



# 13<sup>TH</sup> INTERNATIONAL RESEARCH CONFERENCE

HOLISTIC APPROACH TO NATIONAL GROWTH AND SECURITY

15TH - 16TH OCTOBER 2020

**Management , Social Sciences and Humanities** 

**PROCEEDINGS** 



**General Sir John Kotelawala Defence University** 



# 13<sup>TH</sup> INTERNATIONAL RESEARCH CONFERENCE

HOLISTIC APPROACH TO NATIONAL GROWTH AND SECURITY

# MANAGEMENT, SOCIAL SCIENCES AND HUMANITIES

# **PROCEEDINGS**



General Sir John Kotelawala Defence University
Ratmalana, Sri Lanka



©General Sir John Kotelawala Defence University All rights reserved

This book contains the Conference Proceedings of the Management, Social Sciences and Humanities Sessions of the 13<sup>th</sup> International Research Conference of General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka held on 15<sup>th</sup> and 16<sup>th</sup> of October 2020. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, without prior permission of General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka.

## **Published by**

General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

Tel: +94-71-021-9425 e-Mail: irc2020@kdu.ac.lk Website: https://www.kdu.ac.lk/irc2020

#### ISBN 978-624-5574-16-2

# Other Proceedings of the Conference:

Defence and Strategic Studies: ISBN 978-624-5574-12-4

Medicine: ISBN 978-624-5574-13-1

Engineering: ISBN 978-624-5574-14-8

Law: ISBN 978-624-5574-15-5

Allied Health Sciences: ISBN 978-624-5574-18-6

Built Environment and Spatial Sciences: ISBN 978-624-5574-19-3

Computing: ISBN 978-624-5574-17-9

Basic and Applied Sciences: ISBN 978-624-5574-20-9

#### Published on

15th October 2020

Cover page designed by

Malith Ileperuma

e-Book Version

**Platinum Sponsors** 





**Co Sponsor** 





# **Patron, Conference Steering Committee**

Maj Gen MP Peiris RWP RSP USP ndc psc, Vice Chancellor

# **President, Steering Committee**

Brig N Hathurusinghe psc IG Hdmc

#### **Conference Chair**

Dr L Pradeep Kalansooriya

### **Conference Secretariat**

Mr Sanath de Silva
Ms NKK Mudalige
Dr (Ms) NS Fernando
Capt DDGR Karunarathne

# **Steering Committee**

Brig RGU Rajapakshe RSP psc Prof MHJ Ariyarathne

Cmde JU Gunaseela psc Snr Prof SRD Alwis Senevirathne

Col ULJS Perera RSP USP psc Snr Prof JR Lucas

Col WMNKD Bandara RWP RSP USP psc Snr Prof ALS Mendis

Capt (S) WM Senevirathna Snr Prof ND Warnasuriya

Lt Col AK Peiris RSP Snr Prof RN Pathirana

Squadron Leader WNI Yalagama Snr Prof SSSBDAA Jayawardane

Prof CL Goonasekara

Mr VD Kithsiri

Dr UG Rajapaksha

Dr KMGP Premadasa

Dr (Ms) ADM Gunasekara

Dr JMKB Jayasekara

Mr MPC Wijesooriya

Ms ND Ranasinghe



# **Editorial Committee**

Mr. WAAK Amaratunga – President

Cmde JU Gunaseela USP psc Snr Prof Amal Jayawardane

Col ULJS Perera RSP USP psc Prof W Abeywickreme

Capt (E) MCP Dissanayaka Dr US Rahubadda

Maj (Dr) WMMS Bandara Mr PDDD Wickramasinghe

Dr HL Premaratne

Dr S Fernando

Ms BDK Anandawansa

Dr DDTK Kulathunga

Dr R Vijitha

Ms Lakshani Willarachchi



### Panel of Reviewers

Mrs JI Abegoonawardana Maj JPWK Abeyawickrama Dr RMTB Abevratne Dr Bandula Abeysinghe Dr Ujitha Abeywickrama Dr MPKW Abhayasinghe

Dr De Alvis Mr WM Amaradasa Dr AATD Amarasekara Dr Niranga Amarasinghe Mr WAAK Amaratunga Dr KR Ambenitiva Ms BDK Anandawansa Dr Anuradha Ariyarathne Dr Kusalika Ariyarathne Prof MHJ Ariyarathne Mrs Iresha Ariyasingha LCdr RDS Arunapriya Prof Bandunee Athapattu Dr Iresha Attanayake

Mr DN Balasuriya Col (Prof) Aindralal Balasuriya

Dr ME Balasooriya

Mr Ravimal Bandara Dr Wasala Bandara Dr RMPS Bandara Dr AWMKK Bandara Mr KPSPK Bandara Dr Yapa Mahinda Bandara Lt Col (Dr) WMMS Bandara Eng Prabath Buddika Dr Thushara Chaminda Dr SP Chaminda Dr KVDS Chathuranga Dr Senarath Colombage Dr Amali Dalpadadu

Dr Damayanthi Dasanayake

Eng SU Dampage

Dr WAR De Mel Ms LM De Silva Dr Sara De Silva Mr KSC De Silva Prof Nelun de Silva Dr Dulantha de Silva Dr Darshan de Silva Dr Seneetha de Silva Mrs MMKOK de Silva Dr Anjula De Silva Mrs SCM de S Sirisuriya

Ms R Devi

Mr HKA Dharmasiri Mrs Umanda Dikwatta Capt MCP Dissanayaka Ms AA Edirisinghe

Sqn Ldr Dinusha Edirisinghe Dr EATA Edirisuriya Dr Chamira Edusooriya Dr CD Ekanayake Dr Ruwan Ferdinando Dr Sithara Fernando Dr TGI Fernando Cdr Sarath Fernando Dr Lakshitha Fernando Snr Prof PR Fernando Dr Neil Fernando

Snr Prof Rohini Fernandopulle

Dr NS Fernando

Ms Madushika W.K Gamage

Dr AU Gamage Mrs Anjalee Gamage Archt DWK Gayantha Dr Ayantha Gomes Dr Kishara Goonerathne Dr BGDS Govindapala Prof DMA Gunaratna Dr NK Gunasekara Dr ADAI Gunasekara Prof CL Gunasekara Mr GP Gunasinghe Dr MDEK Gunathilaka Dr HRWP Gunathilake Mr MMLC Gunathilake Dr Buddhika Gunawardana Prof Sampath Gunawardena Dr SHNP Gunawickrama Prof KBS Gunawickrama Dr ADAI Gunesekera Dr GN Duminda Guruge Mr SMB Harshanath Miss Ayesha Herath Mr HMN Herath Dr R Herath

Dr Janith Hettiarachchi Dr B Hettige Dr Kanthi Hettigoda Mr Dulitha Hewadikaram Dr Asiri Hewamalage Dr IMPS Ilankoon Dr RP Illeperuma Ms WMKS Ilmini Dr B Indrarathne Ms JAD Jayakody Dr JMKB Jayasekara Dr Priyamali Jayasekara Ms BKM Jayasekera Dr SD Jayasooriya

Dr MRS Jayathilake Snr Prof Amal Jayawardane Dr MM Jayawardena Dr Kaushalya Jayaweera Dr Janathanan Jeyakumar Dr Kasun Jinasena Ms Gayanthi John

Dr WJABN Jayasuriya

Mrs IADUN Javasuriva

Maj (Dr) Darshitha Jothipala Dr Thilini Kananke

Ms SU Kankanamge Dr GD Kapila Kumara Capt DDGR Karunarathne Dr AMDS Karunaratna Dr PPCR Karunasekara Mr RDN Karunathilake Mr RPS Kathriarachchi Dr Gnanaselvam Kisokanth Dr Saman Koswatte

Dr DU Kottahachchi Mr DMR Kulasekara Dr DDTK Kulathunga Dr RP Kumanayake Mr PPNV Kumara Archt WAPS Kumara Dr KMN Kumarasinghe Dr KDKP Kumari



Dr GP Lakraj Maj RMRKK Rathnayake
Ms Esther Liyanage Dr RMKT Rathnayake
Dr Mrs LS Liyanage Maj RMM Pradeep
Dr Indika Liyanage Dr (Mrs) KKNP Rathnayake
Dr Sanka Liyanage Dr (Mrs) RMCLK Rathnayake
Dr AUS Rathnayake

Ms DD Lokuge Dr AJIS Rathnayake Prof Rohan Lucas Dr Saman Renuka Mr Pasan Maduranga Dr Thusitha Rodrigo Brig (Dr) PTR Makuloluwa Dr GD Ishani Rodrigo Dr Lasanthi Malaviarachchi Dr Nilan Rodrigo Dr Sarath Malawipathirana Dr HSR Rosairo Dr Kritsada Mamat Dr AR Rupasinghe Mr KP Manuranga Dr Methsiri Samarakoon Dr MKDL Meegoda Mrs PWGDP Samarasekara

Ms WDH Mel Mr Rangajeewa Samarathunga
Dr Thushini Mendis Mrs W Samaraweera

Snr Prof Susirith Mendis Dr Thisara Samarawickrema Ms Samanthi Menike Ms KUJ Sandamali Dr TP Miyanwala Dr MS Sandanayake Dr Nasmia Mubarak Ms Niruka Sanjeewani Ms NKK Mudalige Ms NA Sanjeewani Dr IUK Mudalige Mr S Satheesmohan Dr Dulini Mudunkouwa Dr G Senanavake Dr Janake Munasighe Dr SP Senanavake Ms MRIK Munasinghe Dr Asela Senanayake Ms Bhagya Senaratne Mrs Priyanga Munidasa Dr Dilini Nakkawita Dr Thamarasi Senaratne Dr Chandrika M Nanayakkara Mr Asantha Senavirathna Dr Vauna Navarathna Dr Niroshan Senevirathna

Mr SC Padmakumara Ms SMKS Senevirathne Dr HR Pasindu Dr DMKN Seneviratna Snr Prof RN Pathirana Snr Prof SRDA Seneviratne LCdr KGC Pathmal Snr Prof Rizvi Sheriff Mrs WPJ Pemarathne Mr ARN Silva Dr Sanjeewani Silva Dr Janaka Perera Dr Loshaka Perera Dr (Mrs) RMNT Sirisoma Dr Ranjan Perera Mr MA Siriwardhene

Mr CJSAH Perera Mrs Tina Solomons
Eng Randika Perera Dr KA Sriyani
Ms GAD Perera Ms RDUP Sugathapala
Ms ADP Perera Prof Athula Sumathipala
Dr Namal Perera Dr S M T D Sundarapperuma
Ms DR Perera Mrs Wasana Uduwela
Dr KS Perera Mrs DU Vidanagama

Dr KS Perera Mrs DU Vidanag
Dr PKDD Pitigala Dr HR Vidanage
Mr ALI Prasanna Dr R Vijitha

Dr Wuditha Premadasa Dr Meththika Vithanage
Dr Prasanna Premadasa Mr WADGI Wanasinghe
Dr GAS Premakumara Dr SSP Warnakulasuriya
Dr HL Premarathna Snr Prof Narada Warnasuriya

Archt MLNH Premarathne
Dr WMAGHA Premarathne
Mrs ID Wattuhewa
Mrs N Wedasinghe
Mr JMW Premarathne
Dr BS Weerakoon
Dr S Premaratne
Snr Prof TR Weerasooriya

Dr S Premaratne
Lt Col (Dr) Prasad H Premaratne
Dr DSP Pulleperuma
Dr Malinda Punchimudiyanse
Dr KSR Pushpakumara
Dr Ranga Wickremarachchi

Dr US Rahubadda Sqn Ldr (Rtd) Uditha Wicramarathna Mrs RMNP Rajapakse Mr RD Widanagamage

Ms Prasadi Rajapaksha Dr Sanika Wijesekara Dr UG Rajapaksha Mr WLPK Wijesinghe Dr Prabath Ranasinghe Dr Namal Wijesinghe Snr Plnr CP Ranawaka Ms MPC Wijesooriya Ms RBWMH Rathnamalala Mrs AI Wijethunga Dr Vishaka Rathnamalala Mrs MTN Wijetunge Dr Sarath Rathnayaka Ms L Willarachchi Dr RMKT Rathnayaka Dr Trilicia Withanawasam

# **Session Coordinators**

Defence and Strategic Studies Brig RGU Rajapaksha RSP psc

Col ULJS Perera RSP USP psc Maj RMS Rathnayake RSP Maj TVN de Saa RSP psc Ms Niruka Sanjeewani

Medicine Gp Cpt (Dr) RANK Wijesinghe

Dr KSR Pushpakumara Dr TI Withanawasam Dr BCIJ Nanayakkara

Engineering Capt (Rtd) Eng SU Dampage

Dr WTS Rodrigo Mr SD Karunarathna Capt SAAAK Athukorala

Management, Social Sciences and Humanities Mr WAAK Amaratunga

Ms HMAGK Ekanayake Ms P Lankeshwara Ms T Kotelawala

Law Mr WS Wijesinghe

Ms MRIK Munasinghe Ms AA Edirisinghe

Allied Health Sciences Dr DU Kottahachchi

Dr SP Senanayake Mr ARN Silva Ms UDH Kanchana

Built Environment and Spatial Sciences Dr AR Rupasinghe

Ms KS Dinusha Ms NDI Vithana Mr HDS Asoka

Computing Cmde JU Gunaseela USP psc

Ms WPJ Pemarathne Mr DMR Kulasekara Mr GIF de Silva

Basic and Applied Sciences Dr SHNP Gunawickrama



# **Table of Contents**

Welcome Address	1
Major General Milinda Peiris RWP RSP USP ndc psc	
Chief Guest's Speech	3
Prof. GL Peiris	
Keynote Speech	8
Prof. Kapila Perera	
Vote of Thanks	12
Dr. L Pradeep Kalansooriya	
Session Summary	15
Examination of Job Satisfaction of Graduate Teachers in Secondary Schools	21
WAMGPK Wanasinghe and WMS Wanasinghe	
The Resolution 30/1: National Priorities and Implementation Challenges Towards S Lanka	
LG Dilini Tharika Siriwardana	
The Impact of the Social Customer Relationship Management (SCRM) System on Customer Engagement in the Fast Food Industry in Sri Lanka	38
JKPSK Jayasinghe and OC Dissanayaka	
Impact of Green Attributes of Hotels on Re-Visit Intention: Moderating Impact of Customer Environmental Consciousness	47
UJ Mirando and HC Dassanayake	
Language Practices in Bilingual Mathematical Classrooms: The Role of Linguistic Diversity	57
RP Dharmawardene	
Public Intention towards Mobile Money Transactions in Sri Lanka	63
SAKEP Subasinghe#, SD Mirihagalla, T Welivitage and Lahiru Gunathilake	
An Examination of the Social Level Predictors of Cyberbullying Victimisation	74
MAPM Munasinghe and KS Harasgama	
Factors Affecting Young Consumers' Online Purchase Intention in Sri Lanka with Special Reference to Undergraduates in General Sir John Kotelawela Defence University	85
UKGSR Ranasinghe, UKMSR Kuruppu, HJMYD Herath, HGC Wijayagrahi and WDH De Me	
Consumer Preference Towards Own Brands with Special Reference to Own Brands of Cargills & Keells Supermarkets	of
Jayamina Senanayake, Chamindu Nawaruwan, Sathira Heshan, Sandeepa Herath and Lahiru Gunathilake	
Power, Trust, and Tax Compliance of SME Taxpayer	105
Nadee Dissanayake and SP Premaratna	





The Impact of Men Empowerment in Apparel Industry 1	17
Heshani Jayasekara, Hasini Fernando, APM Shehan, and DR Perera	
Employability Model for Higher Education Institutes to Generate Work-Ready ICT Graduates in Sri Lanka	.32
Samanthi Wickramasinghe and Sunesh Hettiarachchi	
Assessment of Public Speaking Anxiety (PSA): A Study Based on the Second Year Law Undergraduates in Kotelawala Defence University, Sri Lanka	
Evaluating the Information Security Awareness (ISA) of Employees in the Banking Sector: A Case Study	47
Asanka D Dharmawansa and RAM Madhuwanthi	
Knowledge, Attitudes, and Practices on Plagiarism among Law Undergraduates in Sri Lanka1	
WS Sudusinghe, WGC Kumara, D Vidanage and TD Kothalawala	
Influence of Socio-economic Imbalance in ELL with Special Reference to Kalkudah Education Zone, Batticaloa, Sri Lanka	.64
Kennedy Jeevaretnam and Sakthy Ravichendran	
Identifying Root Causes for Defects of Solid Tires: A Case of Tire Company in Sri Lanka	
KG Berugoda Arachchige and Asanka D Dharmawansa <sup>2</sup>	
Application of Lean Six Sigma for Sample Checking Audit Procedure Process Improvement in the Apparel Sector in Sri Lanka	.87
Sanduni Sulakkhana, RASA Perera	
Development of a Performance Measurement Framework on Bus Transport Reliabili at Bus Stops	
Piyumika Athapaththu, Thimesha Weerasekara, Seminie Waravita and Sabeen Sharic	
Impact of Trade Openness on Economic Growth in Sri Lanka	80
Tharangi Wanigasuriya	
Examining the Use of Management Control Systems in Managing Perishable Goods:  Evidence from Supermarkets in Colombo Area	15
Ajaya Abeyrathne, Heshani Perera and Harindu De Silva	
Effects of Inventory Management Practices on Perspectives of Employees in Apparel Sector of Western Province in Sri Lanka	28
RN Nishshanka, ORS Jayaneththi, VADPK Vithana and DD Lokuge	
Factors Associated with Employee Job Satisfaction: A Case Study on National Film Corporation, Sri Lanka	35
LN Liyanage	
Factors behind the Success of International Competitiveness of Apparel Industry in Stanka with Special Reference to Vertical Integration Strategy	
Dilshan Rathnayake, Hashini Malsha, Chathuri Dissanayake and Lahiru Gunathilaka	



Patterns and Challenges of Social Identity: An Analysis of Third Space Perspective on Afro-Sri Lankans in Sirambiadiya
KMNU Akmeemana and T Kamalrathne
A Comparative Study of the Characteristics of Domestication and Foreignization in the Sinhalese First Translation and the Retranslation of Chinua Achebe's 'No Longer at Ease'
NM Wijebandara, JAM Hansani
Social Construction of Personality: An Assessment on the Perceptions of Introversion and Extroversion among Undergraduates of Colombo, Sri Lanka
TN Wijewickrama and LS Liyanage
Students' Perception on Learning English through Distance Education: An Online Survey Conducted in Higher Education Institutes, Sri Lanka at the Time of COVID-19
WS Sudusinghe and WGC Kumara
A Study on Compensation Strategies of Subtitling Culture Bound Terms and the Intimate Register with Special Reference to Selected Sinhala Movies
JAM Hansani and HN Gamage
Study on Glass Ceiling Factors Affecting Women's Career Development with Special Reference to Sri Lankan Construction Industry
WNN Alwis and KKNP Rathnayake
Talent, Talent Management & its Practices: A Critical Review
MHR Sandeepanie, GDN Perera, TL Sajeewani, and PN Gamage
Impact of Involvement & Consistency of Organizational Culture on Job Satisfaction in Local Government Organisations in Sri Lanka
SKS Kankanamge and AB Sirisena
Impact of Website Attractiveness and Trustworthiness on Repeat Purchase Intention
KW Opanayake and AB Sirisena
Impact of Retail Store Atmospheric Factors on Repurchase Intention
PD Jayaweera and AB Sirisena
An Evaluation on the Rehabilitation Programmes Conducted for Juvenile Delinquents in Remand Homes and Certified Schools in Sri Lanka: A Case Study Based on Southern Province
DWUC Wickramasinghe, PY Jayasuriya, IADT Medhavini, WAL Avindhya, HMKKA Herath, KMND Konarathne and LS Liyanage
Developing Strategies to Improve the Performance of the Resilient Supply Chain (RSC) to Rise Back from Post Covid-19
Dishanthi N Kahaduwa and Dushanthi D Lokuge
Consumer Intention Towards Self-Banking Services in Sri Lanka: A Study Based on Peoples' Bank
Dilkie Salgado, Nethmi Bandara, Thisuri Peiris and Lahiru Gunathilaka





Celebrity Endorsement and its Effect on Purchase Intention with Reference to Skincal Products in Sri Lanka3	
Chathumini Munasinghe, Charuka Gunaratne, Hasini Chandrasiri, and Lahiru Gunatilake	50
A Study on Women's Empowerment in Aviation Industry in Sri Lanka	97
	91
Sahana Vithanagama and RMNT Sirisoma	
State Legitimacy and the Criteria for Statehood4	06
LCdr G Duminda Dayananda	
Sustainable Competitive Advantage through Disintermediation with Special Reference to Supermarket Chains in Sri Lanka4	
T A A Gamage, I P R Vidanapathirana and S G S D Karunathilaka	
Factors Affecting the Growth of SME Lending Portfolio of Banking Industry with Reference to Consumer Perspective of XY Bank PLC4	28
Nishan Mallikarachchi and Lahiru Gunathilake	
Strategic Impromptu Speaking to Combat Anxiety and Develop a Public Speaking Personality4	40
WSA Fernando	
Determinants of Boundaryless Career for Employee Satisfaction4	48
RHPM Ranasinghe, WAH Wanniarachchi, DMDVB Dissanayake and DD Lokuge	
Perceived Work-life Balance for the Job Satisfaction of Banking Employees in Sri Lank	
Asanka D Dharmawansa and RAM Madhuwanthi	
Impact of Psychological Capital on Academic Performance and Study Stress among Second Year Undergraduates of KDU4	67
Deshini Sirinaga, Jithmi Payagala and KKNP Rathnayake	

## Welcome Address

Major General Milinda Peiris RWP RSP USP ndc psc

Vice Chancellor, General Sir John Kotelawala Defence University

Honurable Minister of Education, Professor G L Peiris, the Chief Guest, Keynote Speaker, Secretary to the Ministry of Education, Professor Kpila Perera, Secretary to the Ministry of Foreign Affairs, Admiral Prof. Jayanath Colombage, Deputy Vice Chancellor (Def & Admin) Brig. Nanda Hathurusinghe, Deputy Vice Chancellor (Academic) Prof. Ariyarathne, Deans Jayantha respective Faculties, Directors of Centres, Academics. Senior Military Officers. Administrative Staff, Students and all distinguished guests who are connected with us in the cyber space.

First and foremost, let me very warmly welcome our chief guest, Hon Professor GL Peiris, Minister of Education for very kindly accepting our invitation and for gracing this occasion as the chief guest of this inaugural session of our international research conference 2020.

Sir, we consider your presence here this morning, as one of the most renowned scholars the country has ever produced in the field of Law, as a great honour to KDU. Let me also warmly welcome our keynote speaker, Prof Kapila Perera, Secretary to the Ministry of Education, who is having a very close affinity with KDU as an illustrious member of our alumni association.

Then I also welcome Admiral Professor Jayanath Colombage, Secretary to the Ministry of Foreign Affairs, and other distinguished guests and invitees participating on line as well. KDU, from its inception, was instrumental in handing down the core values of security to the development paradigm in Sri Lanka.

This year's theme 'Holistic Approach to National Growth and Security" highlights the importance of maintaining a harmonious blend in security and development in all national projects. As you are aware, this year's conference is taking place amidst very challenging circumstances, so much so that, it becomes a landmark event of KDU in terms of its resolution to ensure the continuity of events at KDU even under the most trying circumstances. And this conference is also significant because the year 2020 marks 40 years of existence of KDU since its inception in 1980.

KDU, initially established as a tri-service academy known then as KDA or Kotelawala Defence Academy, marked a significant diversion in 2008 with its renaming as General Sir John Kotelawala Defence University. Since then, with the guidance and vision of His Excellency the President Gotabaya Rajapakse, as the then Secretary to the Ministry of Defence and the Chairman of our Board of Management, KDU kept a giant leap forward to become a fully-fledged university with nine academic faculties and a University Hospital with state-of-the-art facilities. With this phenomenal change, KDU began expanding its horizon to provide its high-quality higher educational opportunities to civilian students, thereby reducing the burden on other state universities of the country in supplying for the higher educational demand in the country. Today, the University is ready to march forward steadfastly contributing to the national needs combining the national security domain with higher educational needs of the country.



Ladies and gentlemen, KDU international research conference has been attracting local and foreign presenters, participants and more importantly renowned scholars and professionals of the highest caliber both locally and internationally. However, in this year, the global pandemic situation has restricted having them physically present at KDU. But many of our invitees will join us on line to enrich the deliberations through this novel experience of having the conference on a virtual platform.

I reckon that this is a blessing in disguise for us to travel on untrodden paths for new discoveries. KDU IRC has been instrumental in establishing and strengthening the much needed research culture not only at KDU but also in the whole country.

We have been attracting papers from almost universities, from many research institutions and other organizations representing even Batticaloa and Jaffna, which I reckon is a very encouraging sign. And the impact of the growing research culture was evident during the first breakout of Covid 19 earlier this year, where our staff and students were researching day and night for creating various products and inventions of our own to help the fight against Corona. So, it is heartening to note that in this year's conference, there are many research papers reaching the conference secretariat, which involve the student community of our nine faculties.

Therefore, we are proud that we have created a platform for emerging researchers and scientists for showcasing their research outcomes at KDU research conference. And it is our fervent belief that inculcating and fostering the research culture and enhancing the quality and quantity of research in various disciplines in the country can raise the resilience levels of society and the nation as a whole.

This year's conference has attracted six hundred and fifty plus paper submissions, which I believe is a very clear indication of the right enthusiasm growing in the country towards research, particularly development and security domains. So we are proud as a university to be able to stand up resolutely to fulfill the needs of the nation, especially at a time when such efforts are very much needed. I believe the efforts of security-based education aiming strengthening national development should be more cooperative in the future and KDU has always facilitated any research efforts that strengthens the national security of our nation. We urge the academic community of Sri Lanka to join hands with us in all our future endeavours to support the nation especially through productive research in diverse disciplines.

The organizers of the KDU international research conference intend to set the tone to initiate more collaborative research at national and global levels. This research conference is an ideal platform to make connections. I hope that authors of KDU and various other local and international universities will take the opportunity to interact and develop friendly relationships, establish networks and to explore win-win situations.

I wish all the very best for the presenters and hope you will enjoy every moment of this academic fusion taking place on two whole days

Finally, let me once again welcome our chief guest and the keynote speaker on behalf of all KDU staff. I wish that presenters and participants would have all the courage to continue their pursuits with determination to link up with the international community and work towards national growth and development through their research.

Thank you.

# **Chief Guest's Speech**

Prof. GL Peiris

Honourable Minister of Education, Government of Sri Lanka

Major General Milinda Peiris, Vice Chanceller of the Sir John Kotelawala Defence University of Sri Lanka, Admiral Professor Jayanath Colombage, Secretary to the Ministry of Foreign Affairs, Professor Kapila Perera, Secretary to the Ministry of Education, Deputy Vice Chancellors, Deans of Faculties, Heads of Department, members of the staff and students of this university, friends well wishers, ladies and gentlemen. I am delighted to be present with you on this occasion for the 13th International Research Conference. I am no stranger to these surroundings. I have been consistently associated with your work during the progress of your university until you have reached the stature that we all are proud of at this time. There is no doubt that with the nine fully-fledged faculties that you already have and your plans further to expand this university particularly bearing in mind the priorities of this country at this moment. I am particularly happy about your plans for the establishment of a Faculty of Criminal Justice. I think that is certainly an area that is worthy of focus and attention. So you have always assessed, evaluated very accurately the needs and priorities of our country in the field of Higher Education. And you have been very quick to respond to those needs. That innovative approach is much to be admired. And these are among the reasons why I have particular pleasure in joining you in these deliberations. There is one another matter that I would like to mention. It is this that you are having this conference for the 13th consecutive time. It is our experience in this country that many good things are planned and inaugurated. It is much more difficult to follow through. So the fact that you have been able to do this without interruptions for 13 years adding to your

expertise as you go alone improving and expanding towards what you are attempting. It is greatly to be admired the sense of perseverance and determination that is greatly required in this country at this moment and your performance is an inspiring example of what we all need to carry the country forward to even greater heights.

Now the theme that you have chosen for this 13th International Conference is extremely appropriate from many points of view. You have heard representation from many countries as Major General Milinda Peiris, Vice Chancellor explained a moment ago. You are holding this conference in exceedingly challenging circumstances. Again you have been to adapt to difficult circumstances. You are resorting to modern technology to include and involve foreign participants in these deliberations even though they are unable to present with us physically on this occasion. The topic that you have chosen is the holistic approach to national growth and security. I think that is extremely relevant to present day needs in Sri Lanka today.

The first point I would like to make is that there is an intimate connection between national growth and security. It is fanciful to talk of any kind of national growth without the assurance of security. Security is a necessary and indispensable foundation. Without security it is impossible to achieve growth in any sector of the economy. The celebrated Political Scientist the late Professor Harold Laski of the London School of Economics said that the basic duty of a state is to provide security for its people. That is the ultimate reason for the existence of the nation state. The theory of the Social



Contract which has been developed by writers like Lock and Rousseau emphasizes the fact that the public have given the authority to state principally for the reason to create conditions in which life can go on in an orderly and frank manner so that the citizens of that state can realize their fullest potential as human beings, develop themselves and develop the community in which they live. In order to do this the essential condition is security. Without it nothing at all can be accomplished. Now we have seen empirical evidence of this in the recent past of our country through the 30year conflict with the Liberation Tigers of Tamil Eelam. It was impossible to attract substantial investment into this country. Every facet of Sri Lanka's economy suffered grievously during that period. How can you attract investors into a country which has been thrown asunder by a ferocious war? Investment, international trade all this was affected by the ongoing conflict. I would also like to make a reference to the concept of reconciliation which became very relevant and important after the end of the war in 2009. There was then naturally the feeling that we have to leave the pain and anguish of the war behind us. We have to emphasize unity and the solidarity and bring together all the people of our cherished land irrespective of caste, creed, ethnic or religious identity to emphasize the oneness of the nation. That was the pith and substance of the concept of reconciliation. But it all went wrong during the Yahapalana administration of 2015 to 2019. And it is worth examining in an objective spirit the reasons why that endeavour failed so miserably. I think the basic reason is that the authorities at that time forgot the sentiments, the feelings and aspirations of the majority community. Reconciliation of course bases emphasis on minority aspirations to make comfortable, to convey to them in definite terms the impression, the conviction that they are very much part of the country. They

belong, the sense of belonging so that confidence should be imparted to minorities, and at the same time, it is absolutely necessary to carry the majority community with you. If you lead them behind if you engender in the lines of the majority community that they are not important, they can be sidelined, they do not matter, such an exercise in reconciliation is doomed to failure as empirical experience in those 4 years convincingly demonstrated. What happened during that period? I think the most alarming spectacle that we are seeing in this country today is evidence that is transpiring in daily basis before the Presidential Commission that is going into the catastrophic phenomenon of the Easter Sunday Attack. Evidence has been given by one witness after another, the Inspector General of Police, the Secretary to President, the Secretary of Defence, all these people. Their evidence emphasizes the total breakdown of this security apparatus in the country. It is not mere debilitation or weakening of security apparatus it was total collapse of it. There was no security apparatus functioning in this country at all in any realistic sense. So it led to the loss of 265 valuable lives of this country and crippling of many other citizens of our land. Why did this happen?

When the present President, His Excellency Gotabaya Rajapaksa was Secretary to the Ministry of Defense, there was a very close collaboration between the intelligence arm and immigration. Whenever an application was made by a foreign preacher somebody who wants to come and teach in this country, when visa was requested a very thorough background check was done. As Admiral Professor Jayanath Colombage would bear witness the antecedent of the person applying for the visa was thoroughly examined. And if there was anything unsavory in the past of that person, if he has been involved in any activity which led to



disharmony among communities, then the immigration authority in close consultation with the intelligence arm would turn down such a request for visa in this country. That whole apparatus was consciously and deliberately dismantled. It did not happen unwittingly or inadvertently. It was deliberate government policy. So intelligence personnel were made to feel that they were in embarrassment. The less that heard from them, the less they were seen the better. That was the environment which prevailed at that time.

Surely, if you are talking of national growth and security, the first thing to ensure is that funds that are coming from abroad had to be brought into the country through proper channels. We have in this country such an established conduit. The conduit is the External Resources Department of the Central Bank of Sri Lanka. Of course resources are welcome. But they must come through the External Resources Department. We must know the source, the origin of these fundsand where are these funds coming from? We must know the purpose for which these resources are going to be applied, who is going to manage these resources? There must be an auditor accounts. All of these were dispensed. You had a situation where a university was built. What is the purpose for a university to come up in Kattankudy. The facilities, the buildings that are constructed, they are better than the buildings that you have here at the Kotelawala Defence University. They are superior to the quality of the infrastructure in the universities of Colombo and Peradeniya. If you go to Kattankudy blindfolded if the blindfold is taken off when you get there, you will feel that you were in the Middle East. The Palmyra trees, the architecture the overall environment. The sums of money involved are colossal. There is no exposure, visibility or accountability. It is that brought about a situation that culminated in the total collapse

of this security establishment. Madrasas can be all over the country. There are no Sunday Schools. They are providing many of them on daily basis. Nobody examines the curricula. There is no regulatory mechanism at all. So the seeds of racial hatred are sown by those institutions. Of course there must be freedom with regard to imparting instruction. But clearly there must be some supervision, some control, some regulation. That was totally lacking. So the country then paid the supreme price for the neglect of security in pursuit of narrow and particent and political objectives to placate aggressive minorities, not law abiding members of minority communities, but people who were intent on the destruction of the very social fabric of the country. So that was our sad experience.

This is true not only within the country, but also in the conduct of our foreign relations. What happened there? Sri Lanka is unique among the nations of this world in committing to a resolution in 2015 in the UN Human Rights Council. Sri Lanka became a co-sponsor of a resolution in condemning its own armed forces accusing its armed forces of the gravest crimes under international law and under the international humanitarian law because the preamble to resolution 13/1 of the 1st of September 2015 acknowledged with appreciation the report of the High Commissioner for Human Rights. And the High Commissioner's report makes the most damaging allegations against the armed forces of this country. And the government of Sri Lanka endorsed all of them and called for a thorough investigation at the international level. The resolution gave responsibility to the Human Rights Council and to the Commissioner for Human Rights to keep Sri Lanka under constant review. So here was a government which consciously, voluntarily, deliberately submitted the country to adjudication and assessment in respect of its armed forces to international tribunals



where justice considered the inanity of what happened. There were pledges given. In resolution 13/1 and 34/1 which are clearly contrary to the highest law of this country, the constitution of Sri Lanka operating para 6 of the first resolution 13/1 recommended that foreign judges of Commonwealth and other foreign judges should be entrusted with the task of judging our armed forces and of course, members of the civilian population. This is not possible under Sri Lanka's constitution because foreigners cannot exercise judicial power in respect of And our citizens. then the High Commissioner for Human Rights, Prince Hussein publicly conceded that in respect no other country has a Human Rights Council based in Geneva adopted so intrusive approach – so intrusive, interfering directly with domestic policy in that country. To what extent did this go? The resolutions involved matters which are clearly within the domain of the Sri Lanka's parliament not the business of foreigners. It called for constitutional reform. It called for devolution of greater powers to provincial councils. It called for thorough overhaul of Sri Lanka's armed forces and the police. It called for the repeal of the prevention of terrorism Act and its replacement by alternative legislation. Members of the Sri Lankan armed forces and the Sri Lankan police force were to be subjected to special criteria when they applied to join UN Peacekeeping forces abroad and even to enroll for programmes of training. So this is the extent to which national dignity and pride was compromised in order to placate foreign interests whose aims and objectives were incompatible with the well-being of this nation.

So this attitude which destroyed the very foundations of our national security manifested itself both in respect to domestic policy and the conduct of country's foreign relations during that period 2015 to 2019. In such a situation you cannot possibly have

national growth. You cannot have economic advancement because security has broken down entirely.

Just one another point I want to make before I conclude, and that is the reference to militarization in the current political discourse. Non-governmental organizations and elements of the opposition as well as prejudiced and biased foreign commentators are finding fault with the role of the military in the conduct of national affairs in Sri Lanka at this time. But no objective observer of the Sri Lankan scene can doubt the fact. When it came to the control of COVID-19, this country could not possibly have achieved what it did without the vigorous involvement and cooperation of armed forces, particularly intelligence arm. We were able to control the pandemic because the armed forces were able to identify those who have been infected, first the immediate circle and then the outer periphery. That is still being done, yesterday today it is being done. And the role of the armed forces is indispensable. Without them the situation would be far worse than it is. Why is there this kind of hostile attitude towards armed forces? I think people who subscribe to that point of view failed to distinguish between the culture of east and west in this regard. Cultural attitudes, assumptions and values are in critical significance in this area. The attitude in this country, the attitude of the public, of ordinary people, to the armed forces is not what prevails in some western countries. The armed forces are not looked upon with fear. They are not regarded as instruments of oppression. On the contrary, after the war ended in 2009, it is in effect the armed forces, they got involved very intimately, very vigorously in uplifting the social conditions in the people affected in areas. They built houses. They made water available. They played a role in restoration of agriculture. And I know personally because I have seen in



my own eyes that armed forces of this country even helped in the constructions of latrines, of toilets in that part of the country. These are not regular functions of the armed forces. But because of the culture of our country the social morals the value system based upon empathy and compassion which is the hallmark of Sri Lanka's culture. That was the nature of the role that was performed by the Sri Lankan military. It is this fundamental fact that is not taken into account. In critiques of the present scene who find fault with the armed forces forget their involvement in national activity on broader scale.

So these are some of the remarks that I would like to make to you on this occasion. I am very happy that you are having this 13th International Research Conference. I am very happy that you have chosen a topic that is extremely appropriate. You have chosen a more relevant topic for this time. As the Minister of Education also with the responsibility for higher education in this country, I am very proud of the achievements of your institution, what you have been able to accomplish within so brief a time span. The needs of higher education in this country are very urgent when more people are clammaering for access to higher education, in our ministry, with the active system of Professor Kapila Perera who is rendering a yeoman service in that regard, we are trying to bridge the gap between education and employment opportunity. We are talking to the major Chambers of Commerce they provide the jobs in the private sector to ascertain from them the employment opportunities that will be available in their institutions during next three or four years, what are the skills which we are looking for? Because they are telling me it is not that we

do not have jobs to offer. We have jobs. But when we interview people we find that they don't have the skills which we want in our institutions. So we don't want to enhance a reservoir of angry and frustrated young people. We want to ensure that there is a corelation between the education that is imparted in our institutions and the skills for which there is an identifiable demand in the market place. So these are some of the adventures that we have embarked upon. We are also looking critically at our curricula which are obsolete and anachronistic. They have not been revisited for a very long period. There must be in line with the needs of our society methods of teaching. There is far too much emphasis on rote learning in memory that students have required to commit their notes to memory, retain in the memory and reproduce it at the examination that is antithetic of the education. Education comes from Latin words 'educate' which is draw out not to force in vast volume of actual material into mind of the students. So purpose of the education is to develop the analytical and the critical faculty of the student to encourage him or her to think for himself or herself and apply that volume of knowledge to face the challenges of life. So in the midst of all of this, in confronting the formidable challenges, I am very confident that your institution, Sir John Kotelawala Defence University will render an invaluable service. So I congratulate to you on your achievements of the past and I wish you well for the future. I know that you will continue to do your country proud. And I thank you sincerely for the honour that you have bestowed upon me by inviting me as the Chief Guest for these deliberations.

Thank you

# **Keynote Speech**

Prof. Kapila Perera

Secretary, Ministry of Education, Government of Sri Lanka

Ayubowan! Wanakkam! Assalamu Alaikum! The Vice Chancellor of General Sir John Kotelawala Defence University, Major General Milinda Peiris, the Chief Guest today my honorable Minister, Ministry of Education, honorable Professor G.L. Peiris, Deputy Vice Chancellors, Deans of the Faculties, Heads of the departments, the Secretary to the Ministry of Foreign Affairs, Professor Admiral Jayanath Colombage, all the foreign participants who are joining this 13th International Research Conference at KDU, all the presenters, moderators, session chairs and all the distinguished invitees. Thank you very much for inviting me to deliver the Keynote Speech under the theme 'Holistic Approach to National Growth and Security.' I am indeed honored and privileged to be here having witnessed the very first one 13 years ago, and it happened to be General Milinda Peiris who was the Vice Chancellor then as Major General and we witnessed the presence of the Chief Guest as the Ministry of Higher Education, Ministry of Research and Technology.

I would like to start with this quote from the Chief Guest, "We do not want to have a reservoir of angry uncontented people." I was one who had gone through in 1971, of course not in the country in 1988 -1989 and then in then 1983 as a university student, and many times during my academic career where there were disruptions to education, holding back the desire to fulfill or acquire knowledge with my colleagues, peers and the rest of the people due to the lack of security. I know how I felt then as a student. I think I was in grade 4 in 1971, and then in 1983 in my second year at this very same premises, the

education of ours were disrupted. And the feeling of those delays due to the lack of security, and the Cheif Guest elaborated in deep sense of comprehension how security is important for the national growth. If I look at what is this traditional approach that is often based on defensive security policies as we had during my time at different ages. We had always defensive security policies. However, the persistence of strong security measures generates inecure feelings. I hope you agree with me. If there are strong security measures that generate insecure feeling as it reveals the presence of threats. So these are some of the things that people quote. Then again the democracy, well-being and freedom are some of the elements that we feel that we reduce this feeling of insecurity by reducing both threats and activities that we feel. Even if you take a house if you feel this insecureness due to lack of security this might not allow you to think, generate analytical skills. You are always worried about the security. How to provide security to your children and for yourself? And then it hinders and it slows down entire process of nurturing, acquiring knowledge. And then that it is halting the growth. so you start from the small households or individuals then if you take as a whole family, a village, a township and then provinces as a country, it basically retards the national growth. So, therefore, we need to have this thinking of holistic approach to national growth and as you and I understand there are necessary and essential conditions when we learn mathematics for certain things. The Cheif Guest emphasized repeatedly the essential elements and in our academic mathematics there sufficient and necessary



conditions or essential conditions for forming mathematical theories there are certain things. Likewise, it is essential to have security for national growth.

When it comes to economics, always and even for decades, the GDP strongly criticizes the measure of development. Still the role of economic systems neglecting the goal of global capabilities and expansion holds this economic growth or national growth. But the concession of development based on the glorification of individual success and the pushed capital accumulation hardly allows reducing insecurity and increasing freedom. So security becomes an individual good and relies upon ineffective defensive policies that we have practiced in the past unlike in the present. So development, well-being, security and freedom are strictly interrelated. Individual capabilities imply collective capabilities. Even in free market economies often human needs such as food, housing, employment, health care, family policies, fresh water, security and safety can be put in a market under regulation or collective governance, and those things even the Chief Guest highlighted. The need for water, need for food, how the security-food security and water security ensure the getting this national security when you combine all these types of security the national growth under war conditions. So these goods are often under political debate as they are critical for development and social cohesion. The more they are shared among the large part of the population the less we experience social conflict and political instability. Security hardly is achievable individually. It is the result of more holistic thinking. Individual security and freedom implies the security and freedom of all. As I mentioned before these are interrelated. And if you look at or if you study research and in future research all these studies can help in understanding human capabilities and pathways towards collective security and enhance development. So instances of participation in definition of security needs would make citizens able to feel at the center of development goals. So therefore, unlike in the past where we did not think holistically and the interrelations between the security and the national growth. Then we will fail. Even the theories in the literature highlights this one.

As far as Sri Lanka is concerned the contemporary security concerns that we face as an Indian Ocean country are broader and more complex, that need not be elaborated, than any state in our history. This will continue to exist. We can't say that this will stop today, tomorrow, next year or in ten years' time because the geopolitics and the race for the arms business and economic development, all these things will continue to grow, sometimes exponentialy. So therefore, national security cannot be neglected and cannot be just let it go as the Cheif Guest mentioned, even in a fraction of a second, it is very important. Otherwise there won't be any growth. As the Secretary to the Education, in the present context the played by ensuring a secure environment for the student to go and sit the examination. They are not in a position to concentrate on answering the questions if the place is not secure. So if we are not able to hold the exams and continue to postpone, then we cannot achieve and we cannot predict national growth. So in this context the role played by the national security is to be commended as the Ministry of Education. I know personally the quick response to ensure secure examination centers for all of us for the future of Sri Lanka. Under these conditions even the identification of COVID origin in the recent past, you have to have peace of mind to concentrate on everything. That is basically if you only think of one place, one



center out of 2,646 examination centers, then there will be lack of security in different centers. So therefore, you have to think holistically. Only the one aspect of securing one place will not enable for us to continue this one and therefore the results will come in future in terms of national growth. So the range that concerns arise from threats to system that allows society to control intergroup and interpersonal conflict to more recently reorganized concerns associated with threats to social and economic systems. Once these events start to influence the policy and the economy of a country with a national resilience, that country will perish. One way of addressing this emerging situation is by promoting more and more research and development.

KDU, boasting with diverse nine faculties and through two new faculties to come, the Faculty of Criminal Law and the Faculty of Technology, is going to expand and provide opportunities and platforms for you to think, ponder in a military environment and inviting day-scholars giving the signal that is very important for you to mix each other understand the role of the military or security for the civilians, 22 million people in this country, how important the national security and the training in a military set up to achieve the common goal of national growth. So the KDU is at the forefront of researching the development and security related problems holistically. A holistic approach is needed to understand contemporary complex situations and circumstances. University education could inculcate co-values of security and development such as human dignity, integrity, democratic participation, sustainable development, economic equity, mutual understanding and respect and equality of opportunity. The three flags that are behind bring all three forces together, thanks to the KDA then, and how important

this mutual understanding in the war was understood and it helped to coordinate things in a better manner. You trained officer cadets together and understand the security roles in the air, at sea, on land. I am sure that it could have been the catalyst then. Now you bring the third aspect the day-scholars. So this is holistic thinking. Like I started at the beginning it was not there then. We had three academies that did not know each other, but how had it come during the time when the national security was at risk. So ultimately the beneficiary is national growth. The honorable Minister, the Cheif Guest mentioned how difficult it was for Sri Lanka to attract foreign direct investments. As I think Minister of Enterprise Development, Foreign Minister, Foreign Secretary. If you don't have security and thrust, nobody would come. But when you train together military and civilians with hand and hand, it would provide an ideal platform. The importance of civil-military relations and how KDU is instrumental in developing the above mentioned areas is to be commended. By promoting civilmilitary relations through education, a country could raise the resilience levels, like I mentioned, of communities. Honorable Minister spoke at length and elaborated that you have to have a strong commitment and the political will to ensure the security of this country. If these elements, instruments fail, the first thing that is going to effect is the education of the future generations. Even for me, the Oxford graduate, Rohdes scholar, I am a pupil. And this has provided opportunities and the responsibility to the government to ensure the security. So all spheres of activity will simultaneously ultimately grow culminating in national growth.

These are the few thoughts that I have to share with you. I would like to extend my gratitude on behalf of the Ministry of



Education for having me and inviting me to deliver the Keynote address and set the platform for the next two day deliberations. And I wish all the success in the deliberations and creating more networks and have future directions for years to come in this context of national security that you have chosen today. Whatever that you are going to do, base national security at the forefront. So divided we lose together

we win. And I wish all the very best and thank you very much for all the participants and the people who have submitted papers, presenters, moderators, and session chairs. You are plying a very important role in this context of national security and the national growth.

Thank you very much!

## **Vote of Thanks**

Dr. L Pradeep Kalansooriya

Conference Chair, 13<sup>th</sup> International Research Conference, General Sir John Kotelawala Defence University

It is with deep appreciation and gratitude that I present this vote of thanks on behalf of the organizing committee of the 13<sup>th</sup> International Research Conference of the General Sir John Kotelawala Defence University.

First of all, I convey my heartiest thanks to Professor G.L. Peiris the Minister of Education, a distinguished academic who spared his valuable time with us on this occasion. Sir, your gracious presence amidst busy schedules is truly an encouragement and it certainly added the glamour and value to this important event.

Professor Kapila Perera, the Secretary to the ministry of Education, also a distinguishable academic and a senior military officer is a proud product from our own institute. Sir, I greatly appreciate your willingness without any hesitation to be our Keynote speaker today.

I would also like to take this opportunity to extend my appreciation and gratitude to the Vice Chancellor, Maj. General Milinda Peiris for all his guidance and assistance provided throughout the event and this event wouldn't have been a reality and a great success without your courageous leadership under the current challenging situation today.

I would be falling my duties if I don't mention the exceptional support and assistance provided by the two Deputy Vice Chancellors who were there behind the team guiding us through a difficult time. I also would like to thank the Deans of all the faculties who shared the responsibilities and guided their staff amidst their very busy schedules. This year's conference has attracted six hundred and fifty plus paper submissions, which is a very clear indication of the right enthusiasm growing in the country towards research, particularly in development and security domains. I take this opportunity to thanks all authors share their studies on National Growth and Security in our conference. I also greatly appreciate our panel of reviewers on the valuable time spent to review this large number of papers. I'm sure that your valuable resnses would tremendeously supports to authors on enhancing their research studies.

Ladies and Gentlemen, as you witnessed, this was a new experience in the new normal, after the present pandemic, and therefore it was huge challenge to organize, coordinate and conduct research conference of this magnitude on virtual platform enabling a wider participation of both local and foreign participants. I thank all our participants attending the conference online despite numerous difficulties encountered due to the present situation.

Further, it is with great pleasure that I acknowledge the tremendous support and assistance provided by academic staff of all the faculties with all the Heads of Departments going beyond their regular duties to make this event a success. Similarly, I take this opportunity to appreciate the contribution of the administrative and non-academic staff whose commitment was essentially required in achieving the overall success.

Our sponsors, the financial support given by our Platinum Sponsors, People's Bank and Bank of Ceylon and Co-sponsor, Abans Private Limited is highly appreciated.

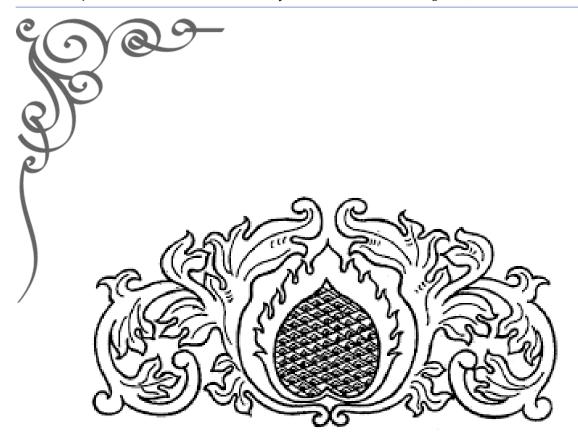
Last but not least the officer cadets and day scholars who formed a very virtual component of the organizing teams in every sphere and I believe that it was a great learning experience and exposure which would help them tremendously in similar undertakings in the future.

Finally, I have no doubt that all of those attending the two days seminar will make the best use of the opportunity to enhance their

horizons and establish new bonds and networking while sharing their own knowledge and experience in a friendly learning environment.

In conclusion, let me take this opportunity to profusely thank my co secretaries, who stood alongside me throughout extending unexplainable support and assistance with exceptional commitment.

Thank you so much. I wish you good luck and all the best.



# **Plenary Session**

# **Session Summary**

Session Chair: Prof. Sanath Dhammika

Rapporteur: Ms. Krishanthi Anandawansa

The plenary session of the Faculty of Management, Social Sciences and Humanities (FMSH) was conducted under the sub-theme 'National Growth and Security towards Social and Human Capital Development'. The session was chaired by Prof. Sanath Dhammika, Prof. of Human Resource Management (HRM) at the Department of HRM, University of Kelaniya. Distinguished speakers of the plenary session were Prof. Harshana Rambuwella, Director Postgraduate Institute of English, Open University of Sri Lanka; Dr. Vagisha Gunasekara, Senior Lecturer, Department of Social Studies, Faculty of Humanities and Social Sciences, Open University of Sri Lanka; and Mr. D. Upali De Soyza, Additional Managing Director (Rtd), Sri Lanka Ports Authority.

The first speech was conducted by Prof. Rambukwella under the title 'The Social Sciences and Humanities in an Era of Technological Change'. The speaker initiated by highlighting the importance of how the Social Sciences and Humanities (SSH) should face both the challenge of technological change and technology in our lives, and how critical responses should be fashioned towards technology. The speaker mentioned how with the advent of print knowledge became widely accessible, de-mystifying and democratizing it, enabling mass literacy. This 'print capital', according to Benedict Anderson, paved way for the development of the 'Nation State', where a sense of belonging was instilled on the mass by means of the print, and this gathered people under a nation state. Anderson further explains how 'time', initially governed by agricultural capital, religious traditions or rainfall, is abstractedly

represented by the clock in Modernity, and is an 'empty homogenous time'. Prof. K.N.O. Dharmadasa explains how 'print capitalism' has played a major role in nationalism in Sri Lanka. Walter Benjamin explains how original art and cultural objects lose their authentic value in the face of their mass reproduction. Kithsiri Malalgoda explained the impact of technology on how Buddhism adapted to Modernity, where print played a significant role in the modernization of Buddhism in Sri Lanka. These were paradigm shifts in how society responded to technology, where scholars in the late 19th century and early 20th century in the SSH stood out of technology and had a critical and philosophical approach on how it affected society.

Today, in contrast, societies are shaped by technology and human beings try to meddle with the forces of nature that they do not necessarily understand, while technology is adopted and adapted to suit; it is part of the SSH. Hence, the discourse nowadays is not to cautiously engage in critical discourse with technology, but to rather look at the lack of technological skills amongst undergraduates, which negatively impacts on their employability. So the disciplines increasingly conditioned by technology, and the fundamental notions of the value of education and the social power of disciplinary knowledge have changed.

Technology today unarguably is the dominant discourse, and the SSH disciplines have limited utility value, and graduates in these disciplines are a problem; they have low employability and limited 'market value'.



Rather than engaging in a philosophical critique of technology, educators in the SSH are worried about the 'technological deficit' in their graduates. The situation aggravates due to deficiencies in the Sri Lankan schooling system, which is deficient in computer literacy, though the situation is changing to some extent. So the SSH are looking for ways to integrate technology: Economics uses technology for sophisticated econometric modelling techniques and language studies uses machine language interfaces. Thematic digital concentrations (i.e. the digital Humanities) have come to address the perceived 'technological deficit' in the SSH. These are positive and necessary developments.

However, the focus on technology seems to deprive certain factors that are critical to the SSH, which need to be retained. More robust intellectual response; the 'critical mirror' that was in the historical perspective to understand technology in a more nuanced manner, is required. In the rush to embrace technocratic approach, this historical approach is undermined. Today, Meta data is gathered unknowingly, so technology is shaping human lives in insidious ways, where we are not fully in control; our physical whereabouts and likings can be tracked. This is both positive and negative. Instead of asking these critical questions about technology, drawn towards we are technology's aura.

In conclusion, the speaker highlighted that today's society is saturated with notions of productivity, where the vision of the SSH are in danger of becoming impoverished, with the excessive focus on practical benefits that technology can do for these disciplines. However, in being so, we are losing the fundamental critical insights that the SSH disciplines provide. The value of these

disciplines lies in their philosophical depth and the possibility of creating revolutionary ideals that go beyond looking at technology's use value. Being merely tech savvy might endanger the true potential of the SSH. Good tech is useful, important and necessary, but the SSH need to train students to critically reflect on the use, abuse, value and impact of technology on society, so that technological innovations can be humancentred. However advanced technology may be, critical human beings are required. Thus, technology's challenge for the SSH is not becoming increasingly tech savvy, but philosophically critical of it, so that we can harness it better.

The second plenary speaker, Dr. Vagisha Gunasekara spoke under the 'Corporatization of the University and Implications for the Humanities and Social Sciences'. Initiating her speech, the speaker stated that the Liberal Arts provide balance and perspective, where it strengthens overview, broadens foundations, teaches to communicate clearly and be problem solvers, develops critical thinking skills and creativity, creates engaged citizens and thinkers, and reinforces cultural and responsibilities and values; it is essential for a well-rounded education. Despite this, there is gradual marginalization of the Arts in Sri Lanka and in the world.

Global shifts in education privilege STEM subjects over the Liberal Arts, and academic communities must be reflective and critical about the challenges faced by the Sri Lankan university system to offer opportunities for Arts students to become innovative and contribute to the knowledge economy. There is also need to converse on corporatization of the university, which interacts and fuses with institutions, people, dysfunctionalities and the culture in Higher Education (HE)



institutions. Global shift towards innovation and technological development, rapid changes in global economy, and World Bank (WB) attempts to find a 'one-size-fits-all' solution to world education shortcomings, prefer focus on STEM subjects.

HE's priority to improve Arts and SSH graduate employability emphasizes developing undergraduate skills i.e. team entrepreneurship. communication, IT and English language skills. Neo-liberalism also marks the most recent trend on the focus on skills and trade. D. B. Johnston explains how WB political agendas reformed universities in the 1990s, which reduced public investment and altered their finances and management, resulting in academics steering towards the market. Michael Gibbens, Counsellor of the WB, affirms the urgency of the new university paradigm and states its main mission should be to serve the economy. This emphasizes a highly ideological management, with a new perspective of using HR to maximize efficiency; an entrepreneurial Propelling efficiency in an inefficient system transforms university administrators to managers who 'tick the boxes' and merely fill numbers of outputs in strategic plans. Corporatization fuses with existing 'baggage', and has its own challenges. For holistic approach towards national growth and security, criticisms of the present system must be addressed and one must have generic awareness. University academics in SSH do not search for new knowledge, and have low intellectual contribution and research output. There is also the unemployed Arts graduates' problem. The basis of such a criticism is in the perceived mismatch between education and employment, an idea that initially surfaced following the 1971 youth insurrection, and since the early 1990s, WB intervention in Sri Lankan HE sector provides loan scheme projects whose objective is to improve quality

and relevance in HE. There is a need to review the reasons for low intellectual output in Arts Faculties with new elements of corporatization.

The politicization of Sri Lankan universities has been detrimental to the quality of education, autonomy and academic freedom. While literatures and languages can be taught in the vernacular, for advanced intellectual work in these subjects, one has to engage with international literature. Politicization of university administration also affects university education. What makes matters worse is the replacement of Liberal Arts with professional and vocational training in light of making education relevant to demands of society. Education with utilitarian objectives undermines its non-instrumental Academics' fractional politics, ideological camps and hierarchies affect universities too. Sri Lankan academia lacks professionalism in relating to those in different ideological camps. Their career-oriented, selfadvancement behaviour may not coincide with achieving academic excellence, teaching or research, and merit-based academic appointments is marred by favouritism, political patronage, internal politics, and political party affiliations.

Arts students too have limitations, since they mostly just want a degree and lack engagement. The present student generation is a product of mass education, with a belief that education is mainly for employment, and their attitudes are also shaped by increasing consumerist approach towards education, resulting in shallow knowledge in subject matter and poor civic consciousness. The crisis is HE is multi-dimensional, complex and has much political continuity. Despite all this, there is the need to make education relevant, to serve the knowledge economy and make undergraduates skilled for employment.



The solution seems to be technology, but modest solutions are available. Proper training in Liberal Arts are known to be able to provide students with intellectual skills in critical thinking, analytical ability, logical and reasoning, and ability complex conceptualize and apply knowledge to new situations. It is not the subject matter, but how it is taught and teaching oneself the skills on how to learn. In terms of application of knowledge, one needs to be creative in thinking, and assignments can be given to deliberate on independent thinking. New pedagogies with student-centred learning and reflex-oriented education can attempted under mass education. The best that can be done is to give the mass individual the basic skills to reflect and skilfully judge any task at hand.

The third plenary speaker, Mr. D. Upali De Soyza's speech was on 'Seaport and Logistics Sector Contribution towards Social and Human Capital Development in Sri Lanka'. The speaker initiated that national growth, security and Social and Human Capital Development Index (HCDI) are inter-related aspects. Social development is improving every individual in society. This involves Per capita income, mortality and life expectancy rates, and access to water and education. The Social Development Index (SDI) is high in countries like Norway and Sweden. However, in the South Asian context, Sri Lanka is in a better (71st place) compared to China, India and Bangladesh. Does the SDI indicate that we are civilized enough in society?

HCDI involves the globalizing, economic and professional potential of citizens in the country. The question is where we are in terms of knowledge, skills, experiences, views and attitudes as people of the country. We do not lack in competencies but in attitudes, in relation to soft skills. You cannot achieve

what you want in the corporate field without 'people skills', which is most what is essentially required in the field. Emotional intelligence, networking, inter-personal skills and communication skills, all go together with social development. 'The higher you go, the firm your feet need to be'- we need to be practical, without which you cannot make your contribution at corporate level. In terms of the HCDI, Sri Lanka is in the 74th place and this is something we can be happy about. In the policy framework 'Empowered Sri Lankans', we have 4 goals: raising per capita income, creating 1 billion jobs, increasing Foreign Direct Investments (FDIs) to 5 billion a year, and doubling exports to 20 billion. To achieve these goals, Sri Lanka needs to be socially and economically developed. So we need to have economic growth to invest in this sense. Sri Lanka is bound to face a lot of economic problems in future because of the impact on tourism due to COVID-19. An article today mentions that Sri Lanka has been selected as the second best attractive country to visit.

The Vision of the Sri Lanka Ports Authority (SLPA) corporate plan indicates to achieve the status of broad and maritime and logistics, while the Mission states the need to provide world-class facilities and logistics services for national, economic development. This is a challenge, especially in the present COVID-19 pandemic situation, and one needs to look at the capacity of infrastructure, modern data and ICT to achieve these goals, which are inter-related. It is possible to request gateways and Colombo International terminal to promote Colombo. In terms of handling volumes, the SLPA is in 23<sup>rd</sup> place by handling 7.2 million traders in 2019. This is quite a positive in terms of the country's development. The road to FDI is crucial and we need to start with a culture of respecting each other and improving our social development. All these would lead to HCD.



The SLPA has improved its quality and as a strategy is going to have public sector participants. In terms of FDI, we need to learn to work and tolerate others and other races when working. The improvements we have in technology contribute to the HCD. Sri Lanka is in a good position in terms of volume handled by ports and needs to have a good Performance Index. For this purpose, a post-COVID system with the assistance of Sri Lanka Customs has been initiated. For all this to be a reality Sri Lanka must have better HCD, and for this, more investment is needed. The trade arm of SLPA has co-operation with other institutions like Colombo International Nautical Engineering College (CINEC), where programmes are conducted to develop the knowledge, skills and practical aspects of employees. Practicality is very important. Even when students graduate from university and enter corporate sector, mere technical skills is insufficient. If Sri Lanka needs to achieve empowerment goals, its younger generation must have emotional intelligence, networking and team-work abilities, and communication and presentation skills. They need to be socially and mechanically intelligent at the same time.

Following the Q & A session, the Chairperson Prof. Sanath Dhammika, summed up essentials in each speaker's presentation. In addition, he mentioned the need for further research to find out if technology affects society or vice versa, and that it is a good research opportunity for young researchers in KDU. He further stated that Social Capital Development (SCD) in HRM is a part of

institutional development, and linking SCD research with development can contribute to the academic community or country at large. In terms of the role of Liberal Arts in the development of Human Capital, Chairperson stated that we need to have graduates who have the knowledge required, skills and attitudes. He stated that education should not be totally commercialized, and should be looked at broadly with a view to creating a 'total human'. In relation to the third speaker's presentation, the Chairperson reinstated the requirement for 'practical personnel' more than those knowledgeable in theory.

In conclusion, the Chairperson raised the issue whether Human and Social Capital lead to national growth and security or vice versa. However, he mentioned that Human and Social Capital do play a significant role in the social and economic growth of a country. Development and security can be perceived at three levels- individual, organizational and national. One needs to also think if 'security' and 'safety' are synonymous or not, and if each term is the construct of the other. 'Safety' is part of 'security', especially at individual and organizational level, whereas 'security' is more in relation to the national level. The relationship between the three levels needs to be studied for HCD and national growth. The Chairperson's final words were that one of the new things to be considered in terms of 'security' is the notion of privacy and other related dimensions i.e. psychological and social aspects, where there is minimal research especially in terms of 'psychological security'.



# **Technical Sessions**

Paper ID: 20

# **Examination of Job Satisfaction of Graduate Teachers in Secondary Schools**

WAMGPK Wanasinghe<sup>1#</sup> and WMS Wanasinghe<sup>2</sup>

<sup>1</sup>Pulathisipura National College of Education <sup>2</sup>Secondary & Tertiary Department, The Open University of Sri Lanka

#pkwanasinghe@gmail.com

Abstract: Teachers who play an important role in developing knowledge, attitudes and skills of youth can be considered as the pillars of nation in any country. The effect of teacher's job satisfaction is directly interrelated with the quality and productivity of the job and it is responsible for the organizational and emotional feelings of the teachers which leads to a worker-friendly atmosphere. objective of this study was to examine the job satisfaction of the graduate teachers working in the secondary schools in North Central Province. Seven hundred secondary school graduate teachers were taken from both Anuradhapura and Polonnaruwa districts as the sample of the research. While the random sampling method was used to select the sample, used a questionnaire as the tool to collect data. SPSS 21 version has been used to analyze the collected data. Applied One Way ANOVA to compare job satisfaction according to service experience period and the nature of first degree qualification. Research findings showed that the secondary school teachers satisfied slightly with student were relationship and their promotion but not satisfied on salary. There was a significant difference in job satisfaction between the service experience and the degree program they had followed: Education, Aesthetic, Art, Commerce, Science and Mathematics. Finally, it can be concluded that it is important to implement measures to increase the job satisfaction of the graduate teachers by the relevant authorities to reap the maximum harvest from the education as expect by the

government, educational administrators and principals.

**Keywords:** secondary school, graduate teachers, job satisfaction

#### Introduction

The teacher has a great responsibility to stabilize students' national goals and common skills. In order to carry out this procedure, they should have a sound knowledge in syllabus and the teaching and learning process. It is also mandatory to seek the support and the guidance of the relevant educational authorities. The teacher has a great responsibility to overcome this problem. Above all, the teacher needs physical and mental fitness. Rajkatoch (2012) states that if the teacher has a fair administration system, a study area, a promotion process, an evaluation process and a satisfactory salary, they will do their best. Morgan (1986) states that employees are the people who want to lead a healthy life and stay energetic. The teacher is that kind of employee. He wants to live an overall healthy life. He prefers to be energetic at his school. Therefore, it is important to know whether the teachers are satisfied with the schools.

The teacher is a valuable human resource. Nyamubi (2016) notes that the teacher is the heart of the classroom. It is true that the teacher is the backbone of the education system. A satisfied teacher can provide a high value education to the society. It can produce future leaders and a valuable generation. The teacher is the key to change in schools and



resources. Jothi and Sharma (2009) reveal that highly trained teachers can provide better education. Moreover, Bolin (2008) noted that quality learning and teaching procedures rely on high teaching behavior, subject-related knowledge, and expert teaching skills. Teacher satisfaction leads to a quality teaching and learning process.

The present system of education gives priority to the graduate teacher. The reason is that secondary education depends on the teaching of graduate teachers. Olulub (2008) notes that teachers play a major role in educating secondary students. Therefore, they should highly concerned about their job satisfaction. Witt (2007) suggests that workplace productivity and quality depend on such factors. Education providers and the Ministry of Education should be able to identify the gap between the satisfaction and dissatisfaction of professionals and take steps to make their workplace satisfactory. Sacco (2002) states that the quality of teaching and learning practices and teacher sustainability also influence the development of a satisfactory education system. This statement can be corroborated by Christodolidis and Papiano (2007). They say that the education system cannot be developed with dissatisfied teachers.

Teachers can avoid dissatisfaction and enhance their satisfaction with teaching. They can look for factors to improve their job satisfaction and it helps them to target their job satisfaction. This study may be useful for those interested in making suggestions to make the teaching profession satisfactory. Satisfaction and dissatisfaction depend on the workplace. Others, including Baderhorst (2008), say that if the teacher is not satisfied with their profession, it can lead to their absence, their aggressive behavior, and their resignation. This can lead to negative education. Pinder (2008) further states that teachers who are dissatisfied with their profession can expect only negative emotions, frustrations, anger, dissatisfaction, and unproductive outcomes.

Dissatisfaction affects the teacher, workplace, and the education system. The Principal who is the Education Manager and Administrative Officer of the school can eliminate dissatisfaction and create a satisfactory workplace. Satisfaction and effectiveness are influenced by a quality teaching and learning process. Job satisfaction directly affects teachers' physical and mental fitness. Peltzer (2009) and others in South African studies have shown that job stress, job dis- satisfaction and depression can be adversely affected by high blood pressure, gastrointestinal injury, asthma, and stress. Misuse of tobacco and alcohol can also be a side effect. Au & Ho (2006) reveals that teachers with low job satisfaction tend to suffer from anxiety, repentance, and stress, whereas teachers with high job satisfaction do not suffer from stress. The main objective of this study was to examine the job satisfaction of graduate teachers working in secondary schools in the North Central Province. The fallowing null hypotheses are examined for this study.

#### **Objectives**

The present study intends to achieve the following objectives:

To explore the job satisfaction of secondary school graduate teachers

To compare the level of job satisfaction of service experience of secondary school graduate teachers.

To compare the level of job satisfaction of the nature of first degree qualification of secondary school graduate teachers.

### **Null Hypotheses**

**Ho1:** There is no significant difference between the job satisfaction and service experience of secondary school graduate teachers.



**Ho2:** There is no significant difference between the job satisfaction level and the nature of first degree qualification of secondary school graduate teachers.

#### Methodology

The study used survey research design. This study involved in the population of teachers in Sri Lanka. The target population was teachers in two districts namely Anuradhapura and Polonnaruwa in the North Central Sri Lanka. A total of 700 teachers including 450 from Anuradhapura District, 250 from Polonnaruwa district selected for this study. Table 1 shows the number of graduate teachers who joined the repository depending on the length of service and the nature of the first degree. According to table 1, the service experience period was divided into four sections and seven graduates were involved depending on the nature of the degree.

Table 1 The scattering nature of the graduate teachers involved in the sample

Variable		Number	Percentage	
po	1 - 10	300	42.9%	
Service Period	11 - 20	343	49.0%	
rvice	21 - 30	49	7.0%	
Š	More than 31	8	1.1%	

	B.A.	377	53.9%
e e	B. Ed.	47	6.7%
Nature of first degree	B.A. (Aesthetic)	68	9.7%
e of f	B.Com.	73	10.4%
Natu	B.Sc. (Science)	95	13.6%
	B.Sc. (Maths)	40	5.7%

Researcher designed a survey questionnaire to collect data from graduate teachers. The quantitative data from the questionnaire survey was analyzed using through software 'Statistical Package for Social Sciences' (SPSS) version-21. One Way ANOVA was applied for the examination of job satisfaction level of service experience and nature of first degree Qualification.

#### Results

**Ho1:** There is no significant difference between the job satisfaction level and service experience of secondary school graduate teachers.

Result of ANOVA that was implemented with the purpose of testing whether there are meaningful impact of service experience on job satisfaction are given in table 2

Table 2 The ANOVA results by service experience

Variables	Source of Variables	Sum of Squares	df	Mean Square	F	Sig.
Salary	Between Groups	13.321	3	4.440	25.038	.000*
	Within Groups	123.436	696	.177		
	Total	136.758	699			ı
Leave	Between Groups	2.599	3	.866	8.018	.000*
	Within Groups	75.199	696	.108		
	Total	77.797	699			
Seminar	Between Groups	1.999	3	.666	4.635	.003*
	Within Groups	100.030	696	.144		
	Total	102.029	699			
Promotion	Between Groups	2.200	3	.733	4.050	.007*



	Within Groups	126.059	696	.181		
	Total	128.259	699			
	Between Groups	8.551	3	2.850	9.356	.000*
Principal Leadership	Within Groups	212.046	696	.305		
	Total	220.597	699			
	Between Groups	.473	3	.158	1.517	.209
Internal Supervision	Within Groups	72.421	696	.104		
	Total	72.894	699			
	Between Groups	.929	3	.310	2.114	.097
External Supervision	Within Groups	101.921	696	.146		
	Total	102.849	699			
	Between Groups	2.417	3	.806	4.879	.002*
Parents Inter. Rel.	Within Groups	114.916	696	.165		
	Total	117.333	699			
	Between Groups	2.193	3	.731	4.408	.004*
Student Inter. Rel.	Within Groups	115.402	696	.166		
	Total	117.594	699			
	Between Groups	1.183	3	.394	1.112	.344
Staff Inter. Rel.	Within Groups	246.915	696	.355		
	Total	248.099	699			
	Between Groups	.289	3	.096	2.674	.046*
Totally Satisfaction	Within Groups	25.074	696	.036		
	Total	25.363	699			

Note. \*p < .05

According to table 2, there is a significant difference between the job satisfaction level and service experience of secondary school graduate teachers. Hence, the null hypothesis, "There is no significant difference of job satisfaction between the job satisfaction level and service experience of secondary school graduate teachers" is rejected and alternate hypothesis accepted. As well as there is a meaningful difference between averages in terms of Salary, Leave, Seminar, Promotion, Principal Leadership, Parents Interpersonal relationship and Student Interpersonal relationship variables. But there is no difference between averages in terms of Internal Supervision, External Supervision and Staff Interpersonal relationship variables.

**Ho2:** There is no significant difference between the job satisfaction level and nature of first degree qualification of secondary school graduate teachers.

Result of ANOVA that was implemented with the purpose of testing to find whether there are meaningful impacts of Nature of first degree Qualification on job satisfaction are given in table 3.



Table 3 The ANOVA results by Nature of first degree Qualification

Variables	Source of Variables	Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	9.701	5	1.940	10.597	.000*
Salary	Within Groups	127.057	694	.183		
	Total	136.758	699			
	Between Groups	13.484	5	2.697	29.100	.000*
Leave	Within Groups	64.314	694	.093		
	Total	77.797	699			
	Between Groups	2.711	5	.542	3.789	.002*
Seminar	Within Groups	99.318	694	.143		
	Total	102.029	699			
	Between Groups	15.862	5	3.172	19.589	.000*
Promotion	Within Groups	112.397	694	.162		
	Total	128.259	699			
	Between Groups	16.074	5	3.215	10.909	.000*
Principal Leadership	Within Groups	204.523	694	.295		
	Total	220.597	699			
	Between Groups	11.050	5	2.210	24.799	.000*
Internal Supervision	Within Groups	61.845	694	.089		
	Total	72.894	699			
	Between Groups	13.045	5	2.609	20.162	.000*
External Supervision	Within Groups	89.804	694	.129		
	Total	102.849	699			
	Between Groups	15.242	5	3.048	20.722	.000*
Parents Inter. Rel.	Within Groups	102.091	694	.147		
	Total	117.333	699			
Student Inter. Rel.	Between Groups	35.221	5	7.044	59.349	.000*
Student Inter. Kel.	Within Groups	82.373	694	.119		



	Total	117.594	699			
	Between Groups	28.234	5	5.647	17.824	.000*
Staff Inter. Rel.	Within Groups	219.864	694	.317		
	Total	248.099	699			
	Between Groups	4.009	5	.802	26.057	.000*
Totally Satisfaction	Within Groups	21.354	694	.031		
	Total	25.363	699			

Note. \*p < .05

According to table 2, there is a difference between the job satisfaction level and nature of first degree qualification of secondary school graduate teachers. Hence, the null hypothesis, "There is no significant difference of job satisfaction between the job satisfaction level and nature of first degree qualification of secondary school graduate teachers" is rejected and alternate hypothesis is accepted. As well as there is a meaningful difference between averages in terms of Salary, Leave, Seminar, Promotion, Principal Leadership, Internal Supervision, External Supervision, Parents Interpersonal relationship, Student relationship Interpersonal Staff Interpersonal relationship variables.

#### Discussion

Service experience has impact on job satisfaction of secondary school graduate teachers. It means that job satisfaction of graduate teachers did increase or decrease with the service experience. Confirming these findings, Mertler (2002), who studied the job satisfaction of middle- and high-school teachers in the United States, pointed out that job satisfaction was lower in mid-service than in early hired teachers. Crossman and Harris (2006), who conducted a study of secondary school teachers' job satisfaction in United Kingdom, further confirmed that there is a relationship between work experience and job satisfaction. But a study of teacher job satisfaction in South Carolina, USA, by Tillman

and Tillman (2008) showed that there was no correlation between work experience and job satisfaction. The same idea was confirmed by a Nigerian study by Akiri and Ogborugbo (2009). As well as there is meaningful difference between averages in terms of Salary, Leave, Seminar, Promotion, Principal Parents Leadership, Interpersonal relationship and Student Interpersonal relationship variables. It means that graduate teachers work with different job satisfaction levels with their service experience between averages in terms of Salary, Leave, Seminar, Promotion, Principal Leadership, Parents Interpersonal relationship and Student Interpersonal relationship variables. However there is no difference between averages of Internal Supervision, External Supervision and Staff Interpersonal relationship variables.

Nature of first degree qualification has impact on job satisfaction of secondary school of teachers. It means that job satisfaction of graduate teachers did increase or decrease with the nature of first degree qualification. These results also verify the study conducted by Turner (2007) who did a research on urban middle school teachers in state of Carolina, United States, It verifies the results of Badenhorst et al. (2008) research study on the job satisfaction of Urban Secondary school teachers in Namibia. Ting (1997) and Panditharathne (2013) concluded that the level of education of teachers does not affect



job satisfaction. But their study by Akiri and Ogborugbo (2009) found that there was a negative relationship between education level and job satisfaction. But Akhtar and Ali (2009) stated that job satisfaction is proportional to the level of education. As well as there is a meaningful difference between averages in terms of Salary, Leave, Seminar, Promotion, Principal Leadership, Internal Supervision, External Supervision, Parents Interpersonal relationship, Student Interpersonal relationship Staff Interpersonal and relationship variables. It means that graduate teachers working with their qualification of nature of first degree did show any significant difference in their job satisfaction.

#### Conclusion

This study was conducted to examine and compare variables of job satisfaction in secondary school graduate teachers in North Central Province. The findings of this research show that there is a difference between the job satisfaction level of service experience and the nature of first degree qualification of secondary school graduate teachers. When considering each variable, there is a meaningful difference between averages in terms of Salary, Leave, Seminar, Promotion, Principal Leadership, Parents Interpersonal relationship and Student Interpersonal relationship variables on service experience. As well as there is a meaningful difference between averages in terms of Salary, Leave, Seminar, Promotion, Principal Leadership, Internal Supervision, External Supervision, Parents Interpersonal relationship, Student Interpersonal relationship and Staff Interpersonal relationship variables on the nature of first degree qualification. But there is no difference between averages in terms of Internal Supervision, External Supervision and Staff Interpersonal relationship variables on service experience.

To continue the teaching learning process in a better way the school practices on teachers' job satisfaction should be improved. Job satisfaction of teachers can raise the quality of education and raise the socio - economic, political and educational quality of Sri Lanka. Therefore the following recommendations are forwarded to school principals, education officers and to the government government.

- The government should provide a sufficient salary to retain the graduates who enter the teaching profession.
- Educational administrators should make teacher promotions on time.
- Teacher trainee programs should be organized and implemented in a productive manner.
- Programs should be implemented to improve the parents and staff interpersonal relationship with the principal.

#### References

Akhtar, Z. & Ali, N. (2009). Job status, gender and level of education as determinants of job satisfaction of senior secondary school teachers. Indian Journal of Social Science Researches, 6(1):56-59.

Akiri, AA. & Ogborugbo, NM. (2009). Analytic examination of teachers' career satisfaction in public secondary schools. Studies on Home and Community Science, 3(1):51-55.

Au, WT. & Ho, CL. (2006). Teaching satisfaction scale: measuring job satisfaction of teachers. Educational and Psychological Measurement, 66(1):172-185.

Badenhorst, G., George, E. & Louw, D. (2008). Job satisfaction among urban secondary school teachers in Namibia. South African Journal of Education, 28:135-154.

Bolin, F. (2007). A study of teacher job satisfaction and factors that influence it. Chinese Educational Society, 40(5):47-64.

Christodoulidis, T. & Papaioannou, A. (2007). A measure of teachers' achievement goals. Educational Psychology, 27(3):349-361.



Crossman, A. and Harris, P. (2006) Job Satisfaction of Secondary School Teachers. Educational Management Administration and Leadership, 34, 29-46.

Jyoti, J. & Sharma, RD. (2006). Job satisfaction among school teachers. IIMB Management Review, 18(4):349-363.

Mertler, CA. (2002). Job satisfaction and perception of motivation among middle and high school teachers. American Secondary Education, 31(1):43-53.

Morgan, M. (1986). Images of Organization. California: Sage Publications.

Nyamubi, G.J. (2016), Determinants of Secondary School Teachers' Job Satisfaction in Tanzania, Hindawi Education Research International.

Olulube, N.P. (2006) Teacher Job Satisfaction and Motivation for School Effectiveness: An Assessment, Article in Essays in Education from.

https://www.researchgate.net/publication/2 29824348

Panditharathna, D.A.P. (2013), An Investigative Study on the Factors Affecting the Job Satisfaction of Secondary School Teachers in the Kandy District, Unpublished Master of Philosophy (Education) Thesis, Peradeniya: University of Peradeniya.

Peltzer, K., Shisana, O., Van Wyk., B., Zuma, K. & Zungu-Dirwayi, N. (2009). Job stress, job satisfaction and stress-related illnesses among

South African educators. Stress and Health, 25:247-257.

Pinder, CC. 2008. Work motivation in organizational behavior. (2nd ed.). New York: Psychology Press.

Rajkotach, O.M. (2012), Job satisfaction among college teachers: A study on Government Colleges in Jammu (J&K) Asian Journal of Research in Social Science & Humanities, Vil. 2, issue. 4,pp. 164-180.

Seco, GMS. (2002). Teacher satisfaction: some practical implications for teacher professional development models. Paper presented at the European Conference on Educational Research, University of Lisbon, Portugal.

Tillman, WR. & Tillman, CJ. (2008). And you thought it was the apple: a study of job satisfaction among teachers. Academy of Educational Leadership Journal, 12(3):1-19.

Ting, Y. (1997). Determinants of job satisfaction of federal government employees. Public Personnel Management, 26(3):313-334.

Turner, HC. (2007). Predictors of teachers' job satisfaction in urban middle schools. Doctoral dissertation. North Carolina, USA: University of North Carolina.

Witte, D. H. (2007). Testing Karasek"s learning and strain hypotheses on young workers in their job. Works & Stress. 21 (2): 131 – 141. from.

http://dox.doi.org/10.1080/0267837070140 5866

Paper ID 34

### The Resolution 30/1: National Priorities and Implementation Challenges Towards Sri Lanka

LG Dilini Tharika Siriwardana#

Master's Candidate, Master of Arts in International Relations, University of Colombo

#tharo.dilini@gmail.com

**Abstract:** After 30-year of war, the UNHRC advised Sri Lanka to adopt the resolution 30/1 2015 promote reconciliation, accountability and protect human rights. Sri Lanka co-sponsored it and implemented domestic mechanisms and national policies for achieving performance. The researcher identified full implementation of resolution is hindered by internal content and priorities national interest, as research problem. Identifying the challenges of implementing and recognized outcomes of resolution 30/1 is objective of the research. The research was done using the research onion model and Interpretivism philosophy and deductive method for building arguments. The research was conducted with two strategies, case study and other as archival research and mono method qualitative data for building arguments. Used Neo-Realism, Transitional Justice, Restorative Justice, Reconciliation and Human Rights for creating theoretical framework. However, some recommendations were fully or partially implemented without future directions, the progress under the resolution 30/1 showed absence of effective solutions for victims and witness protection and lack of confidence building measures among pluralist communities. Effectiveness of Sri Lankan reconciliation process was questioned after the Easter Sunday attack. On that fact created new cycles of violence and ethnic polarization. And government's absence in implementing credible solution for human rights violation in war and post-war contexts. Silent grievances of victims remained unresolved within society and without a focus victim-centric approach. implementation incompetent to address root

causes of the ethnic conflict with no clarity for dealing with the past or avoid cultural impunity. Deep seated anger remains among victims, offenders and community, as the government favoured domestic interest than international interferences.

**Keywords**: Neo-Realism, Transitional Justice, Reconciliation

#### Introduction

The Sri Lankan civil war ended in 2009 with a unilateral war victory. After that Sri Lanka struggled on establishing possible post war reconciliation process according to the domestic legislation arena. According to the Sri Lankan context reconciliation processes, goals, concepts and policies, institutional mechanisms are created by government's own national perspective. But continuously United Nations (UN) put their pressure toward Sri Lanka to establish impartial investigation in investigating final stage of war related crimes. In 2010, the Rajapaksa regime appointed the Lessons Learnt and Reconciliation Commission (LLRC) as a domestic mechanism for investigating these issues. Based on these UNHRC documents adopted resolutions against Sri Lanka as resolutions 11/1in 2009, 19/2 in 2012, 22/1 in 2013 and 25/1 in 2014 considering to promote reconciliation and accountability in Sri Lanka. These resolutions continuously highlighted implementing the constructive recommendations suggested by LLRC. Therefore, the international parties recognized there were gaps between the international norms and practice in the domestic implementation of transitional justice process. Nonetheless, the Rajapaksa regime avoided



international pressure and criticized it as external interference to Sri Lankan reconciliation process. In 2015, UNHRC published the report of the Office of the High Commissioner for Human Rights (OHCHR) investigation on Sri Lanka (Office of the High Commissioner for Human Rights (OHCHR) Investigation on Sri Lanka (OISL Report)) which was a human rights investigation report of Sri Lanka. However, investigators had no access to Sri Lanka as the Sri Lankan government rejected the investigation and upcoming special rapporteurs in coming to Sri Lanka.

But in 2015 with the change in regime motives were created to implement international mechanisms toward transitional justice. The 2015 presidential election results clearly showed community needs for a political solution in addressing grievances. Based on the OISL report the UNHRC adopted another resolution named as 30/1 to promote reconciliation, accountability and human rights in Sri Lanka in 2015. The new good governance government already co-sponsored resolution 30/1 and its turning point to implement transitional justice process according to the international norms; its timebound implementation process with the engagement of national and international disciplines comprehensive toward reconciliation.

Resolution 30/1 included commitments under some thematic areas, Such as, transitional justice and reconciliation, rights and rules of law, security and demilitarization, power sharing and international engagement (Verite Research, 2019, p.1). Through that UNHRC expected to implement international level best practises for reconciliation and accountability. The government implemented comprehensive transitional justice action plan according to resolution 30/1 implementations, this included establishment of accountability mechanisms, truth-seeking, reparation programmes and institutional reforms (Human Rights Council, 2017, p.3). Other than that, the government

established several ad-hoc multi-layered institutional bodies such as Secretariat for Coordinating Reconciliation Mechanisms (SCRM), The Office for National Unity and Reconciliation (ONUR), The Ministry of Integration and Reconciliation National Heterogeneous Multiplicities Reform Transitional Justice and Reconciliation in Sri Lanka. One of the most credible blooming in national consultation on reconciliation was established through the Consultation Task Force (CTF). 11 members from the civil society were appointed by the Prime Minister to the CTF in January 2016 (CTF Report, 2016, p.1). For this national initiative with a holistic approach, CTF consulted national level respective key sectors such as military, families of the disappeared, religious, women's groups, professional, media organizations and others. CTF coordinated the consultation through civil society, public meetings, and written submissions and focused on group discussion, not limited to email and post. In addition, Sri Lanka welcomed international rapporteurs to Sri Lanka in investigating specific areas as steps. These high profile visits provided recommendations used to improve national reconciliation initiatives and Sri Lanka tried to adopt these international standards. This was the first time international rapporteurs were allowed to visit Sri Lanka.

Resolution 30/1 expected to create centreperiphery relations and involvement of all people, community, public and private sector and government. Therefore, after several attempts the government implemented Office of Missing Persons (OMP) under the Office on Missing Persons Act No. 14 of 2016 and established Office of Reparations according to the Act of Office of Reparations No. 34 of 2018 as mechanisms for reconciliation (Verite Research, 2019, p.5). Otherwise, through resolution UNHRC expected to create political solution for victims in achieving lasting peace. Therefore, as a legislative implementation the government signed and ratified International Convention of the protection of



all persons from Enforced Disappearances in 2016, enacted Enforced Disappearance Act. No.5 of 2018 and criminalized enforced disappearances according to international standards. (Verite Reseach, 2019, p.7). Otherwise, Sri Lanka issued Certificate of Absence for registration of deaths. It created more demands from families of those that disappeared. These thematic areas and implementations directly deal with human rights, accountability and reconciliation in Sri Lanka. Government of Sri Lanka implemented its commitment according to their national legislations. Some progress is completed mentioned above, however, some are partially completed and most commitments were never implemented. Resolution 30/1 specifically highlighted repeal Prevention of Terrorism Act. Therefore, government proposed Counter-Terrorism Bill for replacing the Prevention of Terrorism Act. But the bill was totally challenged in the Supreme Court, as the Supreme Court recognized that this bill was completely inconsistent with the Constitution (Verite Research, 2019, p.5). The resolution 30/1 highlighted political solution for Sri Lankan conflict such as, taking necessary Constitutional reform for political settlement and implementing the 13th amendment to the Constitution (Human Rights Council, 2015, p.5). Through this the UNHRC expected to divide power among provincial council and operate it effectively. Therefore, government tried to implement a new Constitution in Sri Lanka to avoid these legislative barriers. As an extension of it the government enacted the Provincial Council Elections (Amendment) Act No. 17 in 2017 (Verite Research, 2019, p.7). It already introduced changes of election system in Provincial Council. Otherwise established Provincial Council Delimitation Committee according to Act investigation about it power of Provincial Council. In 2018, the committee handed over their report to the Parliament. However, the Parliament rejected this report and recommendation. Parliament speaker Karu Jayasuriya appointed committee for reviewed that Delimitation Committee's

Report but implementations are not effectively implemented because of poor progress in 2018 (Verite Research, 2019, p.7). Therefore, government was unable to implement political solution for ethnic conflict in Sri Lanka to address deep roots in the real question.

#### Research Problem

Researcher identified full implementation of resolution 30/1 is hindered by internal content and priorities of national interest as problem statement.

#### Research Objective

Identify the challenges of implementing and recognized strategic outcomes of resolution 30/1 in context of Sri Lanka.

#### Methodology

The research was designed according to the Research Onion Model. This study used Interpretivism research philosophy articulate data analyses and logically used deductive research method for building arguments for approaching a research problem. As strategies of research, the researcher implemented two strategies as case study and archival research, in addition to, research time horizon based on cross-sectional approach. The researcher mainly utilizes primary and secondary source of data with mono method qualitative approach as research method.

Researcher mainly focused on the theory of Neo-Realism to create theoretical framework and the concepts of Transitional Justice, Reconciliation, Restorative Justice and Human Rights to create conceptual framework.

#### Results

I am disappointed to learn that on the eve of the interactive dialogue on the Office of the United Nations High Commissioner for Human Rights' Report on Sri Lanka in the UN Human Right Council, the government of Sri Lanka is resorting to yet another delaying tactic to



escape... implementation of Resolution 30/1. – Navi Pillay- (Tamil Guardian, 2019).

Bloomfield (2006) emphasized reconciliation process as a long-term, deep and broad process (Bloomfield, 2006, p.7-8). The process of reconciliation cannot be implemented within a single day. It had to gradually increase. Sri Lanka achieved both negative peace and no war situation. But it does not mean that they achieved lasting positive peace. Because the government wanted to address hidden social grievances toward achieving durable peace. Therefore, Sri Lanka wanted to re-establish advance political, social, economic, cultural and physiological developments in war-affected pluralist society. UNHRC adopted several resolutions against Sri Lanka since 2009. But Sri Lanka as an independent sovereign state, recognized that commitments as unnecessary interference toward Sri Lanka. Therefore, Rajapaksa regime rejected it and implemented a domestic mechanism towards reconciliation. However, any state action or behaviour can be criticized under the state interest for their survival as a main actor in the world arena. This situation can be identified as a key point which justifies actions by reasoning from state.

Under that pre-circumstance UNHRC implemented resolution 30/1 toward Sri Lanka and the government under Maithripala Sirisena co-sponsored to it to create a more effective reconciliation process. But the question which was raised was that the government failed to fulfil their promises. Since most of the commitments made by the government was still unachieved, partially noprogress or poor progress. The resolution 30/1 created international norms through victimcentric approach toward war affected society. Sri Lanka implemented domestic progress aspects of resolution 30/1. But when it applied to the Sri Lankan context several conceptual, systematic and practical barriers occurred within the progress. Resolution 30/1 and CTF mainly considered establishing report institutional arrangements which included OMP, Office of Reparations, Commission for Truth, Justice, Reconciliation, Non-Recurrence and special judicial mechanism with participation of foreign judges. Nevertheless, the government was unable to establish these mechanisms effectively as they mentioned.

The OMP was established in 2018 with several commitments. But there were logistical issues raised as disappeared person's families still awaited a positive solution (Human Rights Watch, 2019). Therefore, it was lack of credible progress. Office of Reparations Act was enacted and Prime Minister appointed five members for it. But after that, no further progress was made relating to the Office of Reparations. Other than that, former Prime Minister submitted a cabinet memorandum for establishing a Commission for Truth, Justice, Reconciliation and Non-Recurrence. However, cabinet did not approve this proposal (Verite Research, 2019, p.3). Else, there was no further progress in establishing the judicial mechanism with foreign judges for investigating serious violations under International Humanitarian Law (IHL) and International Human Rights Law (IHRL). Several arguments were escalated against these recommendations. The Sri Lankan Bar Association President opposed to the adopting of foreign judges and recognized it was an insult to the judiciary when government invited foreign judges (Groundviews, 2017). But South Asian Centre for Legal Studies Niran Ankell focused on some constitutional approach towards using foreign judges, since the constitution specifically mentioned not to requested judge's nationality to be a judge in Sri Lanka and only required is for an oath (Groudviews, 2017). But when Sri Lanka has possibility to implement a hybrid court it can be recognized as a confidencebuilding measurement among people, because victims will feel an independent judicial procedure within it. But in 2016, former Sri Lankan President Maithripala Sirisena, in a BBC interview highlighted that Sri Lanka did not want foreign judges to investigate into allegations of war crimes. Furthermore, highlighted it as follows,



I will never agree to international involvement in this matter... we have more than enough specialists, experts and knowledgeable people in our country to solve our internal issues... This investigation should be internal and indigenous, without violating the law of the country and I believe in the judicial system and other relevant authorities in this regard. The international community need not worry about matters of state interest... we will certainly reach our target but it's a process (Ameen, 2016).

According to Neo-Realist perspective, above statement highlighted that specific point such as "state interest". Therefore, avoiding international involvement and pressures on Sri Lanka recognized state interests for their domestic implementation. International organization can implement several rules and regulation according to their specific mandate. But under the anarchical situation of the world arena the state has authority or ability to accept these mandates or not, as the state will always act according to their national interest.

Otherwise, one of main issue was people had lack of understanding of reconciliation. When the CTF called inquiries from zonal areas people did not have a sense of what CTF was doing (Haniffa, 2018, p.5). Therefore, ethnic based community felt that reconciliation had a biased progress towards ethnicity. Therefore, people did not have better faith and understanding of reconciliation in Sri Lanka. The government failed in progress toward addressing these issues, as within the weak political situation the government showed lack of commitments to the implementation of reconciliation with accountability.

Other than that, government's progress towards rights and rules of law for reconciliation is unwilling to address the root causes of the social polarization. Because Sri Lanka signed and ratified The Convention on Enforced Disappearances and enacted Enforced Disappearance Act No. 5 of 2018 and criminalized enforced disappearance (Verite

Research, 2019, p.4). But this ratification was ineffective by not accepting the individual complaint procedures (Nain, 2018). It already banned individual victims to file complaints to the committee. Otherwise, Report of UN High Commissioner continuously highlighted in 2017 and 2018 investigation of attacks on journalist, human rights defenders, religious minority, civil society and serious human rights violation of IHL and IHRL under the emblematic cases.

The government inquired about these human rights violations, minority related violent cases and those with lack of effective progress. Other domestic mechanism than that reconciliation LLRC report also highlighted that the development of a vision of a shared future requires the involvement of the whole society (Human Rights Council, 2015, p.7). Therefore, government suffered from unwillingness to address culture of impunity for these serious human rights and IHL. Those situations created lack of trust among minorities and less commitment on building confidence building measures by government.

The Report of High Commissioner emphasized that the trust of victims and society can only be built by addressing their grievances with respect to victim protection, militarization, land occupation and security legislation (Human Rights Council, 2017, p.8). Therefore, government adopted Victims and Witness Authority to protect rights of victims and witness but it is not fully functional effectively.

Furthermore, still there were occupied lands by military. According to the SCRM statistics 46,320 acres of state land and 5831 acres of private land are released. As at 31 December 2018, 30,187 acres (25, 946 state land and 4241 private land) were still occupied by the military (SCRM, 2019, as cited in Verite Research, 2019, p.6).

The, government has failed to form strong confidence building measures regarding these lands. Failure of demilitarization of land directly affects resettlement of internally



displaced persons. It's continuously growing mistrust among people and feel mind of militarization. Therefore, government has yet again failed to address grievances of war affected people.

There was political solution for grievances of Tamil community by resolution 30/1 and CTF recommended to fully implement the 13th amendment to the constitution and constitutional reform. Former Prime Minister Ranil Wickramasinghe appointed a committee for drafting a new constitution, but it failed without any progress. Government implemented Provincial Council Elections (Amendment) Act No.17 of 2017 for a changed election system and appointed Provincial Councils Election Committee for investigating it. But upon handing over the report to the parliament it was rejected. However, end of the 2019 six Provincial Council's elections were spoiled and expired their term period (Verite Research, 2019, p.7).

Therefore, according to all these failures in the reconciliation process in Sri Lanka it can be recognized that the former government was unable to implement strong institutional toward achieving process successful reconciliation. There were contradictions between emphasized points to international community and local implementations. Therefore, the government's domestic implementations process had not achieved into an expected level. They cosponsored to the resolution and continuously participated in UNHRC meetings. But unable to create a credible transitional justice process relative to the pluralist society.

The Easter Attack created polarization of Sri Lanka according to religion and ethnicity. The previous government failed to prevent the attack when they already received the information about the attack. Therefore, people lost their faith in the previous government about their safety and national security. According to this dilemma a deep sense of insecurity occurred among citizens with

doubts on good governance democratic values. This situation was similar to the aftermath of the 9/11 attack in America. Because the situation created deep insecurities among the majority ethnic communities about democracy values and emerged new tension among ethnic communities in multi-ethnic societies (Uyangoda, 2019).

Therefore, Gotabaya Rajapaksa launched his election manifesto based on national security platform. The Majority Sinhalese impressed on the idea of national security and replaced the government with a strong leader who has the capacity of protecting citizens (Uyangoda, 2019). According to the Neo-Realist perspective national security is a prime national interest than other objectives. Under those circumstances in November 2019 another regime change happened with the elected new seventh President Gotabaya Rajapaksa who was the former Defence Secretary, who played a leading role in the civil war in 2009. However, the election results clearly highlighted ethnic division between majority Sinhalese and Tamil minority in the country.

Under that circumstance resolution 30/1 implementation toward reconciliation and its progress was questioned, as the newly appointed government speak against implementation of resolution 30/1, 34/1 and 40/1 in several times. Otherwise, they questioned constitutional reformed adopted by former government.

According to all these criticisms the government decided withdraw to sponsorship to the resolution 30/1, 34/1 and 40/1 and recognized it as against the Sri Lankan constitution which is the supreme law of the country and sovereignty and dignity of Sri Lanka. Therefore, Minister of Foreign Affairs Dinesh Gunawardena formally informed government decision at the council.

Minister of Foreign Affairs Dinesh Gunawardena highlighted in his interview with The Sunday Morning that previous



government's method of implementation was opposed to Sri Lankan context. He further argued that, any government cannot be impeached any provisions of the Constitution or cannot be acted undemocratically. Other than to that, democratically elected parliament has no right to sought on going against own country on false, baseless figures on hearsay figures. Therefore Resolution has no validity. It was overwhelming view of people of Sri Lanka and the Parliament (Gunsekara, 2020).

On the other hand, there were possible action which can be taken by the government for any parliament referencing or Cabinet approval toward bind of resolution 30/1 and former President also expressed that he was not consulted on the adopted resolution 30/1. Therefore, as dualism followed country Sri Lanka have legitimate rights on withdrawing the resolution 30/1 which was not properly implemented. However, current resolution's expiration in March 2021. That session will more important on deciding Sri Lanka's future affairs. Because some contested can be occurred towards Sri Lanka. But, the America withdrew their membership from UNHRC as the partner who proposed the adopted resolution against Sri Lanka. Therefore, there were another question of legitimacy to continue resolution within Sri Lanka with their action against Sri Lankan Army Commander.

According to all these current situations still there were no any further investigation or readopted resolution toward Sri Lanka from UNHRC and domestic implementation toward continued transitional justice process in Sri Lanka. But Dinesh Gunawardena delivered his speech on implantation of future domestic mechanism for transitional justice in Sri Lanka with the reference of LLRC, Paranagama and Ugalagama commission reports and other domestic reports (Colombo Telegraph, 2020). In addition, Sri Lanka already mentioned that government continuously engaged with the international community as independent national state.

#### **Discussion and Conclusion**

However, all these data foundations and analysis point out what the researcher found conversely, that the full implementation of resolution 30/1 is hindered by internal content. Some recommendations completed but without future direction, some recommendation was partially implemented and totally not implemented. Therefore, the progress under the resolution 30/1 lacks an effective solution for victims and witness protection and also adds to the lack of confidence in building measures among pluralist communities in Sri Lanka. After the Easter Sunday Attack, a question arose on the effectiveness of Sri Lankan reconciliation process. It caused rebuilding new cycles of violence and ethnic polarization. Therefore the government unsuccessful on implemented credible solutions for human rights violation in war and post-war context in Sri Lanka.

According to all this observations, researcher found that international organizations can adopt any mandate or recommendations toward country. But under the anarchical situation still state is able to protect their national security and consider it as their prime national interest. As dualist country in the time period from 2009 to 2020 under the three regime in Sri Lanka specifically showed achieved domestic interest than fulfilled international norms. When resolution government unable 30/1 adopted, implement it according to the international and recommendation. Because government favoured to domestic interest than the international interferences.

Reconciliation is a process of achieving a goal of lasting peace. Therefore, author's recommendations towards improvements of transitional justice process in Sri Lanka as follows, 1. The idea of reconciliation must reach every community without considering borders of religion, ethnic or other marginalization, 2. Apply psychological and practical reconciliation procedures and break re-



emerged cycle of violence through including theoretical knowledge for school syllabus as a long-step, 3. Create strong path for confidence building measures among victims and witness. 4. Reconciliation proses have to be equal to all citizens. No racism or ethnicity should be considered. 5. Establish the rule of law and make investigation against the violation of IHL and IHRL from both sides and punish responsible persons without any political interferences 6. Sri Lanka must have adopted new progress toward reconciliation with the reference to the domestic reports such as CTF Report, LLRC, Paralagama Report and etc.

#### Acknowledgement

I would like to express my deepest and sincere gratitude to my research supervisor, Dr. Maneesha S. Wanasinghe-Pasqual, Head, Department of International Relations, University of Colombo for providing me invaluable guidance throughout this research.

I wish to show my gratitude to my worked place Secretariat for Coordinating Reconciliation Mechanism's Head of the Establishment and other staff.

#### References

Ameen, A. (2016). Sri Lanka president wants 'internal' war crimes court, *BBC News*, [online]. Available at: https://www.bbc.com/news/world-asia-35376719 [Accessed: 2019, October 20].

Bloomfield, D. (2006). *On Good Terms: Clarifying Reconciliation*. [ebook] Berlin: Berghof Research Center for Constructive Conflict Management. Available at: https://www.berghof-

foundation.org/fileadmin/redaktion/Publications/Papers/Reports/br14e.pdf

Consultation Task Force on Reconciliation Mechanisms. (2016). Report of the Consultation Task Force on Reconciliation Mechanisms Executive Summary and Recommendations. Colombo, Sri Lanka: Government of Sri Lanka.

Colombo Telegraph. (2020). Foreign Minister Dinesh Gunawardena's Speech at UNHRC – Full Text. *Colombo Telegraph*, [online]. Available at: https://www.colombotelegraph.com/index.ph p/foreign-minister-dinesh-gunawardenasspeech-at-unhrc-full-text/ [Accessed: 2020 March 10]

Groundviews. (2017). A Question of Political Will: Unpacking de Silva's Comments on Foreign Judges. [online] Available at: https://groundviews.org/2017/04/01/a-question-of-political-will-unpacking-de-silvas-comments-on-foreign-judges/ [Accessed:15 October 2019]

Gunasekara, S. (2020). Govt. committed to work with UN and its agencies: Dinesh Gunawardena. *The Sunday Morning*, [online]. Available at: http://www.themorning.lk/interview2-3/[Accessed: 2020, March 20]

Haniffa, F. (2018). Reconciliation, Accountability and International Human Rights in Sri Lanka. [online] Colombo: Lakshman Kadirgamar Institute. Available at: https://www.lki.lk/publication/reconciliation-accountability-and-international-human-rights-in-sri-lanka/

Human Rights Watch. (2019). *Sri Lanka: Need for time-bound plan for implementation of commitments to the Human Rights Council.*[online] Retrieved from: https://www.hrw.org/news/2019/02/25/srilanka-need-time-bound-plan-implementation-commitments-human-rights-council

Nain, Y. (2018). Transitional Justice in Sri Lanka: From Denial to Delay. *The Diplomat,* Available at: https://thediplomat.com/2018/03/transition al-justice-in-sri-lanka-from-denial-to-delay/

Tamil Guardian. (2019). Sri Lankan government reiterates no foreign judges for war crimes inquiry. *Tamil Guardian*, [online] Retrieved from: https://www.tamilguardian.com/content/sri-



lankan-government-reiterates-no-foreignjudges-war-crimes-inquiry

Uyangoda, J. (2019). *Sri Lanka's Presidential Election: Healing the Wounds is the New Task.*[online] Available at: https://groundviews.org/2019/11/19/srilankas-presidential-election-healing-thewounds-is-the-new-task/

United Nations Human Rights Council. 2015. *Resolution 30/1: Promoting reconciliation, accountability and human rights in Sri Lanka* (14 October 2015). [online]. A/HRC/RES/30/1. [09 August 2019]. Available at: https://www.mfa.gov.lk/wp-content/uploads/2018/03/RES-30-1.pdf

United Nations Human Rights Council 2015. Report of the OHCHR Investigation on Sri Lanka (16 September 2015). [online]. A/HRC/30/CRP.2. [09 August 2019] Retrieved from:

https://www.ohchr.org/EN/HRBodies/HRC/RegularSessions/Session30/Documents/A.HR C.30.CRP.2 E.docx

United Nations Human Rights Council 2017. Report of the Office of the United Nations High Commissioner for Human Rights on Sri Lanka (10 February 2017). [online]. A/HRC/34/20. Available at: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G17/030/56/PD F/G1703056.pdf?OpenElement

Verité Research Pvt Ltd. (2019). *Sri Lanka: Resolution 30/1 Implementation Monitor*. Colombo: Verité Research Pvt Ltd. Available at: https://www.veriteresearch.org/wp-content/uploads/2019/03/Verite-Research\_UNHRC-Monitor-No4-March-2019.pdf

#### **Abbreviations**

CTF-Consultation Task Force

IHL- International Humanitarian Law IHRL- International Human Rights Law

LLRC-Lessons Learnt and Reconciliation

Commission

OHCHR-Office of the High Commissioner for Human Rights

OISL-Office of the High Commissioner for Human Rights (OHCHR) Investigation on Sri Lanka

**OMP-Office on Missing Person** 

ONUR-Office for National Unity and Reconciliation

**UN-United Nations** 

UNHRC-United National Human Rights Council

#### **Author Biolgraphy**



Reading for Master of Arts in International Relations, Department of International Relations, University of Colombo. Completed International Relations Special Degree at

University of Colombo with 2<sup>nd</sup> class honours upper division. Former Assistant Lecturer, at Faculty of Graduate Studies, University of Colombo. Former Programme Associate, Secretariat for Coordinating Reconciliation Mechanisms, United Nations and International Affairs Coordinating Unit, Prime Minister's Office.

Paper ID 61

# The Impact of the Social Customer Relationship Management (SCRM) System on Customer Engagement in the Fast Food Industry in Sri Lanka

JKPSK Jayasinghe# and OC Dissanayaka

Sri Lanka Institute of Information Technology

# madara.j@sliit.lk

**Abstract:** Although Customer Relationship Management is an existing and well-known concept, Social Customer Relationship Management is a newly emerged concept that has been identified with social media. In existing literature, the significance of the Social Customer Relationship Management has been explained. In global and Sri Lankan context, there is a dearth of studies that explain the impact of the social customer relationship management (SCRM) / CRM 2.0 on customer engagement in fast-food industry. To fill this gap, this study is carried out to examine the impact of the social customer relationship management (SCRM) / CRM 2.0 on customer engagement in fastfood industry in Sri Lanka with special reference to the Colombo District in the Western province. The objectives of this study are to analyze the impact of social customer relationship management (SCRM) on customer engagement of fast-food industry in Sri Lanka; to suggest the ways of increasing the customer engagement of the fast-food industry in Sri Lanka. Initially 150 questionnaires were distributed to gather data from respondents. This study was carried out as a quantitative research, and the Statistical Package for Social Sciences (SPSS) version 21 was used to analyze the data. The research model was checked using Reliability analysis, Descriptive analysis, and Correlation and Regression analysis. Results of the study revealed that there is a significant relationship between social customer relationship management and customer engagement. The main limitation is that the sample is collected from a limited

section of the society. Human phenomena changed occasionally due to many reasons.

**Keywords:** Social Customer Relationship Management, Customer knowledge, Social customer usage, Customer engagement, Fast food industry

#### Introduction

With the concepts of globalization and the urbanization, people food habits and the life styles had been changed. They have shifted from the traditional and healthy meal styles to fast foods. Fast food can be defined as the most emerging food item in the world (Xiao, Yang and Iqbal, 2017). Fast food industry p0layers need to maintain a better relationship with its target customers. The reason is there are quite similarities in between the products and the prices. The major target should be to attract new customers and maintain the customer base. Therefore, the different applications relationship management (CRM) play a crucial role towards the success of the fastfood industry (Zailani, Omar and Kopong, 2011).

Both local and foreign franchises companies in Sri Lanka to conduct the businesses (Sivarajah, Irani and Weerakkody, 2015). After the end of the civil war in Sri Lanka 2009, more market opportunities were opened. It is as an important market for most of the international and the domestic businesses. During last ten years there was an increment of the numbers of casual dining restaurants (CDR), fine dining, and quick service restaurant (QSR) outlets in Sri Lanka.



Different forms of fast -food companies are in Sri Lanka. Some of them are franchises, retail shops, super markets, restaurants and hotels. In the past time few people only considered about their food habits. After realizing that the fast food will be caused for noncommunicable diseases some of the people moved and changed their food habits. Still it is available there in the Sri Lanka community because of the food preferences, busy life taste styles and (Weerasekara, Withanachchi, Ginigaddara and Ploeger, 2018). The coverage of the study will cover the Sri Lankan fast food context. Apart from selecting all the other provinces, Western province is selected.

Because of the todays business world competition, cost, customers, information will be considered as an important factor. Because of the cost of the businesses, with the help of the internet and the social media vendors try to use Social Customer Relationship Management. It will sophisticate for the vendors to access for more information with less cost. For the success and the retention of the business, Social Customer Relationship Strategy is essential with the applicable techniques. Not only one department but the whole organization should be responsible to maintain and implement that (Permson, 2020).

Here are so many ways to manage the relationships with customers. Today most of the fast-food businesses use internet and the social media to interact with the customers. Some of the authors noted that consumer engagement is an elusive construct, and that researchers and marketers needed to better define, conceptualize, and operationalize this measure of relationship strength (Schultz and Peltier, 2013). By using the internet and the social media usage the vendors of fast-food industries can interact with many more customers, can use attractive images, videos, sound clips, fonts etc. Instantly customers can see all the information of food items,

outlets, vendors, places etc. Vendors of fast-food industry can use both internet and the social media as a tool for customer engagement and as a promotional tool. This study investigates how the Social customer relationship management (SCRM) will effect on the customer engagement of fast food industry in Sri Lanka. It analyzes the ways that the internet and the social media usage will effect on the customer engagement of Social customer relationship management (CRM) in fast food industry in Sri Lanka.

#### A. Research objectives

To analyze the impact of social customer relationship management (SCRM) on customer engagement of fast- food industry in Sri Lanka.

To suggest the ways of increasing the customer engagement of fast -food industry in Sri Lanka.

#### B. Research question

This study investigates how the Social customer relationship management (SCRM) effects on the customer engagement of fast-food industry in Sri Lanka.

#### C. *Scope of the study*

For this study Western province, Colombo district is considered. The nature of the fast-food industry is the reason for this selection.150 randomly selected samples checked through a questionnaire. Statistical Package for Social Science 23.0 version is used to analyze the data.

#### **Literature Review**

## A. Social Customer Relationship Management

For an organization, Social customer relationship management is an essential element to manage and facilitate the customer related performance. Social customer relationship management is the organization capability to efficiently



integrate and convert the social media marketing into acceptable customer relationships outcome (Kim and Wang, 2018). customer Social relationship management effects positively on customer linking capability with the brand and it is resulting for high performance of customers. It will directly lead for high level of financial performance of the business (Diffley, McCole and Carvajal-Trujillo, 2018). For a business or for a brand customer loyalty is a vital for its future growth (Aldaihani and Ali, 2018). One of the studies found that Social customer relationship management positively effects on fast food restaurants but the customer engagement through the social networking sites and the preferences may be varied (Li, Kim and Choi, 2019). Social customer relationship management effects on the customer engagement. Social customer relationship management compiled with two main factors known as Social media usage and Customer knowledge.

#### B. Customer knowledge

Through the social media customer knowledge can be gathered and it is a valuable asset for the organization (He et al., 2019). Most of the organizations manage customer knowledge in a proper way because it will lead to build up a value network (Bagheri, Kusters and Trienekens, 2019).

#### C. Customer Engagement

The intensity of customer participation and the relationship the organizational activities and its performance initiated by either the customer's party or the organization's party (Vivek, Beatty and Morgan, 2012). Normally the variations of the customer experience effects on the with customer satisfaction and the emotional attachment, then it will be an impact for the customer engagement. Customers do engage with their preferred fast-food brand/s once the value is sufficient that they expect (Itani, Kassar and Loureiro,

2019). Customer engagement influences on word of mouth and brand loyalty.

#### D. Fast food industry

Within the global scenario fast food consumption has become a new trend. Because of the globalization and the busy schedules people have converted and changed their food consumption patterns. Fast food industry is the most emerging food category in the world (Dewnarain, Ramkissoon and Mavondo, 2018). In Sri Lanka, majority from the young generation around 54% consume fast foods and from the total amount of monthly income 37.8% amount spend on the food items (Mishra, Casual Dining and QSR Sector Grows in Sri Lanka, 2016). Most of the Sri Lankans try to get Rotti, Rolls, Patties, Pastries, Wade, Cutlets as the fast- food items. Because of the fast -food industry, the traditional Sri Lankan food behaviors transform towards another destination (Weerasekara et al., 2018).

#### **Methodology and Experimental Design**

The goal of this study is to analyze the ways of improving Social Customer Relationship Management (SCRM) and study how it will effect on the engagement of customers in fast food industry in Sri Lanka as a quantitative research. For the data collection tool Likert Scale questionnaires were distributed. It contains overall 17 questions. Some of the questions evaluate the effect of customer engagement and some of the questions evaluate the Social Customer Relationship Management. Some of the questions measure the demographic variables of the customers of fast-food industry in Sri Lanka.

The population of the study, it is hard to define since each and every person consume at least one type of fast-food item. Therefore, for the convenience, convenience sampling method used as a non-probability sampling technique. The sample of the study is based on 150 respondents (Customers) and the results were analyzed using the IBM



Statistical Package for Social Sciences (SPSS) 21 version.

For this study, a conceptual model is used to test the hypothesis and it captures the generic knowledge from different sources and support for the complex situations (Farsari, 2012). The major purpose of the conceptual framework is to blend the relevant knowledge from different sources and show how the implementation can be done to the Social customer relationship management in the fast-food industry in Sri Lanka. After analyzing lot of key theories and literature reviews this model is developed by the author by considering some of the affected areas. According to this conceptual model, only two variables are there. Social customer relationship management (SCRM) is the independent variable and it effects on the customer engagement which is our dependent variable. Customer engagement can lead for many outcomes such as brand loyalty, trust, satisfaction, word of mouth, commitment etc. This model is developed by the researcher with the help of model described in the study of (Dewnarain, Ramkissoon and Mavondo, 2018)

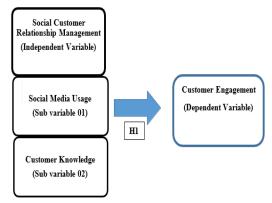


Figure 01-Conceptual model- Developed by the author

The hypothesis of this study would be,

H1- There is a significance relationship between Social customer relationship management (SCRM) and the Customer Engagement in the fast- food industry in Sri Lanka.

#### **Results**

Within this, researcher discussed about the internal consistency and the reliability of the variables before it is operationalized using the Cronbach's Alpha method. Results are given by the table 4.1.

#### A. Internal Consistency of the items

Table 4.1 Reliability Analysis

Variables	Cronbach' s Alpha	No of items
Social media usage	0.746	5
Customer Knowledge	0.700	5
Customer Engagement	0.704	4

According to this reliability analysis all the Cronbach's values are more than 0.6. That is mean there is an internal consistency between the variables. The researcher used Likert scale questions to measure that.

# B. Level of Social customer relationship management and Customer Engagement

Researcher analyzed the responses of the study with related to the Social customer relationship management and Customer Engagement by using Descriptive statistics. Mean, Standard deviation, Coefficient of Skewness have been used. Results are included in Table 4.2.

According to the descriptive statistics, all the mean values variables are in between strongly agreed and neutral level. This mean all the responses are in a moderate level. Highest deviation is there in 0.7 in customer knowledge. It means Customer knowledge has comparatively higher variance. Minimum variance is there in customer engagement and the value of standard deviation is 0.4. All the coefficient of Skewness is there in between +1 and -1. This says data are normally distributed. Absolute values of kurtosis are lesser than the three times of



Standard Error of Kurtosis. It shows again that the data are normally distributed. Therefore, parametric techniques can be applied for the study.

Table 4.2 Descriptive statistics

		Social Media	Customer Knowledge	Customer Engagement
		Usage		
N	Valid	150	150	150
	Missing	0	0	0
Mean		2.41	3.13	1.5833
Std. Do	eviation	.653	.732	.48177
Skewn	ess	.294	.004	0.227
Std. Er Skewn		.198	.198	.198
Kurtos	is	1.27 6	-1.497	.545
Std. Er Kurtos		.394	.394	.394

### C. Relationship between Social Customer Relationship and Customer Engagement

Relationship between the Social customer relationship management and Customer Engagement has been analyzed by using the Pearson Correlation analysis. This is a bivariate and parametric technique. Individually the Individually the association between the variables has been determined. Results are shown in the table 4.3.

Table 4.3 Relationship between Social Customer Relationship and Customer Engagement

		Customer
		Engagement
Social Media Usage	Pearson Correlation	.775**
	Sig. (2-tailed)	.000
	N	150
Customer Knowledge	Pearson Correlation	.692**
	Sig. (2-tailed)	.000
	N	150
Customer Engagement	Pearson Correlation	1
	Sig. (2-tailed)	
	N	150

According to the correlation analysis, all the probabilities are highly significant between the customer engagement as dependent variable and the Social customer relationship management independent variables. All the correlation values are positive. All the values are close to 0.7. It means Social Media Usage and Customer Knowledge have a strong association with the customer engagement.

# D. Factors influence on Customer engagement

Effect of individual factors on customer engagement has been realized using regression model. Researcher applied Classical Linear model to test this. Model summary is given below.

#### **Model Summary**

Table 4.4 Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.798ª	.637	.632	29207	1.715

Effect of individual factors on customer engagement has been realized using regression model. Researcher applied Classical Linear model to test this. Model summary is given below.

The multiple correlation is 0.798 and it says there is a strong association between the independent variables and the dependent variables. R square value is 0.637 and it mean 63% of the customer engagement of fast food industry covered by this model. Since the value is more than 60%, the model is nicely fitted with the theory. Adjusted R Square indicates again 63% of the dependent variable is covered by the model. Durbin Watson value is 1.715 means it is there in between 1.5 and 2.5. Therefore, independent residuals are there and the model is accepted.



Table 4.5 Regression ANOVA

ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.043	2	11.02 2	129.203	.000 <sup>1</sup>
	Residual	12.540	147	.085		
	Total	34.583	149			

Probability of F statistics of the regression ANOVA is highly significant as the P value is 0.000. This means that the model is jointly significant. All the independent factors jointly influence on customer engagement.

Table 4.6 Individual Effect Coefficients

Model	Unstandardized Coefficients		Standardize d Coefficients		
	В	Std. Error	Beta	t	Sig.
Constant Social Media Usage	.012	.107		116	.908
	.424	.053	.575	8.020	.000
Customer Knowledge	.183	.047	.277	3.871	.000

Probabilities of Social Media Usage and the Customer Knowledge are highly significant with positive beta values. There probabilities are less than 0.01. This says that they significantly influence positively on Customer Engagement of fast food industry.

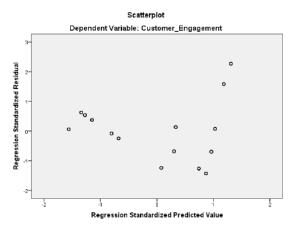


Figure 02- Residuals Behavior

In the scatter plot standardized residuals are plotted against standardized predicted values. Residuals are distributed without having any systematic pattern as the residuals do not have the funnel shape. This

is representing that variance of residuals are constant and no heteroscedasticity problem.

#### **Discussion and Conclusion**

According to the study there is a positive impact of social customer relationship management on customer engagement of Fast food industry in Sri Lanka. The model that has developed through the study was nicely fitted. There are sub variables of the independent variable "Social Customer Relationship Management" and those are social media usage and the customer knowledge while having only one dependent variable "customer engagement". Today like a trend most of the people use social media. Vendors are there to convert the behavior of customers into effective sales.

Vendors and the businesses can use social customer relationship management as a new aspect of customer relationship marketing. It is a new method of building the long-term relationship with customers with less cost. There is no any scope of selecting customers.

Throughout this model it implies social customer relationship management has a great effect on customer engagement and for the fast food industry players can use it with a less cost. Since the competitors are there in the industry, easily customers can move from one competitor to another one. People social habits are changed due to the vital increment of the technology and cultural driven aspects have been neglected (Jiabao Lina, March 2019). For the firms, maintain a last long client relationship is quite a critical factor (Nima Heiratia, January 2019). Therefore, vendors need to adapt with the newest technology and it will tend to increase more sales. All the hypothesizes are proved through the model.

For the convenience to carry on this study, convenience sampling method is applied. Because of this the results can be biased. Sample is limited to the 150 respondents for the easiness to conduct the study.



Occasionally it is difficult to understand the human phenomena. Since this is limited to a specific geographical boundary it covered a limited scope.

#### References

Aldaihani, F. and Ali, N., 2018. Factors Affecting Customer Loyalty in the Restaurant Service Industry in Kuwait City, Kuwait. *Journal of International Business and Management*, 2, pp.1-14

Bagheri, S., Kusters, R.J. and Trienekens, J.J.M. (2019). Customer knowledge transfer challenges in a co-creation value network: Toward a reference model. *International Journal of Information Management*, 47, pp.198–214.

Chu. (2019). Electronic word-of-mouth (eWOM) on WeChat: examining the influence of sense of belonging, need for self-enhancement, and consumer engagement on Chinese travellers' eWOM. *International Journal of Advertising*, 26-49.

Colin CJ Cheng, E. C. (2018). How to enhance SMEs' customer involvement using social media: The role of Social CRM. *International Small Business Journal: Researching Entrepreneurshi*, 1–21.

Devendra, T. (2015). Personal Factors And Fast Food Consumption. Journal of Business Management Science.

Dewnarain, S., Ramkissoon, H. and Mavondo, F. (2018). Social customer relationship management: An integrated conceptual framework. *Journal of Hospitality Marketing & Management*, 28(2), pp.172–188.

Diffley, S., McCole, P. and Carvajal-Trujillo, E., 2018. Examining social customer relationship management among Irish hotels. *International Journal of Contemporary Hospitality Management*, 30(2), pp.1072-1091.

Farsari, I. (2012). The Development of a Conceptual Model to Support Sustainable Tourism Policy in North Mediterranean Destinations. *Journal of Hospitality Marketing & Management*, 21(7), pp.710–738.

Farzana, S. (2019). Facebook as Marketing Tools for Organizations: Knowledge Management Analysis. *Dynamic Perspectives on Globalization and Sustainable Business in Asia- University Brunei Darussalam, Brunei*, 14.

Harrison, M. T. (2009). Wielding New Media in Web 2.0: Exploring the History of Engagement with the Collaborative Construction of Media Products. *New Media and Society 11*, 155-178.

He, W., Zhang, W., Tian, X., Tao, R. and Akula, V., 2019. Identifying customer knowledge on social media through data analytics. *Journal of Enterprise Information Management*, 32(1), pp.152-169.

Heirati, N., Henneberg, S., Richter, A. and Harste, R., 2019. Differential importance of social and economic determinants of relationship performance in professional services. *Industrial Marketing Management*, 76, pp.23-35.

Itani, O.S., Kassar, A.-N. and Loureiro, S.M.C. (2019). Value get, value give: The relationships among perceived value, relationship quality, customer engagement, and value consciousness. *International Journal of Hospitality Management*, [online] 80, pp.78–90. Available at: https://www.sciencedirect.com/science/art icle/pii/S027843191830269X [Accessed 28 Nov. 2019].

Jr, S. (2019). Spreading The Word: Customer Experience in Traditional and Electronic Wordof-Mouth Intentions. *Electronic Commerce Research and Applications*.

Kim, H. and Wang, Z., 2018. Defining and measuring social customer-relationship management (CRM) capabilities. *Journal of Marketing Analytics*, 7(1), pp.40-50.Kumar, V. (2019). Customer engagement in service.



Journal of the Academy of Marketing Science, 138–160.

Kumar, V. (2019). Customer engagement in service. *Journal of the Academy of Marketing Science*, 138–160.

Lepkowska, E. (2017). Exploring the Challenges of Incorporating Social Media Marketing Strategies in the Restaurant Business. *Journal of Internet Commerce*.

Li, J., Kim, W. and Choi, H., 2019. Effectiveness of social media marketing on enhancing performance: Evidence from a casual-dining restaurant setting. *Tourism Economics*, p.135481661986780.

Lin, J., Luo, Z., Cheng, X. and Li, L., 2019. Understanding the interplay of social commerce affordances and swift guanxi: An empirical study. *Information & Management*, 56(2), pp.213-224.

Matzlera. (2019). The effect of price on word of mouth: First time versus heavy repeat visitors.

Mishra. (2016). *Casual Dining and QSR Sector Grows in Sri Lanka*. New Delhi: USDA Foreign Agricultural Service.

Nima Heiratia, S. (January 2019). Differential importance of social and economic determinants of relationship performance in professional services. *Industrial Marketing Management*, 23-35.

Noël, M. (2015). The impact of a Social customer relationship management (SCRM) system on the development of customer engagement in the restaurant industry.

Ogonu. (2019). Procedural Justice and Customer Post-Complaint Behaviour in Fast Food Firms in Port Harcourt, Nigeria. *American Journal of Industrial and Business Management*, 385-402.

Permani C. Weerasekara, C. R. (2011). Nutrition Transition and Traditional Food Cultural Changes in Sri Lanka during Colonization and Post-Colonization. *MDPI*.

Permson, M., 2020. The Effectiveness Of Customer Relationship Management Techniques Adopted By Fast Food Industry In Sri Lanka. [online] Dl.lib.mrt.ac.lk. Available at:

<a href="http://dl.lib.mrt.ac.lk/handle/123/14017">http://dl.lib.mrt.ac.lk/handle/123/14017</a> [Accessed 5 September 2020].

Qin, H. (2010). Perceived service quality in fast-food restaurants: empirical evidence from China. *International Journal of Quality & Reliability Management*.

Ragnedda, G. D. (2019). *Blockchain and Web 3.0.* London: Routledge ,Taylor and Francis Group.

Itani, O.S., Kassar, A.-N. and Loureiro, S.M.C. (2019). Value get, value give: The relationships among perceived value, relationship quality, customer engagement, and value consciousness. *International Journal of Hospitality Management*, [online] 80, pp.78–90. Available at: https://www.sciencedirect.com/science/art icle/pii/S027843191830269X [Accessed 28 Nov. 2019].

Sanjiv Kumar, S. C. (2018). The Impact of Knowledge Management and Data Mining on CRM in the Service Industry. *Nanoelectronics, Circuits and Communication Systems pp 37-52* (pp. 37-52). Springer.

Schultz, D. and Peltier, J., 2013. Social media's slippery slope: challenges, opportunities and future research directions. *Journal of Research in Interactive Marketing*, 7(2), pp.86-99. Shanti. (2019). COGNITIVE-AFFECTIVE ASPECTS OF FORMING BRAND LOYALTY. *Journal of Applied Management*.

Sivarajah, U., Irani, Z. and Weerakkody, V., 2015. Evaluating the use and impact of Web 2.0 technologies local in government. Government *Information* Quarterly, 32(4), pp.473-487.Sultan. (2019). A Strategic Approach to the Consumer Perception of Brand on the Basis of Brand Awareness and Brand Lovalty: Comparative Analysis of Coke & Pepsi Brands



in Erbil KRI. *International Journal of Research* in Business and Social Science, 33-44.

Thackeray, R. B. (2008). Enhancing Promotional Strategies Within Social Marketing Programs. *Use of Web 2.0 Social Media*, 338-343.

Kumar. (January 2019). Customer engagement in service. *Journal of the Academy of Marketing Science*, 138–160.

Vivek, S.D., Beatty, S.E. and Morgan, R.M. (2012). Customer Engagement: Exploring Customer Relationships Beyond Purchase. *Journal of Marketing Theory and Practice*, 20(2), pp.122–146.

Weerasekara, P., Withanachchi, C., Ginigaddara, G. and Ploeger, A. (2018). Nutrition Transition and Traditional Food Cultural Changes in Sri Lanka during Colonization and Post-Colonization. *Foods*, 7(7), p.111.

Wu He, W. Z. (11 February 2019). Identifying customer knowledge on social media

through data analytics. *Journal of Enterprise Information Management*.

Xiao, A., Yang, S. and Iqbal, Q., 2017. Factors Affecting Purchase Intentions in Generation Y: An Empirical Evidence from Fast Food Industry in Malaysia. *Administrative Sciences*, 9(1), p.4. Alarafati. (2019). The Role Of Change Management And Output Quality On The Customer Satisfaction Of The Implementation Of Customer Relationship Management System In Public Sector. *International Journal of Business and Economy*, 45 –58.

Zailani, S., Omar, A. and Kopong, S., 2011. An Exploratory Study on the Factors Influencing the Non-Compliance to Halal among Hoteliers in Malaysia. *International Business Management*, 5(1), pp.1-12.Al-Meshal, S. (June 2014). The Impact of Relationship Quality and Franchisee Credibility on e-CRM Implementation and Brand Adoption Relationship: An Empirical Study in Franchising Industry. *International Journal of Managerial Studies and Research*, 11.

Paper ID 65

### Impact of Green Attributes of Hotels on Re-Visit Intention: Moderating Impact of Customer Environmental Consciousness

UJ Mirando# and HC Dassanayake

Department of Decisions Sciences, University of Sri Jayewardenepura

# uditha.mirando.95@gmail.com

Abstract: Increasing awareness on environmental issues among customers' demands businesses to become more environmentally friendly. Due dependency on natural environment in service co-creation hotel sector is also influenced by this trend. Therefore, this study investigates the impact of green attributes of hotels on re-visit intention of customers and the role played by customers' environmental consciousness relationship. A sample of 271 customers drawn using convenient sampling technique was used in data analysis based on Structural Equation Modelling. It was revealed that green attributes of hotels have a direct positive impact on re-visit intention of customers where this relationship is moderated by customers' environmental consciousness. Accordingly, findings provide valuable input to hotels in designing their service package to retain and attract more customers.

**Keywords:** Green attributes, Re-visit intention, Customer environmental consciousness

#### Introduction

Human concern towards environmentally sustainability has initiated subsequent to industrialization as a consequences of discharging harmful effluents to the nature by industrial players (Kirk 1995) and the output of industries, create problems for human health and sustainability (Mensah 2007). Consequently, interest by global community and consumers on these issues at present has led to a green concern among industries (Ramayah *et al.* 2010).

Subsequently, eco-friendly products and services have gained tremendous relevance in response to escalated sensitivity on environmental sustainability (Guptha *et al.* 2019).

Environmental sustainability is fundamental fact for tourism competitiveness, especially on long-term perspective (Hu and Wall 2005). Tourism is an industry which has been considered as relatively green with the exception of its transportation and land development implications, as a result of this it has only recently become an area of concern (Font and Tribe 2001). Green concern of customers does not only influence manufacturing or construction industry, but also the service industry where the hotel sector occupies a prominent role (Awang et al. 2008). Among the various components of tourism industry, hotel sector is the most harmful sector which attribute 75 percent of its environment effect to disproportionate consumption of nondurable goods, water, and energy. At the same time, hotel sector is the potential victim of climate change (Hsiao et al. 2014; Kasimu et al. 2012).

Consequently, the hotel sector is being pressed by customers, non-profit organizations, and environmental regulators to become more environmentally friendly due to the significant amount of wastage created by daily activities (Lynes and Dregde 2006). Consequent to application of more environmental rules and regulations addition increase to in customer environmental concern, hotel visitors are increasingly looking for eco-friendly hotels



over traditional hotels (Died and Font 2010; Manakotla and Jauhari 2007). Therefore, most of the hotels are attempting to promote and engage environment friendly practices and programs (Karlsson abd Dolnicar 2016).

In the similar vein, environmentally friendly activities of the tourists give significant effect on their intention to choose a green hotel. Those who are actively involved in environmentally friendly activities seem to seek deeper interactions with green hotels. (Noor and Kumar 2014). Further, most of the studies have investigated the impact of green attributes of hotels on behavioral intention (Eirini and Antonia 2014; Leaniz et al. 2017; Verma et al. 2019). However, customer motives, values, attitudes, emotions or sense of responsibility towards the environment influence on customer behavior. If hotels do not value or accept green practices, they will not bother to visit again. Importantly, Leaniz et al. (2017) have proposed to investigate, how internal factors like customer motives, values, attitudes, emotions or sense of responsibility towards environment impact the relationship between green attributes of hotels and re-visit intention of customers. Accordingly, based on the extant literature it is apparent that there is a positive impact of green attributes of hotels on customer revisit intention. However, the role played by environmental consciousness which are internal factors like customer motives, value, attitudes, emotions or sense of responsibility has not been investigated so far. Therefore, the two main research questions of this paper are as follows

RQ1. What is the impact of green attributes of hotels on re-visit intention of customers?

RQ2. Does customer environmental consciousness influence the relationship between green attributes of hotels and revisit intention of customers in Sri Lanka?

#### **Litreature Review**

A. Green Attributes of Hotels

During the last few decades hotels have been making significant amount of investment to identify the concern of visitors towards environment issues (Tang 2015). At the same time, hotel sector is influenced legitimization to undertake externally different measures, highlighting facing actions, seeking marketing and image benefits from being seen to respond to demand of society (Font et al. 2016). For instance, implementation of ISO 14001, eco management, and audit programs are recently adopted by green management approaches (Voracek 2016). Therefore, the management who are in hotel sector have established an aim of building hotels capable of the 3Rs (recycle, reuse, and reduce) with depletion of global resources and increasing concern for environmental issues and ecological conservation (Lee and Cheng 2018). Hotel sector has been applying environmental sustainability starting to consider environmental issues of the service delivery process (Han et al. 2018).

Green hotels have applied a number of environmentally friendly programs several operational areas including food and beverage services, conferences, meeting services, guest rooms, housekeeping, and laundry (Darnall and Sides 2008; Ogbeide 2012). Kim et al. (2012) have suggested the removal of unnecessary amenities, water levels adjusted for short loads of laundry, limited water use while cleaning. investigation of the feasibility of reusing water for washing, reduced use of insecticides, and using plants that are locally adapted are the best environmentally friendly practices. In other words, green hotels refer to lodging that offers various environmental friendly principles and programmers such as reducing waste, improving towel use frequency, installing low-flow shower heads, using energyefficient minimizing lights, energy consumption, adopting and recycling



practices (Yadav *et al.* 2019). There are many new areas which have also emerged recently. Some of them are biodiversity conservation, environmental education, air pollution, ecofriendly design, product innovation and passive design (Jamaludin and Yusof 2013).

#### B. Re-Visit Intention of Customers

Customer re-visit intention centers around the ability of customers to do a certain activity again or visit certain destination again (Weng et al. 2012). It can be defined as the probability and likelihood of a consumer to give priority to green products over conventional products in their purchase decisions (Rashid 2009). Re-visit intention is considered as an extension of customer satisfaction. Re-visit intention can be defined as probability of repeat purchasing and it is viewed as the heart of loyalty (Um et al. 2006). Han et al. (2010) have defined re-visit intention using three dimensions. willingness of the customer of visiting a green hotel, attempt in positive word of mouth behavior, and likelihood to pay premium for the green products. Customers' ability and willingness to make sacrifices for the environmental sustainability lead to enhance customer intention to re-visit green hotel (Thogerse 2000).

#### C. Customer Environmental Consciousness

The concept of customer environmental consciousness is a psychological factor which is related to the ability of customers to involve in pro-environmental behaviors (Zelezy and Schultz 2000). Customer environmental consciousness refers to the degree to which consumers are aware about environmental issues, and at the same time they are willing to make an attempt to solve or indicate the likelihood to contribute individually to their solution (e.g. stay in an environmentally certified hotel) (Hu et al. 2010). Generally, customer environmental consciousness is customer reactions such as dislikes, uncertainties, and compassion towards the environmental issues. It is an evaluation of own behavior if individual or behavior of others, attitude toward own behavior of individual or behavior of others with consequences for the environmental (Schlegelmilch *et al.* 1996).

### D. Impact of Green Attributes of Hotels on Re-Visit Intention of Customers

Today, many that customer realize purchasing behavior the can affect environmental sustainability directly (Lee et al. 2010). Thus, customers intention to visit hotels which compromise green practices can be considered as a behavior that is derived from the intention of customers to protect the nature (Stern 2000). These visitors always would like to prioritize green hotels over conventional hotels (Laroche et al. 2001). Han et al. (2018) have revealed that there is a positive relationship between green practices implemented by hotels and the behavior intention of customers.

Environmental concern and environmentally friendly attitudes of visitors positively affect consumers' re-visit intention towards green hotels (Manaktola and Jauhari 2007; Han et 2009). Customers with positive environmental attitudes tend to purchase green products (Mohamed et al. 2014). Visitors' attitudes towards environmental sustainability is certainly influenced by the green programs adopted by hotels (Verma et al. 2019). Most of the time, consumers who are concerned about environment and sustainability issues, are always motivated to take steps to minimize those sustainability issues (Leonidou et al. 2010). Individuals who are more conscious towards environmental sustainability like to participate in eco-friendly customer behavior. Customers who have a high degree of environmental concern have more favorable attitude towards visiting green hotels (Verma et al. 2019). Visitors with positive environmental behavior favorably attempt to visit green hotels. Finally, eco-



friendly attitudes of hotel consumers positively affect their intention to visit green hotels and their likelihood to pay premium for green products (Verma *et al.* 2019).

According to the S-O-R framework, specific environmental signals (Stimuli) directly affect a person's cognitive and affective states (Organism). Based on the framework, hotel visitors feel environmental cues which are located at green hotels and visitors consume green attributes which are included in the service package of hotel. Those environmental cues and green attributes can cause a positive attitudes towards green hotels. Subsequently, increased positive behavioral repose towards green hotel leading to re-visit intention of customers

Accordingly, based on the empirical findings and S-O-R framework it can be argued that a set of cues in the green environment that create more attention about the green service package proposed by hotels is expected to create re-visit behavior from customers. Therefore, this paper proposes the following hypothesis.

H1: There is positive impact of green attributes of hotels on re-visit intention of customers in Sri Lanka.

### E. Moderating Effect of Customer Environment Consciousness

Leaniz *et al.* (2017) have revealed how internal factors like customer motives, values, attitudes, emotions or sense of responsibility that are not already tested, impact proposed relationship. According to the appraisal theory in psychology emotions are extracted from our evaluations of events that cues specific reactions in different people. Essentially, our appraisal of a situation causes an emotional, or affective, response that is going to be based on that appraisal (Leaniz *et al.* 2017).

According to the appraisal theory and environmental consciousness definition it

can be argued that, elements of environmental consciousness are above internal factors like customer motives, value, attitudes, emotions or sense of responsibility.

Therefore, based on the empirical findings and appraisal theory, it can be argued that there is an impact of customer environmental consciousness on the relationship between green attributes of hotels and re-visit intention of customers. Therefore, this paper proposes the following hypothesis.

H2: Customer environmental consciousness moderate impact of green attributes of hotel on re-visit intention of customers in Sri Lanka.

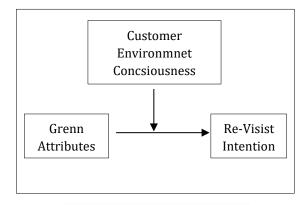


Figure 1. Conceptual framework

#### Methodology

Research design contains objectives derive from research questions, source of collecting data, and ethical issues. It reflects the reason why the researcher is using particular research design and whether he has thought carefully about design (Saunders et al. 2011). According to the philosophical stance, this study follows positivism philosophy. As per the classification of the research purpose, this study belongs to the category of explanatory studies. This category establishes causal relationship between variables. Within this study the relationship between green attributes of hotels and revisit intention of customers is investigated (Saunders et al. 2011). This study follows deductive research approach. It is a kind of a



dominant approach for natural sciences and it involves the development of theory which is reasoned to a rigorous test (Saunders *et al.* 2011). This study has carried out as a cross sectional study.

The aim of this study is to examine the impact of green attributes of hotels on the re-visit intention of customers in Sri Lanka. Therefore, customers who visit star class hotels in Sri Lanka are the members of study population. There is no sample framework because couldn't find exact list of visitors who visits green hotels in Sri Lanka. Therefore, convenience sampling which is a non-probability sampling technique, was adapted. It involves selecting haphazardly cases which are the easiest to get from the sample (Saunders et al., 2011). Strategy of inquiry of this study is survey method. Data collecting instrument is a structured questionnaire which is developed based on a literature review. questionnaire distributed through online method to identified individuals who have already visited star class hotels in Sri Lanka. The items were evaluated on 5-point Likert scale ranging from "strongly disagree" to "strongly agree". The unit of analysis of this study is individual consumer who visit green hotels.

#### **Results**

Collected data was fed into SPSS 21.0 version for cleaning process. Missing value analysis and outlier detection steps attempted to clean the data set (Hair et al. 2009). For this purpose, 271 questionnaires which were obtained from primary screening were used. Within this study, 10 outliers were identified and removed from data set. Remaining 261 usable responses were forwarded to the next step of data analysis process. Data were tested for four parametric assumptions, normally distribution, linearity, multicollineartiy, and homoscedasticity. Satisfied four assumptions revealed that data are ready for further analysis (Field 2009).

Reliability can be defined as the degree to which study variables are consistent in what it is intended to measure (Hair et al. 2009). Cronbach's alpha is most widely used to measure reliability (Hair et al. 2009). The Cronbach's alpha of the measures were all limits comfortably above lower acceptability that is greater than 0.6 (Sekaran and Bougie 2014). In this study, all measures were above 0.6, thus ensured that they are highly reliable. Next exploratory factor analysis (EFA) was performed to investigate the underlying dimensions of the green attributes of hotels, customer re-visit intention and customer environmental consciousness and thereby ensured unidimensionality.

Two step approach of Anderson and Gerbing (1988) was adopted to develop the measurement and structural models using AMOS software. First, measurement model was examined using Confirmatory Factor Analysis (CFA) to investigate adequacy. Consequently, Structural Equation Modeling (SEM) with was developed to measure model fitness and to test hypotheses.

Once the measurement model is correctly established, structural equation model is estimated to provide a vital understanding towards empirical measures of the relationship between variables and constructs which have already represent by the measurement model (Hair et al., 2009). Table 1 displays model fit indices

Table 1. Goodness of fit indicates of the structural equation model

Absolute	е		•	Inci	eme	enta	Parsimo
				l			ny
CIMIN/	GFI	AG	RMSE	IFI	TLI	CFI	PRATIO
DF		FI	Α				
1.42	0.8	0.7	0.04	0.9	0.9	0.9	0.89
	2	2		2	1	2	



Table 2. Results of the hypotheses testing on direct naths

	unect	pauis		
Hypotheses	β	P	Result	on
			Hypothe	eses

H1: There is 0.62 0.000 Supported positive impact of green attributes of hotels on re-visit intention of customers in Sri Lanka.

The results of structured equation modeling showed green attributes of hotels had a significant influence on customer re-visit intention and hence H1 was supported.

Table 3. Results of the hypotheses testing on moderation effect

1110 401 4110 11 011000					
Hypotheses	Result on	Result on			
	Moderation	Hypotheses			

H2: Customer Significant Supported environmental consciousness moderate impact of green attributes of hotel on re-visit intention of customers in Sri Lanka.

The results of structured equation modeling showed customer environmental consciousness had a significant influence on the relationship between green attributes of hotels and re-visit intention of customers in Sri Lanka and hence H2 was also supported.

#### **Discussion and Conclusion**

#### A. Discussion

Visitors' perception towards green practices play a main role in terms of choosing hotel. Further, it is confirmed that eco-friendly practices are powerful elements as other main hotel factors, such as quality of service package, infrastructure (Leaniz *et al.* 2017). Noor and Kumar (2014) have revealed that

there is a positive relationship between hotels' green practices and behavioral intention. Eco-friendly attributes of hotels positively impact perceived values and attitudes of visitors and that significantly affects visitor intention to visit green hotels again (Trang et al. 2019). Attitudes of consumers towards enhancing environmental sustainability impact hotels by including two types of consumer behaviors which are purchasing and revisit intention (Kwok et al. 2016). Accordingly, based on the empirical findings and findings in previous section it can be argued that green attributes of hotels create more attention about the green service package which proposed by hotels. It will lead to create re-visit behavior from customers. Therefore, these findings answer first research question.

This study extend the green hotel literature by opening a new path because this study revealed that customer environmental consciousness had significant influence on the relationship between green attributes of hotels and re-visit intention of customers in Sri Lanka. In other words, customer motives, values, attitudes, emotions or sense of responsibility towards environmental issues, impact on the relationship between green attributes of hotels and re-visit intention of customers. Therefore, these findings answer second research question.

#### B. Managerial Implications

The proposed framework concedes with managerial implications. There is a positive relationship between green attributes of hotels and re-visit intention of customer within the literature. However, there is no attempt to investigate the impact of customer environmental consciousness. Therefore, the proposed framework contributes to fill the empirical gap which already exists. Findings of this study indicate that customer environmental consciousness significant influence on



relationship between green attributes of hotels and re-visit intention of customers in Sri Lanka. Consequently, hotel managers should try to indicate their green attributes, green practices and green programs more through hotel web site or social media. It will create awareness about the sustainability practices of the hotel among environmental conscious customers. Top managers and owners of the Sri Lankan hotel industry can implement strategies to increase re-visit intention of the customers by identifying which green attributes are more powerful.

#### C. Limitations anf Future Research Directions

This study has some limitations which suggest direction for future research. It focused only on hotels in the Sri Lankan context. There is a need for future research to empirically observe the effects of green attributes on re-visit intention of customers in other services to improve generalizability. In this study, only guests of five-star and four-star hotels in Sri Lanka are chosen as the target population. It is suggested that various segments of hotels in Sri Lanka should be included to get more accurate results in terms of investigating green hotel attributes in the Sri Lankan context. There is no attempt to investigate influence of green certificates as an independent variable on consumer decision making patterns and customer re-visit intention. Thereby, it is suggested to investigate the role of green certificates.

#### D. Conclusion

Modern customers are more concerned about environmental sustainability within their purchasing decisions. It has been empirically validated that there is a positive relationship between green attributes of hotels and customer re-visit intention. At the same time, there is an empirically gap which to how customer environmental consciousness intensifies the above established relationship. This paper

proposed a conceptual framework to identify what role customer environmental consciousness plays as a moderator. Findings of this framework provide important contribution to hotel managers in designing the service package of their hotel.

#### Acknowledgment

My heartiest gratitude goes to my research supervisor Ms. H. D. H. C. Dassanayake for her guidance and monitoring through this study period. I would like to give my heartiest pleasure to Department of Decision Sciences, University of Sri Jayewardenepura, Sri Lanka for giving me these opppurtunity to conduct this sudy.

#### References

Awang, K.W., Ishak, N.O.R.K., Radzi, S.M. and Taha, A.Z. (2008). Environmental variables and performance: Evidence from the hotel Industry in Malaysia. *International Journal of Economic*, Vol. 2, No. 1, pp. 59–79.

Darnall, N. and Sides, S. (2008). Assessing the performance of voluntary environmental programs: Does certification matter? *The Policy Studies Journal, Vol.* 36, No. 1, pp. 95–117

Dief, M.E. and Font, X. (2010). The determinants of hotels' marketing managers' green marketing behavior. *Journal of Sustainable Tourism,* Vol. 18, No. 2, pp. 157-174. doi: 10.1080/09669580903464232

Eirini, T. and Antonia, D. (2014). Do beliefs affect customers' intentions to choose green hotels? *International Journal on Strategic Innovative Marketing, Vol.* 1, pp. 51-60. doi:10.15556/IJSIM.01.01.005

Field, A. (2009). *Discovering statistics using SPSS.* (3rd ed.). New Delhi: SAGE Publications India Pvt Ltd

Font, X. and Tribe, J. (2001). Promoting green tourism: the future of environmental awards international. *Journal of Tourism Research International*, Vol. 3, No. 1, pp. 9-21.



Font, X., Garay, L. and Jones, S. (2016). Sustainability motivations and practices in small tourism enterprises in European protected areas. *Journal of Cleaner Production*, Vol. 137, pp. 1439-1448.

Gupta, A. Dash, S., and Mishra, A. (2019). All that glitters is not green: creating trustworthy ecofriendly services at green hotels. *Tourism Management*, Vol. 70, pp. 155-169.

doi.org/10.1016/j.tourman.2018.08.015

Hair, J., Black, W.C., Babin, B.J. and Anderson, R.E. (2009). *Multivariate data analysis*. (7th ed.). Prentice Hall: Chollerstrasse.

Han, H., Hsu, L.T.J. and Sheu, C. (2010). Application of the theory of planned behavior to green hotel choice: Testing the effect of environmentally friendly activities. *Tourism Management*, Vol. 31, No. 3, pp. 325-334. doi: 10.1016/j.ijhm.2018.03.012

Han, H., Hsu, L. and Lee. J. (2009). Empirical investigation of the roles of attitudes toward green behaviors, overall image, gender, and age in hotel customers' eco-friendly decision-making process. *International Journal of Hospitality Management*, Vol. 28, No. 4, pp. 519-528.

Han, H., Lee, J.S., Trang, H.L.T. and Kim, W. (2018). Water conservation and waste reduction management for increasing guest loyalty and green hotel practices. International *Iournal* of **Hospitality** Management, Vol. 75, pp. 58-66. doi:10.1016/j.ijhm.2018.03.012

Hsiao, T., Chuang, C., Kuo, N.W. and Yu, S.M. (2014). Establishing attributes of an environmental management system for green hotel evaluation. *International Journal of Hospitality Management*, Vol. 36, pp. 197–208. doi:10.1016/j.ijhm.2013.09.005

Hu, H., Parsa, H.G. and Self, J. (2010). The dynamics of green restaurant patronage. *Cornell Hospitality Quarterly*, Vol. 51, No. 3, pp. 344–362. doi: 10.1177/1938965510370564

Hu, W. and Wall, G. (2005). Environmental management, environmental image and the competitive tourist attraction. *Journal of Sustainable Tourism,* Vol. 13, No. 6, pp. 617-635. doi: 10.1080/09669580508668584

Jamaludin, M. and Yusof, Z.B. (2013). Best practice of Green Island Resorts. *Procedia - Social and Behavioral Sciences*, Vol. 105, pp. 20 – 29. doi: 10.1016/j.sbspro.2013.11.003

Karlsson, L. and Dolnicar, S. (2016). Does eco certification sell tourism services? Evidence from a quasi-experimental observation study in Iceland. *Journal of Sustainable Tourism,* Vol. 24, No. 5, pp. 694-714. doi: 10.1080/09669582.2015.1088859

Kasimu, A.B., Zaiton, S. and Hassan, H. (2012). Hotels involvement in sustainable tourism practices in Klang Valley, Malaysia. *International Journal of Economics and Management*, Vol. 6, No. 1, pp. 21–34

Kim, Y.J., Palakurthi, R. and Hanceer, M. (2012). The environmentally friendly programs in hotels and customers' intention to stay: An online survey approach. *International Journal of Hospitality & Tourism Administration*, Vol. 13, No. 3, pp. 195–214. doi:10.1080/15256480.2012.698169

Kirk, D. (1995). Environmental management in hotels. *International Journal of Contemporary Hospitality Management*, Vol. 7, No. 6, pp. 3–8. doi: 10.1108/09596119510095325

Kwoka, L., Huang, B. and Huaa, L. (2016). Green attributes of restaurants: what really matters to consumers? *The International Journal of Hospitality Management,* Vol. 55,pp. 107–117. doi: 10.1016/j.ijhm.2016.03.002

Laroche, M., Bergeron, J. and Barbaro-Forleo, G., (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer. Marketing*, Vol. 18, No. 6, pp. 503–520.



Leaniz, P.M.G., Crespo, A.H. and Lopez, G. R. (2017).Customer responses to environmentally certified hotels: The moderating effect of environmental consciousness on the formation of behavioral intentions, Journal of Sustainable Tourism, Vol. 26, 7, pp. 1160-1177. No. doi:10.1080/09669582.2017.1349775

Lee, J., Hsu, L., Han, H. and Kim, Y. (2010). Understanding how consumers view green hotels: how a hotel's green image can influence behavioral intentions, *Journal of Sustainable Tourism*, Vol. 18, No. 7, pp. 901-914. doi: 10.1080/09669581003777747

Lee, W.H. and Cheng, C. (2018). Less is more: A new insight for measuring service quality of green hotels. *International Journal of Hospitality Management*, Vol. 68, pp. 32–40. doi: 10.1016/j.ijhm.2017.09.005

Leonidou, L.C., Leonidou, C. N. and Kvasova. O. (2010). Antecedents and outcomes of consumer environmentally friendly attitudes and behavior. *Journal of Marketing Management*, Vol. 26, No. 13-14, pp. 1319-1344.

Lynes, J. and Dregde. D. (2006). Going green: Motivations for environmental commitment in the airline industry: A case of Scandinavian Airlines. *Journal of Sustainable Tourism,* Vol. 14, No. 2, pp. 116-138. doi.org/10.1080/09669580608669048

Manaktola, K. and Jauhari, V. (2007). Exploring consumer attitude and behavior towards green practices in the lodging industry in India. *International Journal of Contemporary Hospitality Management,* Vol. 19, No. 5, pp. 364-377. doi: 10.1108/09596110710757534

Mensah, I. (2007). Environmental management and sustainable tourism development: the case of hotels in Greater Accra region (GAR) of Ghana. *Journal of Retail & Leisure Property*, Vol. 6, No. 1, pp. 15-22. doi: 10.1057/palgrave.rlp.5100039

Mohamad, Z.Z., Arifin, T.R.T., Samsuri, A.S. and Munir, M.F.M.B. (2014). Intention to visit green hotel in Malaysia: the impact of personal traits and marketing strategy. *International Journal of Business and Social Science*, Vol. 5, No. 7, pp. 167-173.

Noor, N.A.M. and Kumar, D. (2014). Eco friendly activities Vs eco-friendly attitude: Travelers' intention to choose green hotels in Malaysia. *World Applied Sciences Journal*, Vol. 30, No. 4, pp. 506-513. doi: 10.5829/idosi.wasj.2014.30.04.14062

Ogbeide, G.C. (2012). Perception of green hotels in the 21<sup>st</sup> century. *Journal of Tourism Insights,* Vol. 3, No. 1. doi:10.9707/2328-0824.1032

Ramayah, T., Lee, J. W. C. and Mohamad, O. (2010). Green product purchase intention: Some insights from a developing country. *Resources, Conservation and Recycling*, Vol. 54, No. 12, pp. 1419–1427. doi:10.1016/j.resconrec.2010.06.007

Rashid, N.A., (2009). Awareness of eco label in Malaysia's green marketing initiative. *International Journal of Business and Management*, Vol. 4, No. 8, pp. 10-18

Saunders, M., Lewis, P., and Thornhill, A. (2011). *Research methods for business students.* (5th ed.). India: Dorling Kindersley India Pvt Ltd.

Sekaran, U. and Bougie, R. (2014), Research methods for business: A skill building approach. (5th ed.). India: Wiley India Pvt Ltd.

Schlegelmilch, B., Bohlen, G. and Diamantopoulos, A. (1996). The link between green purchasing decisions and measures of environmental consciousness. *European Journal of Marketing*, Vol. 30, No. 5, pp. 35–55.

Stern, P.C. (2000). New environmental theories: Toward a coherent theory of environmentally significant behavior.



*Journal of Social Issues*, Vol. 56, No. 3, pp. 407–424

Tang, M. (2015). Evaluating green hotels in Taiwan from the consumer's perspective. *International Journal of Management Research. & Business Strategies*, Vol. 4, pp. 1-15.

Thogersen, J. (2000). Psychological determinants of paying attention to ecolabels in purchase decisions: Model development and multinational validation. *Journal of Consumer Policy*, Vol. 23, No. 3, pp. 285-313.

Trang, H. L.T., Lee, J. and Han, H. (2019). How do green attributes elicit pro-environmental behaviors in guests? The case of green hotels in Vietnam, *Journal of Travel & Tourism Marketing*, Vol. 36, No. 1, pp. 14-28. doi: 10.1080/10548408.2018.1486782

Um, S., Chon, K. and Ro, Y. (2006). Antecedents of revisit intention. *Annals of Tourism Research*, Vol. 33, No. 4, pp. 1141-1158. doi:10.1016/j.annals.2006.06.003

Verma, V.K., Chandra, B. and Kumar, S. (2019). Values and ascribed responsibility to predict consumers' attitude and concern towards green hotel visit intention. *Journal of Business Research*, Vol. 96, pp. 206-216. doi.org/10.1016/j.jbusres.2018.11.0

Voracek, P.S.J. (2016). Organizational culture and green management: innovative way ahead in hotel industry. *Measuring Business Excellence*, Vol. 20, No. 1), Retrieved From <a href="http://dx.doi.org/10.1108/MBE-12-2015-0057">http://dx.doi.org/10.1108/MBE-12-2015-0057</a>

Weng, M., Ha, J., Wang, Y. and Tsai, C. (2012). A study of the relationship among service

innovation, customer value and customer satisfaction: An empirical study of the hotel industry in Taiwan. *International Journal of Organizational Innovation*, Vol. 4, No. 3, pp. 98–113.

Yadav, R., Balaji, M. S. and Jebarajakirthy, C. (2019). How psychological and contextual factors contribute to travelers' propensity to choose green hotels? *International Journal of Hospitality Management*, Vol. 77, pp. 385–395. doi: 10.1016/j.ijhm.2018.08.002

Zelezny, L.C. and Schultz, P.W. (2000). Promoting environmentalism. *Journal of Social Issues*, Vol. 56, No. 3, pp. 365–371.

#### **Author Biographies**



Uditha Mirando completed his first degree from Unversity of Sri Jayewardenepura, Sri Lanka. This paper is based on the thesis of Uditha Mirando.



Ms. H. D. H. C.
Dassanayake (BSc in
Operations &
Technology
Management (USJ); MBA
(Colombo); CIMAPassed Finalist) is a

Lecturer attached to the Department of Decision Sciences of the University of Sri Jayewardenepura. She is currently reading for PhD in Operations and Supply Chain Management in University of South Australia, Australia.

Paper ID 76

# Language Practices in Bilingual Mathematical Classrooms: The Role of Linguistic Diversity

RP Dharmawardene#

Post Graduate Institute of English (PGIE), Open University of Sri Lanka

#prasadiniesl@gmail.com

Abstract: The aim of this study was to explore how Sri Lankan bilingual students in public sector middle schools use their two languages - Sinhalese and English - to support learning of Mathematics in small groups with their counterparts who use Sinhalese only. The sample consisted of randomly selected 45 bilinguals and 45 monolinguals from three public schools in Colombo in Sri Lanka. The average age of the sample was 12 to 14 years. Over a twomonth period, 8 forty-minute lessons from bilingual mathematics classrooms were video-recorded and later transcribed for analysis. In the presentation of findings, three practices in the language usage which emerged are discussed, i.e. (1) using academic vocabulary, (2) invention of new terms, (3) word-for-word translation. In the study, one example was chosen to represent each practice with some of its situated effects. In the discussion, the first two examples contribute to the idea that the students' experience of language difficulties, whether real or presumed, contributes to creating opportunities that can be beneficial to learning mathematics. The third example, which focuses on learning mathematics in the medium of English points to some contrasting findings. Unlike many other studies found in this field, locally or internationally, which report difficulties and obstacles that arise in learning and teaching due to bilingualism in middle school classrooms, a change of focus via the conceptualization of language in the form of thinking and doing is emphasized in this study especially for learning and teaching mathematics in the context of bilingual classrooms in Sri Lankan public schools.

**Keywords**: Bilingual classroom, Mathematics, Language learning, Language as resource, English medium education

#### Introduction

The main aim of this study was to explore how Sri Lankan bilingual students use Sinhalese and English languages to support the learning of mathematics in small activity groups, while interacting with their monolingual Sinhalese students in the same group work.

In many parts of the world, mathematics teaching and learning are carried on in languages other than the students' native or dominant languages. However, studies in the field of mathematics teaching have acknowledged greatly the impact of the language of instruction in the development of teaching and learning practices (Adler, 2001; Barwell, 2012; Jorgensen, 2010). Many studies in the field of bilingualism show advantages of bilingual education (Clarkson, 2007; Chval & Khisty, 2009). This study attempts to offer a positivistic view of bilingualism from the point of view of its relationship with the creation of opportunities that are beneficial mathematics learning in Sri Lankan middle school context. Considering the studies in the field of bilingual education that have explored advantages of bilingualism (Ni Riordain & O' Donoghue, 2009; Clarkson. Parvanehnezhad & 2008) utilizing small group activities, this study also used small group work assigned to the middle school students in the bilingual mathematics classrooms in the chosen three schools.



Pimm (1987) stated in his research findings that the language is one of the most important areas for research in the field of mathematics education. Expanding his views about bilingual education, Morgan (2007) argued that studying academic language in mathematics supports multilingualism and in many occasions multilingualism supports studying mathematics. Moschkovich (2002)investigated the experience gained by the Latin students in US School system in learning mathematics in the medium of English in bilingual classrooms. She has observed code switching often made by the students mixing both Latin and English to communicate with their teacher mathematics in the classroom. Moschkovich gave evidence to support that code switching also plays a vital role in mathematics in bilingual classrooms when the students find the medium of instruction becomes a barrier to keep focus on the subject content. From the social perspective, the possibilities for mathematics learning opportunities may be influenced by the individual behaviour while they interact in the bilingual classroom. Yackel et al. (1991) states that when the students work together bilingual classrooms and try to communicate with the peers in his or her language, learning second many opportunities arise naturally for both monolinguals and bilinguals to verbalize their different thinking, explain or justify the solutions they offer, and ask for some clarifications when needed (p. 401).

Therefore, it is reasonably important to examine the use of the bilinguals' languages and their impact on learning opportunities in the bilingual mathematics classrooms.

#### Methodology

The main research question addressed in the present study was: How do Sri Lankan bilingual students use their two languages, Sinhalese and English, in small group activities in mathematics? and how is it associated with the creation of new learning opportunities for the students?

Over a two month period 8 lessons from mathematics bilingual classrooms in the selected three schools were video recorded. They were later transcribed and analysed in line with the research questions. Three excerpts, each from one school, were elaborated for the study purpose. The three schools purposefully selected considering the easy access to the researcher. The sample of students, 30 from each school (15 bilinguals and 15 monolinguals), were randomly chosen out of the numbers in bilingual and monolingual mathematics classrooms and further grouped in to three mixed classrooms in the three schools for the study purpose based on the consent of the students, their parents, teachers, School heads and the Ministry of Education prior to the administration of the pre planned lessons. Each lesson consumed 40 minutes, i.e. one school period in the respective school. Lessons were planned ahead targeting six small groups of five students in one classroom. The entire classroom was video recorded at the beginning of the study focusing a camera on the group with the selected bilingual students whose recording was later transcribed for analysis. The topics of the lessons varied according to the school term requirements and the preferences of the teachers in charge. All the mathematics teachers motivated the students in groups to participate actively in the study, solve the given tasks in their groups and finally to report their work to the class.



Figure 2. A photograph showing a group work in the School 1.

Source: Researcher's collection of photos



Figure 2. A photograph showing a group work in the School 2.

Source: Researcher's collection of photos



Figure 3. A photograph showing a monolingual and a bilingual present their group work to the class.

Source: Researcher's collection of photos

#### Results

For each of the three examples of practice of the students in the study, two stages are analysed, giving identification to the while language practice describing mathematics learning opportunities. The first two examples show how the knowledge of English (the second language of the learner) is contributing to comprehend the question in the group activity. The creation of new learning opportunity of mathematics is facilitated when monolinguals, facing either real or presumed second language difficulties, keep their focus on mathematics in their discussion. The difficulty understanding the second language -English- is observed to be facilitating mathematical reasoning that was started in the native language - Sinhalese- in the first two examples.

The Excerpt 1 in the study shows how one monolingual student (Sudesh) discusses a mathematical problem about odd and even numbers with his bilingual peers (Randeep and Vinuk). The interaction helps the monolingual student to understand the meanings of the terms 'odd' and 'even' at the of the interaction which is considered as learning academic vocabulary (odd and even) taking the second language as resource.

#### The Excerpt 1

**Sudesh**: ඔයා මොකක්ද මේකට මෙතත ලිව්වෙ? (What did you write here for this 4x+3x?)

Randeep: මං ලිව්වේ ඔත්තේ සංඛනාවක් (I wrote an odd number)

Sudesh: මං ඇහුවෙ ඔයා මොකක්ද ලිව්වෙ? (No, I asked what did you write?)

Randeep: මේ බලන්න. මං ලිව්වෙ මෙන්න මේ ඔත්තේ සංඛනාව (See, I wrote this odd number).

Sudesh: 'ඔඩ්' කියන්නෙ අමුතුයි කියන එකනෙ? ('Odd'.... Doesn't it mean 'amuthui'?...)

Vinuk: නෑ. මෙත් ලිව්වෙ ඔත්තේ සංඛ්‍යාවක්. ඔත්තේ කියන්තේ ඉරට්ටේ නෙමෙයි කියන එක. ඉරට්ටේ කියන්තේ 2.4.6 වගේ ඒවා. ඒත් මෙතන තියෙන්නේ 7. ඉතිං ඒක ඔත්තේ සංඛ්‍යාවක්. ඔයා මොකක්ද ලිව්වේ? මට පෙත්තන්න. (No, I have also written an odd number. Odd means not even. Even are 2, 4, 6 like that. But here it is 7. So it is an odd number. What have you written? Show me.)

**Sudesh**: මට තේරෙනවා... ඔඩ් කියන්නේ ඔත්තේ (I understand...odd means *oththe*) .

The Excerpt 2 of the study shows how two monolingual students (Roshan and Maneesh) discuss an algebraic expression with a bilingual peer (Dilum) in their group work facilitating the monolingual student to comprehend a new term, 'Consecutive'.

#### The Excerpt 2

 Dilum:3y+(3y+y)+(3y+2y)... එක ගාව එන

 ඉළක්කම් 2ක් එකතු කරන්නයි කියන්නෙ....

 බලන්න ඒක ලේසියි.

 (3y+(3y+y)+(3y+2y)....Adding two or three consecutive numbers...see it is easy!)

Roshan: ඒක කොහොමද එහෙම වෙන්නෙ? (How can that happen?)

Dilum: හි ලේසියි. ඒක නිකං ඔයා එක ඉඳක්කමකට Iක් එකතු කරනවා වගේ....හියට 1+1, 2+1 නැත්නම් 2.5+3.5.. තේරුණාද? ඒවා



අනුයාත සංඛාහ.... මේ බලන්න (Simple, it's just like you add 1 to another number....just like 1+1, 2+1 or 2.5+3.5..got it? They are consecutive numbers look.)

Roshan: ඔයා කියන්නෙ ඔයා ඊගාව ඉළක්කම ගන්න නිකම්ම කලින් ඉළක්කටෙ 1ක් එකතු කරනවා කියළද? ඒවා එක ගාව ඉළක්කම් වුණාම (you mean you just add 1 to the former number to get the next number? And they should follow each other?)

Dilum: නෑ නිකම්ම 1 ක් එකතු කරලා බෑ. ජ්වා එක ගාව එන ඉඳක්කම්ම වෙන්න ඕනත් නෑ. සමහර වෙලාවට ඔයා එකතු කරන්නෙ x yß y" හැබැයි ඒවා අනුයාත වෙන්න ඕන. (No, not just adding 1, not the numbers that follow each other always, sometimes you add x or y but they should be consecutive numbers).

Maneesh: ඔයා ඒ ඉලක්කම් අනුයාතයි කියන්නේ හැම තිස්සේම ඒවායේ වෙනස 1 වෙන තිසාද?. (You mean they are 'consecutive' beacuase the difference between the two numbers is always 1?.)

**Dilum:** අන්න හිඳ ඒවා අනුයාතයි....මලන්න 4.5y 1y 5.5y ඒවායේ වෙනස 1 යි. තේරුණාද රෝෂාන්? (That's right! They are consecutive numbers...see this 4.5y and 5.5y... The difference is 1. You got it Roshan?).

Roshan: මව්....ඒවා කන්සකටිව් ඉලක්කම් වෙන්න ඕන (Yes...they should be consecutive.)

#### The Excerpt 3

The Excerpt 3 in the study shows one monolingual student (Samantha) interacts with a bilingual peer (Hiran). They discuss about the perimeter and radius of objects. Their interaction was supported by wordfor-word translations, from Sinhalese to English.

Samantha: ඔයා දත්තවද පිමිතියට කියත වවතෙ? (Do you know what we call for 'parimithiya'?)

Hiran: ඔට්, පෙිමීට¾ (Yes. It is perimeter.)

Samantha: පෙන්නන්න මේකෙ පෙිමීට¾ එක (Show me the perimeter in this.)

Hiran: මෙතන ඉදලා මෙතෙන්ට එනකම්ම වටේට තියෙන තිර (the distance from here to here.)

Samantha: ඒ කියන්නෙ රූපයේ වටේ රවුමේ තිරතෙ? (That means the outer boundary of a body or figure.?)

සමහර වෙලාවට වටේට තියෙන දාර ඔක්කොගේම එකතුවත් ගත්තවතෙ? (Sometimes we take the sum of all the sides ?)

Hiran: මයා හි ඇති (may be you are right)

Samantha: එතකොට රාඩියස් කියන්නෙ? (What is the meaning of the word 'raadius'?)

Hiran: රා-ඩියස් නෙමෙයි ඒක <sup>3</sup>¾-ඩියස්....මෙන්න මේ Èග.....බලන්න. (Its not 'raa-dius', it is 're-dius', this length.....)

Samantha: එහෙනම් 3ේ4ඩියස් තමයි අරය (then the 're-dius' should be the 'araya'. )

Hiran: හි. මයා දන්නවාද පෙිමීට¾ එක සොයන සූතුය? (Right, do you know the formula for the perimeter?)

**Samantha**: මව්. පෙිමීට $\frac{3}{4}$  එක සොයන්නෙ 2  $\sum \pi$  r වලින් (Yes, we use 2  $\sum \pi$  r to find out the perimeter.)

#### **Discussion and Conclusion**

The Excerpt 1 which showed how one monolingual student (Sudesh) discussed a mathematical problem of odd and even numbers with his bilingual peers (Randeep and Vinuk) is an instance that proves the interaction helps the monolingual students to improve academic vocabulary. As Huguet (2007) revealed, some monolingual speakers choose academic vocabulary in the way that makes their native language look more distant to the second language linguistically. In the Excerpt 1, Sudesh does not first identify the mathematical term 'odd' as an academic vocabulary. Instead, he asks if it meant 'strange' ('amuthui' in Sinhalese). However, at the end, the



monolingual, Sudesh, came to understand the meanings of the terms 'odd' and 'even' at the end of the interaction which is considered as learning academic vocabulary taking the second language as resource. The concern they have with specific vocabulary supports developing the arithmetic meaning for mathematical problems they come across.

The Excerpt 2 that shows how two monolingual students (Roshan and Maneesh) discussed an algebraic expression with a bilingual peer (Dilum) in their group work is an instance that supports the finding that bilingual classrooms facilitate the monolingual students to invent new terms. In the example, two monolinguals comprehend the meaning of the term 'consecutive' and add it as a new term in to their vocabulary.

The Excerpt 3 is an example that shows how monolinguals' interaction with the bilinguals in group work is supported by word-for-word translations. in the example, the student (Samantha) interacts with a bilingual peer (Hiran) and discusses about the perimeter and radius of objects. Samantha, the monolingual, translates the terms, perimeter and radius, in to Sinhalese to conceptualize those mathematical concepts.

When the terms are translated from one language to another in the process of communication in mathematical lessons, second language does not support as resource for learning new vocabulary because the focus on the second language is kept away from its focus on mathematics. However, the language practice of the monolinguals of word-to-word translation could be observed in many instances throughout this study. The practice was equally common in almost all three schools.

In the present study, the focus was on linking language learning opportunities with the language practices in the bilingual classrooms rather than the opportunities of language learning. It also focused on

academic and technical vocabulary in mathematics. The first two examples given in the results support the view that some language barriers contribute to generating learning opportunities in bilingual mathematics classrooms as long as the focus of the discussion is not directly related to language. The third example presented here is an instance where the students find it difficult to keep their focus on mathematics as it is interrupted by word-to-word translation. As Cobb et al., (2003) have suggested, some systematic research on learning opportunities of mathematics should be carried on in the bilingual classroom settings to find out how linguistically diverse students supported with better learning opportunities.

#### Acknowledgment

I acknowledge the staff, the pupils of the three schools and all who supported me in carrying out this research in Bilingual Education.

#### References

Adler, J (2001). Teaching mathematics in multilingual classrooms. Dordrecht: Kluwer Academic Publishers.

Barwell, R. (2012). Heteroglossia in multilingual mathematics classrooms. In H. Forgasz & F. Rivera (Eds.), Advances in Mathematics Education. Toward equity: gender, culture, and diversity (pp. 315-332). New York: Springer.

Chval, K. B., & Khisty, L. L. (2009). Bilingual Latino students. writing and mathematics: A case study of successful teaching and learning. In R. Barwell (Ed.), Multilingualism in mathematics perspectives classrooms: Global (pp. Multilingual 128-144). Clevedon: Matters.

Clarkson, P. C. (2007). Australian Vietnamese students learning mathematics: High ability bilinguals and



their use of their languages.
Educational Studies in Mathematics, 64, 191- 215.

Cobb, P., Confrey, J., diSessa, A., Lehrer, R., & Schauble, L. (2003). Design experiments in education research. Educational Researcher, 32(1), 9-13.

Huguet, A. (2007). Language use and language attitudes in Catalonia. In Lasagabaster & A. Huguet (Eds.), Multilingualism in European bilingual contexts: Language use and attitudes 17-39). Clevedon: Multilingual (pp. Matters.

Jorgensen, R. (2010). Language, culture and learning mathematics: A Bourdieuian analysis of indigenous learning.

Morgan, C. (2007). Who is not multilingual now? Educational Studies in Mathematics, 64, 239-242.

Moschkovich, J. N. (2002). A situated and socio-cultural perspective on bilingual mathematics learners. Mathematical Thinking and Learning, 4(2-3), 189-212.

Ni Riordain, M., & O'Donoghue, J. (2009). The relationship between performance on mathematical word problems and language proficiency for students learning through the medium of

Irish. Educational Studies in Mathematics, 71, 43-64.

Parvanehnezhad, Z., & Clarkson, P.C. (2008). Iranian bilingual students reported use of language switching when doing mathematics. Mathematics Education Research Journal, 20(1), 52-81.

Pimm, D. (1987). Speaking mathematically: Communication in mathematical classrooms. London: Routledge and Kegal Paul.

Yackel, E., Cobb, P., & Wood, T. (1991). Small-group interactions as a source of learning opportunities in second-grade mathematics. Journal for Research in Mathematics Education, 22(5), 390-408.

#### **Author Biography**



R. P. Dharmawardene is teaching Language Arts in the Postgraduate Diploma in Bilingual Education program at the Post Graduate Institute of English in the Open University of

Sri Lanka. She is currently reading for her PhD on the Effectiveness of Virtual Blended Mode in teaching ESL to Undergraduates in Sri Lanka.

Paper ID 79

### Public Intention towards Mobile Money Transactions in Sri Lanka

SAKEP Subasinghe\*, SD Mirihagalla, T Welivitage and Lahiru Gunathilake

Department of Management and Finance, Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defence University

# k.eranga2701@gmail.com

**Abstract:** Mobile Money Transaction (MMT) is an innovative technology, which is freshly introduced by several business entities in Sri Lanka. Though this service is useful and relatively easy, an initial study revealed that it is not popular among the community as an e-banking service. With this background, the study was conducted to detect the factors affecting public intention towards MMT in Sri Lanka and to recognise the most influencing factor on public intention towards MMT. With the support theoretical of Technology Acceptance Model (TAM) and Theory of Reasoned Action (TRA), five independent variables were developed namely, perceived usefulness, awareness, perceived ease of use, perceived risk and perceived trust, while public intention was identified as the dependent variable. The survey questionnaire was developed after a pilot testing with 18 undergraduates and 170 responses were collected through a web-based questionnaire. The collected data were analysed with the use of SPSS software, and all the data preparation techniques such as normality, linearity, validity, reliability and multi-collinearity were conducted. According to the multiple regression analysis, it was revealed that Perceived Ease of Use and Awareness have no impact on dependent variable, whereas all the other three independent variables showed a significant impact. Also, the perceived risk was identified as the critical factor on consumer intention towards MMT. As implications of the study, mobile service providers need to take measures to

minimise the associated risk of MMT in order to make MMT more popular among people.

**Keywords:** Mobile Money Transactions, Consumer intention, Consumer awareness, Perceived risk

#### Introduction

Mobile technology has a major opportunity to become an important service in economic arena of developing countries, because most of the people are using mobiles to accomplish monetary activities in their daily activities, such as money transferring, money receiving and payment activities. Banks and mobile service providers already established mobile money platforms for consumers to do monetary activities, like deposit money and transfer money through digital account. It is a competitive opportunity to millions of unbanked people in all over the world (IOM;UNFPA, 2014). There are now 411 million worldwide mobile money accounts. In addition, mobile money is available in 85% of countries where there is no access to a formal financial institution for the vast majority of the population. This is an exceptional accomplishment, showing the power of digital, underpinned by the important role played by mobile network operators in the development of this market (GSMA, 2016).

The number of mobile money providers in 93 countries grew to 271 in 2015. In addition, according to World Bank data on global financial inclusion, mobile money services are available in 85% of countries where there are less than 20% of citizens



with an account at a financial institution (World Bank, 2015). Mobile money has evolved to offer options to save and borrow money, supporting people in handling financial risks and household surprises, more than a creative and open resource for transactions. Though microfinance has its origins in the late 1970s. (Grameen bank, 1970).

One of mobile money's most pronounced impact has been that millions of individuals and companies who have never had access to credit can now create a transaction history, borrow money, and pay it back via their mobile phone. There were 52 live mobile credit services allowed by money in 2016, up from seven in 2011 (Genga, 2016). Mobile cash has redefined the economics of the poor by exploiting broad-based agent networks, inexpensive feature phones and mobile network access to reach mass audiences in a financially sustainable manner (GSMA, 2016).

Telecommunication industry have an important role in country's economy. In Sri Lanka has a small market telecommunication industry. There are four service providers are serving mobile services in Sri Lanka. These are Dialog, Mobitel, Airtel and Hutch. These service providers are struggling to keep their market share by increasing new customers. Mobile service providers are introducing new products into the market to attract new customers. E-channeling, e-shopping, e-learning and mobile money transactions are very significant technologies in Sri Lanka (Dissanayake, Hewagamage, Ramberg, & Wickramanayake, 2014). Traditionally people use money notes to financial transactions but later credit cards and automated teller machines replaced to old banking methods. Mobile phone operators put more effort to introduce new services to their customers. Surveys, softwares, Advertising and Marketing activities use to introduce new services. Awareness and interest of the customers are important to success new innovations (Biemans, Griffin, & Moenaert, 2016). Mobile phones introduce new and rapidly growing methods of facilitating financial transactions and transfers for those included in or removed from structured monetary systems (Porteous, 2006). Mobile money transaction technology creates opportunity to operate a mobile instrument such as a mobile phone to start, control and ratify a monetary arrangement (Kaufmann & R.J., 2007).

#### **Research Issue**

Mobile network providing companies have introduced a money transferring method using mobile phones which is similar to a bank account. Since this service is new to the customers, there is a challenge to attract the target population and there will be many reasons for this situation. The researchers conducted an Exploratory Research on usage of mobile money in Sri Lanka. As a result of that, the findings indicated that the MMT is not much established as much as mobile banking. So, this research will be conducting to observe the reasons for the poor expansion of MMT and identify the most influencing factor to adopt mobile money transactions in Sri Lanka.

Previous researchers have provided an in depth understanding of the factors that affect consumer attitude and intention towards mobile money transactions in relationship with mobile banking and internet banking (Colombage & Priyangika, 2011). Sandaruwan, et al., (2018) have provided a conference paper regarding on the "Factors affecting the mobile money transactions in Colombo district Sri Lanka". But the researchers haven't considered about the perceived ease of use and the perceived usefulness variables which can be affected to the behavioral intention of consumers. This research will consider about perceived ease of use and usefulness along with other variables. By observing those researches, we identified that the mobile money transactions happen without banks are not much considered. We are conducting this research to observe



the public intention towards MMT and reasons for their intensity to use it in Sri Lanka. The research questions are as follows:

- 1. What is the relationship between Perceived Usefulness, Perceived Ease of Use, Perceived Risk and Perceived Trust and Awareness towards Public Intention on MMT in Sri Lanka?
- 2. What is the most influencing factor to establish mobile money transferring in Sri Lanka?

The research aims at investigating the effectiveness of factors related to consumer intention on mobile money transferring method in Sri Lanka and to recognize the most influencing factor among them.

#### **Literature Review**

Generally mobile money can describe as an electronic technology which process monetary transactions through mobile phones. Mobile money services can be categorized in three ways. Those are "mobile banking", "mobile payments" and "mobile transfer. Every developed state which developed in every area use mobile banking but developing countries do not have much intention on mobile banking. Other monetary activities operating through mobile are mostly used in nondeveloped countries with people who don't have banking access. Main services of MMT are mobile payment and mobile transfer. The mobile money account is registered for the mobile number of the particular user. This electronically operable account can be recognized as a "mobile wallet", and it is secured by a personal identification number (PIN) and the account can credit or debit instantly through this digital service. Mobile phone users should engage with the small merchant outlets to deposit money into their mobile account. Company Telecommunication should provide small mobile recharge outlets in each area to cover all consumers. Local mobile agent centers can convert cash into mobile money as well as mobile money to cash through transmitting activity with the mobile telecommunication company. The electronic mobile account is controlled by mobile service operator according to standard value. (IOM, UNFPA, 2014).

The rapid development of electronic payment technology requirements, in bv mentioning particular internet contribution as a key commercial channel and potentially exciting potential has not yet been fully exploited. Previously, consumers did not know the internet and saw it only as a means of gathering information. But now, consumers are accepting this channel for their purchasing decisions and transactions. The increase mobility needs of customers when the payment of transactions has created the need for a new payment instrument that makes transactions easier and more convenient (Ondrus & Pigneur, 2006).

Consumers must have knowledge to make payments by using mobile. Companies targeting to mobile money transactions but most of the people haven't trust on the mobile payments because consumers should have learning activities to launch mobile money transactions among the future consumers and merchants (Arviddson, 2014).In Europe electronic payments were more significant because of the advantage of electronic form of mass payments than the cash payments. If cash payments are replaced by the electronic payments may be around or even more than 0.3 percent of annually GDP economic profit can gain for a society (Danmarks national bank, 2011).

With the use of TAM, we can identify age as an important variable to explain the use of new technologies (Sun & Zhang, 2006). Number of researches has an inverse relationship with the importance of age and new methods (Morris, Venkatesh, & Ackerman, 2005). However, the age-appropriate study on technology acceptance has found that age has been negatively associated with the self-efficacy of the Internet, but has not affected the



perceived ease of use, perceived utility, and intent to participate in online community websites. Higher age and lower income people have more interest towards the mobile payment services (Arviddson, 2014). The value of the product or service has positive relationship with a network externality because the user increases the total number of individual products or services sold and used (Economides, 1996).

Mobile technologies are changing economically life of developing countries. Many people use handsets for a variety of financial transactions, such as receiving and sending money. In fact, mobile money is already having in banks and mobile network operators to provide money transferring services for unbanked consumers as digital money. Mobile financial services are known as, "mobile money". Mobile money transactions (MMT) make change life of the people who are living in the developing countries because of ability to pay electronically and access easily to financial services. Unbanked people can use mobile phone as a bank account to deposit money, transfer money and withdraw money. People can use mobile systems to make utility bill payments and make payments in merchant shops (IOM, UNFPA, 2014).

The research framework we have considered is based on the Technology Acceptance Model (TAM) and Theory of Reasoned Action (TRA).

# A. The Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a theory of information systems that models how users adopt and use technology. The model suggests that a number of factors when presenting a new technology to users will influence their decision as to how and when to use them. Davis et al (1989) introduced TAM and it considers the acceptability of a new creation and looks for the ways that makes the product accepted. TAM identifies

perceived usefulness (PU) and perceived ease of use (PEU) deciding user behavior (Davis, Bagozzi, & Warshow, 1989). Over the years, TAM has received significant empirical support through validation, applications, and replication to predict the use of information systems. TAM has proven to be a useful theoretical model for understanding and explaining user behavior in the implementation of information systems (Legiris, Imgham, & Collerete, 2003).

### B. Theory of Reasoned Action

In the TRA, the behavioral intention, which largely determines the actual behavior, is an additive function of two variables: attitudes (positive or negative behavioral evaluation) and subjective (perceived influences, etc.). In general, an increase in attitudes and subjective norms leads to a stronger intention to achieve behavior (Fishbein & Ajzen, 1975). Fishbein and Ajzen (1995) suggested that a person's actual behavior may determined by analyzing their prior intention and beliefs that the person would have for the given behavior. By definition, a person's intention before taking on real behavior is considered a behavioral intention. This was used as a measure of his intention to show behavior.

#### Methodology

The conceptual framework developed for the study is depicted in Figure 1. According to the conceptual framework which was developed in the previous chapter, perceived usefulness, perceived ease of use, perceived trust, perceived risk and awareness will be the independent variables and the intention can be identified as the dependent variable. The research will be discussed under following hypothesizes.

H1: Consumer awareness positively impacts on the consumer intention to use MMT.



H2: Perceived usefulness positively impact on the consumer intention to use MMT.

H3: Perceived Ease of Use positively impact on the consumer intention to use MMT.

H4: Perceived Risk negatively impact on the consumer intention to use MMT.

H5: Perceived Trust positively impact on the consumer intention to use MMT.

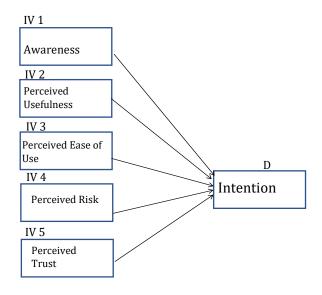


Figure 1: Conceptual Framework Source : Authors

#### Results

All the mobile consumers of Sri Lanka are obtained as the population of the research. Brink, (2001) defines a sample as "part or fraction of a whole, or a subset of a larger set, selected by the researcher to participate in a research project. A sample consists of a selected group of the elements or units from a defined population". Therefore, the population was selected through convenience sampling and 162 respondents were obtained as the sample. The sample of population is consisting of undergraduates, government and private sector employees.

	le 1: Reliability Cronbach's	
	Alpha	
Perceived usefulness	0.605	03
Perceived ease of use	0.784	05
Perceived risk	0.744	04
Perceived trust	0.728	04
Awareness	0.706	04

Source: Authors

A correlation coefficient is the value or unique number who builds a relationship between the two variables examined. The correlation coefficient value can be varied among positive and negative which shows the direction of relationships (Bryman & Bell, 2007). Usually "r" is used to represent the Correlation coefficient and the value should lie between -1 and +1.

	ble 2: Correlation Pearson's		<sup>ent</sup> decision
esis	Correlation	ance	
H1	0.271	0.000	Do not
			rejected
H2	0.450	0.000	Do not
			rejected
Н3	0.479	0.000	Do not
			rejected
H4	0.527	0.000	Do not
			rejected
Н5	0.489	0.000	Do not
			rejected

Source: Authors

According to the Table 2, Pearson correlation coefficient is greater than 0.4 in



most of the hypotheses above. So that it can be concluded that H1, H2, H3, and H5 have weak positive relationships while H4 is having a moderate positive relationship. Significance value is also can be used as a measure to take a decision regarding the hypotheses when the significance is less than 0.05 can be highly accepted. Therefore all the H1, H2, H3, H4 and H5 hypothesis can be considered as reliable significance. So that as it mentioned in the above table H1, H2, H3, H4 and H5 will be identified properly correlated.

Multicollinearity is discussed when there's an exact or nearly exact relationship between two or more input variables (Hawking & Pendleton, 1983). The Variation Inflation Factor (VIF) can be used to identify whether there is any multicollinearity effect for the explanatory variables of the research.

Table 3: Multicollinearity Test

1 able 5: W	rable 3: Multiconinearity Test				
	Tolerance	VIF			
Perceived Usefulness	0.617	1.621			
Perceived Risk	0.486	2.056			
Perceived Trust	0.555	1.803			
Perceived Ease of Use	0.439	2.276			
Awareness	0.802	1.247			

Source: Authors

Usually a value greater than 0.1 is suitable for the tolerance of variables and "0" level of tolerance is a special occasion where it is defined as Perfect multicollinearity. Also the tolerance level of "1" indicates zero multicollinearity. VIF should have a value less than 10 (Field, 2005). According to the Table 3, all the tolerance values for the variables are greater than 0.1 and VIF

values are less than 10. So there is no multicollinearity among the variables.

Regression is the method that can interpret the relationship between given variables. Multiple regression method can be used to find the relationship between independent variables.

Table 4: Model Summery

Table 1: Model Bullillery							
Model	R	R	Adjusted	Std. Error			
		Square	R Square	of the			
				Estimate			
1	0.603	.363	.343	.568			

a. Predictors: (Constant), Awareness,
 Perceived Risk, Perceived
 Usefulness, Perceived Trust,
 Perceived Ease of U

According to the Table 4, Awareness, Perceived risk, Perceived usefulness, Perceived Ease of Use, Perceived Trust can be identified as the independent variables and Intention as the dependent variable.

In the Model Summery table, R value is 0.603 and it indicates a positive linear relationship with dependent variables. R square (R2) value should between 0 and 1, it interprets the proportion of explained variance. When the R square value is higher, the relationship is strongly proved. Adjusted R square is considered as the modified version of R square. Adjusted R square value also can interpret several predictors in the model. The value of Adjusted R square is 0.343 and it also can indicate as a percentage. It show that 34.3% total variance of user intention can be explained by the independent variables. When the standard error of the estimate value is small, it indicates that the sample represent the significant quantity of the population. The standard error of the estimate value of the model summery table is 0.568 and it shows that the sample (170) can represent the population which we considered in the research.



_	_				
Tab	.1.	Е.	A N	$\alpha$	7 /
1 au	110	Э.	AIN		v A

Model	Sum of	df	Mean	F	Sig.
	Squares		Square		
1.Regression	28.692	5	5.738	17.814	0.000b
Residual	50.253	156	.322		
Total	78.944	161			

a. Dependent variable: Intention

b. Predictors: (Constant), Awareness,
 Perceived Risk, Perceived
 Usefulness, Perceived Trust,
 Perceived Ease of Use

ANOVA table represent the F value is equal to 17.814 and P value or the significant value is less than 0.05 in the 95% of confidence level. It shows that overall regression model is significant.

Table 6: Coefficients

	dize	d ficient	Standa rdized Coeffici ents		
	В	Std. Error	Beta	t	Sig.
(Constant)	.964	.271		3.55 2	.001
Perceived Usefulness	.204	.084	.199	2.41 8	.017
Perceived Ease of Use	.065	.087	.072	.747	.456
Perceived Risk	.231	.077	.275	3.00 4	.003
Perceived Trust	.188	.093	[]/9	2.02 8	.044
Awareness	.023	.065	.025	.347	.729

Source: Authors

#### a. Dependent variable

According to the Table 6, the independent variables of Perceived Ease of Use and

Awareness are having significant values of 0.456 and 0.729 respectively which are greater than 0.05. Therefore, the variables of Perceived Ease of Use and Awareness are considered as independent variables with no impact to the dependent variable of intention. Therefore. the remaining independent variables of Perceived Usefulness, Perceived Risk and Perceived Trust have an impact to the independent variable of Intention. It can be expressed as follows in an equation.

# Public Intention towards MMT = 0.199(perceived usefulness) + 0.275(perceived risk) + 0.179(perceived trust)

Though the variable of perceived risk was assumed as a negatively affecting factor on consumer intention towards MMT, it resulted a positive effect on public intention towards MMT. (as the questions are developed to get the idea of consumers when the risk towards MMT is mitigated). So, when the perceived risk is mitigated, consumer intention towards MMT is increasing. Therefore, the variables of perceived risk, perceived trust and perceived usefulness are affecting positively on consumer intention towards MMT while perceived ease of use and awareness does not affect.

#### **Discussion**

Five hypothesis which were proposed based on the conceptual framework are discussed with the help of data analyzing methods and their results. The research model was found significant in the data analyzing chapter as it scored 0.000 in the



test. Also, the most affected independent variable will be indicated in this chapter according their R<sup>2</sup> values. So in this chapter researchers have discussed that the extent to which the independent variables of perceived usefulness, perceived ease of use, perceived trust, perceived risk and awareness have impacted on the independent variable of intention based on research data.

H1: Consumer Awareness positively impact on the consumer Intention to use MMT.

The significance value should take a value lesser than 0.05 (p<0.05) with the confidence level of 95% to have a linear relationship among dependent independent variables. Though confidence level of the Awareness is 95%, its significance value is 0.729 which is greater than 0.05. Therefore, it can be stated that the consumer Awareness does not have a positive impact on consumer Intention towards MMT which is opposite to what we assumed initially. So according to the research data, study implies that the Awareness about the MMT among mobile service consumers in Sri Lanka is not an impact to their Intention to use MMT.

H2: Perceived Usefulness positively impact on the consumer Intention to use MMT.

The significance value should be less than 0.05 (p<0.05) with the confidence level of 95% to have the linear relationship among variables. So, it can be interpreted that the perceived usefulness has a positive impact on the intention. Further discussing the results, it shows that the "R square" value which is 0.203 has 20.3% for the intention to use MMT. So, this is the 3rd most affected independent variable to dependent variable of Intention which depicts that the Perceived Usefulness on MMT can create a positive impact on mobile service consumers to motivate them to use MMT.

H3: Perceived Ease of Use positively impact on consumer Intention to use MMT.

Considering the significance value and confidence level of PEOU, it has a 95% confidence level while having 0.456 significance level which is greater than the required significance margin of 0.05. Therefore, the variable PEOU does not have an impact on the consumer Intention. So, the initial hypothesis made about PEOU is not correct. Therefore, the research study reveals that the easiness of MMT does not affect the mobile service consumers to adapt MMT.

H4: Perceived Risk negatively impact on consumer Intention to use MMT.

Though the variable of perceived risk was assumed as a negatively affecting factor on consumer intention towards MMT, it resulted a positive effect on public intention towards MMT. (as the questions are developed to get the idea of consumers when the risk towards MMT is mitigated). So, when the perceived risk is mitigated, consumer intention towards MMT is increasing. Also according to the correlation coefficient table (table 2), H4 is having a moderate positive relationship while other hypotheses are having weak positive relationships. In the coefficient table (table 6), there are positive values for the perceived risk variable. So, it can be identified that the perceived risk is having an positive impact to the independent variable of Intention.

The significance value for the variable of perceived risk is 0.003 and the confidence level is 95% which create a linear relationship with the independent variable of consumer Intention. According to the "R square" values, perceived risk is having the highest value of 0.278 which effects consumer Intention by 27.8%. So, this is the highest affected variable to the consumer Intention towards using MMT. Therefore, the research study implies that perceived risk is a highly considerable factor concerned by mobile service users in adapting MMT.



H5: Perceived Trust positively impact on consumer Intention to use MMT.

As mentioned previously, a variable should have satisfied a 95% confidence level and a significance level lesser than 0.05 to have a linear relationship with the independent variable. Perceived Trust is having a confidence level of 95% and a significance level of 0.044, therefore Perceived Trust also having a multiple relationship on consumer Intention. As the R² value of the perceived Trust is 0.239, it affects the dependent variable in 23.9% amount and it is the second most affected variable on MMT according to the research study.

#### Conclusion

I. What is the relationship between Perceived Usefulness, Perceived Ease of Use, Perceived Risk and Perceived Trust and Awareness towards Public Intention on MMT in Sri Lanka?

When considering the factors affecting public intention on MMT in Sri Lanka, there were various factors including perceived usefulness, perceived ease of use, perceived risk, perceived trust, awareness and etc. Research analysis expressed that there is no relationship between awareness and perceived ease of use to the consumer intention on MMT. It emphasizes that, a considerable amount Sri Lankan mobile consumers are aware of their MMT service provided by their mobile service providers and it does not affect their intention to start consuming MMT. Simply that, though the consumers are aware about MMT, they don't tend to use that service. Likewise, the same situation with the variable of PEOU where there is no relationship with consumer Intention. It means that, though the mobile service users are able to ease their transactions in means of MMT, they are not interested in adapting the service. So, the study reveals that there is no use of advertising about the MMT services to the mobile service consumers in aim of increasing the awareness.

Considering on the analyzed results of remaining variables, Perceived Risk is the most affecting variable on Perceived Intention. It means that, the most of the mobile service consumers are having Risk issues about the MMT services. Therefore, the mobile service providers should take measures to minimize these risk issues on their MMT services or assure their subscribers that there are no risks in dealing with MMT.

Perceived Trust is the second most affected factor on consumer Intention. It conveys that the mobile service consumers have considerable Trust issues about this service even they consumed their mobile packages. Though there is a relationship between perceived usefulness and intention, the mobile service providers should take more actions to make the consumers aware about the usefulness of this service.

So according to the finalized data research study has concluded that from the considered variables, Perceived Risk, Perceived Trust and Perceived Usefulness are the only factors affected on consumer Intention towards MMT.

II. What is the most influencing factor to adapt mobile money transferring in Sri Lanka?

According to the finalized research data and conclusions, it is very clear to understand that the variable of Perceived Risk has the largest impact on the consumer Intention towards MMT. It means that the most of the mobile service users are afraid of registering on this service as they believe that there's a risk, they possess in means of privacy and security.

Therefore, the mobile service providing companies should take measures to minimize these Risk issues their customers feel about MMT as no one would like to risk their private information and money. Mobile service consumers will choose MMT



if they feel much confident about their privacy and security.

#### References

Arviddson, N. (2014). International journal of bank marketing. *consumer attitudes of mobile payment services*.

Biemans, W. G., Griffin, A., & Moenaert, R. K. (2016). New service development. *Journal of product innovation management, 33*(4), 382-397.

Bryman, A., & Bell, A. (2007). *Business Research Methods* (2nd ed.). New York: United States, Oxford University Press.

Colombage, S. S., & Priyangika. (2011). The potential of using mobile money systems for enhancing financial inclusion in sri lanka.

Danmarks national bank. (2011).

Davis, F. D., Bagozzi, R. P., & Warshow, P. R. (1989). User acceptance of computer technology. *A comparison two theoritical models, Management science*, 982-1003.

Dissanayake, V., Hewagamage, K. P., Ramberg, R., & Wickramanayake, G. N. (2014). Study to initiate mobile learning among a group of young farmers from Kandy district. *An activity theory based approach*, 26(1), 26-38.

Economides. (1996). The economics and networks. *International Journal of Industrial Organization*, 14,No.6, 673-699.

Field, A. (2005). *Reliability Analysis* (2nd ed.). London: Sage.

Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research Reading. *MA: Addison-Wesley*.

Genga, B. (2016). *J. Kenyan Lender CBA to Take Mobile-Bank Service Deeper Into Africa. Bloomberg.* 

Grameen bank. (1970). History of grameen bank. 31 Grameen Research, Inc. (2016).

GSMA. (2016). State-of-the-Industry-Report-on-Mobile-Money.

Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). Multivariate data analysis. *7th ed.s.l.*; *Pearson*.

Hawking, R. R., & Pendleton, O. J. (1983). The regression Dilemma . *Stat-Theo.Meth*, *12*, 497-527.

IOM, UNFPA. (2014). mobile money services"a bank in your pocket".

IOM; UNFPA. (2014). An overview of trends and opportunities. *Mobile money services*" *Abank in your pocket*".

Kaufmann, A., & R.J. (2007). The economics of mobile payments: understanding stakeholder issues for an emerging financial technology application,. *Electronic commerce research and applications*.

Legiris, P., Imgham, J., & Collerete, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information & Management*, 40, 191-204.

Morris, M., Venkatesh, V., & Ackerman, P. (2005). Gender and age differences in employee decisions about new technologies:an extension to the theory of planned behavior". *IEEE Transactions on Engineering Management, 52 No.1*, 69-84.

Ondrus, J., & Pigneur, Y. (2006). Towards a holistic analysis of mobile payments: A multiple perspectives approach. *Electronic Commerce Research and Applications*, *5*(3), 246-257.

Porteous, D. (2006). *The enabling environment for mobile banking in Africa.* department for international development.

Sun, H., & Zhang, P. (2006). The role of moderating factors in user technology acceptance. *International Journal of Human-Computer Studies*, 64, 53-78.

World Bank. (2015). *Global financial Inclusion Database*. Retrieved june 4, 2019, from

http://databank.worldbank.org/data/reports.aspx?source=global-findex

Paper ID 100

# An Examination of the Social Level Predictors of Cyberbullying Victimisation

MAPM Munasinghe#, KS Harasgama

Law School, Faculty of Humanities and Sciences, Sri Lanka Institute of Information Technology (SLIIT)

#paramie.m@sliit.lk

**Abstract:** With the increasing use of information & communication technologies, and the popularity of various social media applications, incidents of cyberbullying have also increased. A number of studies have been conducted in the recent years to investigate how various social factors influence one's vulnerability to cyberbullying. This paper reviews the existing literature and develops conceptual framework on critical social factors predicting cyberbullying victimization. Such a framework would be immensely useful for governments and policymakers as it gives a comprehensive view and understanding of the critical predictors of cyberbullying. Such an understanding is important for devising a holistic approach addressing to cyberbullying through potential victim empowerment and placement of early preventive measures. The conceptual framework developed in this paper identifies family background, school climate and peer relationships as critical social factors for cyberbullying victimization.

**Keywords**: Cyberbullying victimization, Critical social factors

#### Introduction

#### A. Background

During the past decade, social networking, instant messaging, and blogs have developed into more prominent tools for social interactions over telephonic or face-to-face interactions, beginning with Myspace and Yahoo chat rooms and

progressing, to the now popular Facebook, what sapp and various other web platforms (Kowalski, Limber, & Agatston, 2012).

This new and rapidly growing form of communication has given way to a new form of bullying in the 21st century called cyberbullying. Hinduja and Patchin (2009) define cyberbullying as "willful and repeated harm inflicted through the use of computers, cell phones, and other electronic devices". According to Belsey (2004) "cyberbullying involves the use of information and communication technologies to support deliberate. repeated and hostile behavior by an individual or group that is intended to harm others".

Cyberbullying forms a subset of online harassment and covers a wide range of conduct such as trickery, outing, trolling, catfishing, online impersonation, exclusion, flaming, denigration etc. Recent research has shown that among various forms of harassment that take place in cyberspace, a substantial number of persons are victims of cyberbullying, which leads to a wider realization that cyberbullying is becoming serious problem (Cross, 2008; Thompson, Smith, & Goldsmith, 2008). For instance, "The Pew Internet and American Life Project on Cyberbullying" conducted in 2006, using a sample of 935 teens age 12 to 17 years-old and their parents living in continental United States, found that one out of three teens have been cyberbullied in the past year (Lenhart, 2007). These findings signify



importance of carrying out a thorough examination of cyberbullying victimization enquiring into the root causes of it.

#### B. Research Objective

This article enquires into the social antecedents (risk factors) of cyberbullying victimization and discusses how certain socio environmental factors such as family background, school climate and peer relationships etc. influence a person being more vulnerable to cyberbullying victimization.

### Social Factors which Predict Cyberbullying Victimization

Human behavior is shaped by the complex interactions in multiple contexts including the individual, family, peer, and school environments (Bronfenbrenner,1979). Accordingly, through a comprehensive review of literature, this part of the article aims to extend the body of research on cyberbullying victimization by determining how victimization is predicted by a person's social surrounding.

#### A. The impact of family background

Family is viewed as one setting embedded within broader societal and cultural settings, all of which influence the shaping of an individual's development (Marrett et al., 2018). Grusec et al. (2014) suggest that the family background of a person has an important bearing on his/her development.

It has been shown that the most important prerequisite of a child's survival is his or her connection with the parents. This connection serves many functions, but there is increasing evidence that the qualities of such early relationships influences the way a child's brain develops, particularly the part of the brain that involves physiological, emotional and behavioral self-regulation (Newman,

Sivaratnam & Komiti, 2015; Swain et al., 2007).

Similarly, in the context of cyberbullying victimization, negative family dynamics and parental characteristics serve as risk factors (Buelga et al., 2015). Thus, this part of the study aims to assess the role of five family background related strain elements, namely, Lack of parental support and poor parent child communication; Family conflict; Deprived socio-economic status and deprived employment situation; and Parental educational level as possible predictors of cyberbullying victimization.

# 1). Lack of parental support and poor parent-child communication

explored Certain studies have the association between parenting and Initial cyberbullying victimization. research has found that cyberbully-victims experienced less parental monitoring and reported poorer emotional bonds with their parents than children who have not experienced cyberbullying (Ybarra et al., 2007; Ybarra & Mitchell, 2004; Erog'lu & Peker, 2011). Wang et al. (2009) have assessed parental support in relation to cyberbullying using four measures: (a) whether parents provided help when needed, (b) were loving, (c) understood children's problems, and (d) were able to make them feel better when upset. The authors found that most of those who were cyberbullied had a family history with a significantly less parental support.

Additionally, it was found that both the cyber and traditional victims of bullying more often reported having authoritarian or neglectful parents. (Conor, 2016; Dilmaç and Aydoan, 2010). Authoritarian parenting includes imposing strict rules in an obedience-valued environment; for instance, authoritarian parents commonly use corporal punishment in order to modify their child's behavior (Baumrind, 1966). Studies by Baldry and Farrington



(2000) and Wang et al. (2009) show that increased parental pressure will predict significantly higher rates of cyberbullying victimization. Similarly, Dehue et al. (2012) who examined the relationship between cyberbullying victims and parenting characteristics, reported victims of cyberbullying having parents who were less responsive to their needs, but were also more demanding.

A study by Bornstein & Bornstein (2014) shows that authoritarian parenting style minimize opportunities for children to learn to cope with stress. According to too much control them, and demandingness may limit children's opportunities to make decisions for themselves or to make their needs known their parents. Furthermore. authoritarian parents were found to display low level of engagement and trust toward their children. They most often discourage open communication and make strict control of a child's behaviour (Hoskins, 2014). According to Nijhof and Engels (2007), the authoritarian parenting style is related with the lower level of ability and self-confidence to employ coping mechanisms among adolescents and thus restricts a child to explore his/her capabilities and social interactions, eventually resulting in the child's dependence on parental guidance and direction. Hence, it can be argued that these inherent features are the reason which makes a person brought up in an authoritarian parenting environment more vulnerable to cyberbullying victimization.

Similarly, parent-child communication also has been one of the most studied dynamic variables and there is a fairly high degree of agreement between the researchers that it is one of the most important variables influencing cyberbullying victimization. On the one hand, Boniel-Nissim and Sasson (2018) found that a poor parent-child communication was associated with

cyberbullying victimization. Larranaga et al. (2016) also found that a poor quality of family communication, avoidant, not open, and with difficulties in general, is related to a greater probability of becoming a cyberbullying victim. These coincides with the results of the research by Shapka et al. (2010) who point to the importance of communication-based parent-child relations; accordingly, a child revealing or disclosing information about his/her online behavior to his or her parents or to a family member was found to negative correlation have cyberbullying victimization. On the other hand, both positive mother-child communication and father-child communication were associated with lower risks of cybervictimization (Boniel-Nissim and Sasson, 2018). These results agree with the previous findings of the research conducted by Doty et al. (2017), who found that parent-child communication offered direct protection for students, thus reducing the likelihood of them being cyberbullied.

As aforesaid, lack of family support, care and parent child parental communication is evidently a predictor of cyberbullying victimization. This is because the relationship and communication that exist within a family play a key role in an individual's socialization as it is the main the way in which he/she learns to interact with others (Bavelas & Segal, 1982; Checkland, 1999). Parent-child relations are among the most important protecting factors against unfavorable circumstances for children (Wallen & Rubin, 1997). Effective parent-child communication parental support help adolescents to develop the necessary problem-solving skills (Noller, 1995) and enables them to deal more effectively with the problems challenges they face. Such and communication is therefore more likely to encourage the development of positive self-



concepts. Studies indicate that positive parent– child communication is associated with less compulsive Internet use (Van den Eijnden, Spijkerman, Vermulst, van Rooij & Engels, 2010). Further on, positive communication with parents constitutes a protective factor against the development of psychological problems; specifically, positive parent–adolescent communication has been associated with higher levels of adolescent psychological well-being (Lam, Shek, Tang & Lee, 2003).

#### 2) Family conflict

A negative family climate, where there are frequent conflicts among the family member specially between parents where they argue about the same things over and over, have serious arguments, or often insult or yell at each other (Hemphill et al.,2014), has been positively related to cyberbullying victimization (Cava, Musitu, & Murgui, 2007; Lereya et al., 2013; Martínez-Ferrer, Moreno, Amador, & Orford, 2011, Buelga et al. 2017; Chen et al. 2018). In a study by Marret and Choo (2017) using students from randomly selected public secondary schools in the state of Negeri Sembilan, Malasia (using a sample of 1487 students between 15 years and 16 years of age) found out that students who experienced high levels of parental conflict were twice as more likely to be cyber-victims. Shams et al. (2017) discovered that children who witnessed violence between their parents were more likely to show cyberbullying victimization behaviors. However, Le et al. (2017) found that witnessing violence between their parents was a significant predictor of cyberbullying perpetration, but not in case of victimization.

Frequent and intense conflicts or fighting between parents has a negative impact on children's sense of safety and security which affects their relationships with their parents and with others. Parental conflict

violent, intense or poorly resolved, that focuses on children is also linked to adjustment problems, particularly when children blame themselves for their parents' problems. Accordingly, in families where there is a high level of conflict and animosity between parents, children are at a greater risk of developing emotional, social and behavioral problems, as well as difficulties with concentration educational achievement (Harold, 2013; Castro & Priegue, 2019). Children who are placed in the middle of their parents' dispute (by either parent) are more likely to be angry, stressed, depressed or anxious, and have poorer relationships with their parents than children who are not used in this way, and thereby create individual who have more vulnerable to get victimized to cyberbullying ( Buelga, Ferrer & Cava, 2017; Cross et al., 2015). Hence it is evident that the aforementioned behavioral and emotional problems which are triggered by family conflict, ultimately result creating an individual who will become an easy prey of cyberbullying victimization.

'Good quality parenting', or parenting that provides structure, warmth, emotional support and positive reinforcement in contrast to a family with constant fighting and irreconcilable arguments, has been found to reduce the aforesaid impacts of conflict (Chen & Liu, 2012). Thus, providing children with an environment in which they feel physically and psychologically safe is critically important for their wellbeing and must be given high priority as a measure against cyber victimization.

# 3) Deprived socio-economic status and poor employment situation

Regarding parental employment situation and economic status, Bevilacqua et al. (2017) found that a low socio-economic status was associated with a greater risk of being a cyberbullying victim. In addition, Jansen et al., (2012) found that children



belonging to low-income families experienced cyber bullying more than those from moderate-income families. Chen et al. (2018) have also found low family income and father's unemployment to be associated with cybervictimization. To the contrary, Uludasdemir and Kucuk (2018) found no relationship between parental employment situations cyberbullying victimization. Shaheen et al. (2018) also stated that the parents' job did not have an impact on the adolescents' cyber victimization experience. However as mentioned above, despite of a few studies, socio-economic status and lower employment situation of the family, to a greater extent, is shown to have a positive link with cyberbullying victimization.

It has been found that this is mainly due to the fact that socio-economic status of the family and parental employment situation is a powerful predictor of many facets of a child's personality. These facets of personality may encompass elements such as cognitive ability, risk preferences, and resilience etc. (Huisman et al, 2010).

For an instance, children and adolescents with a lower cognitive ability or those who lack the mental capability that basically involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience etc. have a lower resilience to adverse circumstances than children and adolescents with greater cognitive ability (Gottfredson, 1997). Studies have disclosed that the reason for this might be the fact that the individuals with a greater cognitive ability are more successful in finding solutions for stressful situations or learn more quickly how to avoid them and to functioning—to 'rebound recoil'—in the face of adversity than those who do not possess that ability (Decker et al, 2015; Huisman et al., 2010).

Moreover, deprived parental employment status and low parental socio-economic position is also believed to be an important risk factor for the development of both personality and internalized problems in the child. Internalized problems which are associated with a group of emotional symptoms of an individual reveals more prevalent effortful control of behavior, feelings of sadness, low self-esteem, behavioral inhibition, and fears (Novak and Mihić, 2018). Previous studies reveal that this is because it reflects exposure to a disadvantageous social environment during important developmental phases in the early life course. Such disadvantaged environments may be characterized by economic hardship, heightened levels of stress, poor parenting, and child abuse within the family, or by neighborhood factors such as poor housing, substance abuse and delinquency (Huisman et al.,2010; Burger et al.,2008; Xu et al., 2019).In the light of the above substantial evidence as provided by former studies, it can be suggested that these outcomes which is a direct result of having a deprived employment and socio-economic status lead to an increased vulnerability to cyberbullying victimization.

#### 4) Parental educational level

Furthermore, in relation to the parents' education level, there are different findings in the existing literature. Cakir et al. (2016) discovered that students with parents possessing a low level of education were more likely to be cyber victims. However, in the study conducted by Chen et al. (2018) only the mother's low level of education was associated with cyberbullying victimization. In Soydas and Ucanok's (2014) study, they find that the daughters of the mothers whose education level is low are more often vulnerable to cyberbullying. Further it has been shown that students whose mothers do not have or drop out



high school education have more cyberbullying victimization behaviors compared to the students whose mothers have high school education or completed higher education (Eroglu et al., 2015). Conversely, some other studies report that parents with a high level of education increased the likelihood of cyberbullying victimization (Uludasdemir and Kucuk, 2018; Laftman, Modin and Ostberg, 2013).

Parental knowledge and awareness of online bullying is also associated with parental educational level. To be more specific, higher the parents' educational level, greater the parents' willingness to be informed of the safer use of new technologies by their children and to adopt a proper parenting style. Specifically, this provides guidance for parents as a first step to know the risks that children may be faced with. Likewise, parents should learn about the nature and forms that cyberbullying take place, as well as the resources, materials and organizations where they can find help to deal with cyberbullying (Navarro Serna,2015). Thus, it can be said that parental lack of awareness as to these aspects can also form a risk factor for cyberbullying victimization.

Accordingly, despite of a very few research findings, there is a considerable consensus amongst most of the available literature on the positive association between parents with a lower educational level and the risk of being cyberbullied.

#### B. School climate

It is increasingly recognized that school climate—the quality and character of school life— affects children's development, learning and achievement. School climate includes the norms, goals, values, interpersonal relationships, teaching, learning and leadership practices, and organizational structures that comprise school life (National School

Climate Council, 2007). There is evidence that school factors, such as poor school climate (students' sense of belonging to school and respect for and fair treatment of students by school staff), are associated with greater rates of cyberbullying victimization (Williams & Guerra, 2007). Sourander et al. (2010) incorporated measures of school environment in their research, finding that cyberbully victims felt significantly less safe at school, and were more likely to report that their teachers did not care about them. Kowalski et al. (2014) also observed that it is possible that negative school climate could increase the vulnerability to cyber victimization among the schools' students.

On the other hand, Williams and Guerra (2007) found that positive school affiliation and a perception of the climate as trusting, fair and pleasant had protective impacts for both cyber harassment, violence and bullying (Calmaestra- Villen, 2011; Cappadocia, 2009; Taiariol, 2010; Kowalski et al., 2014).

The following is explanatory of what makes a negative school climate increase the vulnerability to cyberbullying victimization: When a child is being educated in such a surrounding there is a high probability that he or she won't be immune to cyberbullying victimization. This is mainly due to the fact that inhospitable school surroundings do not cater to the creation of an individual who is socially, mentally and physically active, since it lacks a climate related to connectedness, belongingness, safety, school spirit and good morale (Hinduja, 2013). Moreover, non-supportive school climate thwarts any attempt made by an individual to develop his/her cognitive skills, problem solving skills, skills about group life including learning to express and integrate their own feelings etc. (Berzoff et al.,2016) which ultimately creates an individual child who lacks the



ability to fight against cyberbullying because he has not learnt the basic skills of life from the school, the next place after family, which ought to enable all children to find positive pathways to adulthood. Thus, the facts mentioned above suggest that, a person who studies or who emerges from a school setting which is non-supportive, such a person has a tendency to be more vulnerable to cyberbullying victimization since such school environment act as a barrier for the development of one's intellectual, interpersonal and social skills.

#### C. Peer relationships

Bukowski, Hoza, & Boivin (1994) states that having high quality friendships have been shown to offer support and feelings of connectedness and security and also to act as a buffer against negative impact that result from cyberbullying victimization experiences. However, it should also be noted that reduced and unhealthy peer support or loneliness emerges as a predictor of cyber harassment victimization in children and youth (Pavri, 2015).

Although findings on online harassment victimization and peer relationships are limited, victims of cyberbullying have been found to rate their friendships they had before victimization as being less trusting, caring, and helpful (Williams & Guerra, 2007). One study that focused on 12–17-year-old cyberbullying victims showed that among other factors less support friends was a significant predictor of being negatively affected by cyberbullying. (Ortega, Elipe & Monks, 2012).

Children rejected by peers and without friends have been also considered at risk for victimization and also it has been suggested that being socially isolated could be a risk factor (Hodges et al., 1997; Hodges & Perry, 1999; Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1999).

As shown above, although there is a visible connection between having poor peer relationships and increased susceptibility to cyber bullying victimization, further research need to be carried out in this regard since most of the available literature focus on the area of peer support being a protective factor which can be used to remedy the negative impact of cyber bullying victimization rather than focusing on poor peer relationships as a predictor of cyber victimization.

#### **Conclusion and Implications**

#### A. Conceptual framework.

study examined This how various components of the society (e.g.: -parents, school, peers etc.) act as predictors of cyber harassment victimization by taking into consideration selected literature on the subject. Findings from this study indicate how factors such as lack of parental support, conflicts within the family, struggle for employment of the parents and educational level of parents contribute towards exposure to victimization whereas the risk is no less depending on one's school climate and peer relations and the amalgamation of these parameters can be indicated in a conceptual map as follows.

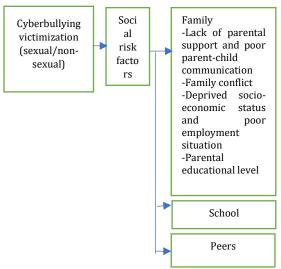


Figure 1: Social Level Predictors of Cyberbullying Victimization



B. Implications for governments and policy makers

The above analysis reveals that negative family background, weak peer relationships and negative school climate have significant positive correlations with cyberbullying victimization, implying the fact that in order to change the ongoing pattern of cyberbullying victimization, the transformation should start from within the society.

Accordingly, schools could make use of the above findings to create a favorable school climate where there is a supportive and close relationship between the school and its students and equip the school with necessary techniques to make the school staff and its students ready to face this form of victimization by incorporating those into the school curriculum and by training the school staff to handle such situations etc. Moreover, as evident form the above review children learning through interactions with parents provide the foundation for later literacy and life learning process. Thus, it is also suggested that parents can utilize the above findings as an opportunity to talk and interact with their children and to strengthen the bond and understanding between them, as the relationship of a parent to a child - the emotional quality of their interaction, the experiences they share, the adult's beliefs about the child's capabilities - helps motivate young children's cognitive development and inspire their selfconfidence.

Moreover, the abovementioned correlation between various social factors and cyberbullying victimization can be utilized by governments and policymakers in formulating a mechanism through which cyberbullying victimization can be remedied. This includes empowering individuals who are potential targets of cyberbullying and implementing early preventive measures which include social involvement, in conjunction with the traditional approach centered on technical remedies and deterrence of the perpetrator by imposing penalizing provisions.

The above findings contribute to a better understanding of the cyberbullying phenomenon, thus, opening up new directions for the analysis of antecedents and predictors of victimization in cyberspace, eventually creating a society immune to cyberbullying.

#### References

Abu Bakar, H., Yusof, N. and M. Budiman, A. (2013). The Paradigm Model of Cyberbullying Phenomenon. GSTF Journal on Media & Communications, [online] 1(1). Available at: https://www.reserchgate.net/publication/287850514\_The\_Paradigm\_Model\_of\_Cyberbullying\_Phenomenon [Accessed 2 Jan. 2020].

Aydogan, D. and Dilmac, B. (2010). Parental attitudes as a predictor of cyber bullying among primary school children. World Academy of Science, Engineering and Technology International Journal of Computer and Systems Engineering, [online] 4(7). Available at: http://http://waset.org/publications/3406 [Accessed 4 Dec. 2019].

Bavelas, J. and Segal, L. (1982). Family Systems Theory: Background and Implications. Journal of Communication, [online] 32(3), pp.99-107. Available at: https://academic.oup.com/joc/ article/32/3/99/4372066 [Accessed 26 Dec. 2019].

Bevilacqua, L., Shackleton, N., Hale, D., Allen, E., Bond, L., Christie, D., Elbourne, D., Fitzgerald-Yau, N., Fletcher, A., Jones, R., Miners, A., Scott, S., Wiggins, M., Bonell, C. and Viner, R. (2017). The role of family and school-level factors in bullying and cyberbullying: a cross-sectional study. BMC



Pediatrics, [online] 17(1).Availableat:https://bmcpediatr.bio medzentral.com/articles/10.1186/s12887 -017-0907-8[Accessed 5 Dec. 2019].

Boniel-Nissim, M. and Sasson, H. (2018). Bullying victimization and poor relationships with parents as risk factors of problematic internet use in adolescence. Computers Human Behavior, [online] 88, pp.176-183. Available at: https://www.sciencedirect.com/science/a rticle/pii/S0747563218302735?via%3Dih ub [Accessed 4 Jan. 2019].

Buelga, S., Martínez–Ferrer, B. and Cava, M. (2017). Differences in family climate and family communication among cyberbullies, cybervictims, and cyber bully–victims in adolescents. Computers in Human Behavior, [online] 76, pp.164-173. Available at: <a href="https://www.sciencedirect.com/science/article/pii/S0747563217304296">https://www.sciencedirect.com/science/article/pii/S0747563217304296</a> [Accessed 12 March 2020].

Bukowski, W., Hoza, B. and Boivin, M. (1994). Measuring Friendship Quality During Pre- and Early Adolescence: The Development and Psychometric Properties of the Friendship Qualities Scale. Journal of Social and Personal Relationships, [online] 11(3), pp.471-484. Available at: https://journals.sagepub.com/doi/10.117 7/0265407594113011 [Accessed 3 Jan. 2020].

Cakir, O., Gezgin, D. and Ayas, T. (2016). The Analysis of the Relationship between Being a Cyberbully and Cyber victim among Terms of Different Adolescents in Variables. International **Iournal** Progressive Education, [online] 12(3), pp.134-154. Available at: <https: //eric.ed.gov/?id=EJ1116891> [Accessed 16 March 2020].

Chen, J. and Liu, X. (2011). The Mediating Role of Perceived Parental Warmth and Parental Punishment in the Psychological Well-Being of Children in Rural China. Social Indicators Research, [online] 107(3), pp.483-508. Available at: <a href="https://link.springer.com/article/10.1007/s11205-011-9859-9">https://link.springer.com/article/10.1007/s11205-011-9859-9</a> [Accessed 12 March 2020].

Chen, Q., Lo, C., Zhu, Y., Cheung, A., Chan, K. and Ip, P. (2018). Family poly-victimization and cyberbullying among adolescents in a Chinese school sample. Child Abuse & Neglect, [online] 77, pp.180-187. Available at:

https://www.ncbi.nlm.nih.gov/pubmed/29407606 [Accessed 6 Dec. 2019].

Dehue, F., Bolman, C., Völlink, T. and Pouwelse, M. (2012). Cyberbullying and traditional bullying in relation with adolescents' perception of parenting. Journal of Cyber Therapy & Rehabilitation, [online] 5(1), pp.25-35. Available at: https://www.academia.edu/2284155/ Dehue \_F.\_Bolman\_C.\_ V%C3%B6llink \_T.\_and \_Pouwelse\_M.\_2012 \_.\_Cyberbullyingand\_traditional\_bullying\_in\_relation\_with\_ adolescents\_perception\_of\_parenting.\_Jour nal of Cyberherapy and Rehabilitation 5 1\_25-34 [Accessed 5 Dec. 2019].

Hinduja, S. and Patchin, J. (2013). Social Influences on Cyberbullying Behaviors Among Middle and High School and Students. Journal of Youth Adolescence, [online] 42(5), pp.711-722. Available https://www.researchgate.net/ publication/234084454 SocialInfluences on\_Cyberbulling\_Behaviours Among\_Middle\_and\_High\_School\_Students [Accessed 27 Dec. 2019].

Hodges, E. and Perry, D. (1999). Personal and interpersonal antecedents and consequences of victimization by peers. Journal of Personality and Social Psychology, [online] 76(4), pp.677-685. Available at: https://psycnet.apa.org/



journals/psp/ 76/4/677.html [Accessed 5 Jan. 2020].

Huisman, M., Araya, R., Lawlor, D., Ormel, J., Verhulst, F. and Oldehinkel, A. (2010). Cognitive ability, parental socioeconomic position and internalising and externalising problems in adolescence: Findings from two European cohort studies. European Journal of Epidemiology, [online] 25(8), pp.569-580. Available at:<a href="https://www.ncbi.nlm.nih">https://www.ncbi.nlm.nih</a> .gov /pubmed/ 20535529> [Accessed 12 March 2020].

Kowalski, R., Giumetti, G., Schroeder, A. and Lattanner, M. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. Psychological Bulletin, [online]140 (4),pp.1073-1137.Available at: https://www.researchgate.net/publication260151324\_

Bullying\_in\_the\_Digital
Age\_A\_Critical\_Review\_and\_MetaAnalysis\_of\_Cyberbullying\_ Research
Among Youth [Accessed 27 Dec. 2019].

Lam, C., Shek, D., Tang, M. and Lee, B. (2003). Parent-adolescent communication and adjustment in Chinese adolescents in Hong Kong. In: Social Work Symposium: Knowledge, Practice and Research in Chinese Societies - Challenges Ahead. [online] Hong Kong. Available at: https://scholars.ln.edu.hk/en/publication s/ parent adolescent-communication-and-adjustment-in-chinese-adolescents in Hong Kong [Accessed 28 Dec. 2019].

Marret, M. and Choo, W. (2017). Factors associated with online victimisation among Malaysian adolescents who use social networking sites: a cross-sectional study. BMJ Open, [online] 7(6). Available at:

https://bmjopen.bmj.com/content/7/6/e 014959 [Accessed 9 Dec. 2019].

Navarro, R., Yubero, S., Larrañaga, E. and Martínez, V. (2011). Children's

Cyberbullying Victimization: Associations with Social Anxiety and Social Competence in a Spanish Sample. Child Indicators Research, [online] 5(2), pp.281-295. Available at: <a href="https://link.springer.com/article/10.1007/s12187-011-9132-4">https://link.springer.com/article/10.1007/s12187-011-9132-4</a> [Accessed 12 April 2020].

Noller, P. (n.d.). Parent-Adolescent Relationships. Explaining Family Interactions, [online] pp.77-111. Available at:

http://sk.sagepub.com/books/explaining-family-interactions/n3.x ml [Accessed 7 Jan. 2020].

Patchin, J. and Hinduja, S. (2010). Cyberbullying and Self-Esteem\*. Journal of School Health, [online] 80(12), pp.614-621. Availableat:https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1746-1561.2010.00548.x [Accessed 3 Jan. 2020].

Schwartz, D., McFadyen-Ketchum, S., Dodge, K., Pettit, G. and Bates, J. (1999). Early Behavior Problems as a Predictor of Later Peer Group Victimization: Moderators and Mediators in the Pathways of Social Risk. Journal of Abnormal Child Psychology, [online] 27(3), pp.191-201. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC27 61646 / [Accessed 5

Shaheen, A., Hammad, S., Haourani, E. and Nassar, O. (2018). Factors Affecting Jordanian School Adolescents' Experience of Being Bullied. Journal of Pediatric Nursing, [online] 38, pp.66-71. Available at: https://www.pediatricnursing.org/article/S0882-5963 (17) 30351-2/ abstract [Accessed 8 Dec. 2001].

Jan. 2020].

Sourander, A., Brunstein Klomek, A., Ikonen, M., Lindroos, J., Luntamo, T., Koskelainen, M., Ristkari, T. and Helenius, H. (2010). Psychosocial Risk Factors Associated with Cyberbullying among Adolescents. Archives of General Psychiatry, [online] 67(7), p.720. Available



at:http://www.antibullying.eu/sites/default/files/psychological\_risk\_factors\_as sociated\_with\_cyber bullying \_among\_adolescents.pdf [Accessed 27 Dec. 2019].

Swain, J., Lorberbaum, J., Kose, S. and Strathearn, L. (2007). Brain basis of early parent infant interactions: psychology, physiology, and in vivo functional neuroimaging studies. Journal of Child Psychology and Psychiatry, [online] 48(3-4), pp.262-287. Available at: <a href="https://www.

ncbi.nlm.nih.gov/pmc/articles/ PMC431855 1/ > [Accessed 1 April 2020].

Uludasdemir, D. and Kucuk, S. (2019). Cyber Bullying Experiences of Adolescents and Parental Awareness: Turkish Example. Journal of Pediatric Nursing, [online] 44, pp.84-90. Available at: https://www.ncbi.nlm.nih.gov/pubmed/3 0503252 [Accessed 7 Dec. 2019].

Wallen, J. and Rubin, R. (1997). The role of the family in mediating the effects of community violence on children. Aggression and Violent Behavior, [online] 2(1), pp.33-41.Availableat:https://www.sciencedirect.com/science/article/pii/S13591789960 00122?via%3Dihub [Accessed 7 Dec. 2019].

Wang, J., Iannotti, R. and Nansel, T. (2009). School Bullying Among Adolescents in the United States: Physical, Verbal, Relational, and Cyber. Journal of Adolescent Health, [online] 45(4), pp.368-375. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles /PMC2751860/ [Accessed 3 Dec. 2019].

Williams, K. and Guerra, N. (2007). Prevalence and Predictors of Internet Bullying. Journal of Adolescent Health, [online] 41(6), pp.14-21. Available at: https://www.ncbi.nlm.nih.Gov/pubmed/1 80 47941 [Accessed 27 Dec. 2019].

Ybarra, M. and Mitchell, K. (2007). Prevalence and Frequency of Internet Harassment Instigation: Implications for Adolescent Health. Journal of Adolescent Health, 41(2), pp.189-195.

#### Acknowledgment

This research was supported by the Accelerating Higher Education Expansion and Development (AHEAD) Program of the Ministry of Higher Education funded by the World Bank.

#### **Author Biographies**



MAPM Munasinghe is currently working as a Research Assistant at Law School, Faculty of Humanities and Sciences, Sri Lanka Institute of

Information Technology (SLIIT), under an AHEAD project titled 'An Investigation of Online Harassment among the Young Population in Sri Lanka: Development of a National Strategy to Combat Online Harassment'. She is a graduate of law from the Faculty of Law, University of Colombo and an Attorney-at-Law of the Supreme Court of Sri Lanka.



Dr. KS Harasgama is currently working as a Senior Lecturer (Higher Grade) at the School of Law, Faculty of Humanities and Sciences,

Sri Lanka Institute of Information Technology (SLIIT). She is an Attorney-at-Law, and has a B.A (Hons) in English Literature from the University of Kelaniya, Sri Lanka, an LLM degree from Deakin University, Australia, and a Ph.D. in law from Monash University, Australia. She is the Lead Researcher of an AHEAD Research Grant Project titled 'An Investigation of Online Harassment among the Young Population in Sri Lanka: Development of a National Strategy to Combat Online Harassment'.

Paper ID 101

## Factors Affecting Young Consumers' Online Purchase Intention in Sri Lanka with Special Reference to Undergraduates in General Sir John Kotelawela Defence University

UKGSR Ranasinghe, UKMSR Kuruppu#, HJMYD Herath, HGC Wijayagrahi and WDH De Mel

Department of Management and Finance, General Sir John Kotelawala Defence University

# shashikaramali@gmail.com

Abstract: The continued growth of technological advancements and improved Internet comprehension has converted the nature of day-to-day customer activities, and most offline operations have moved to operations. In this context, electronic-commerce transactions in Sri Lanka are expected to continue to grow in the near future. The aim of the study is to investigate the factors affecting young consumers' online purchase intention in Sri Lanka. The study will consider online purchase intention of young consumers with special reference to undergraduates of KDU in Sri Lanka. The research is based on Technology Acceptance Model (TAM), Perceived Risk Theory and the Theory of Reasoned Action (TRA) which are commonly used theories in the research field of online purchase intention. The research explores how the perceived usefulness, perceived ease of perceived risk, subjective norms and attitude towards the behaviour affect the online purchase intention of young consumers. In terms of research methodology, this study follows the quantitative approach, and the necessary data for the execution of the study were gathered through questionnaires distributed around 400 young consumers in KDU. Further, the study employed regression analysis. The researchers found that perceived usefulness, perceived ease of use, perceived risk, subjective norms and attitudes towards behaviour have significant influence with positive effect on online purchase intention of young consumers in Sri Lanka.

**Keywords:** Online purchase intention, Perceived risk, Attitudes

#### Introduction

Over the last two decades, the Internet has developing rapidly with appropriate digital economy driven by the global development of information technology. With these technological developments, many business organizations use these facilities to enhance and promote their image of goods and services using websites (Osman, Yin-Fah & Choo, 2010). Nowadays almost everyone has been given the opportunity to access the internet and conduct their day to day tasks with the use of the internet and new technologies.

Many internet and web users use these technologies for online shopping. Shopping came into practice thousands of years ago. In the old days, there was very little population for a village, and it was not a very profitable business for them. So, people use to sell their good in weekly fairs. All sellers gather to one place with their selling items and sell them to others for the desired price. But with the development of technology people wanted to do things very easily. They wanted to buy things when they want as soon as possible. So, the supermarkets were taken place in the world. But it wasn't enough for the people with the rapid development of the internet and technologies. They wanted their basic necessities to their doorstep instead of going out and buy things. Because of the busy life schedule of people, their life is becoming more and more complicated day by day. Due to these reasons, sellers seek to use technology for their selling techniques and with the help of the internet, online shopping was invented by web developers. Unlike traditional shopping, it is very easy to use the internet to buy internet users day



to day family needs and it can be done by just in a few seconds with their fingertip touch.

When it comes to online shopping, transactions make over the Internet. This task is primarily cognitive activity. Consumers do their shopping on their computer or hand-held devices rather than having to prepare and drive to several shopping malls. Not only busy businessmen but also housewives who always at their home use online shopping nowadays. In online shopping behavior consistency includes consumer behavior and shopping habits (Vellido et al., 2000). In addition, lifestyle compatibility can reflect on the consumer opinion of those who purchase goods online (Goldsmith and Bridges, 2000). Online shopping has been around in this world for more than 30 years, but it has become known to the general public in the last decade. There are two major E-Business styles. They are business-tobusiness (B2B) and business-to-customer (B2C). Under B2B, it is established that a particular company operates digital networks with its vendors, distributors, and other stakeholders. On the other hand, B2C deals with the sale of products and services through electronic networks to customers. Although the general public is familiar with B2C, B2B plays a major revenue role.

According to the latest statistics, Sri Lanka's Internet penetration improved by 30% during 2016, and Online users grew by up to 6.1 million, particularly due to the availability of multiple link options such as smartphone options, broadband options and dial-up options. This has a tremendous impact on Sri Lankan's life. And also because of this, several online activities have increased public media and especially e-commerce activities (Colombo Digital Marketers, 2017). In addition to these according things, to a recent comprehensive report published Kayamu, in Sri Lanka, online transactions are likely to grow by more than 72% in the near future (Khan, 2017). This research is targeted to investigate the factors affecting to young consumer's online purchase intention of undergraduates in Sri Lanka

#### **Problem Statement**

Nowadays online purchasing has become more popular among young consumers even in Sri Lanka. Awareness of computer tools and techniques has raised among young generation not only in urban areas but also in rural areas. They are attractive advances in computer technologies such as e-commerce and e-businesses with the advancement of education systems, there is a automatically a high demand for the purchase and use of new products it made it easier to obtain product data and client can buy the product after receiving product reviews and feedback and also due to the busy life with the competition of studying, young consumers tend to shop in a relaxed way for their own comfort (Sharma, 2013).

When it comes to online purchasing intention among young consumers, there are many factors affecting for online purchase intention such as perceived usefulness, perceived ease of use, perceived risk, attitude towards the behavior and subjective norms according to previous studies in world. Therefore, considering these background researchers tend to investigate that, how can these factors affect for young consumers online purchase intention in Sri Lanka.

#### **Research Objectives**

The primary objective of this research is to To investigate whether perceived usefulness, perceived ease of use, perceived Risk, Attitude toward behavior and Subjective norm will make an influence on the online purchase intention of the young consumers.

#### **Literature Review**

#### A. Introduction

The purpose of the literature review is to investigate the factors that influence intention of young customers when purchasing online shopping. There exist a number of models and theories to determine the customers' intention

- B. Theoretical Background
- 1) Technology Acceptance Model (TAM)



TAM, developed by Davis (1986), is an adoption of TRA specifically designed to model the acceptance of information systems by users. The purpose of TAM is to provide a general description of the determinants of computer acceptance that can clarify user behavior across a wide range of end-user computing technologies and user communities, while at the same time being theoretically justified (Davis, Bagozzi and Warshaw, 1989). There are two determinants in the Technology Acceptance Model, namely perceived ease of use and perceived usefulness. At first, the TAM is unique to the use of the information system to implement the principles of ease of use and usefulness. In contrast, the TAM is more parsimonious and it is more applicable in the different applications of the information system (Keyan, 2011).

#### 2) Perceived Risk Theory

Arrow (1950), Humphreys and Kenderdine (1979) and Taylor (1975) highlights Perceived risk "represents an uncertain, probabilistic potential future outlay". Perceived risk generally means the disagreement among the consumers have before purchasing a product or a service. Perceived risk could be considered naturally subjective and could vary from person to person and time to time (Bhasin, 2019). Customers often discuss with experts, family or friends about the product when buying products with a higher perceived risk and then make their choice. A common belief is that a majority of buyers tend to prefer products with high perceived risks-which already has a good review (Bhasin, 2019).

#### 3) Theory of Reasoned Action (TRA)

The theory of reasoned action (TRA) is intended to explain the connection within human action between attitudes and behaviors. This theory was introduced by Fishbein and Ajzen. The theory states that voluntary behavior of a person could be predicted by that person's attitude relating to a particular behavior combined with view point of the surrounding personal on the fact that person should or should not conduct a particular act. With the model generated by the TRA, behavioral intention

which defines the true behavior, is an additive function of attitudes subjective norms. Attitudes include both negative and positive behavioral outcomes while subjective norms describe applicable effects arising from the surrounding people. Attitudes and social norms could be changed to improve the chances of actual execution of the actions considered (Nguven et al., 2018).

#### C. Empirical Literature

#### 1) Perceived Usefulness

Perceived Usefulness (PU), representing a person's strong belief in the use of technology, will be helpful in increasing 2012). efficiency (Kim, Perceived usefulness relates to the result of the online purchase experience. Detailed information, availability and speed, as well the accessibility and easy to make orders. have often been listed as shopping major advantages of online For Internet users who have experience and busy during regular shopping times, the speed and accessibility of shopping can be actually useful advantages (Cho and Sagynov, 2015)

#### 2) Perceived ease of use

Perceived ease of use (EOU) relates to the degree to which the potential consumer intends the target process to be effortless (Davis, Bagozzi and Warshaw, 1989). when Applying the definition to context of online purchase, ease of use relates to consumers' expectations that buying through the Internet will implicate a minimal effort Although perceived usefulness relates to consumers' expectations of the end result of online purchase experience, perceived ease of use relates to their expectations of the method leading to a concluding online shopping outcome.

#### 3) Perceived Risk

Perceived risk is associated to a consumer's perceived value and the degree of risk when making a specific purchase decision (Cox and Rich, 1964). A buyer would take into account the variety risks associated with a purchase before purchasing that product. The types of risks are classified as



perceived or anticipated risks (Moshrefjavadi et al., 2012). Research suggests that customers typically prefer to buy goods which doesn't require physical inspection using electronic commerce (Peterson et al., 1997). In general, as lower the perceived risk of experience could be guaranteed for the buyer through brick-and-mortar store for the product purchase it would be the general preference.

#### 4) Attitude towards the Behavior

Attitude is the favorable or unfavorable feeling of a person to perform a particular behavior. Such principles are called values of conduct. When he or she positively judges it, a person may plan to follow a certain action. Attitudes of a person are closely related to the confidence of an individual for the acquired results of behavioral achievements (behavioral beliefs), which are classified by selfof consequences assessment the (evaluations of results). This proves that attitude could over define beliefs of a person to provide positive or negative outcome for the result resulted by a behaviour.

#### 5) Subjective Norms

Subjective Norms are considered to be a result of perceptions that the action is accepted or disapproved by individuals. Subjective norms are generally established by a considered set of beliefs. Established social effect in general would be characterized by the effect of surrounding individuals, which leads to adapt to their interests and acceptance. Even if the action may not be endorsed or authorized by an individual. pre-established social manipulation results pressure on an individual to agree upon the community social norms.

#### D. Conceptual Framework

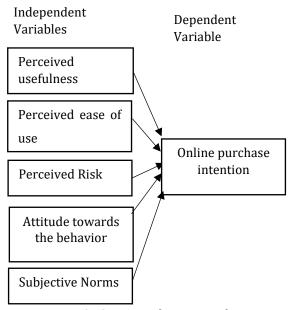


Figure 3. Conceptual Framework Source: Authors

As shown in figure 1 the conceptual framework has five independent variables which are known as Perceived usefulness, perceived ease of use, perceived risk, subjective norms and attitude towards the behavior and one dependent variable known as online purchase intention. the variables are based on three major theories known as perceived risk theory, TRA and TAM.

According to the conceptual framework researcher has come up with five hypotheses.

H1: Perceived usefulness influences the online purchase intention of young consumers.

H2: Perceived ease of use influences the online purchase intention of young consumers.

H3: Perceived risk influences the online purchase intention of young consumers.

H4: Attitude towards the behavior influences the online purchase intention of young consumers.

H5: Subjective norms influences the online purchase intention of young consumers.

#### **Data Collection**

This research conducted by using quantitative method. The study is a descriptive prevalence study also known as cross-sectional analysis, related to



quantitative method. The research is based on deductive approach which is concerned with building up hypotheses relevant to a prevalent theory, and then constructing a research strategy to measure hypotheses (Research-Methodology, 2019). Technology Acceptance Model, Theory of reasoned Action and Perceived Risk Theory are the theories which have based on the research approach. The sampling frame used in this study was distributed to undergraduate students representing the Ratmalana Branch of General Sir John Kotelawala Defence University in Sri Lanka. The sample of the study was distributed among 351 out of 4009 undergraduates. In this study stratified random sampling method was identified as the most preferable. The survey will be conducted by using questionnaire as data collection method. The questionnaire is generally based on three major theories used in the study. There are seven sections which examine each conception model the questionnaire.

#### **Data Analysis**

#### A. Reliability

The researchers tested the reliability of each concept and confirmed that the measurements consistently reflected the measured structure based on the data collected (Hair, et al., 2009). The Research article state that Flynn, et al. (1994) if the value is higher than or equal to 0.6, it means that the collected data is accurate and appropriate.

Table 1: Reliability Test

Table 1: Reliability Test				
	Cronbach's	N of		
	alpha	items		
Perceived	.799	7		
Usefulness				
Perceived Ease of	.923	6		
Use				
Perceived Risk	.857	13		
Attitudes towards	.890	12		
Behavior				
Subjective Norms	.740	4		
Online Purchase	.885	11		
Intention				

Source: Authors

#### B. Normality

If the Skewness and kurtosis values are less than three times their standard error values, Hair et al. (2009) assumes that the variables are normally distributed. For Skewness, the agreed value should be within -1 to + 1 and for Kurtosis, meaning that the variables are normally distributed should be within -3 to + 3 (Hair, et al., 2009).

Table 2: Normality Test

Model	Skew	Std. Error	Kurto	Std.
	ness	of	sis	Error of
		Skewness		Kurtosis
Perceived	.001	.134	395	.267
Usefulness				
Perceived	093	.134	625	.267
Ease of Use				
Perceived	.219	.134	375	.267
Risk				
Attitude	.529	.134	.194	.267
towards				
the				
Behavior				
Subjective	.246	.134	.210	.267
Norms				
Online	.662	.134	.745	.267
Purchase				
Intention				

Source: Authors

#### C. Linearity

In this study linearity was tested between online purchase intention and five variables. Here online purchase intention is the dependent variable while other five variables are independent variables. When considering the significance values all relationships show an accepted significance level.

Table 3: Linearity Test

	· · · · · · · · · · · · · · · · · · ·						
	R square	F	Signifi				
			cance				
PU and OPI	0.119	44.449	0.000				
PEU and OPI	0.082	29.306	0.000				
PR and OPI	0.109	40.340	0.000				
ATB and OPI	0.326	159.827	0.000				
SN and OPI	0.230	98.651	0.000				

Source: Authors



#### D. Validity

Kaiser-Meyer-Olkin (KMO) test can be used to determine the validity and typically KMO should be between 0-1. If the value of the KMO is closer to 1 indicates that the data collected is appropriate (Kim and Mueller, 1978). According to the table, the results of the study's KMO test are intermediate so that it can be considered as scientifically valid data set.

Table 4: KMO test

Kaiser-Meyer-Olkin	Measure	of	.774				
Sampling Adequacy							

Source: Authors

#### E. Multicollinearity

The tolerance value must usually be greater than 0.1 and if the tolerance level is "0" it indicates a complete multicollinearity while the tolerance value "1" does not mean multicollinearity. According to Field (2005), VIF should be less than 10. When considering the above tables, all tolerance levels are higher than 0.1 and all predictor variable VIF values are less than 10. It indicates that there is no multicollinearity.

Table 5: Multicollinearity Test

Tubic 5. Multicol	iniculity rest	
Model	Tolerance	VIF
Perceived	0.513	1.949
Usefulness		
Perceived Ease of	0.715	1.398
Use		
Perceived Risk	0.844	1.185
Attitudes towards	0.571	1.752
Behavior		
Subjective Norms	0.470	2.129

Source: Authors

#### F. Correlation

Pearson's coefficient of correlation is usually used to determine the correlation as a tool. The coefficient(r) should range from -1 to + 1 for a proper correlated relationship.

Table 6: Correlation Test

Hypothesis	Pearson's Correlation	Significance	Decision
H1	0.345	0.000	Not Rejected
Н2	0.286	0.000	Not Rejected
Н3	0.330	0.000	Not Rejected
H4	0.571	0.000	Not Rejected
Н5	0.480	0.000	Not Rejected

Source: Authors

In all of the above hypotheses the coefficient for correlation of Pearson is greater than 0.2. So, it can be assumed that there are strong positive relationships between H1, H2, H3, H4 and H5. Significance value can also be used as a measure to take a hypothesis decision when the meaning (p) is less than 0.05 is highly acceptable. All the hypotheses are below 0.01 can be considered reliable significance (p<0.05). So, as mentioned in table H1, H2, H3, H4 and H5 above, accurate relationship will be established.

#### G. Regression

Regression is a mathematical method used to analyze variables relationships. The research article (Baron et al. 1986) state that the regression analysis should be performed in three stages, taking into account three linear regressions. Firstly, analyzed the linear relationship between independent variables and Online Purchase Intention. Perceived Usefulness, Perceived Ease of Use, Perceived Risk, Attitudes towards Behavior and Subjective Norms consider as independent variables which represent the Online Purchase Indention. The following tables were generated to analyze the linear regression by using SPSS.

Table 7: Model summary

Table 7: Model Sullillary							
Model	R	R	Adjusted	Std. Error			
		Square	R Square	of the			
				Estimate			
1	.572ª	.327	.316	.453			

Source: Authors



 a. Predictors: (constant), Subjective Norms, Perceived Ease of Use, Perceived Risk, Attitudes towards the Behavior, Perceived Usefulness.

According to the above table the R value has a positive relationship with the dependent variable of Online Purchase Intention due to R value is 0.572a. R square suggested the ratio of the stated variance from 0 to 1 as a percentage. The modified R square, which is 0.327 is statistically significant and indicates that the difference between Perceived Usefulness, Perceived Ease of Use, Perceived Risk, Attitudes towards Behavior and Subjective Norms defines 32. 7% of the variance in on reputation. The standard error of the estimate is 0.453 and it suggest the sample size of 351 represent the young consumers in Sri Lanka.

Table 8: ANOVA

Model	Sum of Square		Mean Square	F	Sig
Regression	30.288	5	6.058	28.681	.000b
Residual	68.853	326	0.211		
Total	99.142	331			

Source: Authors

- a. Dependent Variable: Online Purchase Intention
- b. Predictors: (Constant), Subjective Norms, Perceived Risk, Perceived Ease of Use, Attitudes towards Behavior, Perceived Usefulness

According to the above table it can be observed that the overall regression model is significant where F= 28.681 and p<0.05 under 95% of confidence level. So that it can be concluded that the linear regression in the above case is significant. The next output of regression analysis is the following table which depicts the standardized beta coefficient which the researchers can use it to determine the relative importance of independent variables on the dependent variable.

Table 9: Coefficients Dependent Variable: Online Purchase Intention

Model	Unstandard		Standar	t	Sig.
	ized		dized		
	Coefficients		Coefficie		
			nts		
	В	Std.	Beta		
		Error			
Consta	.779	.229		3.402	.001
nt					
PU	.156	.056	.178	2.807	.005
PEU	.116	.058	.108	2.013	.045
PR	.162	.046	.174	3.512	.001
ATB	.296	.074	.241	3.999	.000
SN	.333	.057	.386	5.822	.000

Source: Authors

The researchers derived following formula by using the beta coefficient.

Regression equation.

$$Y = a + (PU) + (PE) + (PR) + (ATP) + (SN) + E$$

Y - Online Purchase Intention

PU - Perceived Usefulness

PE - Perceived Ease of Use

PR - Perceived Risk

ATP - Attitudes towards Behavior

SN - Subjective Norms

 $\epsilon$  - Error term

According to the regression equation if Online Purchase Intention increase by one unit while another factor is constant when the Perceived Usefulness would be increase by 0.178 units, Perceived Ease of Use would be increase by 0.108 units, Perceived Risk would be increase by 0.174 units, Attitudes Towards Behavior would be increase by 0.241 units and Subjective Norms would be increase by 0.386 units on average.

#### **Conclusion**

This study specifically examined the factors that influence Online Purchase Intentions from a technical point of view and the researchers used variables in a TAM model. TRA model and Perceived Risk model to explain the factors that influence Online Purchase Intentions. The Perceived Usefulness. Perceived Ease of Use, Attitudes Perceived Risk. **Towards** Behavior and Subjective Norms were the variables which were used as factors



during this research and after the study the researchers verified that all above factors have a significant impact to Online Purchase Intention of undergraduates.

As a summery, the findings confirm that the Perceived Usefulness, Perceived Ease of Attitudes Towards Behavior. Use. Subjective Norms and Perceived Risk have a positive impact to Online Purchase Intention in Sri Lanka. According to our findings Attitude towards Behavior and Subjective norms are two variables which have highly affected to online purchase intention of young consumers'. Further Subjective norms is the highly influenced factor or the variable than Attitude towards Behavior.

At the same time the researchers provide that the Attitude towards Behavior and Subjective norms have an impact to online purchase intention. Therefore, information useful to the government of Sri Lanka before taken a decision related to the online businesses. Also, it is useful for web retailers for their business transactions. Web retailers can use a variety of mechanism to create a positive Attitude of trust in the mind of consumers. Thus, affecting more consumers to the web stores. Although the Perceived Risk is one of the major factors influencing the purchase intention, web designers should pay particular attention to this factor when selling their products and services. If online retailers can plan their organizational layout and merchandise with wellorganized content, it will improve their consumers' Online Purchase Intention.

As recommendations, the result of this study could be served as a foundation for further research about online purchase as a new strategy beyond Traditional media marketing tools. In Sri Lanka there are different internet penetrations in each province and it may affect for consumers' online purchase intention. The process is used by most of the people regarding of the gender, age and region a considerable sample size should be used for an effective representative of the entire study population chosen from different young rather than choosing consumers undergraduates only. In addition.

demographic factors could be further investigated such as specifying into different ranges to observe the impact of these factors on online purchase intention. Further, in the present study it is only used quantitative data because of convenience. If the qualitative data also used it would be more effectively. According the technological to development the features of platforms are changing day by day. Future researchers can improve this study through the influence of technological development.

A number of limitations and direction for future research are to be noted in the study. The data were collected from just one particular University in Sri Lanka. Study can be further affected to other universities and comparative study based on various provinces. The study ws based on quantitative data and further research may be carried out embedding qualitative data gathered through interviews and focused group discussions for indeapth analysis.

#### Acknowledgment

We take this opportunity to thank and express our deep appreciation to our supervisor Ms. W. D. H. De Mel and research coordinator Dr. Wasanatha Premarathne and for their support throughout this assignment and for their valuable time in providing advice and we would also like to thank all the academic and non-academic personnel who have helped us all along. Finally, we are forever grateful to our families and friends who have supported and helped us to complete this work

#### References

Arrow, K. (1950). A Difficulty in the Concept of Social Welfare. Journal Of Political Economy, 58(4), 328-346. https://doi.org/10.1086/256963

Bhasin, H. (2019). What is Perceived risk? Definition & 5 Types of Perceived Risks. [online] Marketing91. Available at: https://www.marketing91.com/p

Chen, H. H. and Chen, S. C. (2009) 'The empirical study of automotive telematics



by Simple Alkyl Phenols\*. Endocrinology, 102(5), pp.1429-1435.

Cho, Y., & Sagynov, E. (2015). Exploring Factors That Affect Usefulness, Ease Of Use, Trust, And Purchase Intention In The Online Environment. International Journal Of Management & Information Systems (IJMIS), 19(1), 21. https://doi.org/10.19030/ijmis.v19i1.908 6

Cox, D., & Rich, S. (1964). Perceived Risk and Consumer Decision-Making—The Case of Telephone Shopping. Journal Of Marketing Research, 1(4), 32-39. https://doi.org/10.1177/002224376400100405

Davis, F. D., Bagozzi, R. P. and Warshaw, P. R. (1989) 'User Acceptance of Computer Technology: A Comparison of Two Theoretical Models', Management Science, 35(8), pp. 982–1003. doi: 10.1287/mnsc.35.8.982.

Field Crops Research, 2005. Field. 94(1), p.ii.

Flynn, J., 1994. Questioning Technology and Progress. Academe, 80(6), p.42.

Humphreys, L. (1979). The construct of general intelligence. Intelligence, 3(2), 105-120. https://doi.org/10.1016/0160

Journal of Mobile Communications, 7(1), pp. 50–65. doi: 10.1504/IJMC.2009.021672.

Kim, J. B. (2012) 'An empirical study on consumer first purchase intention in online shopping: Integrating initial trust and TAM', Electronic Commerce Research, 12(2), pp. 125–150. doi: 10.1007/s10660-012-9089-5.

Moshrefjavadi, M., Rezaie Dolatabadi, H., Nourbakhsh, M., Poursaeedi, A. and Asadollahi, A. (2012). An Analysis of Factors Affecting on Online Shopping Behavior of Consumers. International Journal of Marketing Studies, 4(5).

MUELLER, G. and KIM, U., 1978. Displacement of Estradiol from Estrogen Receptors

Nguyen, D., & et al., e. (2010). ChemInform Abstract: Potent Inhibitors of Farnesyltansferase and Geranylgeranyltransferase-I. Cheminform, 33(34), no-no. https://doi.org/10.1002/chin.200234176-2896(79)90009-6

Peterson, R., Balasubramanian, S. and Bronnenberg, B. (2019). Exploring the Implications of the Internet for Consumer Marketing.

Research-Methodology. (2019). Deductive Approach (Deductive Reasoning) - Research-Methodology. [online] Available at: https://research-methodology.net/research-methodology/research-approach/deductive-approach-2/ [Accessed 27 Oct. 2019]

Sharma, A., Gnanapandithan, K., Sharma, K. and Sharma, S. (2013). Relapsing polychondritis: a review. Clinical Rheumatology, 32(11), pp.1575-1583.

Taylor, K. (1975). Adaptation. BMJ, 1(5955), 463-463. https://doi.org/10.1136/bmj.1.5955.463-b

#### **Author Biographies**



Ms. Danisha De Mel. Lecturer. BBA (Finance Sp.) (Hons) (Colombo), MBA (PIM - USJP), CIMA (UK) passed finalist.



UKMSR Kuruppu. Bachelor of Science in Management and Technical Sciences. Department of Management, Social Science and Humanities.

General Sir John Kotelawala Defence University Sri Lanka.



HJMYD Herath. Bachelor of Science in Management and Technical Sciences. Department of Management, Social Science and Humanities. General Sir

John Kotelawala Defence University Sri Lanka.





KGSR Ranasinghe.
Bachelor of Science in
Management and
Technical Sciences.
Department of
Management, Social
Science and Humanities.
General Sir John

Kotelawala Defence University Sri Lanka.



HGC Wijayagrahi.
Bachelor of Science in
Management and
Technical Sciences.
Department of
Management, Social
Science and Humanities.
General Sir John

Kotelawala Defence University Sri Lanka.

Paper ID 159

### Consumer Preference Towards Own Brands with Special Reference to Own Brands of Cargills & Keells Supermarkets

Jayamina Senanayake, Chamindu Nawaruwan, Sathira Heshan, Sandeepa Herath# and Lahiru Gunathilake

Department of Management and Finance, Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defence University

#sandeepahm1@gmail.com

**Abstract:** The supermarkets in Sri Lanka operate in an oligopolistic market in which the players have head to head competition. In order to win such competition, several supermarkets introduced their brands, which are available at relatively cheaper rates than those of branded products. With this background, the study was carried out to examine the consumer preference towards such own brands introduced bv Cargills & Keells Supermarkets in Sri Lanka. When developing the conceptual framework, brand equity model was used and the study explored how the brand image, brand trust, brand awareness, brand loyalty, brand association and perceived quality impact on the consumer preference towards own brands. The data was gathered through questionnaires distributed around 250 consumers in the western province. As per the correlation and multiple regression analysis, it was found that, brand image, brand trust, brand awareness, brand loyalty, brand association and perceived quality have a significant influence on consumer preference towards own brands. Hence, in order to place them ahead in competition, supermarkets should invest on their own brands while developing their product portfolio further.

**Keywords:** Brand equity, Consumer preference, Own brands

#### Introduction

It is very essential for brand managers and the own brand manufactures to have a clear and a wide understanding of the customers' expectations, likes, dislike, motivations and inclinations that drive a customer to purchase a new product (Yang & Tsou, 2017). ). In the modern world marketing plays a very competitive role. Simply it is like a battle field fighting for a new company to attract new customers. If any country has strong retail sector that can be identified as the most important factor that affect to economy of the country. In the modern world retail sector has become a necessity for a society (Wanninayake & Randiwela, 2017). In Sri Lanka, supermarket concept developed with the departmental store namely of Cargills and millers. Firstly, the supermarkets started in 1980s and expanded from 2000 onwards. At the present supermarket is at the growing stage in the business life cycle (Ratnayake, 2014). Mostly around 600 supermarket outlets are around the country with influencing Cargill's food city and keels super as the main supermarket chain. After considering the major supermarkets where sub supermarkets could be seen as well. Sentra, Kings super, Arpico, sun up, park and shop, crystal and prince super and there can be seen a lot of single owner selfservice and also retail supermarkets are running throughout the country (Gunewardene & Alihussain, 2018). In recent years retailing market has risen comparison to above rapidly with mentioned supermarkets. supermarket chain has improved as a result of mushrooming food and grocery items. With the passage of five year time it was observed private supermarkets have grown/ escalated throughout the country and the it spreaded to the urban areas. This has been mainly due to the desire of the



retail customers and the changing of the lifestyle. And also it creates a new social circle of wealthy people in outstation areas. When considering the western province Supermarkets have alreadv established where as private supermarket owners are risky. (Essays, 2018). At the present Situation, Sri Lankan Supermarket industry can be identified as oligopolistic market. And also, there is competition which named as "head to head" competition. Therefore, most of the supermarket use several strategies to win the market share such as low-cost method and product differentiate. Further they have introduced their own brands (Keels K-Choice, Cargills My-Choice) for their consumers by giving names by those products.

#### **Problem Statement**

At the present supermarkets already introduced their own brands to the market under new brand name. Building a brand among consumers can be identified as a complicated task and it takes considerable time. At the present Sri Lankan supermarket culture has been rapidly growing over the past year (Anon, 2019). And also there can be identified huge competition among the existing supermarkets. Therefore building an own brand in this culture is not an easy task. And also it is a difficult task to creating a brand memorable and in superior in qualities (Lee & Back, 2010). When we consider about the recent culture of the supermarkets, they were already able to introduce their own brands to the market under new brand name.

When considering the Sri Lankan super market culture, Cargills and Keells which can be considered as most popular supermarkets among the Sri Lankans have introduced their own brands in a successful manner. They have introduced wide range of products through the My-Choice (by Cargills) and K- Choice (by Keells).

Therefore, considering these background researchers tend to investigate into what is the current consumer preference towards own brands developed by the supermarkets and investigate what are the

factors that affect to the consumer preference towards own brands of Sri Lankan supermarkets.

#### **Research Objectives**

In this study researchers identified both primary and secondary objectives. On primary objective this study can be identified as to identify current state and attitude to the Supermarket own brands by consumers. Secondary Objectives of this study was to examine how brand image, brand trust, brand awareness, brand loyalty, brand association and perceived quality impact on consumer preference towards own brands and to identify the main factor that affects to the consumer preference towards own brands of Sri Lankan supermarkets.

#### Literature Review

#### A. Introduction

Literature review is an important fundamental point in researchers view point. Writing an effective review creates a solid foundation for advancing facilitate development, knowledge of theory and also uncover areas where research is required (Webster & Watson, 2002).

#### B. Empirical Literature

#### 1) Branding

Branding can be identified as a marketing technique in which a company generates a name, design or symbol that is simply recognizable as belonging to the company/organization. Branding significant because not only it gives a memorable impression or an intention on consumers, but also it allows consumers to know what to expect from the company (Yohn, 2014). From hereafter this study will consider about Aaker's brand equity (Aaker, 1996) model by using some independent variables such as Brand image, Brand awareness, Brand trust, Brand loyalty, Brand association and Perceived quality of supermarket own brand. Dependent variable is consumer preference this chapter shows how it will be towards supermarket own brands.



2) Impact of brand image to the consumer preference

A common strategy is used to strengthen a brand image is creating brand trust between consumer and company. Brand trust provides a greater lens through which to examine and assess consumer's behavioral responses about the own brand. Similarly, consumer's brand affect plays an important role between company and consumer relationship. Brand image can be identified as the secondary perception generated of the brand association. Indicates consumer perception about the total personality of the brand it may influenced satisfaction, perceived value, willingness to pay, support intentions and recommendation of the brand (Beverland, 2009). Further, Marketers create tangible aspect of the brand through advertisements or other of information source and importantly imposing unique selling intention of the product. When it comes to supermarket own brands strong brand image can lead to high brand equity. Imposing the product's unique selling proposal most importantly. Strong brand image can result in high brand equity when it comes to supermarket own brands.

3) Impact of brand trust on the consumer preference.

Normally brand is liable to the customers to accomplish their expectations. Brand trust is a significant term in branding that helps customers being loyal to the brand. Without the trustworthy on brand customer can't enter in loyalty set. To manufacture a trust, it's significant for the Consumer to take and evaluate the data from the item. Organizations can create passionate trust on the off chance that they can demonstrate that the brand is just for the customers and meet their expected expectations (Moorman & all, 1993).

4) Impact of brand awareness to the consumer preference.

Brand awareness is the degree of consumer acknowledgment of an item by the name. Making brand awareness is an important to advance another item or restoring a more established brand. In a perfect world,

awareness of the brand may incorporate a few characteristics that recognize the item from that challenge (Mahmutovic, 2018). Products and services which maintaining a high level of brand awareness are likely to produce more sales of that market. Consumers confronted with preferences are more likely to buy a good branded name product than a brand which is not familiar. Brand recall, promotions, brand recognition affordability. familiarity and likings of certain brand can be evaluated by these variables well awareness of the own brand promotions and campaigns easy recognition of the brand familiarity of the supermarket own brands and competitively affordable than the other brands (Miller, 2015).

5) Impact of brand loyalty to the consumer preference

Brand loyalty can be shown as the tendency of consumers to continuously purchase one brand's products over another. Consumer personal conduct standards uncover that consumers will keep on purchasing items from an organization that has embraced a depend relationship. Loyalty is very important to businesses as it leads to continues purchases by consumers, higher revenues, and customer quotations (Aaker, 1996).

When focusing on supermarkets own branding those product colours, ways of displaying products, features, ease of recognizing those products, smell of the product and the condition of the product can be identified as aesthetic consumer response to the brand loyalty. Brand loyalty consciously or unconsciously influences how people feel about the product. Here supermarket marketers should identify the niche market to provide wider customer satisfaction bringing constant innovations to ensure that customers will repeatedly purchase the products (Malik, et al., 2013).

6) Impact of brand association to the consumer preference

Brand association can be identified as an interaction which buyer forms in his/her mind with the brand. Brand association does not imply benefits, but these are more



intangible in nature. The customers form association are mainly created on the expected perception they have about the product or service (Finkle, 2019). Brand association can be identified in positive or negative. Most of the brands wants to subordinate itself with something positive. Supermarket own brands also like same as that although they grew under the super market brand this brand wants to be unique. Positive brand associations are succeeded when the product's brand shows durable, reliable and desirable. The consumers must be assured that the brand possess the features and attributes satisfying their needs. This will drive to customers having a positive intention about the product. And also, Positive brand association helps an organization to gain goodwill and block the entrance of the competitors to the market (Aaker, 1996).

# 7) Impact of perceived quality to the consumer preference

Brand quality customers discernment about the item and administrations quality. It is the impression of the customer made the organizations through publicizing exposures, and the other web based life expect to buy the item (Kazmi, n.d.). Normally there is an attitude by the customer about product quality and its features provided to them such a performance and reliability of the product. The promises that are made by the branded product to meet the expectations of the customers (Zeithaml, 1988). Mainly there are two phases of the quality objective and perceived quality. According to (Cook & Thompson, 2000) objective quality has no validity and valuations of the quality. Present day retailers can source items at low costs because of their bigger measure of sales while a large portion of the quick moving consumer merchandise they sell are dependent upon most extreme retail costs which get down the value contrast with customary retailers. We believe customers will bit by bit organize comfort and quality over cost in the midst of rising pay levels, which likewise looks good for present day basic grocery retail and supermarket own brands reputation, saving that can gain from buying those products the feeling of secureness will help them to growth of the own brands (Julien & Damian, 2018).

# 8) Consumer Preference for the own brands.

Consumer preference is outlined because the subjective tastes individual shoppers, measured by their satisfaction with those things when they have purchased them. This satisfaction is usually called utility. as Consumer worth is determined by however consumer utility can compared between totally different things. It is an attribute of customer satisfaction about own brand and it is loyalty (Weedmark, 2018). Social factors, satisfaction and reputation of supermarket own brand make customers preference better towards the other brands of same products. Own brand products are only available in in their own super market consumers will attract to those preferred items make customers satisfaction (Lee, et al., 2016).

# C. Conceptual Framework

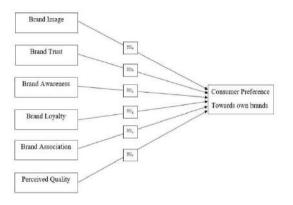


Figure 1: Conceptual Framework Source: Authors

As shown in figure 1 the conceptual framework has six independent variables and one dependent variable. Those variables are mainly based on brand equity model and two separate concepts (brand image and brand trust). This conceptual framework is used to indicate the relationship exist within the variables in the study.

According to the above conceptual framework research will be discussed under six hypotheses.



H1<sub>a</sub>: Brand Image has a positive impact on the consumer preference towards supermarket own brands.

H1<sub>b:</sub> Brand Trust has a positive impact on the consumer preference towards supermarket own brands.

H1<sub>c</sub>: Brand Awareness has a positive impact on the consumer preference towards supermarket own brands.

H1<sub>d</sub>: Brand Loyalty has a positive impact on the consumer preference towards supermarket own brands.

H1<sub>e:</sub> Brand Association has a positive impact on the consumer preference towards supermarket own brands.

H1<sub>f</sub>. Perceived Quality has a positive impact on the consumer preference towards supermarket own brands.

#### **Data Collection**

In this study researchers have used quantitative method and the study is a cross-sectional analysis. And also research is based on deductive approach which is concerned with building up hypotheses which is relevant to an existing theory and measure the hypotheses. In this study researchers used brand equity model and two separate concepts to illustrate the topic. The sampling frame used in this study was distributed to consumers who the supermarket own brands representing the western province, Sri Lanka. The sample of the study was distributed among 250 consumers who prefer the supermarket own brands. And also researchers used Convenient and judgmental sampling techniques have been used under non-probabilistic sampling because there can't be identified all the supermarket users in the western province (Saunders, et al., 2012). The survey will be conducted by using questionnaire as data collection method. The questionnaire is generally based on three major theories used in the study. There are nine sections which examine each conception model in the questionnaire.

# **Data Analysis**

#### A. Reliability

Reliability indicates that data used for further analysis is measured effectively and

efficiently. Based on the data researches have collected, reliability was tested on every concept to make sure that all the measures are continuously reflecting the construct that is measuring (Hair, et al., 2009). According to (Taber, 2017) Cronbach's Alpha is the statistical tool used to identify the reliability of a study. Generally, if the Cronbach's Alpha value is within 0.6-0.7 that indicates an accepted level of reliability. If the value is 0.8 or greater it is a very good level. However, values greater than 0.95 are not in a good standard (Hulin, et al., 2001). According to this study all the dependent and independent variables exist the accepted level of 0.6. It indicates that data analysis was measured effectively and efficiently.

# B. Normality

If the Skewness and kurtosis values are less than three times their standard error values, Hair et al. (2009) assumes that the variables are normally distributed. For Skewness, the agreed value should be within -1 to + 1 and for Kurtosis, meaning that the variables are normally distributed should be within -3 to + 3 (Hair, et al., 2009). In this research all the skewness and kurtosis values are in the accepted level. Therefore it can be concluded that all the variables are normally distributed.

# C. Linearity

In this study linearity was tested between Consumer Preference and six variables including Brand Image, Brand Trust, Brand Awareness. Brand Lovalty. Brand Association, and Perceived Quality respectively. In here Consumer Preference is the dependent variable while other six variables are independent variables. In this study linearity was tested between the below mentioned variables.

In this study R<sup>2</sup> value for brand image and consumer preference is shown as 0.155 which implied that 15.5% of variation in brand image according to the findings. And also all the other variables namely brand trust, brand awareness, brand loyalty, brand association, perceived quality with consumer preference shows 0.336 (33.6%), 0.185 (18.5%), 0.348 (34.8%), 0.410 (41%) and 0.395 (39.5%) variations



respectively. Furthermore, when taking in to account significance values all relationships show an accepted significance level.

# D. Validity

Kaiser-Meyer-Olkin (KMO) test can be used to determine the validity and, in the meantime, KMO should lie between 0-1. According to the (Kim & Mueller, 1978) if the KMO value is closer to 1 means, data which collected is acceptable. The value 0.90 in KMO test display excellent while 0.8, 0.7, 0.6 and 0.5 are define as meritorious, middling, mediocre and miserable respectively.

According to this study, results of KMO test is meritorious and it can be considered as data set which used for this study is scientifically valid.

# E. Multicollinearity Test

According to (Hawking & Pendleton, 1983), an incident where there is an absolute or nearly exact linear relationship among two or more input variables is known as multicollinearity. According to the findings the tolerance value should be greater than 0.1. If the tolerance value becomes "1", it indicates no multicollinearity and if the tolerance level is "0" it indicates perfect multicollinearity. With reference to (Hair & all, 1995) stated that, "10" as the maximum level of VIF value but according to (Ringle & all, 2015), it is stated that "5" as the maximum level of VIF. When considering the above table (4.5) all the tolerance value is greater than 0.1 and also all the VIF values of all the variables are less than 10 indicate that which there multicollinearity. According to the findings of this study all the Tolerance values and VIF values are greater than 0.1 and all the VIF values are less than 10. Therefore it can mentioned that there no multicollinearity.

#### F. Correlation

Correlation is used as a statistical technique by the researchers to measure how accurate two data sets are related and associated. Pearson's correlation

coefficient is generally used to as a measurement to determine the correlation. If there is a coefficient (r) range between -1 to +1 it is considered as a proper correlated relation.

Table 1: Correlation Test

Hypothes	Pearson's	Significan	Decisio
is	Correlatio	ce	n
	n		
H1	0.394	0.000	Accepte
			d
H2	0.580	0.000	Accepte
			d
Н3	0.430	0.000	Accepte
			d
H4	0.590	0.000	Accepte
			d
H5	0.641	0.000	Accepte
			d
Н6	0.629	0.000	Accepte
			d

Source: Authors.

According to the above hypotheses the coefficient for correlation of Pearson is greater than 0.2. So, it can be assumed that there are strong positive relationships between all the hypotheses. Significance value also can be identified as an indicator that can be used to measure the hypothesis. If the significance value is less than 0.05 (P<0.05) the hypothesis are highly acceptable. And also if the hypotheses are below 0.01 it can be considered as a reliable significance. Therefore above mentioned table, shows that there is an accurate relationship between the hypotheses which were established.

#### G. Regression

Regression can be identified as a mathematical method that used to analyze relationships among the variables. According to the (Baron & Kenny, 1986), regression analysis should be performed under three stages. Here linear relationship between independent variables consumer preference (dependent variable) has been analyzed. Here Brand Image, Brand Trust, Brand Awareness, Brand Loyalty, Brand Association and Perceived Quality consider as the independent variables which represent the Consumer



Preference towards own brands. The following tables were generated to analyze the linear regression by using SPSS.

Table 2: Model Summary

Model R R Adjusted Std. Error

Square R Square of the

Estimate

1 0.732a .536 .523 .324

Source: Authors

Predictors : (Constant), Perceived Quality, Brand Image, Brand Awareness, Brand Trust, Brand Loyalty, Brand Association.

According to the Model Summary table R indicates positive linear value a relationship with the dependent variable because it is a positive value which is 0.732. R square stated that the proportion of explained variance between 0-1, it can be shown as a percentage. If it is a higher value, association is well proved. With reference to the above table R value is 0.732 and it shows that there is a positive moderate linear relationship. considering the Adjusted R2 it has a value of 0.523, which indicates that 52% of the variance of consumer preference can be determined by the changes of Brand Image, Brand Trust, Brand Awareness, Brand Loyalty, Brand Association, and Perceived Quality. And also, value of the standard error is also minimum which concludes that the deviation of mean in western province supermarket is less deviated.

Table 3: ANOVAª

Table 5. ANOVA					
Model	Sum of Square		Mean Square	F	Sig
Regression	24.452	6	4.075	38.773	.000b
Residual	21.127	201	0.105		
Total	45.579	207			

Source: Authors.

- a. Dependent Variable: Consumer Preference
- Predictors :(Constant), Perceived Quality, Brand Image, Brand Awareness, Brand Trust, Brand Loyalty, Brand Association

According to the above table it can be concluded that the overall regression model is significant where F=38.773 and p<0.05 under 95% of confidence level. Therefore, by looking at the overall significance level given in the ANOVA table which is .000 it can be concluded that this study is statistically significant.

Table 4: Coefficients<sup>a</sup>

Mode l	Unstandardi zed Coefficients		Standa rdized Coeffic ients	Т	Sig.
	В	Std. Error	Beta		
Const ant	.679	.264		2.571	.011
BI	.188	.070	.160	2.684	.008
ВТ	.194	.080	.171	2.422	.016
BA	289	.093	249	-3.118	.002
BL	.133	.072	.149	1.848	.066
BAS	.379	.086	.387	4.413	.000
PQ	.222	0.70	.231	3.194	.002

Source: Authors

According to the beta values in the above table the equation can be derived which it indicates, a change of one unit in Brand image results a change of 0.160 units in consumer preference keeping other variables constant. Also, a change of one unit in Brand trust result a change of 0.171 units in consumer preference while other variables are constant. A change of one unit in Brand Loyalty result a change of 0.149 units in consumer preference while other variables are constant. A change of one unit in Brand Association results a change of 0.387 units in consumer preference while other variables are constant and finally a change in one unit in perceived quality results a change of 0.231 units in consumer preference while other variables are constant. But when considering the beta value of Brand Awareness, it has shown as  $\beta$ = -2.249. A change of one unit in brand awareness results a decrease of -2.249



units in consumer preference while all the other variables are constant.

The equation can be derived as follows.

# **Consumer preference**

$$= \beta_{0+}\beta_{1+}\beta_{2+}\beta_{3+}\beta_{4+}\beta_{5+}\beta_{6}$$

2.571 (Constant Value) + 0.160 (Brand Image) + 0.171 (Brand Trust) - 0.249 (Brand Awareness) + 0.149 (Brand Loyalty) + 0.387 (Brand Association) + 0.231 (Perceived Quality)

#### Conclusion

In Sri Lanka own brands by supermarkets can be identified as a new trend. There are large number of supermarkets in Sri Lanka and only few supermarkets introduced their own brands. In this research we could identify own brands by supermarkets improving the efficiency of consumer decision making by offering equivalent quality products at affordable prices. Therefore, consumers who use supermarket own brands are increasing respectively. And also it is much important to identify the attitude and the state of the customers in order to maintain a sustainable supermarket own brand that is because the willingness to purchase a product by a customer arise from his/her attitude. Also the state of the customer widely influence to the supermarket own brands if the supermarket own brands are produced targeting the customer with a good or medium state or stability it will arise a success in the supermarket own brands and wise versa if the supermarkets targets the lower state customers it will the deployment in the result in supermarket own brands. According to Akers brand equity theory model the attitude and the state of the customers must be at a high or a moderate level in order to increase the brand image, brand trust, brand awareness, brand loyalty, brand association and perceived quality. According to the findings of the researches the state and the attitude of the customers were at acceptable level in brand image, brand trust, brand association, perceived quality. The level of attitude and state of the customers should be improved in brand awareness. That can be mainly done

through advertisements, promotion campaigns, etc.

This whole study based on Aaker's brand equity model so the chosen factors are from that model Brand image, Brand trust, Brand awareness. Brand loyalty, association and Perceived quality as independent factors that affect to the consumer preference towards own brands of Sri Lankan supermarkets. Study conduct to measure the overall impact of the elements of brand equity model as above mentioned from that analysed data proven brand image, brand trust. brand brand loyalty, brand awareness, association and perceived quality has a positive impact towards consumer preference of own brands in Sri Lankan supermarkets.

Overall brand equity significantly influenced on consumer brand preference and purchase intention and that is together with brand association. As above mention positive impact like brand extensions, contribution to the brand, advertisements and attitudes on consumer preference like satisfaction, reputation of the brand, perceptions, recommendations innovations paying premiums and extend purchases from that. Based on Aaker's brand equity model this study results suggest that the brand association create the brand image and brand equity in brand management and bv increasing advertisements of own brand product and influence buyers attitudes about own brands, doing continuous innovations doing promotions during purchasing like premium prize awarding can enhance more the brand association towards consumer preference. Finally, with the analysed data and the literature review the researchers have proven only brand association highly affect to the consumer preference towards own brands of Sri Lankan supermarkets.

# Acknowledgment

We would especially like to express a sincere thanks to our research supervisor Mr. MMLC Gunathilake, Lecturer, Faculty of Management, for always finding the time to guide us and advice during the research



study period. The helpful suggestions provided by him are the most obvious fact behind the ultimate success appropriate completion of this research study. The one year of supervision gave us the knowledge on the subject. Further we would sincerely express the gratitude to all the academic members of the Department of Logistics Management who have developed our subject knowledge and melded the personality throughout these years. Very special thanks go to all the respondents who spent their precious time to proper completion of the research questionnaire which indeed support.

#### References

Aaker, 1996. Measuring Brand Equity Across Products and Markets.

Anon, 2019. Development of Supermarket Culture.

Baron & Kenny, 1986. Journal of Personality and Social Psychology. *The moderate-mediator variable distinction in social psychological research.* 

Beverland, 2009. Building Brand Authenticity 7 Habits of Iconic Brands.

Cook & Thompson, 2000. Reliability and validity of servqual scores used to evaluate perceptions of library service quality.

Essays, U., 2018. Supermarket culture in Srilanka. [Online]
Available at: https://www.ukessays.com/dissertation/literature-review/marketing/the-srilankan-retail-market-marketing.php

Finkle, 2019. What is a Brand Association.

Gunewardene, R. & Alihussain, A., 2018. *The race to be the king of retail.* [Online] Available at: http://www.ft.lk/marketing/The-race-to-be-the-king-of-retail/54-659429

Hair & all, e., 1995. *Multivariate data analysis.*, Volume 3rd edition.

Hair, Black, Babin & Anderson, 2009. *Multivariate Data Analysis.*. s.l.:s.n.

Hawking & Pendleton, 1983. The regression dilemma, Commun. Stat..

Hulin, Netemeyer & Cudeck, 2001. Can a Reliability Coefficient Be Too High? Journal of Consumer Psychology.

Julien & Damian, 2018. *Modern Grocery Retail in Africa 2018: Report and Dataset.* 

Kazmi, n.d. Consumer Perception and Buying Decisions.

Kim & Mueller, 1978. Factor Analysis: Statistical Methods and Practical Issues.

Lee, J. S. & Back, K., 2010. Re-examination of attendee-based brand equity. Tourism Management..

Lee, kari & Jane, 2016. An empirical research on customer satisfaction study: a consideration of different levels of performance.

Mahmutovic, 2018. Avarage business awarness and Prefrence elationship. *Brand Awareness Research*.

Malik, Iqbal & Ghafoor, 2013. Importance of Brand Awareness and Brand Loyalty in assessing Purchase Intentions of Consumers.

Miller, 2015. Sticky Branding. *Principles to Stand Out, Attract Customers, and Grow an Incredible Brand.* 

Moorman & all, e., 1993. Moorman, Christine & Deshpande, RoFactors Affecting Trust in Market Research Relationships..

Ratnayake, C., 2014. The Impact of Physical Evidence on effect creation; Special Reference to modern retail outlets in Sri Lanka.

Ringle & all, e., 2015. Accepted value of the Multicolinearity. *SmartPLS*.

Saunders, Lewis & Thornhill, 2012. *Research Methods for Business Students,* Volume 6th edition.

Taber, K., 2017. The use of Cronbach's Alpha. The Use of Cronbach's Alpha when developing and reporting research instruments in science education..

Wanninayake, W. & Randiwela, P., 2017. THE IMPACT OF VISUAL MERCHANDISING ON CONSUMER STORECHOICE DECISI The impact of visual merchandising on



consumer storechoice decision in Srilankan Supermarkets..

Webster & Watson, 2002. writing a literature review..

Weedmark, 2018. Consumer Preference Introduction.

Yang, C.-H. & Tsou, M.-W., 2017. Does an own-brand produce higher profitability? Evidence from Taiwan's manufacturing firms.

Yohn, 2014. What Great Brands Do: The Seven Brand-Building Principles that Separate the Best from the Rest,.

Zeithaml, 1988. Scale for perceived product quality.

# **Author Biographies**



Lahiru Gunathilake
Senior Lecturer-Grade II
Department of Management
and Finance
Faculty of Management,
Social Sciences and

Humanities. General Sir John Kotelawala Defence University



Jayamina Senanayake
Undergraduate,
Department of
Management and Finance
Faculty of Management,
Social Sciences and

Humanities. General Sir John Kotelawala Defence University



Chamindu Nawaruwan
Undergraduate,
Department of
Management and Finance
Faculty of Management,
Social Sciences and

Humanities. General Sir John Kotelawala Defence University



Sathira Heshan Undergraduate, Department of Management and Finance. Faculty of

Management, Social Sciences and Humanities. General Sir John Kotelawala Defence University



Sandeepa Herath
Undergraduate,
Department of
Management and
Finance
Faculty of
Management, Social

Sciences and Humanities. General Sir John Kotelawala Defence University

Paper ID 170

# Power, Trust, and Tax Compliance of SME Taxpayer

Nadee Dissanayake<sup>1#</sup> and SP Premaratna<sup>2</sup>

<sup>1</sup> Faculty of Graduate Studies, University of Colombo <sup>2</sup>Department of Economics, University of Colombo

#info@nadeed.org

**Abstract:** Sri Lanka is currently facing a problem with achieving its tax revenue targets. The government can collect tax money from citizens, either through enforcement or by letting them contribute voluntarily. However, the tax authority should take a firm decision to choose between enforcement of power of the revenue body or to develop mutual trust between the tax authority and the relevant parties of the society in the process of collecting tax. The objective of the study is to empirically examine the influence of power and trust on enforced tax compliance and that of voluntary tax cooperation. A survey was conducted from January 1, 2020, to January 31, 2020 to collect data, and 408 Small Medium Taxpayers responded. Simple Regression analysis was used to interpret and analyze the data. All hypotheses are accepted and proved that there are positive relationships between power, voluntary trust, compliance, and enforced compliance. The findings suggest that by improving trust and voluntary compliance, an efficient tax compliance could be developed.

**Keywords:** Tax compliance, Trust, Power, SMEs

#### Introduction

The taxpayers' willingness to pay or not to pay due tax depends on their personal views of taxation (Hariyadi & Bayu, 2013). Kirchler (2007) highlights that people's attitudes, thinking, and behavioral patterns are more affected by what they feel more than what it is and identify two tax compliance situations, namely enforced

and voluntary. In a voluntary compliance nature, people fulfill their primary obligations without any involvement of the tax authority, while in the enforced compliance culture, the authority collects tax from people forcefully.

After ending the thirty years of civil war, Sri Lanka is looking for a rapid economic growth targeting doubling per capita income. The tax system of Sri Lanka has not been able to generate sufficient tax revenue. Hence, there exists a dire need for an effective and efficient tax collection system to increase government revenue (Central Bank, 2018). Like in most developing countries, only about 20 percent of the tax revenue is collected through direct tax, and 80 percent is generated through indirect tax. It is noted that in 2019, total revenue (tax and non-tax revenue) as a percentage of GDP has declined(Central Bank, 2019).

The OECD (2019) admits that tax compliance is an outcome of the complex behavior of an individual and, therefore, requires studying and analyze the compliance issues from a different point of view. Further, the observations of OECD (2014) confirmed that the level of tax contribution of Small Medium Enterprises (SMEs) to the government revenue collection is deficient. Combining the factors considered in economics and psychology models, Kirchler (2007)developed the Slipery-Slope Framework to determine the Taxpayer's behavior in the tax field with the influence of factors, power of authority, and trust in authority. Empirical research is conducted to explore



how power and trust as determinants of influencing tax compliance behaviour but the research findings vary according to the target populations and the geographic locations of the survey. Therefore, this study aims to contribute by empirically testing the power of authority and trust in the tax regime as determinants of SME taxpayers' compliance behavior in Sri Lanka. Furthermore, the researchers intend to identify the compliance pattern in Sri Lanka in terms of voluntary and enforced.

# **Literature Review and Hypothesis**

# A. Slippery - Slope Framework (SSF)

According to Kirchler et al. (2008), the belief and understanding of individuals and social groups on tax authorities create mutual trust between the two parties, the authorities, and taxpayers, and the welldeveloped collaboration between the tax collector and Taxpayer builds up a synergistic tax climate. In a cooperative tax climate, the authorities believe that taxpayers pay their due taxes accurately and honestly. Therefore, they compel to treat taxpayers in a friendly manner with respect. In turn, the Taxpayer's repose trust that authorities utilize their tax money transparently and provide excellent services for the citizens in the state. Thus, they automatically compel themselves to pay their due taxes on time. Explaining the power of authorities, Kirchler, et al., (2008) say that too much power leads to mutual distrust between the revenue authorities and taxpayers, which creates a hostile environment. In such a scenario, the authorities act on the assumption that taxpayers evade taxes whenever they have a chance to do so. Therefore, the authorities substantial audits and punishment to coerce tax payments. Such unpleasant situations could demoralize the attitude of honest taxpayers to react negatively by hiding and evading tax and cheating the tax authority (Kirchler, 2007).

The SSF discusses two types of tax compliance behavior. One is voluntary compliance behavior, and the other one is forced compliance behavior. These behaviors depend on the "power of the authorities" and the "trust that individuals have in the authorities." Voluntary compliance depends on trust in the authorities, which is mainly built up by perceptions of fairness and social norms. If a taxpayer does not pay taxes voluntarily, tax authorities use deterrence power and enforce citizens to pay tax with fines.

Under the antagonistic atmosphere, there grows mistrust between the relationship of taxpayers and tax authorities, known as the "cops and robbers" (Kirchler, et al., 2008). Tax authorities feel that taxpayers are always trying to evade paying taxes, and as a result, they find a way to punish them. From a synergistic climate, another relationship is created, namely "service and customers." Taxpayers and tax authorities work together in such an environment trusting each other. The tax authorities place their trust on taxpayers to pay taxes honestly. Taxpayers concurrently feel that the tax authorities treat them with courtesy and respect, and this process makes taxpayers pay fees voluntarily (Kirchler, et al., 2008). The SSF, illustrated in Figure 1, explains the potential interaction between trust and power in tax compliance (Kirchler, 2007).

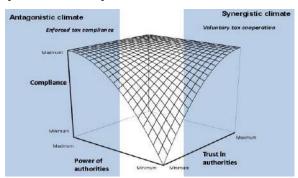


Figure 1. Slippery-Slope Framework Source: Muehlbachera & Kirchler (2010, p. 608)



Trust refers to the relationship between taxpayers and tax authorities based on the belief that the taxpayers have on the tax officials and policymakers. If taxpayers have a high level of confidence in tax authority and policymakers, then tax compliance is perceived to have increased (Kastlunger, et al., 2013). Similarly, if the power of authorities increases, then tax payments are expected to increase as well (Kirchler, et al., 2008).

# B. Tax Compliance

Jackson & Milliron (1986) describe tax compliance as the reporting of all incomes and payment of all taxes according to the laws. They believe that tax compliance should happen without any force. Agreeing with this, Palil & Mustapha (2011) noted, tax compliance is a person's attitude of filing the tax returns and declaring all taxable income accurately, within the stipulated period without having any follow-up actions from the authority. Highlighting the importance of the tax compliance Ming-Ling, et al., (2005) say, a taxpayer submitting a tax return every year and following the required payment time frames according to the existing law is tax compliance. Loo & Ho (2005), explaining the tax compliance behaviour say that the degree of honesty and sufficient tax knowledge will change the tax compliance pattern of the taxpayers. They further mention the adjustability to schedules, accuracy, and proper recordkeeping practices to complete the tax returns are also essential to creating a favorable compliance environment among taxpayers. According to Kirchler (2007), taxpayers' willingness to comply with tax laws, declaring the correct income, claiming the proper deductions, relief, and rebates, and paying all taxes on time is tax compliance.

However, Terkper (2003) studied the reasons for the poor performance of SME

and found that many SME taxpayers do not register and pay tax voluntarily. Also, those who have registered often fail to keep adequate records, neglect to file tax returns, and settle their tax liabilities promptly.

# C. Power of Authority

The power of taxation cannot be defined solely by persuading people to comply with their tax obligations, but also as to who has the potential to set the rules through policymaking. The tax authorities use the power delegated to them and control taxpayers' behavior. The controlling power or enforcement power applies to the tools of penalty and tax audit to increase compliance.

When there is a "cops and robbers" relationship between taxpayers and tax collectors, it creates a hostile climate situation in the tax field (Muehlbacher, et al., 2011). People make mistakes, but at least they would get one chance to correct the error and learn a lesson for the rest of their life. If not, the hostile environment and the fear of the people to revenue authority persuade them to switch for possible alternatives such as bribe officers, use political contacts, and threaten tax officials at a personal level to evade or hide tax. The response of Taxpayers towards the legitimate and coercive power implemented by the government and the tax regime is considered as the power of authority in this study.

# D. Trust in Authority

When taxpayers have faith with the tax authority, they are willing to comply according to the actions taken by the tax authority, with the confidence of their rights and interests will not be abused (Mayer, et al., 1995). When the level of Taxpayer's trust in tax authorities goes up, they willingly compel to accord (Faizal, et al., 2017). The objective of tax authorities is



to provide services to taxpayers that facilitate compliance according to the law. Findings from prior research show that trust in tax authorities is positively related to tax compliance (Torgler & Schneider, 2007).

When taxpayers do not trust the tax administration, it will be one of the reasons to increase the non-compliance rate (Murphy, et al., 2016). Collecting taxes in a fair system, without any discrimination and spending such revenues development of the country encourage taxpayers to concur in the process of revenue generation. Besides, Uslaner & Brown (2005) found that inequality is the most vital determinant of trust; therefore, people are more willing to pay tax when they feel that the tax system and tax authority are treating them equally. Also, treating taxpayers with trust and respect produces a more cooperative setup, improve compliance (Murphy & Tyler, 2008). Develop confidence within citizens in a transparent approach, and to emphasize the perceived fairness would improve tax collection (Wahlund, 1992). In line with the argument OECD (2010) noted that taxpayers treated as trustworthy would be more likely to repay this respect with voluntary compliance. Rothstein (2000) argues that two conditions need to be fulfilled within taxpayers' minds to build up the confidence of why pay tax. People need to believe that other taxpayers are paying their tax shares to the state, and tax authorities must ensure that the fees invested in the public welfare projects rather than filling the hands of tax administrators or other government officials. Therefore, both interpersonal trust and institutional trust are essential to ensure cooperation between taxpayers and collectors. Abdulsalam, et al., (2015) found that voluntary compliance is high when the authorities are trustworthy. Another point that when there is no trust between both parties, that creates a forced compliance situation in the tax system.

In developing countries, tax authorities often show little confidence in taxpayers and use deterrent actions to solve all problems related to tax non-compliance. The enforced compliance environment, Kirchler, et al., (2008), explains as "cops and robbers" relationships between taxpayers and the tax authority. In a similar culture, taxpayers often try to hide due to tax but behave with fear and uncertainty. On the contrary, tax officials always suspect the taxpaying community, attempts to chase them until the discovery of a dispute in the declared tax return and the documents submitted. Collecting tax money in a "cops and robbers" culture is costly, time-consuming, full of conflicts, and unpleasant for both parties.

Another fact that corruption of the tax authority and tax officials damage taxpayers' trust in tax authority and decreases tax compliance (Torgler & Schneider. 2007). A systematic. transparent, and fair tax structure increases the faith in the government and reduces illegal tax activities. When the government spends tax money to make citizens satisfied, and develop their trust about the state, increase the tax compliance rate. This study considered the belief in authority with the Taxpayer's image of the transparency and the accountability of the government and tax regime.

#### E. Enforced Tax Compliance

The tax authority has two different powers to collect money from taxpayers, legitimate power and coercive power (Kirchler, et al., 2008). The legal power means reduce tax misconduct of taxpayers, using the power delegated through tax legislation by tax officers. The coercive power of authority permits tax collectors to detect and punish unlawful acts, like tax evasion and producing of wrong information. Then the



tax officers can punish taxpayers by imposing penalties, issuing additional assessments, issuing seizure notices to banks and the immigration Department, and taking prosecution action to collect default tax from taxpayers.

# F. Voluntary Tax Compliance

Research on taxation focuses not only on enforcement strategies like audits and fines but also on trust-related strategies like social norms and fairness as determinants of tax compliance. As emphasized by Kirchler (2007), the individual motivation for cooperation or evasion varies across the Taxpayer's trust in a different set of actors in the field of tax. Further, he is of the view that faith is the foundation of civic commitment. A study done by (Hauptman, et al., 2015) found that national and social norms are a significant factor of voluntary tax compliance. Modern tax systems rely heavily on voluntary compliance for revenue collection. Voluntary compliance means that each Taxpayer expected to prepare and file returns; pay liable tax on due dates without any involvement from the tax authority or government. The study conducted Lubua (2014) based on SMEs of Tanzania observed the factors Taxpayer's awareness of tax laws, business experience, frequency of visiting tax officers influenced voluntary compliance. When there is a voluntary compliance situation, the cost incurred with revenue collection is meager and efficient. Therefore, most of the states around the world work extensively to improve their taxation approaches focusing on voluntary tax compliance systems.

However, the decisiveness of tax compliance is directly connected with the nation of the country indirectly bridging with many other economic and psychosocial factors. Under a voluntary compliance situation, the Taxpayer does not need to be coerced or forced into

paying taxes, and he does not see tax payment as a burden on him; instead, he sees it as a duty he owes to the government. Voluntary compliance is, therefore, an essential determinant in tax administration and helps in achieving higher tax revenue at a lower cost.

# G. Hypothesis Development

There is a question of why some are paying taxes, while others do not pay. The answer is some are aware of the responsibility of a citizen, and some do not have any faith in the authority. If the taxpayers have high trust in the tax system and the government, they pay their fair share to the government coffers without any force being applied (Kirchler, 2007). A hypothesis developed to study the relationship between the Taxpayer's trust in authority and voluntary compliance pattern as follows;

# H1: Taxpayer's trust in revenue authority is positively related to the voluntary tax compliance behavior of SME taxpayers in Sri Lanka

In a voluntary compliance culture, tax officers respect and trust taxpayers; treat them with dignity (Kirchler, 2007). The authority accepts what the Taxpayer declared in the tax return as accurate. In the absence of audit or additional queries by the tax authority, it would make the taxpayer content with the existing tax system. Simultaneously, the government utilizes peoples' money; in a transparent, fair, and efficient manner that would encourage the people to join hands with the tax system. The hypothesis developed to study the relationship between voluntary compliance and total tax compliance as follows:

# H2: Voluntary tax compliance is positively related to tax compliance behavior of SME taxpayers in Sri Lanka

Tax officers can use the power assigned to them to collect taxes efficiently and



effectively. If the officers identify tax evaders, they will attempt to charge them for not complying with tax regulations; thus, officers tend to use coercive methods such as penalty and audit to collect due taxes from evaders (Kirchler, et al., 2008). A hypothesis was developed as below to study the relationship between the power of authority and enforced tax compliance behaviour

# H3: Power of tax authority is positively related to enforced tax compliance behavior of SME taxpayers in Sri Lanka

According to SSF assumptions (Kirchler, 2007), the higher the power used by tax authority increases tax compliance and, at the same time, tends to decrease the volume of honest taxpayer contributions. Such an impression imparted by the tax authority could distract the relationship of the genuine Taxpayer and the authority since it creates an atmosphere to change their mindset (Taxpayer). Treating them as untrustworthy taxpayers would have an ultimate effect on the efforts of the authority when the **Taxpayer** emotionally The perturbed. below hypothesis was suggested to study the relationship between enforced compliance and tax compliance,

# H4: Power of tax authority is positively related to enforced tax compliance behavior of SME taxpayers of Sri Lanka

# Methodology

The quantitative research approach has been utilized in this study. The Primary Data required to test the hypotheses obtained through a questionnaire applied to all the SME taxpayers, registered at the Inland Revenue Sri Lanka, as at 31.12.2019. Thirty-two thousand one hundred seventeen (32,117) taxpayers are covering all-island, and they have been categorized under six subgroups, namely agriculture, services, manufacturing, trading, and

constructions. The questionnaire used in this study has been adapted from the previous reviews about SSF to reflect the Sri Lankan situation.

Based on the hypothesis, the conceptual framework of the study is as follows;

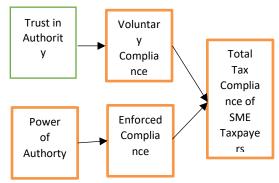


Figure 2. Hypothetical Framework Source: Developed based on previous research

# 3.1 Sample Selection

From the registered SME taxpayers of Inland Revenue as of December 31, 2019, under the Medium Corporate category, a sample of 408 respondents was randomly selected based on Yamane's (1967) sample selection formula. The survey conducted from January 1, 2020, to January 31, 2020, and the five hundred questionnaire forms were sent by mail to the business addresses of SME taxpayers expecting to reach the required number of four hundred of a sample.

#### 3.2 Measurement Instrument

Participation in the study was voluntary and assured that their answers would be kept confidential. There were twenty-eight (28) questions in the survey form relating to the variables measured in this study. The questionnaire consists of two parts. Section A of the questionnaire was on the of demographic characteristics the respondents, while Section B of questionnaire developed to test the research hypothesis. The respondents' perceptions for the questions were measured using a 5-point Likert scale, in



which the level of agreement spread from 1 = strongly disagree to 5 = strongly agree.

When designing the survey form, the medium of language was a factor to be concerned to be very much. Sri Lanka is a multi-ethnic, multi-religious country, and people speak several languages. Since the respondents of the survey comprise different ethnic groups, the questionnaire was designed in three main languages used in Sri Lanka; Sinhala, Tamil, and English. At the time of addressing and posting the survey forms, the medium was selected based on the available taxpayer profile data at Inland Revenue. The profile database was developed with the information submitted by the Taxpayer at the time of registration. Keeping participants comfortable and easy to understand the survey questions and motivate them to respond actively was the focus.

# **Research Results and Analysis**

The Exploratory Factor Analysis (EFA) was conducted to examine whether the questionnaire also consists of a single factor. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity were used to verify the suitability of the data set is for factor analysis. In this study, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy value was 0.924 (p<0.001 Bartlett's Test of Sphericity). Therefore, these groups of data sets were statistically significant, and factor analysis is appropriate for these groups of data sets.

According to the eigenvalues, seventeen items emerged with an eigenvalue above 1 in all samples, and the initial eigenvalues percentage of variances were less than 41.2%. However, the difference between the eigenvalue of the first component and the following components is so massive (7.415), and all the eigenvalues were in the positive range that implied all the items in good condition.

The average factor loadings were 0.563 (range 0.30 - 0.81), and all item loadings easily exceeded the critical value of 0.30, indicate that all the items fit well with the other items in their components in this sample.

The next measure is to evaluate the construct reliability, and the Cronbach's Alpha value measures it. The rule of thumb for Cronbach's Alpha is that it should be 0.6 or higher than 0.6 (Hair, et al., 2014). Jayasinghe-Mudalige, et al., (2013, p. 7), confirming this argument and say that Cronbach's Alpha value should be 0.6 or higher, but 0.7 or higher means that reliability is very good with internal consistency. In this study, the influence of the variables of trust, power, voluntary compliance, and enforced compliance on overall tax compliance of the SME taxpayer was studied.

Table 1. Results of the construct

Construct	Cronbach's Alpha
	Value
Trust	0.636
Power	0.705
Voluntary	0.602
Compliance	
Enforced	0.655
Compliance	
Tax Compliance	0.601

The total Cronbach's Alpha value was 0.886, and the rest of the construct reliability is illustrated in Table 2. The internal consistency of the questionnaire was good, and it can, therefore, conclude as it is a reliable instrument. Since the Cronbach's Alpha value of all constructs is more significant than 0.6 so that it can be supposed that indicators were consistent in measuring the construct.

Also, to measure the strengths and directions of the linear relationships between pairs of variables as mentioned above under the research framework was



measured using the Pearson Correlation. The Pearson Correlation is a statistical technique that shows how strongly two variables are related to each other or the degree of association between the two variables. There was a strong, positive correlation between all the compared variables, which was statistically significant. Table 3 below explains the correlation between power and trust, voluntary and enforced compliance as well as tax compliance.

Table 2. Results of the Hypothesis Source: Based on a sample survey, 2020

	Relatio		_	Pearso	1
eses	nship	ard	Statis	n	valu
		Error	tics	Correl	es
				ation	
H1-	T / VC	0.399	15.94	0.620	< 0.0
Accept			1		01
ed					
H2-	VC / TC	0.452	17.11	0.647	< 0.0
Accept			8		01
ed					
Н3-	P / EC	0.333	18.54	0.677	< 0.0
Accept			3		01
ed					
H4-	EC / TC	0.518	11.18	0.485	< 0.0
Accept			1		01
ed					

Where, T = Trust; VC = VoluntaryCompliance; TC = Tax Compliance; EC = Enforced Compliance; P = Power

Hypothesis 1: Results in Table 3 revealed that there is a significant relationship between the Taxpayer's trust in revenue authority and voluntary tax compliance behaviour  $(\beta = 0.399, t = 15.941, p < 0.000)$ . This association further confirms the value of (r = 0.62). Therefore,  $H_1$  is accepted and similar to the findings of (Kirchler, 2007). According to the Sri Lankan scenario, there is a significant relationship between the Taxpayer's trust and voluntary compliance. When the Taxpayer aptly realizes that he is part of the citizenry that utilizes the infrastructure

facilities provided by the state for the common good and the welfare of the people, he becomes aware of the efforts of the government to offer such benefits. As a person who received privileges of free education, he feels that his hard-earned money has a direct link to the government's involvement in these benefits, he inevitably explores the avenues of income generation by the state. His spontaneous reactions would be to subscribe to the government's efforts; hence, the only way he could discharge this duty is through the voluntary payment of taxes. There he becomes part and parcel of the strategic development of the country.

**Hypothesis 2:** Results in Table 3 revealed that there is a significant relationship between the Taxpayer's voluntary tax compliance behaviour and the total tax  $(\beta = 0.452, t = 17.118, p <$ compliance 0.000). This association further confirms the value of (r = 0.647). Therefore,  $H_2$  is accepted, and it is in line with the findings of (Kirchler, 2007). Voluntary compliance is a salient feature as far as the Sri Lankan SME taxpayers are concerned. The positive relationship between voluntary compliance and the total tax compliance correspondently increases the tax payment. Such a scenario reduces administrative and legal ambiguities.

Hypothesis 3: Results in Table 3 explained that there is a significant relationship between the power of revenue authority and the enforced tax compliance culture ( $\beta = 0.333$ , t = 18.543, p < 0.000). This association further confirms the value of (r = 0.677). Therefore,  $H_3$  is accepted and similar to the findings of (Kirchler, et al., 2008). There is ample evidence that has been found to prove that there is a positive relationship between the power of authority and enforced tax compliance. Enforce tax compliance always increases government revenue. However, it appears



to be cumbersome for the tax officers who are armed with legitimate power to discharge their duties in an unfriendly environment.

**Hypothesis 4:** According to the results in Table 3, it is revealed that there is a significant relationship between the power of revenue authority and the enforced tax compliance behaviour  $(\beta = 0.518, t =$ 11.181, p < 0.000). This association further confirms the value of (r = 0.485). Therefore, H<sub>1</sub> is accepted and similar to the findings of (Kirchler, 2007). Enforced tax compliance has a direct effect on tax compliance. In the Sri Lankan context, neglect of compliance brings in several implications such as harassments, unnecessary correspondents, waste of time, stress, fear, and more than anything; it would create an indelible stigma among the business community and the society in general. This will compel most of the tax evaders to fall in line with tax compliance. The hostile atmosphere tends to reverse the relationship between the Taxpayer and the tax regime. The fear that a taxpayer is blacklisted causes pain of mind forcing him to avoid such situations. In another related sequence, the Taxpayer keeps confidential information close to his heart as a measure to prevent them from being leaked out to even his kith and kin and other business associates. All four hypothetical situations have been significant, and the study further envisages to explore the tendency of the Taxpayer's tax compliance behavior vis-àvis voluntary or enforced.

This study aims to identify the tax compliance pattern among the SME taxpayers in Sri Lanka. According to table 4 below, when the enforced tax compliance is increased by 1, correspondingly, the total compliance results in an increase by 0.2, while the voluntary compliance is increased by 1, the total compliance tends to increase by 0.7. Hence, these results

show that there is a marked improvement in voluntary tax compliance though it poses a very pertinent question of whether voluntary compliance in Sri Lanka is genuine. This argument is based on low revenue collection for the government Further inquiry shows that coffers. voluntary compliance is linked to the risk the taxpayers facing owing to the legal framework of the tax authority. Question number 48 of the survey signifies that 390 respondents out of 408 survey sample have been answered in the affirmative, stating that they either "agree" or "strongly agree" with the query. The question that has a bearing on these answers is as, "I pay tax, though I would prefer not to pay any taxes," which indirectly sounds that the voluntary compliance of SME taxpayers is accurate or not. The determination of the preceding is that voluntary compliance is far from being genuine.

Table 3. Regression Path Coefficient – The Dynamic Relationship

Dependent Variable = Total tax compliance

Source: Based on a sample survey 2020

Source: Based on a sample survey, 2020					
Model	Unstandardi		Standardi		Signific
	zed		zed		ant
	Coeffic	cients	Coef	ficien	
			ts		
	В	Std.	Bet	t	
		Error	a		
(Constan	0.592	0.203		2.91	0.004
t)				6	
Enforced	0.168	0.063	0.12	2.65	0.043
Complia			8	0	
nce					
Voluntar	0.661	0.056	0.56	11.7	0.550
у			7	22	
Complia					
nce					

# Conclusion

The research findings confirm the main assumptions of Slippery-Slope Framework by Kircher in 2007. All four hypotheses are significant and proved that there are positive relationships between power,



trust, voluntary compliance, and enforced compliance. Further, this study reveals that the theory in SSF also can be applied to the Sri Lankan context.

The study has several limitations that can affect the results. The study only considered the SME taxpayers in Sri Lanka. As there are large taxpayers as well as Pay-As-You-Earn taxpayers in the revenue contributing group, it is an important fact understand their tax compliance behavior. Also, all dimensions of trust and power, such as perceived trust and coercive power does not cover in the research. Still, this study gives the insight to explore more on the influence of faith in authority and power of tax authority on tax compliance patterns such as voluntary and enforced. Besides, further research could conducted considering the demographic factors of the respondents and the business nature wise.

The tax compliance system should be designed to encourage and attract SME taxpayers. The SME taxpayer's revenue contribution is essential in the economic development of the country. The findings of the study show that a mix of both voluntary and enforced tax compliance behaviour exist among SME taxpayers in Sri Lanka. Nevertheless, increasing the Taxpayer's faith and trust in the authority will cause to increase in voluntary compliance patterns among SME taxpayers. The government and tax policymakers should pay their attention to this area.

Policymakers should review the existing laws and the weightage carried out by tax law, which creates an unhealthy environment as far as Taxpayer is concerned. Also, the academicians should have ideas of the coercive methods used and implemented by the tax officers to collect required revenue for the state. The SME taxpayer's perception towards the accountability of government and the tax

regime should be adequately addressed to create a better tax culture that will inevitably place the SME taxpayer in a comfort zone caused to increase revenue collection of the country.

# Acknowledgment

Authors are grateful to Professor K A P Siddhisena, and Lalith Allahakkoon for their reviews and insightful comments, the Inland Revenue, Sri Lanka for the helpfulness that allowed this work to be completed, and Harsha Gomes for the support extended in data cleaning and statistical analysis.

#### References

Abdulsalam, M., Nor, A. A. M. & Natrah, S., 2015. Testing assumptions of the 'Slippery-Slope Framework' using cross-country data: Evidence from Sub-Saharan Africa. *International Journal of Business and Society*, 16(3), pp. 408-421.

Central Bank, 2018. *Annual Report,* Central Bank: Sri Lanka.

Central Bank, 2019. *Annual Report,* Central Bank: Sri Lanka.

Faizal, S. M., Palil, M. R., Maelah, R. & Ramli, R., 2017. Power and Trust as Factors Influencing Tax Compliance Behavior in Malaysia. *Asian Journal of Accounting and Governance*, 38(3), pp. 79-85.

Hair, J. J. F., Black, W. C., Babin, B. J. & Anderson, R. E., 2014. *Multivariate Data Analysis*. 7th ed. UK: Pearson.

Hariyadi, S. & Bayu, S., 2013. Factors Affecting Willingness to Pay Taxes on Individual Taxpayers at Pratama Surabaya Tegalsari Tax Office. *The Indonesian Accounting Review*, 3(1), pp. 77-88.

Hauptman, L., Gürarda, Ş. & Korez-Vide, R., 2015. Exploring Voluntary Tax Compliance Factors in Slovenia: Implications for Tax Administration and Policymakers. *Journal of Local-Self Government*, 13(3).



Jackson, B. R. & Milliron, C. V., 1986. Tax compliance research: Findings, problems, and prospects. *Journal of Accounting Literature*, 5(0), pp. 125-165.

Jayasinghe-Mudalige, U. K., Udugama, J. M. M. & Ikram, S. M. M., 2013. Use of Structural Equation Modeling Techniques to Overcome the Empirical Issues Associated With Quantification of Attitudes and Perceptions. *Sri Lankan Journal of Applied Statistics*, Volume 13, pp. 15-37.

Kastlunger, B., Lozza, E., Kirchler, E. & Schabmann, A., 2013. Powerful authorities and trusting citizens: The Slippery-Slope Framework and tax compliance in Italy. *Journal of Economic Psychology*, pp. 36-45.

Kirchler, E., 2007. *The Economic Psychology of Tax Behavior*. UK: Cambridge University Press.

Kirchler, E., Hoelzl, E. & Wahl, I., 2008. Enforced Versus Voluntary Tax Compliance: The 'Slippery Slope' Framework. *Journal of Economic Psychology.* 

Loo, E. C. & Ho, J. K., 2005. Competency of Malaysian Salaried Individuals in Relation to Tax Compliance under Self Assessment. *eJournal of Tax Research*, 3(1).

Lubua, E. W., 2014. Influencing Tax Compliance in SMEs through the use of ICTs. *Educational Research*, 2(1), pp. 80-90.

Mayer, R. C., Davis, J. H. & Schoorman, F. D., 1995. An integrative model of organizational trust. *The Academy of Management Review*, 20(3), pp. 709-734.

Ming-Ling, L., Normala, S. & Meera, A., 2005. Towards Electronic Tax Filing: Technology Readiness and Responses of Malaysian Tax Practitioners. *Tax Nasional*, pp. 16-23.

Muehlbachera, S. & Kirchler, E., 2010. *Tax Compliance by Trust and Power of Authorities*, s.l.: International Economic Journal.

Muehlbacher, S., Kirchler, E. & Schwarzenberger, H., 2011. Voluntary versus enforced tax compliance: empirical evidence for the 'slippery slope' framework. *European Journal of Law and Economics*, Volume 32, pp. 89-97.

Murphy, K., Bradford, B. & Jackson, J., 2016. Motivating Compliance Behavior Among Offenders: Procedural Justice or Deterrence?. January, 43(1), pp. 102-118.

Murphy, K. & Tyler, T., 2008. Procedural justice and compliance behaviour: the mediating role of emotions. *European Journal of Social Psychology*, March, 38(4), pp. 652-668.

OECD, 2010. Evaluating the effectiveness of compliance risk treatment strategies, Paris: Centre for Tax Policy and Administration.

OECD, 2014. Tax Compliance by Design. Achieving Improved SME Tax Compliance by Adopting a System Perspective, Paris: OECD.

OECD, 2019. public consultation document what is driving tax morale. [Online] Available at:

https://www.oecd.org/tax/tax-global/public-consultation-document-what-is-driving-tax-morale.pdf [Accessed 1 February, 2020].

Palil, M. R. & Mustapha, A. F., 2011. The Evolution and Concept of Tax Compliance in Asia and Europe. *Australian Journal of Basic and Applied Sciences*, 5(11), pp. 557-563.

Rothstein, B., 2000. Trust, Social Dilemmas, and Collective Memories: On the Rise and Decline of the Swedish Model. *Journal of Theoretical Politics*, pp. 477-499.

Terkper, T., 2003. Tax Notes International, 13 January. *Managing small and medium taxpayers: tax administration viewpoint, Tax administration viewpoint,* Volume 29, pp. 211-234.

Torgler, B. & Schneider, F., 2007. 'Shadow economy, tax morale, governance, and



*institutional quality: A panel analysis,'* GErmany: Institute for the Study of Labor.

Uslaner, E. M. & Brown, M., 2005. Inequality, Trust, and Civic Engagement. *American Political Research*, 33(6), pp. 868-894.

Wahlund, R., 1992. "Tax Changes and Economic Behavior: The Case of Tax Evasion." *Journal of Economic Psychology*, 13(4), pp. 657-677.

Yamane, T., 1967. *Statistics: An Introductory Analysis.* s.l.:2nd Edition, New York: Harper and Row.

# **Author Biographies**



Mrs. Nadee Dissanayake is currently attached to the Inland Revenue, Sri Lanka, in the capacity of a Commissioner. During her twenty-one years of work experience, she has

the distinction of participating in many taxation programmes held at the National Institute of Public Finance and Policy, India, 2006, Revenue Forecasting Programme at the University of Duke, North Carolina, 2011, E-Governance Programme, at Malaysian Revenue Board, 2014, Revenue Management Programme, at Netherland,

2017, and participated as the moderator of CATA 37th Annual Technical Conference, in Barbados, 2016. She is a Ph.D. Fellow at the Faculty of Graduate Studies, University of Colombo, and a Doctoral Student at the California InterContinental University in the USA.



Dr. S.P.Premaratna, a
Professor in the
Department of
Economics, University of
Colombo. He obtained
his first degree in
Economics, specializing

in Econometrics from the University of Colombo. He also received a Post-graduate Diploma in Economics Development and a master's in economics at the same University. Premaratna completed his MPhil degree at Maastricht School of Management and obtained a Ph.D. from Eindhoven University in the Netherlands (Title: Entrepreneurial Networks and SME Development in Sri Lanka). He also followed a Diploma course in Social Work. His research interests are micro-finance, gender economics (gender budgeting), Project planning and management, entrepreneurship, SMEs, and social network analysis.

Paper ID 177

# The Impact of Men Empowerment in Apparel Industry

Heshani Jayasekara#, Hasini Fernando, APM Shehan, and DR Perera

Department of Management and Finance, Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defence University

#heshanijayasekara2@gmail.com

**Abstract:** Increase in the female employees and their contribution towards traditional sectors and hierarchical administrative level to operational level is the new trend in the world. This is becoming regular in Sri Lanka as well. According to the Sri Lankan Census and Statistics reports, they consider that the male employment in apparel industries in Sri Lanka is lower than the female employment, and the major share of the Sri Lanka's apparel industry work is provided by female workers. This research was carried out to examine the portion of male employees in Sri Lanka engaged in the apparel industry, to identify the reasons for decrease of male employees in the apparel industry and to propose corrective actions that can be taken to empower and engage male employees in the apparel industry. In order to achieve those objectives, the researchers used the KSA Learning theory as the primary theory. Knowledge, skills, attitudes are the three main variables of the theory, and the job suitability is taken as the Mediating variable to prove the conceptual model, the researcher used significant value testing of reliability, validity, regression and coefficients. The hypotheses were proven with significance. The research study was based on the deductive approach and the quantitative analysis method was used. Data were collected through structured questionnaire based on a sample of 175. The implications of the study benefit apparel companies, potential employees specifically males, and HR policy regulators.

**Keywords:** KSA, Job suitability, Men empowerment

#### Introduction

**Problem Statement** 

When scrutinizing about how Sri Lankan men in young adulthood, the research detected that the men in youth is now leaning into unemployment or employed in to a job which is not permanent or reputed by the society and they relinquish their academics on top. And the youth is now tending to engage in illicit deeds such as drug abusing, loitering and also some of them become a victim of men trafficking by abyss.

The research which has done previously depicts that the Sri Lankan women and men who are employed in apparel industry work in a range of factories. The majority of women employment in the textile and garment industries and the men employment is lacking there. The most of previous researches are done to empower women and most of them are divulging on the impacts on women and women empowerment in the various industries.

Sri Lanka has also done many researches based on women employment but there are few Number of researches that have done on this topic.as there are very rare number of researches have done in Sri Lanka an empowerment of men in apparel industry, this research is mainly focus on men empowerment in apparel industry. In the apparel industry not only very sporadic contribution of men can be seen. The Problem is that, in the apparel industry



there are more than 350000 employees both men and women are toiling in the apparel industry. From that much toilers the majority is women employment and the contribution of male employment is low in the apparel industry collating to women employment in apparel industry and the research is aiming to fill that gap by recruiting men into apparel industry who are not working, who are engaging in the illicit work in the abyss and the ones who are doing unsafe, unaccepted and uninsured jobs.

#### Research gap

The majority of the researches and reports related to this area inspected the elements that spread diverse subject related occurrences in regards to the topics like, how women are empowering in apparel sector in Sri Lanka and increasing of the employment base of the women in apparel industry.

Somehow the certain amounts researches focus on the gender imbalance in employment sector of the apparel industry. But they are not considering about the main role of men empowerment. As an example, The Gender Imbalances in the Export Oriented Garment Industry in Bangladesh which research made in Bangladesh that explained the how the employment of women in export-oriented industries exploits the "comparative advantages of their disadvantages". (Pratima Paul Majumder, 2000)

All the findings state only about employment and empowerment in women but none of them are not filling the gap of how male employees engage in industries like apparel industry or empowering males in the apparel industry. Therefore, the purpose of this research report is to search on the solutions to empower men in the apparel industry by recruiting males who are not engaging in a permanent, legal, and safe insured jobs and the males who are

seeking for a job in apparel industry. Also the changes in literacy levels, working environments, social status differences factors among the men are and how it has affected to the research.

# Significance

The researches opt for do this research "The impact of men empowerment in apparel industry" under the section of OB related areas such as organizational culture, personality, leadership'. To carry out the further proceedings of the research the researcher chose KSA theory as researchers' foremost theory Hofstede's Cultural Dimension theory, Employee Engagement theory and Herzberg's theory of motivation research's external theories.

- 1. *Theoretical:* KSA theory was developed by Benjamin Bloom in the 1950's and he was a behaviourist and founding father of competency-based learning, posited three "domains" of learning that have since become theory.
- 2. *Practical:* The three levels of managers operational, tactical and strategic level. However, the men in the apparel industry can be employed in either level. The already existing managers can practically understand the needs of new employees and how they should be empowered.

# Research Questions

The 3 examined research questions will be what are the quantities of male employees in Sri Lanka engage in the apparel industry, what the reasons for decrement of male employees in the apparel industry and what are the corrective actions to empower and engage male employees into the apparel industry?

# *Objectives of the study*

This research is mainly focussing on understanding the quantities of male employees in Sri Lanka, identify the



reasons for decrement of male employees in the apparel industry. and to suggest the corrective actions to empower and engage male employees into the apparel industry.

# Scope of the Study

The textiles and apparel industry is an ancient one. The industry experienced relatively slow development and a lack of progress until the industrial revolution, when production of textiles and apparel was significantly altered by technology, including the cotton gin and pedal-powered sewing machines. The apparel side of the industry is still primarily done with human labour (humans operating sewing machines, etc.).

The wearing of attire is only a human trademark and is a component of most human social orders; however, it isn't known precisely when different people groups started wearing clothes. Anthropologists believe that animal skins and vegetation were adapted into coverings as protection from cold, heat and rain, especially as humans migrated to new climates. Textiles can be felt or spun fibres made into yarn and subsequently netted, looped, knit or woven to make fabrics, which appeared in the Middle East during the late Stone Age. (Wikipedia 2019)

Apparel industry has been the Sri Lanka's largest gross export earner since 1986 and accounted for more than 52% of total export earnings of the country. Sri Lanka as a garment export has shown signs of improvement in many respects yet even at present, the quota system covers more than 52% of the country's apparel exports. Besides dependence on the quota system, there are weaknesses in the domestic industrial and export structure, labour markets, rigidities and strong competition in international markets. (Dheerasinghe, 2009)

Employment is a relationship between two parties, usually based on a contract where

work is paid for, where one party, which may be a corporation, for profit, not-for-profit organization, co-operative or other entity is the employer and the other is the employee. (Employment, 2019)

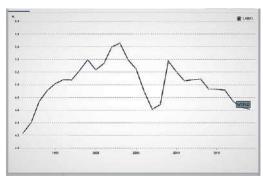


Figure 1.1 Participation rates of unemployment in World Source: Unemployment rate male, 2019

Figure 1.1 shows the participation rates of unemployment male labour force in entire world that in 1991 it was 4.242%. It reached its peak in 2003 and it was 5.654% and in 2018 it was 4.651%. (Unemployment, male 2019)

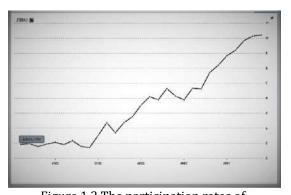


Figure 1.2 The participation rates of employment in Sri Lanka Source: Unemployment rate male, 2019

In the figure 1.2 shows the male unemployment labour force in 1991 it was 10.219% and it was diminished in to 2.973% in 2018. (Unemployment, male, 2019)

"Empowerment" is elucidated as A management practice of sharing information, rewards, and power with employees so that they can take initiative and make decisions to solve problems and improve service and performance and it is based on the idea that giving employees



skills, resources, authority, opportunity, motivation, as well holding them responsible and accountable for outcomes of their actions. (empowerment, 2019)

In the apparel industry women are dominating in the percentages as per the one of the main companies in the apparel industry in Sri Lanka the MAS Holdings state that "With over 70% of their team being female, they provide women with a safe and secure work environment where women can thrive in their careers and personal lives. Women empowerment at MAS begins with capacity building on multiple levels. (Women go beyond 2019).

When researching about men empowerment in apparel industry it is not enough only to reckon at apparel industry and for that we have to observe other industries too. Research should compare it with other industries. Also to get a brief idea on how men proliferate in other industries and to acquire knowledge on how men's' taste varies on selecting a job.

The correlates and consequences of psychological empowerment among a group of 612 which includes 129-men and 483-women technically skilled, professional and managerial hospital employees. (Christine S. Koberg, 1999)

In the IT sector year-on-year increase in women managers are outstripped by the expand in the numbers of men working in programming/software and web development roles (17.4% and 20.3% respectively). Although the medium-term trend shows female numbers increasing in IT professional roles, the numbers of men working in these roles are increasing at a faster rate, so the female proportion of the IT professional workforce is still only 16.2% in 2018, (Workforce Statistics, 2018)

Table 1.1 Distribution of employed population

Sri Lanka%	Gender	Gender		
	Men	Women		
Sri Lanka	100%	100%		
Agriculture	29.5	35.3		
Industry	26.7	25.1		
Services	43.8	39.5		

Source : Sri Lanka Labour Force Statistics Quarterly Bulletin, 2013

According to the table 1.1 spread of employed population by main industry & gender second quarter 2013 as per the Sri Lanka Labour Force Survey. The highest percentage of men is in the service sector accounting for 43.8% of the labour force, while men in agriculture and industry account for 29.5% and 26.7%, respectively. (Sri Lanka Labour Force Survey, 2013)

In the transport sector here in Sri Lanka men representation is more than 97% in a country where 49% of its population is men. (Karunaratne, 2019)

After observing the whole background not only the apparel but also other industries the researcher found out that some of those industries are dominating by women employment and some of them are dominating by men also. But in every industry man are also employing. In this research researchers are mainly focussing on the empowerment of men in the apparel industry in Sri Lanka.

#### **Literature Review**

# A. Backgroud

Research study predominantly emphasis on the cultural factor of the organizational behaviour study, with the assists of Knowledge, Skills and Attitude Learning theory (KSA Learning theory). Study approached the impact of men empowerment on the apparel industry, with the consideration of increasing men



labour participation and empowerment of the apparel sector in Western Province Sri Lanka. In the past few decades Sri Lanka has rapidly changed their traditional agriculture - based economy to the industrial economy. New technologies, products, applications, concepts, so on and so forth, are emerging faster than ever in nearly all industries from the world market to local market. Due to these changes happening in the world, Sri Lanka also became a follower of the industrial economy.

Sri Lankan apparel industry largely emerged from the late 1970s, with the huge labour attraction. Most illiterate young individuals fasten with this industry, resulting in building new trade zones around the country. Not only in the Sri Lankan market, it is widely spreading around the world market with some major contenders like Brandix Apparel Ltd, MAS Intimates (Pvt) Hirdramani Ltd, International **Exports** Ltd SO (Jayawardhana, 2016) Sri Lankan attire manufacturers & suppliers are supposed worldwide for manufacturing high quality moral fashion attire trusty by the longlasting international fashion brands. Worn by quality aware customers everywhere around the globe, products belonging to these international brands are sourced and made in Sri Lanka as the South Asia's fashion and supply hub and international attire visionary.

Sri Lankan apparel industry is one of the most vital and dynamic contributors for Sri Lanka's economy. The industry has obtained a long period of time for its growth levels over the past four decades. The apparel industry of Sri Lanka bears 40% of the total exports and 52% of industrial products exports. (EDB, 2019) According to the figure (2.1) globally, the labour force participation rate for male and female aged 15 and over continues its long termly decreasing and it stands at 61.1% in

2018, down by 1.5% points over the past decade. The deterioration in women's participation rate has been slower than that of men, resulting in a slight narrowing of the gender gap. (International Labour Organization, 2018)

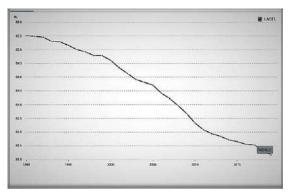


Figure 2.1 Labour Force participation rate Source: International Labour Organization (April 2019)

When it comes to the apparel sector, in the whole world women participation is relatively higher than contrast of the men participation for that sector. There are several reasons for it. However, the particular reasons are also being differ with each developing and developed countries, society levels as well. Considering women in the labour force and employment are generally lower than those of men and women are not comparable internationally, reflecting that demographic, social. legitimate systems, and cultural trends and norms. (International Labour Organization, 2019) Therefore, most companies are interested in researching the complications related to the industry, because it gives support to improve the quality of the performance of the company.

#### B. Men Employment in Sri Lanka

In Sri Lankan situations most of the young male individuals left their education in lower grades and joined to earn money from different activities which are illegal in sometimes. One of the major challenges that lift the economic and social prospects of Sri Lanka is increasing the women participation and closing the gender gap on



the total Labour force by overcoming social and cultural barriers. (Statistics, 2017)

Table 2.1 Distribution of the recruitments

Year	Total		Female		Male	
	No.	%	No.	%	No.	%
2015	1,226,395	100.0	460,487	37.5	765,98	62.5
2016	1,187,956	100.0	515,273	43.4	672,683	56.6
2017*	881,411	100.0	378,143	42.9	503,268	57.1

Source: Department of Senses and Statistics (2017)

The survey (Table 2.1) that was conducted by the Department of Census and Statistics in Sri Lanka, throughout the duration of 2015 to mid of 2017, percentage of female hiring increased sharply from 37.5 to 42.9 % by 5%. The gap of recruiting males and females was about 25% in 2015 and it was narrowed down to 15% in mid of 2017. These statistics are real evidence that the collaborating men employment rate is being low in Sri Lanka.

There are several reasons that can be identified for decreasing the level of men labour participating in Sri Lanka such as drug addicted youth, influence of the social media, foreign job market, increasing the rate of taxi drivers, increasing the rate of underemployment etc. Among all those situations, the worst scenario is rapidly increasing the number of taxi drivers (three-wheel drivers) who are below age 18.

# C. Defining Empowerment

Empowerment can be defined in a number of ways. A management practice of sharing information, rewards, and power with employees so that they can take initiative and make decisions to solve problems and improve service and performance. Empowerment is based on the idea that giving employees skills, resources, authority, opportunity, motivation, as well holding them responsible and accountable for outcomes of their actions, will contribute to their competence and satisfaction. (Business Dictionary, 2019)

# D. Men Empowerment in Apparel industry

There are respectable variations in women's access to the labour market across the countries at totally different stages of development. The gap in participation rates between male and females are narrowing in developing and developed countries. (International Labour Organization, 2018) While both men and women are affected by the challenges in the industry, female labourers tend to be more vulnerable to these risks than male labourers. (ICRW, 2017) However the modern apparel sector has always been dominated by women labour force than the males in every country in the world.

In Sri Lanka, year 2016 there were 13 free trade zones island wide with 134,956 employees, from them 70% were female workers. (Marcus, 2016) Gender-specific issues also are potent in encouraging garment employers to use additional females than men in their companies. These are some of the explanations that they give; females are additional patient and nimble at operating, ladies are additional manageable than men, females are less mobile and fewer probably to hitch a trade unions and they will do higher in stitching as a result of this job coinciding with their traditional jobs. (Pratima Paul-Majumder, 2000) In the meantime,



organizations should have to pay proper attention to the encouraging young energetic unemployed male group who are wasting their precious time and money on useless things such as drugs, social media etc.

# E. Theoretical framework

Research study mainly focuses on three basic influences which are knowledge, Skills and Attitudes that are related to the KSA Learning theory which is the central theory of this research. Furthermore, it develops with the assists of theories as Hofstede's cultural dimension theory and Employee engagement theory.

# 1) KSA Learning Theory

KSA learning theory was developed by Benjamin Bloom in the 1950's and he was a behaviourist and founding father of competency-based learning theory, posited three" domains" of learning which are Knowledge, Skills and Attitudes that have since become theory. Those have become the main variables of this research as under mentioned.

Knowledge; According to the theory knowledge can describe as conditions of being aware of something. (Bloom's Taxonomy of Learning Domains, 2019) Also can be recognized as a cognitive or mental abilities used to retain and process information. The psychological or thinking area incorporates certainties. Knowledge comprises facts, information, and skills acquired through experience or education. Questionnaires of the research are specially considered on the respondent's educational level, knowledge of the IT, level of the English knowledge etc.

Skills; Skills can simply define as physical abilities that used to perform activities or tasks. This research mainly based on the particular individual's interpersonal skills relate to the apparel industry and the Oral and written communication skills etc. also

skills as observation, problem solving, creative thinking are assists to the different kinds of jobs in the apparel industry.

Attitude; Attitudes can depict feelings or emotions about someone or something. According to this research, attitude variable that indicates the behavioural attitudes of the particular target respondents which holds the important part among other variables. (Bloom' s Taxonomy of Learning Domains, 2019) Research based on a simple questionnaire that covers some attitudes of men's behaviour on Sri Lankan society.

# F. Job Suitability

Suitable job in the apparel industry is the mediating variable of the research study. Questionnaires are covering the areas of respondent's current job situation with asking some questions about current job satisfaction, salaries, job type and so on. Also questionnaires cover the respondent's decision about if he is selected to an apparel industry job vacancy, which department is most suited for his qualifications and the respondent's interest for each department.

# Methodology

This empirical study carried on organizational efforts towards to discover Organizational Behaviour related areas such as organizational culture, personality, leadership. This study sought to explore and identify the impact of men empowerment of apparel industry and to be conscious about why men employment is lagging in apparel industry. Data collection and analyse may do with the unambiguous questionnaires. Mainly this research based on the deductive approach that on going with the theory and hypothesis are developed and tested due to the positivism and also positivism approach that emplovee empirical



methods to make extensive use of quantitative analysis.

The study involves predominantly on the review of the literature on the KSA Learning theory and furthermore Hofstede's theory of cultural dimension Engagement Theory Employee Herzberg's Theory of motivation. This research defines the study type of descriptive, correlations, experimental and sub type of research question, hypothesis, independent and dependent variables and statistical analysis plan. The research design is the framework that has been created to seek an answer to research questions.

The target population of the study comprised the aged 18+ men who are not in Sri Lankan apparel industry including the employed and unemployed males, who are in the society. The sampling technique of this research is Purposive sampling technique which is categorized under the non-probabilistic sampling method. In the pilot study the researches collected 20 responses from 20 questionnaires. The behaviour of respondents which located to the area of Ratmalana which is a main industrial city in Western province. The researches have replaced some questions due to the negative impact on the values of the research and the convenience of the research. And with that the researches collected the main study of 175 responses from 175 questionnaires which include open ended and close ended questions which consist of Likert type questions respectively. The behaviours respondents which located to the whole area of western province. To validate the conceptual framework of KSA and its impact on men empowerment in the Sri Lankan apparel industry.

Data collection tools such as both primary data and secondary data had collected for this study. Questionnaires were used in this

study to collect required primary data. Both Sinhala and English structured questionnaires distributed among the selected sampling frame of 175 males who are aged above 18 in the society which includes employed and not employed males in western province. For the secondary data we referred data that collected by means of extensive literature study that includes the research data bases (Research gate, Google scholar), research papers, newspaper articles, books and referred industrial reports as well. For the research data analysis techniques are regression, reliability, frequencies, correlations and etc. and the data analysing was done with the data collection tool which is the software of SPSS version 23. The Sobel test was done by the Sobel Test calculating website.

# A. Conceptual Framework and Hypothesis

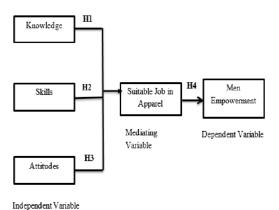


Figure 3.1 Conceptual Framework Source : KDU IRC 2020

H1: Knowledge has an effect on suitable job in the apparel industry

H2: Skills has an effect on suitable job in the apparel industry

H3: Attitudes has an effect on suitable job in the apparel industry

H4: Suitable job in the apparel industry mediates the relationship of Knowledge, Skills, Attitudes on the men empowerment.



3 MV 4 DV Men

# **Data Analysis**

# A. Preparation of data for analysis

The pilot study was based on 20 survey Questionnaire responses. Frequencies of each variable are normally distributed among the 20 responses. Also the results of the pilot study are valid through the reliability and the validity analysis in SPSS version 23 (Nie, Bent & Hull, 1970). However, some questions were removed due to those questions did not tap the exact motive of the research study, appropriately data cleaning was done.

Through the survey the authors received 175 questionnaires. In addition, 0 outliers were found from the SPSS box-plot analysis. The researchers found no missing data while analysing the data by using the SPSS in this research study. A scale was developed to measure men empowerment.

# B. Descriptive Statistics

Descriptive modelling methods such as maps and bar graphs are used to evaluate solutions to the general questions and statistical problems. Assumptions and statements are based on that descriptive statistics which are including three independent variables (Knowledge, Skills, Attitudes), mediating variable suitability) and the depending variable (Men Empowerment in apparel industry). Referring to questionnaire, question no. (8.5) the study discussed the frequency of men respondent acceptance of the offer from the apparel industry.

# C. Inferential Statistics

#### 1) Normality:

In the case of skewness, the agreed values should be within-1 to + 1 and in the case of kurtosis between-3 to + 3 for the normal distribution of the variables (Hair, et al., 2009). The researchers tested the normality of the data and the Skewness and Kurtosis values of each variable including

their standard errors using SPSS are given in the table below.

Table 4.1 Skewness and Kurtosis Source : KDU IRC 2020

1 IV 2 IV

	Know	Skill-	Attitu	Suita	Empow
	ledge	S	de-e	ble-e	erment
	-e			Job	
Skewnes	214	227	227	.129	.329
S					
Std.					
Error of	.184	.184	.184	.184	.184
Skewnes					
S					
Kurtosis	-	520	520	551	133
	1.269				
Stud					
Error of	.365	.365	.365	.365	.365
Kurtosis					

According to the study findings, both parameters are of an acceptable level of skewness and kurtosis. The details are therefore assumed to be distributed approximately normally

# 2) Multicollinearity:

The tolerance value must usually be greater than 0.1 and if the tolerance is 0 then a perfect multicorllinearity is shown, while the tolerance 1 does not display multicorllinearity and the VIF should not exceed 10, Field (2005) has indicated.

All the tolerances of the variables are higher than 0.1 and when considering the all VIF values, they are less than 10, which show that all the values are reach to the perfect level.

Table 4.2 Multicollinearity Source: KDU IRC 2020

Ű.	our co i me o mio i		
	Collinearity Statistics		
Model	Tolerance	VIF	
IV 1 K	.560	1.787	
IV 2 S	.622	1.607	
IV 3 A	.930	1.075	
MV 4 SJ	.776	1.289	



# 3) Reliability:

Alpha is the statistical tool of evaluating the reliability of a sample by Cronbach, et al. (1994), which if that value is greater than or equal to 0.6 it says that the data collected were fairly reliable and appropriate, according to Flynn, et al. (1994).

According to Cronbach, the variable of Knowledge of the current study is accurate but the other variables which are Skills, Attitudes, Suitable job and the Men Empowerment is not accurate (less accurate) because of their negative response of attitudes and the skills towards the sewing

Table 4.3 Reliability Source: KDU IRC 2020

	Cronbach's	N of
	Alpha	Items
IV 1 Knowledge	.899	4
IV 2 Skill	.300	4
IV 3 Attitude	.474	8
MV suitable job	.367	5
DV Men Empowerment	.400	4

# 4) Construct Validity:

Kaiser-Meyer-Olkin (KMO) can be used to determine the validity of the sample and KMO must usually be between 0 and 1. If the KMO is equal to 1 the data is appropriate (Kim and Mueller, 1978).

Table 4.4 Validity (KMO and Bartlett's Test)
Source : KDIJ IRC 2020

Bource: RB0 IRC 2020	
Kaiser-Meyer-Olkin Measure	
of Sampling	.601
Adequacy.	132.650
Bartlett's Test of Approx. Chi-	10
Square	
Sphericity Df Sig.	.000

According to the study findings, KMO value is 0.6 so that it can be recognized as a scientifically valid data set.

# 5) Correlation:

The Pearson's correlation coefficient must vary from-1 to + 1 for a good correlated relationship. The correlation coefficients in the current study are shown in the table 4.5.

Table 4.5 Correlations

Hypothesis Pearson's Significance correlation

HI	0.454	0.000
H2	0.374	0.000
Н3	-0.077	0.308
H4	0.026	0.728

Source: KDU IRC 2020

Pearson correlation is positive for H1 (0.454) and thereby the Hypothesis H1 is accepted. The significance is 0.000 The Pearson correlation is positive for H2 (0.374) and thereby the Hypothesis H2 is accepted The significance is 0.000. Pearson correlation is negative for H3 (-0.077). Pearson correlation is positive for H4 (0.026) and thereby the Hypothesis H4 is accepted and the significance level is 0.728. So H1 and H2 are perfectly significant and the H3 and H4 hypotheses are normally significant in the data set.

# 6) Regression:

According to Baron et al. (1986), regression analysis must take three linear regressions into the consideration in three steps as described by methodology in the current conceptual framework, in which a mediating factor is proposed.



Table 4.6 Regression ANOVA					
Model	Sum of	DF	Mean	F	Sig
	Square		Squar		
	S		e		
1	.733	1	.733	2.11	.000
Regressio				2	b
n					
	60.001	17	.347		
Residual		3			
Total	60.734	17			
		4			

Source: KDU IRC 2020

According to the table no 4.9 it can be observed that the overall regression model is significant where F=2.112 and p<0.05 under 95% of confidence level. So that it can be concluded that the linear regression in the above case is significant.

According to the beta values in the below table following equation can be derived which it states, a change of one unit in knowledge results a change of .136 units in the Men Empowerment keeping other variables constant and so on with the other variables.

Table 4.7 Coefficients

Table 4.7 Coefficients					
			Standa		
	Unstandardi		rdized		
	zed		Coeffici		
	Coefficients		ents	t	Sig.
		Std.			
	В		Beta		
(Consta	1.929	.385		5.006	000
nt)				3.000	.000
IV 1 K	.076	.057	.136	1.346	.180
IV 2 S	.022	.086	.025	.259	.796
IV 3 A	.161	.096	.131	1.669	.097
MV 4 SJ	032	.080	034	401	.689

Source : KDU IRC 2020

According to the table the significance value of the independent variables namely; Knowledge, Skills and Attitudes are significant because they are between the significant range of -1 to +1 according to the SPSS-IBM Knowledge centre website

# 7) Sobel Test:

Sobel p-values (Sobel, 1982) were used to test the significance of the mediating effect and indicate that the mediating effects for all three models.

Table 4.8 Sobel Test

Models				<i>p-</i> value
Knowledge	Suitable	job	in	0.965
	the	appa	rel	
	industry			
Skills	Suitable	job	in	0.965
	the	appa	rel	
	industry			
Attitudes	Suitable	job	in	0.967
	the	appa	rel	
	industry			

Source: KDU IRC 2020

The reported p-values are drawn from the unit normal distribution under the assumption of a two-tailed z-test of the hypothesis that the mediated effect equal 0 I the population. +/- 1.96 are the critical values of the test ratio which contain the central 95% of the unit normal distribution.

#### **Discussion and Findings**

A. Achievement of the Research Objectives

1)Understanding the portion of male employees engages in the Sri Lankan apparel industry.:

The population of the males' portion is 2,993,000. The unemployed rate of males in 2017 is 2.9% in every sector in Sri Lanka. (Statistics D. o., 2018) It is 12.5% in Sewing and machine operating on male recruitment (Statistics D. o., Sri Lanka Labor Demand Survey, 2017). Above findings depicts that the portion of male employees engage in apparel industry is very low.

2) The reasons for decrease of male employees in the apparel industry:

Identified that sewing skills of males are very low and the knowledge about the



apparel industry is very low in the society. No idea about having lot more jobs other than sewing which can be done by the males also. Another reason is that the negative attitudes towards the apparel industry which leads to the decrement of male employment.

3)The corrective actions to empower and engage male employees into the apparel industry:

Males who are educated up to G.C.E. Advanced level and completed their tertiary education can be employed in the Administrative/ Strategic level and the Executory/Tactical level. The ones who are have not completed their education up to Advanced level can be employed in the Operative / First-line level employees. Males can be employing according to the skills of sewing, machine operating, driving and various other skills.

#### **Conclusion and Recommendation**

#### A. Implications

### 1) Methodological Implications:

After the analyses based on the responses of the respondents the researchers understand the theory is influence and the improvement can be applied to industries which are similar to apparel industry. The hypothesis which was made by the researchers is been proven to males of western province in the Sri Lanka.

# 2) Managerial Implications:

Sri Lankan males are now tending to addicted to drugs and they are becoming victims of the abyss and most of males are involving in these illegal activities due to their unemployment. If these people can be categorized according to their skills and their desires in the jobs in the apparel industry men can be empowered in the apparel industry. Future perspectives can help potential managers of male gender to collectively connect knowledge, skills and

attitudes when seeking job-related incentives and higher responsibilities.

# B. Limitations of the study

The mediating variable the researchers produced does not recognized in the KSA learning theory therefore the mediating variable which is the suitable job in the apparel industry is limited only to this research. After the survey collected the researches did not investigate further on so the changes of perception are limited in this research. This research the sample is limited to the size of 175 and the sampling technique is non-probabilistic to capture the purpose of the study group therefore this research cannot easily generalize to the other study settings

# C. Recommendation to further research

For the future researches this can be placed comparative into the other industries such as Agriculture, IT-BPO, Logistics and transport with quantitative study and at different levels of men empowerment can be done. And this research should be pay more attention on deeply explaining each factor by using qualitative analysis methods such as interviews or focus groups. In terms of the sample size, a small sample of 175 respondents is not adequate in most of the instance. Usually researchers are taken 300 respondent sample for get the more accuracy in research. This can be carry on from western province region to a considerable sample size should be used for an effective representative of the entire study population chosen from different provinces rather than choosing one province only. Simply researcher is recommending to get larger sample size in future researches based on this study.

#### Acknowledgment

We would especially like to express our sincere gratitude to our research supervisor Miss DR Perara senior Lecturer, Faculty of Management, for the great



guidance and support in completing our research project. Also the kind association and supportive suggestions are so helpful to us for continue the research project in giving period of time. Further thankful for giving her valuable time in providing advice in order to process our research. Also we wish to express deep appreciation for the effort of our group members throughout the entire research.

Further we would sincerely express the gratitude to all the academic members of the Department of Logistics Management who have given their support to us in many ways. Very special thanks go to all the respondents who spent their precious time to proper completion of the research questionnaire which indeed support.

Once again, we are thankful to all the people who have provided us with assistance in completing our Final Year Project.

#### References

Bakarman, A. (2011). ATTITUDE, SKILL, AND KNOWLEDGE: (ASK) A NEW MODEL FOR DESIGN EDUCATION. Proceedings of the Canadian Engineering Education Association.

Betterwork.org. (2019). Better Work launches strategy to enhance gender equality in the garment industry – Better Work. [online] Available at: https://betterwork.org/blog/2018/01/30/better-work-launches-strategy-to-enhance-gender-equality-in-the-garment-industry/# [Accessed 24 Oct. 2019].

Council on Foreign Relations. (2019). Ten Factors That Affect Women's Economic Empowerment. [online] Available at: https://www.cfr.org/blog/ten-factors-affect-womens-economic-empowerment [Accessed 24 Oct. 2019].

D.Sivasubramaniam, D. and Dr.A.Mahadevan, D. (2011). A Study on

Migrated Workers in Garment (Apparel) Industry with Special Reference to Tirupur District, Tamilnadu. Indian Journal of Applied Research, 3(6), pp.383-385.

Daily News. (2019). Three-wheelers drivers dismayed by age bar. [online] Available at: http://www.dailynews.lk/2018/09/04/fe atures/161510/three-wheelers-drivers-dismayed-age-bar [Accessed 25 Oct. 2019].

Data.worldbank.org. (2019). Employment in services, male (% of male employment) (modeled ILO estimate) - Sri Lanka | Data. [online] Available at: https://data.worldbank.org/indicator/SL. SRV.EMPL.MA.ZS?locations=LK&view=chart [Accessed 25 Oct. 2019].

Data.worldbank.org. (2019). Labour force, female (% of total labour force) | Data. [online] Available at: https://data.worldbank.org/indicator/sl.tl f.totl.fe.zs [Accessed 24 Oct. 2019].

Dhaka Tribune. (2019). ILO Global Wage Report 2018: Bangladesh's gender wage gap lowest in the globe. [online] Available at:

https://www.dhakatribune.com/labour/2 018/11/26/ilo-global-wage-report-2018-bangladesh-s-gender-wage-gap-lowest-in-the-globe [Accessed 24 Oct. 2019].

Dheerasinghe, R. (2009). Garment Industry in Sri Lanka Challenges, Prospects and Strategies. Staff Studies, 33(1), p.33. Farani, S. and Fatemi, A. (2014). The Impact of Teacher's Self-disclosure on Students' Attitude towards Language Learning in a Foreign Language Context. Theory and Practice in Language Studies, 4(11).

Gaille, B. (2019). 22 Sri Lankan Apparel Industry Statistics and Trends. [online] BrandonGaille.com. Available at: https://brandongaille.com/22-sri-lankan-apparel-industry-statistics-trends/ [Accessed 24 Oct. 2019].



geosrilanka. (2019). Challenges ahead for the Sri Lankan garment industry. [online] Available at: https://geosrilanka.wordpress.com/2016/03/15/challenges-ahead-for-the-srilankan-garment-industry/ [Accessed 24 Oct. 2019].

Hancock, P., Carastathis, G., Georgiou, J. and Oliveira, M. (2016).

Female workers in textile and garment sectors in Sri Lankan Export Processing Zones (EPZs): gender dimensions and working conditions. Sri Lanka Journal of Social Sciences, 38(1), p.63.

Heretohelp.bc.ca. (2019). Visions—Men | Here to Help. [online] Available at: https://www.heretohelp.bc.ca/visions/me n-vol2 [Accessed 24 Oct. 2019].

Ilo.org. (2019). World Employment and Social Outlook: Trends for Women 2018 – Global snapshot. [online] Available at: https://www.ilo.org/global/research/global-reports/weso/trends-for-women2018/WCMS\_619577/lang-en/index.htm [Accessed 24 Oct. 2019].

LTD, L. (2019). The Island. [online] Island.lk. Available at: http://www.island.lk/index.php?page\_cat =article-details&page=article-details&code\_title=163154 [Accessed 24 Oct. 2019].

Madurawala, S. (2017). The Dwindling Stitching Hands -- labour shortages in the apparel industry in Sri Lanka. [online] Island.lk. Available at: http://www.island.lk/index.php?page\_cat =article-details&page=article-details&code\_title=163154 [Accessed 17 Aug. 2019].

Police.lk. (2019). Police Narcotic Bureau. [online] Available at: https://www.police.lk/index.php/narcotic-bureau [Accessed 25 Oct. 2019].

Sekaran, U. and Bougie, R. (2016). RESEARCH METHODS FOR BUSINESS. New York: Wiley.

Sofi, I. and Kunroo, M. (2017). Demand Shocks and Employment Adjustments: Does Employment Protection Legislation Create Rigidity?. International Labour Review.

Srilankabusiness.com. (2019). Apparel Manufacturers, Suppliers & Exporters in Sri Lanka. [online] Available at: http://www.srilankabusiness.com/appare l/ [Accessed 24 Oct. 2019].

Statistics.gov.lk. (2019). Gender Statistics. [online] Available at: http://www.statistics.gov.lk/page.asp?pag e=Gender%20Statistics [Accessed 24 Oct. 2019].

Statistics.gov.lk. (2019). The Sri Lankan Women. [online] Available at: http://www.statistics.gov.lk/Gender%20S tatistics/Publications/The%20Sri%20Lan kan%20Woman.pdf [Accessed 24 Oct. 2019].

Thepeakperformancecenter.com. (2019). Knowledge, Skills, and Attitudes - The Peak Performance Centre. [online] Available at: http://thepeakperformancecenter.com/ed ucational-

learning/learning/process/obtaining/obta ining-

information/knowledge-skills-attitudes/ [Accessed 25 Oct. 2019].

Trehan, B. (2019). Let us empower men. [online] Times of India Blog. Available at: https://timesofindia.indiatimes.com/blogs/voices/let-us-empower-men [Accessed 24 Oct. 2019].

UK Parliament. (2019). Jobs for the boys. [online] Available at: https://www.parliament.uk/business/publications/research/olympic-britain/employment/jobs-for-the-boys/[Accessed 25 Oct. 2019].



United Nations Sustainable Development. (2019). United Nations: Gender equality and women's empowerment. [online] Available at: https://www.un.org/sustainabledevelopment/gender-equality/ [Accessed 24 Oct. 2019].

Voice Male magazine. (2019). Male Empowerment. Really? | Voice Male magazine. [online] Available at: https://voicemalemagazine.org/male-empowerment-really/ [Accessed 24 Oct. 2019].

#### **Abbreviations**

EDB – Export Developing Board EPZ- Export Processing Zones ICRW- International Centre for Research on Women

IFC- International Finance Corporation

ILO- International Labour Organization

KSA- Knowledge, Skills and Attitude

OB- Organizational Behaviour

#### **Author Biographies**



DR Perera is a senior lecturer in the department of management and finance. Her research interests include organizational culture,

benefit management in organizational projects and legal aspects of business.



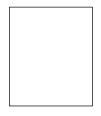
Author is a third year undergraduate of BSc in Logistics Management Degree program conducted in General Sir John Kotelawala Defence

University Sri Lanka. Her research interests include cultural factor of the organizational behaviour study and KSA Learning theory.



Author is a third year undergraduate of BSc in Logistics Management Degree program conducted in General Sir John Kotelawala Defence

University Sri Lanka. Her research interests include cultural factor of the organizational behaviour study and KSA Learning theory.



Author is a third year undergraduate of BSc in Logistics Management Degree program conducted in General Sir John Kotelawala Defence

University Sri Lanka. His research interests include cultural factor of the organizational behaviour study and KSA Learning theory.

Paper ID 208

# Employability Model for Higher Education Institutes to Generate Work-Ready ICT Graduates in Sri Lanka

Samanthi Wickramasinghe<sup>1#</sup> and Sunesh Hettiarachchi<sup>2</sup>

<sup>1</sup>Horizon Campus, Sri Lanka <sup>2</sup>TECH Computers, Sri Lanka

#samanthi@horizoncampus.edu.lk

**Abstract:** According to the survey conducted by National IT-BPM Workforce in 2019, it was found that there is a gap between demand and supply of ICT graduates in Sri Lanka. Furthermore, there is a gap between the demand and supply of skills due to the fact that top skills demanded by employers and top skills offered by training organizations are not aligned at present. Primary data for the study were collected from the sample interviews through expert and questionnaires. The sample (N=400)consists of employers, academics, and alumni. Secondary data were collected from the curriculum of ICT programmes, Subject Benchmark Statement (SBS) on IT, Sri Lanka Qualifications Framework (SLQF) and ACM guidelines for Bachelor's degrees in IT. The main objective of the study is to develop an employability model to generate work-ready ICT graduates in Sri Lanka while reducing the skill mismatch. According to the proposed employability model, components of the curriculum must align with the student-centred teaching and learning methods, programme learning outcomes and SLQF learning outcomes to develop graduate attributes which will be useful to generate workready graduates irrespective of the discipline. Most importantly, the Internal Quality Assurance Unit (IQAU) of the HEIs and Management of the HEIs have a great responsibility towards implementing the above-proposed model to generate workready ICT graduates in Sri Lanka. As a result, the gap between demand for and

supply of ICT graduates and the skill mismatch can be reduced.

**Keywords**: Employability, Higher education, ICT graduates

#### Introduction

Demand and Supply gap of ICT graduates of Sri Lanka in 2019 is shown in figure 1 (NATIONAL IT - BPM WORKFORCE SURVEY, 2019). It shows that the demand exceeds the supply in a significant margin of 12,140. However, high demand for ICT workforce can be considered as a healthy sign of growth in the industry and should be welcome even though the supply is low. The main concern of the industry is not the numbers of supply alone but in terms of the quality of supply.

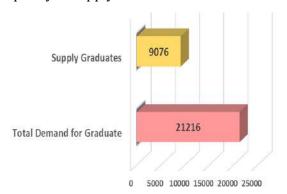


Figure 1. Demand and Supply Gap of ICT Graduates Source: NATIONAL IT - BPM WORKFORCE SURVEY 2019

Furthermore, there is a gap between demand and supply of skills. Table 1 shows that top skills demanded and top skills offered are not aligned in a consistent order of priority. Hence, the main objective of the study is to develop an employability model to generate work-ready ICT graduates in



Sri Lanka while reducing the skill mismatch.

Table 1. Gaps in demand for and supply of skills

Table 1. Gaps in demand for		Mismatch of Skills				
Types of	Skills in demand	Skills in				
skill		demand	Less supplied skills in demand skills in supply			
	Business analysis & process Engineering	Systems Design	& process engineering			
	Database design & administration	Programming	<ul> <li>Customer service</li> <li>Internet &amp; Systems</li> <li>Security</li> </ul>			
	Hardware engineering & maintenance	Systems Analysis	Systems / Application support			
	Customer service	Network design	System application testing			
Core Skills	System analysis	Database design and admin				
	Programming	Network implementation				
	Systems/Application support	Internet and				
	Project management	Hardware engineering and maintenance				
	Network implementation	Systems Design				
	System design	Programming				
	System application	Project				
	testing	Management				
	Communication Skills	Communication Skills				
	Team work	Team working				
	Interpersonal Skills	Creative thinking Skills				
Soft Skills	Creative thinking skills	Interpersonal Skills				
	Professional ethics	professional ethics				
	Proficiency in English language	Proficiency in English language				
Technical	SQL Server	Java	MS Windows			
Skills	MS Windows	C++	My SQL			
	MySQL	Linux	Oracle			
	Oracle	Visual Basic	.NET			
	NET	NT				
	PHP	C#				
	Linux	SQL Server				
	C#	PHP				
	C++					
	Java					

Source: NATIONAL IT - BPM WORKFORCE SURVEY 2019



## **Research Methods**

To identification of the tools are the most important factor in developing employability model for Higher Education generate Institutes to work-ready graduates. Primary data collected from expert interviews and questionnaires from the sample. The sample (N=400) consists of employers, academics and alumni. Secondary data collected from, curriculum of ICT programs, subject benchmark statement on IT, Sri Lanka Qualifications and the Association for Computing Machinery (ACM) and the IEEE Computer

Society (IEEE-CS) guidelines for Bachelor's degrees in IT.

The curriculum is an academic content and sequence of courses of the total learning experience of the student. A curriculum signifies a continuous evolution of the respective study programs. According to Ralph Tyler (2004), there are four (4) fundamental questions that were considered to develop a curriculum. The following table indicates the fundamental questions and answers for those questions (Arroyo & García Garduño, 2004).

Table 2. Fundamental questions and answers for those questions of the Ralph Tyler (1990).

OUES'	TIONS	ANSWERS
What kind of	What educational purpose shall	What kind of
individual/employee do we	the curriculum serve?	individual/employee do we
need?		need?
		Can do by Selection of program
		aims (based on graduate
		profile/Program outcomes)
		Graduate Profile
		Curriculum determinants
		Benchmarks
		Stakeholders feedback
What do they learn?	What experiences should the	What do they learn?
	institution and its faculty provide	Selection of learning
	to meet these expressed	experience and content driven
	purposes?	by learning outcomes (Course
		Outcomes)
		Course outcomes are
		determined to achieve
		program outcomes
How do they learn?	How can this experience be	Organization of the experience
	organized most effectively?	with determined objectives
		• Learning Outcomes (LOs)
		based on levels should be
		cumulative: experiences
		should build on earlier ones
		Course workload
		Credits – the agreed-upon
		value used to measure a
		student workload in terms of
		learning time required to
		complete course units,
		resulting in learning
** 1	**	outcome's (UNESCO, 2004)
How do we assess the learning	How can one best determine the	Evaluation is the last step of the
outcomes?	outcomes of learning-the	curriculum model.
	purposes and attainment of the	A comprehensive evaluation can
	curriculum?	be done using a variety of
		evaluation techniques. Through
		the evaluation process it can be
		decide whether or not the goals
		of the curriculum and objectives of instruction have been met.
		or instruction have been thet.



Subject Benchmark Statement (SBS) in IT of the University Grants Commission (UGC) clearly indicated that the IT graduate should try to develop generic skills as well as subject-specific skills (Subject Benchmark Statement, 2010).

The Sri Lanka Qualification Framework (SLQF) is a globally standardized structure for all of Sri Lanka's offered higher education qualifications (Sri Qualification Framework, 2016). The SLQF refers to all public as well as private higher education institutions (HEIs), which provide post-secondary education. It helps to understand qualifications and assess a qualification's relative worth. encourages learners to make educated decisions about the skills they want to obtain. The SLQF comprises twelve (12) levels, and comprehensively describes the descriptors of each of these levels. Since the amount of learning is included in the SLQF, there is also the number of credits that the students can earn for each certification.

#### **Results and Discussion**

Based on the analyzed primary data indicated that graduates must acquire meaningful work knowledge, demonstrated good working skills with the attitudes at the workplace. Nevertheless, there were still areas for continual improvement ensure graduates were well-prepared for practicum, further soft skill development and to improve the quality of their project and minor modifications to be done for the existing curriculum to match with the current market demand.

SLQF level descriptors describe the nature of the study and the academic standards expected of graduates in respect of particular qualifications (Sri Lanka Qualification Framework , 2016). They provide a picture of what graduates might reasonably be expected to know, do, and understand at the end of their program of study.

SBS is used as reference points in the design, delivery, and review of academic programs. They provide general guidance for articulating the learning outcomes associated with the program but are not intended to represent a national curriculum in a subject or to prescribe set approaches to teaching, learning, or assessment. Instead, they allow for flexibility and innovation in program design within a framework agreed by the subject community.

The K-SAM model is considered an integrated model. Thus, each learning outcome identified under the attributes of a particular level may not be confined to a single domain within the K-SAM model. For example, communication skills (i.e. a learning outcome) are not considered only as a skill (i.e. a single domain of the K-SAM model). The SLQF recognizes a given learning outcome as a blend of more than one domain (in most cases all the domains) in the K-SAM model.

Table 6. KSAM Model

Knowledge	What the qualification holders know?
Skills	What the qualification holders can do?
Attitudes, Values, Professionalism and Vision for life	How the qualification holders think and behave?
Mind-set and Paradigm	How the qualification holders perceive the world?

Source: SLQF Booklet



For each qualification, the generic outcomes and attributes signify the expected capabilities from qualification holders defined in terms of the four main domains of learning: knowledge, skills, attitudes, and mindset characterized as the 'K-SAM model'. This is exactly expected by the employer from the fresh graduates.

The curriculum of the degree program plays a vital role in employability. Contents, Teaching/Learning Methods. and Assessment Methods are components of the curriculum in any discipline. According to the SBS in IT, Information Technology is an integrative discipline. It combines together the IT knowledge areas of databases, humancomputer interaction, networking, programming, and web systems. Concrete backgrounds in each of these areas enable graduates to solve all types of computing and informational problems, regardless of their origin.

There are twelve (12) learning outcomes defined in the SLQF as being of national significance have been adapted to fit each level of qualification as level descriptors. Categorizing the learning results according to the key components of K-SAM. Any of the widely used student-centered teaching and learning approaches recommended for the learning outcomes. The learner is expected to meet or demonstrate that certain learning outcomes have been achieved. Therefore, the assessment of the outcomes

of learning by effective and appropriate assessment methods is essential in the process of the qualification framework.

A core consists of all essential areas that must be included in any IT undergraduate degree program that can be identified (Curriculum Guidelines for Undergraduate Degree Programmes in IT, 2017). Core areas in a degree program are IT fundamentals. **Programming** fundamentals, Computer fundamentals, Operating systems, IT systems, Web systems, Networking, Databases, Humancomputer interaction, Professional communication, Information assurance & security, and Professional ethics. In addition to the above key areas, a successful IT graduate needs many skills in Mathematics, Scientific Method, Familiarity with Application Domains and Communication Skills areas as well. Other than knowledge areas there must be projects including teamwork, professional communications (reports presentations), design, implementation, and testing.

According to the proposed employability model, components of the curriculum must align with the student-centred teaching and learning methods, program learning outcomes, SLQF learning outcomes to develop graduate attributes which will be useful to generate work-ready graduates irrespective of the discipline

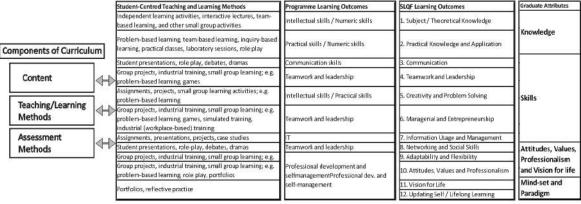


Figure 2. Proposed Employability Model Source: Author Constructed



#### **Conclusions**

According to Yorke & Knight (2006), employability is a set of skills, understanding, and personal attributes that make graduates more likely to gain employment, and be successful in their chosen occupations, which benefits themselves, the workforce, and the economy (Dean & Mansour, 2016).

Hence, it is a fact that the content of the degree program must follow the core areas defined in the ACM guidelines. In addition, teaching/learning methods. assessment methods must comply with the mentioned student-centered methods. Furthermore, each and every course outcomes map with the program learning outcomes and twelve (12) SLQF learning outcomes. Finally, those twelve (12) outcomes map with the graduate attributes which were considered as employability indicators (KSAM Model). Additionally, the program outcomes consist of key skills: intellectual skills, practical skills, numeric skills, IT skills, communication skills, teamwork, and interpersonal skills and professional development & self-management skills.

Furthermore, the HEIs must consider the component of the curriculum and skills related to the ICT, when the proposed employability model will be used to generate work-ready ICT graduates

Most importantly, the Internal Quality Assurance Unit (IQAU) of the HEIs and Administrative Staff of the HEIs have a great responsibility towards implementing the above-proposed model to generate work-ready ICT graduates in Sri Lanka. As a result, can reduce the gap between demand for and supply of ICT graduates and skill mismatch.

## References

Arroyo, G. C., & García Garduño, J. M. (2004). Tyler's Curriculum Rationale and the Reconceptualists: Interview with Ralph W. Revista Electrónica de Investigación Educativa.

Brakewood, C., Rojas, F., Robin, J., Sion, J., & Jordan, S. (2014). *Forecasting Mobile* 

Ticketing Adoption on Commuter Rail by Candace Brakewood,. Retrieved from www.scholarcommons.usf.edu/jpt/vol17/iss1/1

(2017). Curriculum Guidelines for Undergraduate Degree Programmes in IT. Association for Computing Machinery (ACM) and IEEE Computer Society (IEEE-CS).

Dean, J., & Mansour, B. (2016).Employability Skills as Perceived by Employers and University Faculty in the Fields of Human Resource Development (HRD) for Entry Level Graduate Jobs. Iournal of Human Resource and Sustainability Studies.

GIRINIVAS, N. (2015). *International Journal of Computer Science and Mobile Computing.*Retrieved from www.ijcsmc.com/docs/papers/March201 5/V413201594.pdf

Kumar, C., & Ram, V. (2013). "IJIREEICE\_ A Monthly Peer reviewed Online Journals,". Retrieved from www.ijireeice.com/wpcontent/uploads/2013/03/6b-a-Ram\_Kumar-train\_ticketing.pdf

Maheshwar, V. (2018). *IOSR Journal of Engineering*. Retrieved from www.isorjen.org/Papers/Conf.ICATE-2018?Volume-13/9-33-38.pdf

(2019). *NATIONAL IT - BPM WORKFORCE SURVEY*. ICTA of Sri Lanka.

Rouse, M. (2007, March). requirements analysis(requirements engineering). Retrieved from https://searchsoftwarequality.techtarget.c om/definition/requirements-analysis

Sri Lanka Qualification Framework. (2016). The World Bank funded Higher Education for Twenty First Century (HETC) Project of the Ministry of Higher Education.

*Sri Lanka Qualification Framework.* (2015). Ministry of Higher Education.

Subject Benchmark Statement. (2010). QAA Council, Sri Lanka.

Zongjiang, W. (2012). Railway Online Booking System and Implementation -Science Direct. Retrieved from



www.sciencedirect.com/science/article/pi i/S1875389212016155

## **Author Biographies**



Ms. Samanthi
Wickramasinghe
completed my MSc in IT
(Cardiff Metropolitan, UK),
BIT (UCSC, Sri Lanka).
Currently working as a

Lecturer in IT at Horizon Campus. She has more than five (5) years of teaching experience in undergraduate degree, final project supervision and twelve years of experience in Quality Assurance in Higher Education. She published twenty papers related to IT and QA. She has the

membership of Computer Society of Sri Lanka.



Mr. Sunesh Hettiarachchi has more than 14 years of industry experience in Software Industry including 6 years of managerial experience. He is working as a

part-time visiting lecturer and conducting lectures and supervision for undergraduate and postgraduate level. Nearly eight (8) papers related to the Business Management and IT are published at National and International Conferences. Further, he is currently reading for the DBA (Lincoln University College, Malaysia). He is a member of ACS.

Paper ID 226

# Assessment of Public Speaking Anxiety (PSA): A Study Based on the Second Year Law Undergraduates in Kotelawala Defence University, Sri Lanka

WS Sudusinghe<sup>1#</sup>, WGC Kumara<sup>2</sup>, CJ Kothalawala<sup>3</sup> and TD Kothalawala<sup>3</sup>

<sup>1</sup>Post Graduate Student (MA in Linguistics), University of Kelaniya <sup>2</sup>Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University <sup>3</sup>Department of Languages, General Sir John Kotelawala Defence University.

#wssudusinghe@gmail.com

**Abstract:** Eliminating the apprehension of public speaking is vital for undergraduates to perform well as future attorneys and other legal professionals. A descriptive cross-sectional study assessed Public Speaking Anxiety (PSA) among all the (n=140)second-year law undergraduates followed who the compulsory Public Speaking module in KDU, Sri-Lanka. A pre-tested, administered questionnaire followed by the Personal Report of Public Speaking Anxiety (PRPSA) scale developed by McCroskey was used for data collection. Data was analysed using descriptive statistics, t-test, and one-way ANOVA in SPSS 23.0. All the participants had a 'low' level of PSA. The majority (90.9%: n=100) had the previous experience of performing in front of an audience, and 60% (n=66) were involved in extra-curricular activities related to public speaking. However, the majority (75.5%: n=83) had not followed any course related to public speaking. The mean of the PRPSA score of the students who had participated in extra-curricular activities related to public speaking was significantly different from that of the ones who had not (P=0.030). Tukey post hoc test on a one-way ANOVA revealed that the students who had participated in debating had a significant mean difference in PRPSA score with the students who had taken part in Toastmasters (P=0.000) and with those who had not participated in any activity related to public speaking (P=0.000).

Previous exposure and having a compulsory course module on public speaking were identified as the critical elements in reducing the PSA among the law undergraduates. It would lead to the transformation of self-confidence and ultimately, a positive transformation in their professionalism and personality.

**Keywords:** Public speaking anxiety, Law undergraduates, University education, Communication apprehension

#### Introduction

Public Speaking Anxiety (PSA) is identified in the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders; American *Psychiatric Association*) as a social anxiety disorder (APA, 2013). It is also named as Glassophobia, and identified as a state of nervousness or distress triggered by the expectation of something threatening. Further, PSA is classified as one of the prevailing social phobias among the modern generation (Herath, 2019). It is reported as prevalent in 15% to 30% of the general population (Pull, 2012). Up to 10% of those say that their PSA results in an intrusion with daily activities, including work and education (Heeren et al., 2013; Stein et al., 1996). Regardless of being knowledgeable in their field specialisation, many professionals struggle due to poor public speaking skills. Even professionals involved in business and undergo politics may also stressful



conditions due to the fear of public speaking. For certain individuals, the fear of public speaking has become a threat to achieving success in their career. Further, society has an underestimation on them as they fail to create a strong impression among the public.

Fear of public speaking can lead to various physiological changes in the speaker such as experiencing dryness of mouth, increasing the level of blood pressure, asymmetrical breathing, reddening of the face and perspiring due to the feeling of embarrassment (Kushner, 2004). People who experience speaking anxiety, get confused very quickly and they may feel anxious and uncomfortable even when they are in front of a small crowd. They may experience a weakness in their body due to the stressful condition. The very thought of giving a speech in front of the public may bring them a sense of discomfort and (Furmark, nervousness 2002). symptoms of Glassophobia can be classified into three: physical, verbal, and non-verbal. The individuals with Public speaking anxiety may undergo physical symptoms such as acute hearing, raised heartbeat, dilated enhanced pupils, sweating. increased oxygen intake, spasm of upper back muscles and neck rigidity. They will also experience verbal symptoms such as tense and shaking voice and vocalised pauses and non-verbal symptoms like disturbed body language (Furmark, 2002). Studies reveal that females have a high prevalence of social phobia than males (Kessler et al., 1994; McLean et al., 2011).

Communication Apprehension, which weakens the competency and the disposition to speak in public, can be treated with three approaches, such as systematic desensitisation, cognitive restructuring, competence/skilland building. The above approaches are classified as the most effective techniques in maximising the students' performance.

Systematic desensitisation comprises in a determination to engage, repetitively, in the same apprehension-causing exercise or event in order to reduce its newness and intensify the comfort with that activity (Colbeck, 2011). This is an gradual exposure for the fear occurring stimuli that leads to a decrease in the stress levels with the aid of the relaxation techniques. The mechanism of cognitive restructuring aims at directing the individuals with high levels of Communication Apprehension to an instructor who will identify weaknesses of the participants' and rebuild and replace them with positive motivation (Stein, 2009). Skills training serves as one of the fundamental approaches utilised in the universities in public speaking programmes. This approach strengthens the students' confidence in public speaking as they gain the assistance of their instructors in enhancing their skills of public speaking. The main focus of this approach is to reduce the public speaking competence/ anxietv through building approach. An experimental study which has surveyed this method has proven a reduction in the level of PRPSA (Colbeck, 2011).

It has become a common practice among many young students that they try to escape from the instances where they are expected to do a presentation or deliver a speech. Further, they have a high tendency of avoiding social gatherings. Studies have revealed that language speaking courses play an influential role in reducing the level of speakers' anxiety and create positive reinforcement in the level of performance (Scovel, 2006). Further, recent survey studies highlighted that the incidence of PSA among university students is parallel to that of the general population (Tejwani et al., 2016). Since this is a significant barrier in achieving one's personal and professional the goals, university undergraduates must be trained to



overcome the fear of public speaking before they become professionals (Raja, 2017). As a result of this high incidence of public speaking fear, and in light of its clinical implications, the need for brief and precise measurement of this construct is critical (Heeren et al., 2013).

A positive, pre-speech self-talk experience is also identified as a very effective mechanism in assessing the influence of anxiety on student performance in various disciplines. The research studies highlight the significance of providing the students with an opportunity to narrate aloud a selfaffirming statement in unison before they deliver the relevant presentation or speech. This will have a profound effect on reducing the anxiety of the students in speaking. Nevertheless, recurrent use of the recited positive affirmation practice over numerous instances in the same course module and academic semester did not result in a noteworthy additional decrease performance anxiety over classes in which only one speech or presentation was performed during the term (Shadinger et al., 2020).

Psychological distress has been categorised as an influential element in the student's transition and success. Many university students across all the academic disciplines undergo different levels of anxiety and distress in their interpersonal, social and performance situations, and that serves as a strong barrier into their competency in achieving success in their higher education. Hence the Performance Anxiety, Public Speaking Anxiety, Stage Fear Communication Apprehension are the common most types of anxieties experienced University by the Undergraduates (Martin-Lynch et al., 2016).

In general, the public speaking anxiety is a common issue that many Law

undergraduates, as well as aspiring Law students, struggle with. A Lawyer is expected not only to interact with clients but also to deliver the arguments persuasively and constructively before the court. When the students master the art of public speaking during their university this may lead education. transformation in their self-confidence. Therefore, eliminating the fear of public speaking is of crucial importance to Law undergraduates since it may threaten the confidence in their future as attorneys. Hence, improving the public speaking skills of Law undergraduates is a key to have a promising legal career and a source of empowerment (Brown, 2015). However, there are only a few studies conducted in Sri-Lanka regarding the PSA among the Law undergraduates. Therefore, the study aimed at assessing the PSA among the second-year Law undergraduates who follow compulsory public speaking module in General Sir John Kotelawala Defence University, Sri-Lanka.

#### **Literature Review**

The fear of public speaking is even more dreadful than their fear of death for some individuals. However, the psychologists identify this as one of the irrational fears which can easily be eliminated through constructive intervention. researches have highlighted the need to include the public speaking modules into the curriculum right from School to Higher education at universities (Raja, 2017). A study revealed that the students who get exposed to the training on public speaking before they enter the world professionalism are more likely to be competent and confident than those who had no prior exposure (Akin and Kunzman, 1974).

A study was conducted in Japan to assess the efficiency of a skills-based program as a mechanism in decreasing the PSA. The



study population comprised of twenty-five college sophomores who were subjected to a methodical approach for developing a presentation that was theoretically associated with approaches in reducing Communication Apprehension. provided with students were the opportunity to conduct four presentations. The performance was evaluated and graded by the teacher and the colleagues. Results of the study shown that the experimental group reported a significant decrease in the level of public speaking anxiety than the control group of 86 students (Priby et al., 2001).

study was conducted Another Midwestern university to determine the impact of a basic-level speech course on students' CA. The McCroskey's Personal Report of Public Speaking Anxiety (PRPSA) questionnaire was used in both pre- and post-test. The pre-test was conducted during the first two weeks of the course to assess their level of anxiety in public speaking while a post-test was conducted at the end of the course to assess their level of improvement. The study population comprised of 324 students at Midwestern University. The results have shown a significant decrease in the level of CA after completion of the speech course (Colbeck, 2011)

An experimental study conducted in Sri-Lanka among the third year undergraduates who follow compulsory module on public Speaking at Uva Wellassa University revealed that the students who had a high level of anxiety in public speaking (64%) at the beginning of the module, were able to reduce their anxiety to 5% at the end of the module. The level of anxiety was measured using questionnaire of Personal Report of Public Speaking Anxiety (PRPSA) developed by McCroskey. This highlights the significance of having a separate course module on

public speaking for university undergraduates (Herath, 2019).

## Methodology

The study was conducted as a descriptive cross-sectional study among all the (N=140) second-year Law undergraduates who study compulsory Public Speaking module in General Sir John Kotelawala Defence University, Sri-Lanka. administrated questionnaires were handdelivered among the participants once the informed written consent was taken. A selfadministered questionnaire consisted of an assessment of socio-demographic data followed by the Personal Report of Public Speaking Anxiety (PRPSA) scale was used for data collection. Personal Report of Public Speaking Anxiety (PRPSA) scale is a 34-item developed by McCroskey, J. C. (McCroskey, 1970) which is an excellent measure of public speaking anxiety. Cronbach's alpha of PRPSA scale ranges from 0.84 to 0.94 (Mörtberg et al., 2018), which proves that the scale is very reliable. The severity of the PSA is categorised in PRPSA under three levels (High = > 131, Low = < 98 and Moderate = 98-131) and the response to each item was scaled in a Likert scale (1- Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree).

The questionnaire was piloted among ten second-year law undergraduates to evaluate cultural appropriateness and comprehension, and they were excluded from the study population. Data was analysed using SPSS 23.0, including the descriptive statistics, independent sample t-test and Turkey Post hoc test on one-way ANOVA.

#### **Results**

The response rate of the participants was 78.57%(n=110), and the mean ( $\pm$ SD) age of the participants was  $21.58(\pm 3.567)$  years. Majority of them were females (59.1%: n=65), and the native language of most of



the participants was Sinhalese (91.8%; n=101). Many of them (90.9%: n=100) had the experience of presenting an item in front of an audience, and 60% (n=66) have involved in the extra-curricular activities related to public speaking such as Toastmaster (30%: n=330), Debating (28.2%: n=31) and Model United Nations (MUN) (1.8%: n=02). However, most of the participants (75.5%: n=83) have not followed any courses related to public speaking.

Parameter Status	ı		
D			
Demographic Data			
AgeMean21.58			
Median 22			
Mode 21			
SD 3.567			
Gender Male 40.9%(r	ı=45)		
Female 59.1(n=	65)		
Native Sinhala 91.8%(r	n=10		
Language 1)			
English 4.5%(n=	=5)		
Tamil 3.6%(n=	<del>-4)</del>		
<b>Had the</b> Yes 90.9%(r	90.9%(n=10		
experienc 0)	0)		
e No 9.1%(n=	=10)		
Extra- Yes 60%(n=	66)		
curricula No 40%(n=	44)		
r			
activities			
<b>Type of</b> Toastmast 30.0%(r	n=33)		
activities er			
involved Debating 28.2%(r	n=31)		
	=2)		
MUN 1.8%(n=	-,		
MUN 1.8%(n=	44)		

All the participants had a 'low' level of PSA, and the mean score was 40.35 (±19.09). There was no significant mean difference in PRPSA score between the two genders (P=0.058), and the mean of the PRPSA score was significantly different between the students who have participated in

extra-curricular activities related to public speaking and the ones who have not (P=0.030). One-Way ANOVA suggested that there is a statistically significant difference in the mean PRPSA score between the types of extra-curricular activities that the participants have taken part related to public speaking (P=0.000). The students who have done debating had a significant mean difference in PRPSA score with the students who have taken part Toastmaster (P=0.000) and those who have not participated in any activities related to public speaking (P=0.000). However, the students who have taken part in MUN had no significant mean difference in PRPSA score with the students who have done (P=0.999),Toastmaster Debating (P=0.246) and those who have not participated in any activities related to public speaking (P=0.408).

Table 2. Multiple Comparisons Dependent Variable: PRPSA Value

(I) type of	(J) type	Mean	Sig.
activity	of	Differen	
	activit	ce (I-J)	
	y		
Done	Debatin	-20.090*	.00
nothing	g		0
	Toast	3.917	.72
	master		9
	MUN	-18.477	.40
			8
Debating	Done	20.090*	.00
	nothing		0
	Toast	24.007*	.00
	master		0
	MUN	1.613	.99
			9
Toastmast	Done	-3.917	.72
er	nothing		9
	Debatin	-24.007*	.00
	g		0
	MUN	-22.394	.24
			6



MUN	Done	18.477	.40
	nothing		8
	Debatin	-1.613	.99
	g		9
	Toast	22.394	.24
	master		6

#### **Discussion**

This descriptive cross-sectional study was aimed to assess PSA among all the secondyear Law undergraduates who follow a compulsory public speaking module in KDU, Sri-Lanka. The study revealed that all the participants had a low level of PSA. A similar study conducted in medical undergraduates in Pakistan found that the majority of the study population had a moderate PRPSA level (Khan et al., 2015). Further, there was a significant difference between the gender and PRPSA level, which was not found in the present study. Further, a similar experimental study conducted in Sri-Lanka among the 3rd year undergraduates who follow compulsory module on public Speaking at Uva Wellassa university revealed that the students who had a high level of anxiety in public speaking (64%) at the beginning of the module, were able to reduce their anxiety to 5% at the end of the module. This highlights the significance of including a specific module on public speaking into the curriculum of the university undergraduates (Herath, 2019).

In this study, majority of the participants have had the previous experience on presenting an item in front of an audience, and 60% (n=66) have involved in the extracurricular activities related to public speaking. Moreover, PRPSA score was significantly different between the students who have participated in extracurricular activities on public speaking and the ones who have not. The previous experience and the mandatory course module on public speaking should be the reason behind the low PSA among the

study population. Further, many researchers have highlighted the need for including Pubic speaking modules into the curriculum higher education. Another study revealed that the students who had exposure to public speaking are more likely to be competent and confident than those who had no prior exposure (Akin and Kunzman, 1974). Further, exposure to virtual environments and the use of cognitive-behavioural self-help programs delivered on the Internet would reduce the PSA (Pull, 2012).

#### Conclusion

The study was conducted to identify the **PSA** among the second-year law followed undergraduates who the compulsory Public Speaking module in KDU, Sri-Lanka. It was revealed that the PSA level among all the participants was 'low'. Previous exposure to extra-curricular activities related to public speaking and having a compulsory course module on public speaking are critical elements in reducing the PSA among the Law undergraduates. This would lead to the transformation of their self-confidence, speaking style, intonation pattern and ultimately, a constructive alteration in their professionalism and personality.

## References

Akin, C., Kunzman, G.G., 1974. A Group Desensitization Approach to Public Speaking Anxiety. Can. J. Couns. Psychother. 8.

Brown, H., 2015. Empowering Law Students to Overcome Extreme Public Speaking Anxiety: Why "Just Be It" Works and "Just Do It" Doesn't (SSRN Scholarly Paper No. ID 2595308). Social Science Research Network, Rochester, NY.

Colbeck, J.J., 2011. The Impact of a Fundamentals of Speech Course on Public Speaking Anxiety 17.



Furmark, T., 2002. Social phobia: overview of community surveys. Acta Psychiatr. Scand. 105, 84–93. https://doi.org/10.1034/j.1600-0447.2002.1r103.x

Heeren, A., Ceschi, G., Valentiner, D.P., Dethier, V., Philippot, P., 2013. Assessing public speaking fear with the short form of the Personal Report of Confidence as a Speaker scale: confirmatory factor analyses among a French-speaking community sample. Neuropsychiatr. Dis. Treat. 9, 609–618.

https://doi.org/10.2147/NDT.S43097

Herath, H., 2019. Effect of a Separate Course Module on Reducing Public Speaking Anxiety Among Undergraduates of Uva Wellassa University of Sri Lanka. IOSR J. Humanit. Soc. Sci. 24, 29–33.

Kessler, R.C., McGonagle, K.A., Zhao, S., Nelson, C.B., Hughes, M., Eshleman, S., Wittchen, H.U., Kendler, KS, 1994. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey. Arch. Gen. Psychiatry 51, 8–19. https://doi.org/10.1001/archpsyc.1994.0 3950010008002

Khan, D.F., Ismail, S., Shafique, M.S., Ghous, K., Ali, S.A., 2015. Glossophobia among Undergraduate Students of Government Medical Colleges in Karachi 2, 7.

Kushner, M., 2004. Public Speaking For Dummies, 2 edition. ed. For Dummies, Hoboken, NJ.

Martin-Lynch, P., Correia, H., Cunningham, C., 2016. Public speaking anxiety: The SAD implications for students, transition, achievement, success and retention.

McCroskey, J.C., 1970. Measures of communication-bound anxiety. Speech Monogr. 37, 269–277. https://doi.org/10.1080/03637757009375677

McLean, C.P., Asnaani, A., Litz, B.T., Hofmann, S.G., 2011. Gender Differences in Anxiety Disorders: Prevalence, Course of Illness, Comorbidity and Burden of Illness. J. Psychiatr. Res. 45, 1027–1035. https://doi.org/10.1016/j.jpsychires.2011.03.006

Mörtberg, E., Jansson-Fröjmark, M., Pettersson, A., Hennlid-Oredsson, T., 2018. Psychometric Properties of the Personal Report of Public Speaking Anxiety (PRPSA) in a Sample of University Students in Sweden. Int. J. Cogn. Ther. 11, 421–433. https://doi.org/10.1007/s41811-018-0022-0

Priby, C.B., Keaten, J., Sakamoto, M., 2001. The effectiveness of a skills-based program in reducing public speaking anxiety. Jpn. Psychol. Res. 43, 148–155. https://doi.org/10.1111/1468-5884.t01-1-00171

Pull, CB, 2012. Current status of knowledge on public-speaking anxiety. Curr. Opin. Psychiatry 25, 32–38. https://doi.org/10.1097/YCO.0b013e328 34e06dc

Raja, F.U., 2017. Anxiety Level in Students of Public Speaking: Causes and Remedies. J. Educ. Educ. Dev. 4, 94. https://doi.org/10.22555/joeed.v4i1.100

Scovel, T., 2006. The Effect of Affect on Foreign Language Learning: A Review of the Anxiety Research. Lang. Learn. 28, 129–142. https://doi.org/10.1111/j.1467-1770.1978.tb00309.x

Shadinger, D., Katsion, J., Myllykangas, S., Case, D., 2020. The Impact of a Positive, Self-Talk Statement on Public Speaking Anxiety. Coll. Teach. 68, 5–11. https://doi.org/10.1080/87567555.2019. 1680522

Stein, D.J., 2009. Textbook of Anxiety Disorders, 2 edition. ed. American



Psychiatric Publishing, Inc., Washington, DC.

Stein, M.B., Walker, J.R., Forde, D.R., 1996. Public-speaking fears in a community sample. Prevalence, impact on functioning, and diagnostic classification. Arch. Gen. Psychiatry 53, 169–174. https://doi.org/10.1001/archpsyc.1996.0 1830020087010

Tejwani, V., Ha, D., Isada, C., 2016. Public Speaking Anxiety in Graduate Medical Education—A Matter of Interpersonal and Communication Skills? J. Grad. Med. Educ. 8, 111–111. https://doi.org/10.4300/JGME-D-15-00500.1

## Acknowledgement

I gratefully acknowledge the participants of the study for their contribution and for their genuine feedback given to fulfil the objectives of this study.

## **Author Biographies**



Wasana Sudusinghe is currently undertaking her Master in Linguistics and further she is serving as a visiting instructor in English at the

Department of Languages, General Sir John Kotelawala Defence University, Sri Lanka. Applied Linguistics and Educational Psychology are her major research interests.



WGC Kumara is a lecturer attached to the Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University, Sri Lanka and

he is currently extending his service as the Faculty Counsellor at the same institute. Mental Health and Medical Education are his major research interests.



Chamila Kothalawala is a Senior Lecturer in English at the Department of Languages of General Sir John Kotelawala Defence University, Sri Lanka. She

has conducted studies on stakeholder needs in English for Legal Purposes and development of Legal English practitioners' identity. Her research interests include curriculum development for English for Law and English for Specific Purposes.



Thamara Kothalawala is a Senior Lecturer of English at the Department of Languages of General Sir John Kotelawala Defence

University, Sri Lanka. She has conducted studies on Multiple Intelligence theory and its application in developing undergraduates' English language speaking and writing competence. Her research interests include testing and evaluation and material development.

Paper ID 227

# **Evaluating the Information Security Awareness (ISA) of Employees in the Banking Sector: A Case Study**

Asanka D Dharmawansa<sup>1#</sup> and RAM Madhuwanthi<sup>2</sup>

<sup>1</sup>Department of Industrial Management, Wayamba University of Sri Lanka <sup>2</sup>Esoft Metro Campus, Kurunegala

# asankad@wyb.ac.lk

Abstract: Information has become a vital and valuable asset to an organization. In the banking sector, employees should have a better knowledge about the security of the information system since they are always exposed to very confidential and sensitive information. Thus, the awareness on information security has become a major area that should be focused on by the employees as well as the management of the banking industry. The objective of this research is to evaluate the awareness of the employees on information security in the banking sector in Sri Lanka. This study is based on Human Aspects of Information Questionnaire (HAIS-Q). Security questionnaire was developed based on relevant literature for collecting data in the study. Regression analysis was carried out using SPSS to analyze the collected data. It was concluded that all the factors in HAIS-Q are predictors of employee information security awareness (R<sup>2</sup>= 0.984). Although all the variables have affected positively on the awareness on information security in the banking sector, the variables of Password Management, Email Use, Internet Use and Incident Reporting have a positive and significant impact on the awareness of employees on Information Security. Especially the Password Management significantly impacted on the awareness of information security. The employers should identify the importance of password management, Email Use, Internet Use and Incident Reporting when they structure training activities for employees in the banking industry.

**Keywords:** Information Security, Awareness, Banking Sector

#### Introduction

With the globalization, Information Security Awareness (ISA) has become a key concept in information security. Contrary, attackers also concern more about enhancing their capabilities by developing various novel attack methods. When they got a chance, they targeted to intend information system and effectively exploit corporate network and infrastructure through individual human behaviour. Therefore, cybersecurity has become a business problem that should concern by Chief Information system officers in every organization. The objective of ISA is to allow every employee to inform that they are vulnerable in providing opportunities for attackers to threaten the organization's corporate system and infrastructure and when they have an idea about this issue. Employees can change their behaviours to mitigate those risks and threats.

The ISA is typically focused on two aspects; understanding and compliance. According to the Kruger & Kearney, (2006) understanding means how far employees in the organization recognize the value and vitality of information security, the levels are information security appropriate to the company and what extent they have known the individual security responsibility. The other aspect; compliance is a level of commitment that concerned with information security plans, directions and strategies as per demonstrated by the



agreement (Siponen, 2001). Accordingly, ISA can be explained as employee's understanding of the companies Information Security strategies and measures and their perspective towards having to adherence to them.

Not only technological reasons but also the behaviour of computer users impact on issues of Information security (Furnell, et al., 2006, Herath & Rao, 2009, Vroom & Von Solms, 2004). Human Aspects of Information Security Questionnaire (HAIS-Q) is a well-known instrument which was developed to assess the employee's information security awareness.

In the banking sector, employees should have more knowledge about information system security since they always exposed to very confidential and information. Therefore. sensitive awareness of the information systems in an organization and its security has become a major area that should be focused by employees as well as management of the organization. The study will use the Human Aspects of Information Security Questionnaire (HAIS-Q) as a model to evaluate the information security awareness of employees who are working in the banking sector in Sri Lanka.

The primary objective of this research is to evaluate the information security awareness of employees in the banking sector in Sri Lanka.

#### Literature Review

Information security is identified as the protection of the confidentiality, integrity, and availability of the data that is stored in a computerized environment (Kruger, 2006). Along with the other business assets information requires protection to make sure that the information is available in a confidential situation along with its integrity is preserved where it is necessary (Microsoft, 1999). There are various types

of threats that can happen in information security. They are such as fraud, drafts, viruses, social engineering risks on protecting information etc; (Microsoft, 1999). These threats along with the careless human errors that can happen in the security controls may lead to major financial and reputational damages to the organization which can impact in the long-run. The controls need to be done along with the organizational security goals and objectives to minimize the risk that can happen.

Information security is identified as a critical and complex task and it is not just using user names and passwords as a measure of security. For many years, information security programs are more focused towards technical solutions such as firewalls, anti-virus programs, access controls etc. than in human element. Information security mainly focuses in maintain confidentiality, integrity and availability of information for organization to perform its business operations smoothly without interruption (Kruger & Kearney, 2006). Confidentiality is defined as the protection of data and information without exposure unauthorized parties (Mcleod & Schell, 2008). Integrity is the accurate representation of data information between the parties that disclosed them while the availability of information means provide authorized people to access relevant data as they want and when they want. Human behaviour is very important when considering the information security awareness that the employee obtains and it is not entirely depending on technical solutions (Cox, et al., 2001). In 2018, Kruger and Kearney developed a model based on social psychology field for determining information security awareness through different factors; knowledge, attitude and behaviour (KAB) and the refined version of KAB model HAIS-Q employee



information security awareness component.

Knowledge: Knowledge can be defined as all information that an individual owns about a specific field Through the empirical review of literature that was performed the researcher has identified models. instrument and then variables for the study to accomplish the research objective.of study (Alexander & Jetton, 2000). Knowledge compromise three forms; declarative, or knowing what, procedural, or knowing how, and conditional, or knowing when and why.

Attitude: Attitude can be defined as mental and neural readiness which direct individual's all activities (Allport, 1967).

Behaviour: According to most psychologists, Behaviour is an observable action. The fundamental definition of behaviour is how people or group of people responds to a certain set of conditions.

The information security awareness is measured through HAIS-Q model which consists 63 items that are categorized into 7 types; Password management, Email use, Internet use, Social media use, Mobile devices, Information handling and Incident reporting.

The original development of HAIS-Q model was inspired to gain the understanding of employee information security awareness who are working in the government sector, Australia (Parsons, et al., 2014). The main conclusion that derived through the discussions held with senior managers of

the Australian government is that the security breaches commonly happened due to the human errors along with their ignorance. This finding was the basic that motivated for question development of HAIS-Q (Parsons, et al., 2014). Many researchers have used this model as the conceptual framework in their studies and many have tested the validity and reliability of the model (Straub, et al., 2004). HAIS-Q model can be used as a reliable measure of information security awareness (Mccormac, et al., 2016).

Information is identified as the newest currency in the current business and corporate world where the value of the business rise and falls depending on how, when, where and by whom it is been used and type of medium that is been used. Depending on the way it is used there is a risk and an opportunity in using information security. In simple terms, a user is a person who is dealing initially with the information that is related to the organization. The information security management of the organization is based on the human factor and also on the processes that are related to organization.

Importance in creating a security culture within the organization setting arise when the human dimension of the information security is considered to be one of the weakest points. Therefore, the creation of information security culture in the organization is important in effective security management.

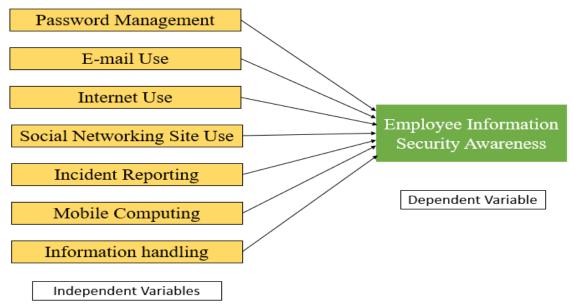


Figure 01. A Conceptual Framework

## Methodology

The developed conceptual framework is illustrated in Figure 01. Seven independent variables were derived from the Human Aspects of Information Security Questionnaire (HAIS-Q), which are password management, e-mail internet use, social networking site use, incident reporting, mobile computing and information handling. The dependent variable of the study is employee information security awareness. Table 01 depicts the sub-areas of the selected focus areas. The Likert scale questionnaire was developed by covering all the variables of the study.

The target population of the study is all employees who work at a private bank in Sri Lanka. The sample from the above population was selected through random sampling technique. The sample size for the study is determined through the table developed by Krejcie and Morgan to fulfil the existing gap of not having a proper representative statistical sample table. Therefore, 357 employees were selected as the sample for the study.

Table 01. Sub-areas of the Focus areas

Focus area	Sub-areas				
Password	Locking workstations				
management	Password sharing				
	Choosing a good password				
Email use	Forwarding emails				
	Opening attachments				
	IT department level of				
	responsibility				
Internet use	Installing unauthorized				
	software				
	Accessing dubious websites				
	Inappropriate use of internet				
Social	Amount of work time spent on				
networking	SNS				
site (SNS)	Consequences of SNS				
use	Posting about work on SNS				
Incident	Reporting suspicious				
reporting	individuals				
	Reporting bad behaviour by				
	colleagues				
	Reporting all security				
	incidents				
Mobile	Physically securing personal				
computing	electronic devices				
	Sending sensitive information				
	via mobile networks				
	Checking work email via free				
	network				



Information	Disposing	of	sensitive			
handling	documents					
	Inserting DVDs/USB devices					
	Leaving sensitive materia					
	unsecured					

## **Result and Analysis**

The descriptive analysis was illustrated as shown in Table 02. The mean value of all the variables is greater than the average and it indicates that all the factors can be affected by information security awareness.

Table 02. Descriptive Analysis

Table 02.			
Variable	Mean	Median	Standard
			Deviation
Password	3.85	3.89	0.497
Management			
Email Use	3.99	4.00	0.511
Internet Use	3.87	3.89	0.367
Social Media	3.87	3.89	0.305
Use			
Mobile Devices	3.92	4.00	0.290
Information	3.91	3.89	0.300
Handling			
Incident	3.92	3.89	0.311
Reporting			
Information	3.69	3.90	0.584
Security			
Awareness			
	1		

The skewness and kurtosis values for all seven independent and dependent variables are in between -1.96 and +1.96 as shown in Table 03. It can be argued that data for both two variables are normally distributed.

Table 03. The measure of Divergence from Normality

Descriptive Statistics							
	N	Skewness		Kurto	sis		
	Stati	Stati	Std.	Stati	Std.		
	stic	stic	Error	stic	Error		
Password	100	438	.241	.366	.478		
Manageme							
nt							
Email Use	100	662	.241	.122	.478		
Internet	100	425	.241	443	.478		
Use							
Social	100	511	.241	.032	.478		
Media Use							
MobileDev	100	405	.241	066	.478		
ices Use							
informatio	100	465	.241	263	.478		
n Handling							
Incident	100	524	.241	423	.478		
Reporting							
Informatio	100	082	.241	.839	.478		
n Security							
Awarene.							

Table 04. Model Summary for the predictors of information security awareness

Model Summary						
Mod	R	R	Adjusted	R	Std.	Error
el		Squa	Square		of	the
		re			Estii	mate
1	.992a	.984	.983		.079	39
a. Predictors: (Constant)						

Table 05. Coefficients for predictors of information security awareness

illioi illation security awareness						
Coefficients						
Model	Unstanda		Standar	t	Sig.	
	rdized	i	dized			
	Coeffi	cien	Coeffici			
	ts		ents			
	B Std		Beta			
		Err				
		or				
(Constant)	137	.06		-	.025	
Password	.548	.06	.530	8.7	.000	
Email Use	.207	.05	.210	3.5	.001	
Internet Use	.173	.04	.165	3.6	.000	
Social Media	.018	.01	.028	1.6	.027	



Mobile	.084	.06	.079	1.3	.027
information	.043	.04	.042	.93	.012
Incident	.034	.05	029	-	.000
a. Dependent Variable: ISA					

Table 04, illustrates the R<sup>2</sup> of the variable which means that 98.4% of the variance in information security awareness can be predicted from independent variables that are derived from Human Aspects of Information Security Questionnaire which are password management, e-mail use, internet use, social networking site use, incident reporting, mobile computing and information handling.

The Coefficient table (Table 05) for factors of Human Aspects of Information Security Questionnaire and Information Security Awareness provides p values of all seven independent variables. Since all values are less than 0.05 it can be concluded than all seven variables are predictors Information Security Awareness of the employees in the private bank in Sri Lanka. Out of all seven sub-variables of Human of Information Aspects Security Questionnaire, password management is the most influential factor when predicting the information security awareness of the employees in the banking sector.

The linear model for the multiple regression equals to,

 $Y=0.548X_1 + 0.207X_2 + 0.173X_3 + 0.018X_4 + 0.084X_5 + 0.043X_6 + 0.034X_7 - 0.137$ 

Where,

Y- Information Security Awareness

X<sub>1</sub>- Password Management

X<sub>2</sub>- Email Use

X<sub>3</sub>-Internet Use

X<sub>4</sub>- Social Media Use

X<sub>5</sub>- Mobile Devices Use

X<sub>6</sub>- Information Handling

X<sub>7</sub>- Incident Reporting

#### Conclusion

The study was conducted to examine the association between seven independent variables that were derived from the Human Aspects of Information Security Questionnaire (HAIS-Q)and information security awareness of employees who are working in the banks in Sri Lanka. Through the descriptive analysis, the researcher was able to find out email use strategies used by the employees in the banks are the most commonly used aspect by them out of seven factors related with Human Aspects of Information Security Questionnaire (HAIS-Q) while other six studied factors play an equal amount of involvement is information security awareness.

Three types of independent variables; Social Media Use, Mobile Devices Use and Information Handling had a positive but moderate impact on the Information Security Awareness of employees in the banks.

Other four independent variables; Password Management, Email Use, Internet Use and Incident Reporting had a positive and strong impact on the Information Security Awareness of employees.

Password Management is the most influenced independent variable derived from the Human Aspects of Information Security Questionnaire (HAIS-Q) towards the dependent variable of employee information security awareness in the selected organization.

All factors derived from Human Aspects of Information Security Questionnaire (HAIS-Q) are better predictors of employee information security awareness in the private bank in Sri Lanka.

#### A. Recommendations

The number of researchers has been carried out to prove the validity and reliability of the Human Aspects of Information Security Questionnaire (HAIS-



Q) (Straub, et al., 2004 & Mccormac, et al., 2016). Hence, employee awareness on information security has become a major strength for all types of organization, findings of the study have more practical consequences. Since employees in the banking industry are working with very confidential information related to customers and the bank itself, they should follow a proper strategy with the security of information which they possess.

By administrating the HAIS questionnaire, an organization can determine the level of the awareness that employees have toward each factor such as password management, e-mail use, internet use, social networking site use, incident reporting, mobile computing and information handling. When a bank needs to perform training for employees on information security awareness, they can use this questionnaire before the study to identify the baseline of employee information security awareness and then after conducting the training they can measure the success of the training program through providing this questionnaire for employees and on the other hand, management can identify the areas that need to improve.

#### References

Alexander, P. A. & Jetton, T. L., 2000. Learning from text: A multidimensional and developmental perspective. Handbook of reading research, Volume 3, pp. 285-310.

Allport, G. W., 1967. Readings in attitude theory and measurement. New York, John Wiley & Sons.

Cox, A., Connolly, S. & Currall, J., 2001. Raising information security awareness in the academic setting. VINE, pp. 11-16.

Furnell, S., Jusoh, A. & Katsabas, D., 2006. The challenges of understanding and using security: a survey of end-users. *Computer Security*, 25(1), pp. 27-35.

Herath, T. & Rao, H. R., 2009. Encouraging information security behaviours in organizations: role of penalties, pressures and perceived effectiveness. *Decision Support System*, 47(2), pp. 154-165.

Krejcie, R. and Morgan, D., 1970, "Determining sample size for research activities", Educational and Psychological Measurement, Vol. 30, pp. 607 - 610.

Kruger, H. & Kearney, W., 2006. A prototype for assessing information security awareness. *Computers & Security*, 25(4), pp. 289-296.

Mccormac, A., Calic, D., Parsons, K., Zwaans, T., Butavicius, M., & Pattinson, M., 2016. Test-retest reliability and internal consistency of the Human Aspects of Information Security Questionnaire (HAIS-Q). ACIS 2016 Proceedings. 56.

Mcleod, R. & Schell, J. G., 2008. Management Information Systems. London, Pearson Education.

Microsoft. 1999, Security threats: Best practices for enterprise security [Online]. Available:

http://technet.microsoft.com/en-us/library/cc723507.aspx. [Accessed 10 April 2020].

Parsons, K. et al., 2014. Determining employee awareness using the Human Aspects of Information Security Questionnaire (HAIS-Q). *Computers & Security*, May, Volume 42, pp. 165-176.

Siponen , M., 2001. Five Dimensions of Information Security Awareness. Computers and Society, 31(2), pp. 24-29.

Straub, D., Boudreau, M. & Gefen, D., 2004. Validation guidelines for IS positivist research. *Community Association Information System,* Volume 13, pp. 380-427.

Vroom, C. & Von Solms, R., 2004. Towards information security behavioural



compliance. *Computer Security*, 23(3), pp. 191-198.

## **Author Biographies**



Asanka D. Dharmawansa obtained his PhD and M.Sc. degree in Management and Information systems Engineering from Nagaoka University of Technology,

Japan. He obtained his B.Sc. Degree in Industrial Management and computing and Information Systems from the Wayamba University of Sri Lanka. He has published peer-reviewed research articles and reviews in the fields of Information Science, e-Learning and human-computer interaction.



R.A.M. Madhuwanthi obtained her PhD in the Department of Information Science and Control Engineering at Nagaoka University of

Technology, Japan. She received her M.Sc. Degree in Operational Research from the Department of Mathematics, University of Moratuwa, Sri Lanka in 2013. She obtained her B.Sc. Degree in Industrial Management and Statistics from Wayamba University of Sri Lanka, Sri Lanka in 2008. Her current research interests include the Information Science, Transportation System Analysis, Safety Management, Cleaner Production and Operational Management.

Paper ID 238

# Knowledge, Attitudes, and Practices on Plagiarism among Law Undergraduates in Sri Lanka

WS Sudusinghe<sup>1#</sup>, WGC Kumara<sup>2</sup>, D Vidanage<sup>2</sup>, TD Kothalawala<sup>3</sup>

<sup>1</sup>Post Graduate Student (MA in Linguistics), University of Kelaniya, Sri Lanka <sup>2</sup>Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University <sup>3</sup>Department of Languages, General Sir John Kotelawala Defence University.

#wssudusinghe@gmail.com

**Abstract:** The action or practices of taking someone else's work or idea and passing it off as one's own is called plagiarism. This study aimed to assess knowledge, attitudes, and practices on Plagiarism, among law undergraduates of Kotelawala Defence University (KDU). An online questionnaire that consisted of four parts; sociodemographic data, knowledge, attitudes and practices on plagiarism was used for data collection, from among randomly selected 105 students in all four batches. The mean (±SD) age of the participants was 22.08 (±2.86) years, and the majority of them were females (58.1%; n=61). The majority (80%, n= 84) of the participants knew about "plagiarism", and out of them, 80% (n=68) have learnt it through university lecturers. Further, 79.0% (n=83) were aware of the plagiarism checking software, which is available at KDU. The majority (84.8%; n=89) of the participants realised that plagiarism have unprofessional and many (76.2%; n=80) have accepted that the plagiarism should be a punishable offence. Moreover, 91.4% (n=96) have believed that the level of English Language proficiency influences on plagiarism. **Among** practicing participants, 24.8%, 20% and 10.5% were using Turnitin, Plagiarism Checker X and Grammarly software respectively to detect plagiarism. However, 57.1% (n=60) have stated that they submit assignments for their academic institute without checking plagiarism. An online system which indicates the level of plagiarism in the

initial stage of assignment submission should be introduced to the students. Further, the knowledge on plagiarism should be enhanced through compulsory course modules and interactive workshops on summarising and paraphrasing techniques.

**Keywords**: Plagiarism, Law undergraduates

#### Introduction

Plagiarism is "the action or practices of taking someone else's work, idea, etc. and passing it off as one's own; literary theft" in the Oxford Dictionary (Stevenson, 2010). Plagiarism may occur at any stage of planning, including research writing or publication (Kumar et al., 2014). According to The World Association of Medical Editors (WAME), plagiarism has been defined as "use of others' published and unpublished ideas or words (or other intellectual property) without attribution or permission, and presenting them as new and original rather than derived from an existing source" (Das and Panjabi, 2011).

Plagiarism is classified into four main categories based on the context in which it occurs. If someone is submitting someone else's words in his/her name without even acknowledging him/her publicly, it is called as Verbatim Plagiarism. This is commonly seen in the introduction and discussion part of a manuscript. The mosaic plagiarism happens when someone involves in the act of copy-pasting by



mixing one's own words with another author's ideas and opinions. Paraphrasing is a restatement of someone else's ideas on your own words. Changing a few words of the original sentences does not make it your writing. To avoid plagiarism, the content should be accurately referenced (Dhammi and Ul Haq, 2016).

Self-plagiarism is considered as intellectual stealing and involves dishonesty, and it does not contribute to scientific work. Roig (2002) provided the classification of selfplagiarism and categorised it into four types (i.e. Duplicate publication, augmented publication. segmented publication, and text recycling). When an author publishes a similar manuscript (same data, results, and discussion) in two different journals, it is considered as a duplicate publication. According to the Committee On Publication Ethics (COPE) guidelines, it is considered as an offence and editor can take any action against the author and it is referred to as that the author adds additional data into his/her previous published work by changing title, modifying objectives of the study and changing results. A plagiarism detecting software cannot detect this because the word patterns are changed. It is not considered strictly as for plagiarism, and the editor would yet accept it under three situations. When two or more papers have been derived from one research project, it is called segmented publication. It is not easy to detect salami sliced papers, and generally, reviewers are pointing out the matter. Text recycling happens when the author uses large portions of his/ her already published text in his/her new manuscript and it can be tested by plagiarism checking software and can be controlled according to the guidelines (Dhammi and Ul Haq, 2016).

If an author copies entire research papers or ideas from the internet by not giving acknowledgement for the original author, is called as cyber-plagiarism. Suppose someone copies an image and a video without requesting the permission or by not providing the citation that would be called as image plagiarism (Dhammi and Ul Haq, 2016).

Before submitting any document for a journal, the authors must check the level of plagiarism. The reviewers of those articles also should have a practice of using plagiarism detection tools in order to avoid the practice of plagiarism. Once the editor of the journal receives the reviewed articles, he/she should recheck it for plagiarism using a powerful plagiarism detection tool before finalising the publication material (Kumar et al., 2014).

Systematic detection of plagiarism will be encouraged by plagiarism detection tools (Kim, 2013). Most of the Plagiarism detecting software like iThenticate, Viper, Turnitin do not detect plagiarism and would test the similarity index. Similarity index considers the total percentage of matched words that a system finds for a submission. This similarity index would also detect common words like E-mail IDs, phone numbers, address of academic affiliation, etc., even if it is presented in an article by the same authors (Khan, 2011).

The students who work on plagiarism would use the availability and accessibility of the internet to detect plagiarism. Therefore, appropriate punishment should be implemented for the committers if detected (Kenny, 2007). It is stated that the plagiarism is named as one of the three great misconducts of research and the other two misconducts are named as fabrication and falsification by the US Office for Research Integrity (ORI) (Godlee, 2007). Plagiarism can be started from simple dishonesty, and it can be extended up to the highest level, and therefore the penalty for that misconduct would be the same. The penalties would be ranged from



formal actions (i.e. apology letters) to criminal charges (i.e. suspension) (Kumar et al., 2014).

#### Literature Review

A research study conducted in Pakistan among graduate and postgraduate students in private and public universities found that the awareness and the practices on plagiarism were low among them. Majority of the population was not even aware of what the plagiarism is, and they have admitted that they practised plagiarism intentionally (Ramzan et al., 2012).

A cross-sectional study carried out at Hawler Medical University in Erbil to assess the prevalence of plagiarism among 400 medical and nursing students using a questionnaire found that plagiarism among participants was 54.3%. The prevalence of the male students was found higher than that of females (54.9% Vs 53.8%; P = 0.820), and the practice of plagiarism among medical students was higher than the nursing students (58.9% Vs 43.3%; (P = 0.004). About 28% of the students were aware of the legal penalties of plagiarism, while 34.8% of the students were not aware. According to the results, the most common reasons for practising plagiarism were laziness, easiness of the procedure, confusion and the stress on meeting up with deadlines (Ismail, 2018).

In Australia, a study carried out to describe the awareness of university policies concerning academic honesty, attitudes to plagiarism and on cheating practices among pharmacy graduates and postgraduates reported that the plagiarism was commonly practised and they have not considered that as serious misconduct (Ryan et al., 2009).

A study carried out in Sri Lanka intending to investigate the concerns of plagiarism among 181 students in the University of Moratuwa claimed that the students do not have complete knowledge regarding plagiarism. The lack of awareness was the most common factor for practising plagiarism among the eight factors identified (Kodikara and Kumara, 2015).

the studies conducted on Though knowledge, attitudes, and practices on plagiarism among the university students around the world is so high, it is less commonly reported in the Sri Lankan context. The results of this study will be beneficial in upgrading the rules and regulations on plagiarism in the University system in Sri Lanka. By considering all these reasons, this study was conducted to assess knowledge, attitudes and practices the intakes among all of Law undergraduates, General Sir Iohn Kotelawala Defence University, Sri Lanka.

## Methodology

A sample of 105 law undergraduates was selected from a stratified random sampling method. A pre-tested questionnaire was used to obtain data. The questionnaire in English was circulated among participants through an online platform. The consent for attending the study was also taken online from the participants, once the purpose and the objectives were explained through an online statement before the questionnaire. A pilot study was among conducted ten University undergraduates to determine the difficulty level of the items, ease of understanding of concepts in the items, any discomfort when responding, and the appropriate length of the instrument before the data collection. The students who have taken part in the pilot study were excluded from the main study.

The questionnaire consisted of four main sections. 'Section A' composed of questions regarding demographic information. 'Section B', 'Section C' and 'Section D' were composed of knowledge, attitudes, and



practices regarding plagiarism among the participants, respectively. Descriptive statistics were performed in SPSS 23.0 version, in order to obtain results based on the study objectives.

#### Results

Socio-Demographic Data

According to the results, the mean ( $\pm$ SD) age of the participants was 22.08 ( $\pm$ 2.86) years, and the majority of them were females (58.1%; n=61). Most of the participants were first-year undergraduates (42.9%; n= 45) while the majority (53.3%; n=56) of the participants had 'A' passes for the English language in GCE (A/L) (Table 01).

Table 01 - Socio-Demographic Data

Table 01 – Socio-Dem	
Parameter	Status
Demographic Data	
Age (years)	22.08/±2.85
Gender	
Male	41.9 % (n=44)
Female	58.1 % (n=61)
Academic Year	
First	42.9% (n=45)
Second	15.2% (n=16)
Third	22.9% (n=24)
Forth	19% (n=20)
The highest grade	
obtained for English	
in GCE (A/L)	
A	53.3% (n=56)
В	29.5% (n=31)
С	16.2 % (n=17)
S	1% (n=1)

## Knowledge on Plagiarism

When the knowledge on plagiarism among participants is concerned, it was noticed that majority (80%, n= 84) of the participants had the pre-knowledge on the term "Plagiarism", and 64.8% (n=68) have got to know about plagiarism through

university lecturers. Most of the participants who were not aware of the term "Plagiarism" were from the first year (Figure 01). Most of the participants knew that their academic institution follows the rules and regulations to prevent plagiarism (98.1%; n=103). Many participants (77.1%; n=81) were aware of legal penalties for practising plagiarism at their institute. Further, 79.0% (n=83) were aware that plagiarism checking software is available in their institute. The majority (67.6%; n=71) had the belief that their knowledge on "in-text citation" "referencing methods" is satisfactory (Table 02).

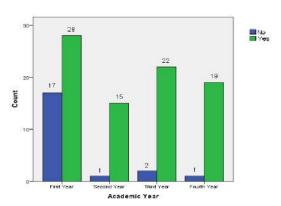


Figure 01- Awareness on Plagiarism

Table 02 – Knowledge of participants on

plagiarism						
Parameter		Status				
Question						
Have you	Yes	80% (n=				
known the		84)				
meaning of the	No	20 % (n=				
term		21)				
"plagiarism"						
before?						
How did you	From the	64.8% (n=				
get to know	University	68)				
about	lecturers					
plagiarism?	From books	3.8% (n=4)				
	From the	14.3%				
	internet	(n=15)				
	Other	17.1%				
	sources	(n=18)				



Do you know	Voc	98.1%
_	168	
that your academic	No	(n=103)
	NO	1.9% (n=2)
institution		
takes the		
necessary		
actions to		
prevent		
plagiarism?		
Are you aware		77.1%
of the legal		(n=81)
penalties for	No	22.9%
practising		(n=24)
plagiarism in		
your institute?		
Are you aware	Yes	87.6% (n=
of the		92)
plagiarism	No	12.4%
detecting		(n=13)
software?		
Are you aware	Yes	79.0% (n=
of the software		83)
available in	No	21.0%
your institute		(n=22)
for checking		
plagiarism?		
Do you have	Yes	67.6%
adequate		(n=71)
knowledge of	No	32.4%
"in-text		(n=34)
citation" and		
"referencing		
methods"?		
		l

## Attitudes on Plagiarism

When considering the attitudes of the participants, the majority (84.8%; n=89) of the participants realised that the plagiarism is unprofessional and unethical and the majority (76.2%; n=80) of the participants have accepted that the plagiarism should be a punishable offence at their institute. However, the majority (23.8%; n=25) of the participants believed that the students detected with plagiarism should be given a chance to re-submit the assignments without reduction of marks.

The majority (91.4%; n=96) of the study population have believed that the level of English Language proficiency influences on practising plagiarism among the university undergraduates (Table 03).

Table 03 – Attitudes of participants on plagiarism

plagiarism					
Paramete	r		Status		
Question					
Do	you	Yes	84.8%(n=8		
believe	that		9)		
the		No	15.2%		
plagiarisn	n is		(n=16)		
unprofess	ion				
al	and				
unethical?	?				
Do	you	Yes	76.2%		
believe	that		(n=80)		
the		No	23.8%		
plagiarisn	n		(n=25)		
should b	e a				
punishabl	e				
offence	at				
your					
institute?					
What sor	t of	Terminatio	2.9 % (n=3)		
punishme	nt	n of the			
would	you	study			
prefer	for	programme			
that stude	nt?	Considering	21.0%(n=2		
		the relevant	2)		
		module as			
		"Fail."			
		Considering	22.9%		
		the	(n=24)		
		particular			
		component			
		as "Fail"			
		Allow	1.9% (n=2)		
		resubmissio			
		n with			
		deducting			
		marks for			
		the			
		component			



Allow	23.8% (r	1=
resubmissio	25)	
n of the		
component		
without		
deducting		
marks		
Not relevant	27.6%	
	(n=29)	

## **Practices on Plagiarism**

When the practices on plagiarism are concerned, the majority (57.1%: n=60) of the undergraduates have accepted that they submit assignments for their academic institute without checking plagiarism. The participants who practice plagiarism have admitted that reusing passages from their previously submitted work is the most common type of plagiarism (15.2%; n=16). Further, the most attributing factor for the practice of plagiarism was busy schedule and heavy workload (27.6%; n= 29). It was found that 57.1% (n=60) of the participants were having a plagiarism detecting software in their personal computers. Among those participants, 24.8%, 20% and 10.5% were using Turnitin, Plagiarism Checker X and Grammarly software, respectively to detect plagiarism on their own (Table 04).

Table 04 – Practices of participants on plagiarism

Parameter			Status
Question			
Do you submit	Yes		57.1%
assignments			(n=60)
in your	No		42.9%
academic			(n=45)
institute			
without			
checking			
"Plagiarism"?			
If Yes, what is	Presenting a	an	1.9%
the type of	entire text l	by	(n=2)
plagiarism	someone else	as	
you practice?	your work		

	Rephrasing	7.6%
	someone else's	(n=8)
	ideas without	
	citation	
	Directly copying	2.9%
	a passage of text	
	without citation	(11 0)
	Combining texts	Ω 60%
	and ideas from	
		(11=9)
	different sources	
	without citation	4 = 004
	Reusing passages	
	an idea from your	(n=16)
	own previously	
	submitted work	
	Not relevant	63.8%
		(n=67)
If yes, what is	Busy schedule	27.6%
the most		(n=29)
	workload	
factor for this	Ease of	1%
practice?	plagiarising and	
P	laziness	(11 1)
	Pressure to meet	12 4%
		(n=13)
	Lack of serious	` ,
		(n=2)
	-	` '
	Follow what my	
	peers do	(n=2)
	Not relevant	55.2%
		(n=58)
Are you using		57.1%
any software		(n=60)
to avoid	No	42.9%
plagiarism?		(n=45)
If Yes, what is	Turnitin	24.8%
the software		(n=26)
that you use to	Plagiarism	20.0%
detect the	Checker X	(n=21)
plagiarism?	Cross Check	1%
(You can		(n=1)
select more	Ithenticate.com	1%
than one		(n=1)
answer)	Grammarly.com	10.5%
	, , , ,	(n=11)
	Not relevant	41.9%
		(n=44)
	<u> </u>	( 11)



Do you believe	Yes	91.4%
that the level		(n=96)
of English	No	8.6%
Language		(n=9)
proficiency		
influences		
practising		
plagiarism		
among the		
university		
undergraduat		
es?		

#### Discussion

This study was aimed at evaluating the knowledge, attitudes and practices on plagiarism among law undergraduates. It was found that the majority of the participants have known the meaning of the term "Plagiarism". Most participants who were not aware of the term "Plagiarism" were from the first year. Further, it was noted that most of the participants have known about the plagiarism from the university lecturers as they were informed about the ethics of plagiarism as a part of their curriculum. Therefore, it was highlighted that it is necessary to provide the students with a thorough knowledge of what plagiarism is from their first year. Similar studies conducted elsewhere on the awareness of plagiarism among university undergraduates revealed that majority had pre-knowledge regarding plagiarism (Kumar and Mohindra, 2019; Memon and Mavrinac, 2020) while some studies have revealed on a deficient level of awareness on the term plagiarism (Ramzan et al., 2012).

Students should possess a sound understanding on how to avoid plagiarism as well as why they should avoid it (Macdonald & Carroll, 2006). However, it was good to know that most of the participants were aware of the necessary actions taken by the institute to prevent

plagiarism and about the legal penalties uplifted by the institute on plagiarism. Moreover, they were aware of the plagiarism checking software available in their institute. Majority of the participants from a similar study have revealed that their University does not provide access to plagiarism detection software (Memon and Mayrinac, 2020). Further, it was noted that the majority of the participants have accepted that plagiarism the unprofessional and unethical as many have recommended that it should be a punishable offence at their institute. This emphasises that the study group has good attitudes towards avoiding plagiarism.

Most of the participants in the present study were aware of the term plagiarism, and they have also considered plagiarism as unethical and a misconduct. However, it was noted that even if they have the tools to check plagiarism among themselves and in the institute, the majority submit assignments for their academic institute without checking plagiarism. Moreover, the students have believed that their busy schedule and heavy workload as the main reasons for practising plagiarism. A similar study revealed that the majority of the undergraduates tend to practice plagiarism because of lack of time (Memon and Mavrinac, 2020). Therefore, it seems that it is necessary to plan for improving time management skills and coping strategies of stress in order to enhance academic motivation and reduce malpractices among the study participants.

There are other mechanisms that can be utilized to motivate the students in preventing plagiarism. As an initial strategy it is necessary to design assignments which would demand for an amalgamation of reading material rather than summarisation. The second strategy is a prior explanation of the students about the gravity of plagiarism as ethical misconduct. The third strategy is to provide



comprehensive knowledge on plagiarism and allocate more time to help the students complete their assignments focused on avoiding plagiarism. The fourth strategy is to offer students with explicit instruction on appropriate paraphrasing (Prohaska, 2012). However, A learning management system where the assignments undergo a mandatory plagiarism check at the initial stage of assignment submission would prevent plagiarism in the study population. Moreover, the knowledge and positive attitudes on plagiarism should be enhanced through compulsory course modules and workshops on interactive academic writing.

#### Conclusion

Plagiarism is classified as a serious breach of academic integrity that depreciates the value of original and honest scholarly work. The study revealed that the majority of the participants had the awareness on what plagiarism is, the legal concerns of the institute on plagiarism, and the availability of means to check plagiarism themselves and at the institute. Further, as future law professionals, the participants have had good ethical attitudes on plagiarism. However, it was found that many undergraduates do not practice on plagiarism well despite the availability of Plagiarism checking software at their institute.

It was recommended to educate undergraduates how to use, interpret the reports generated by the Turnitin which is available at the institute. A learning management system where assignments undergo mandatory a plagiarism check at the initial stage of assignment submission should introduced to the study population. Hence, a preventative, education-based approach will be highly benefited for the Law undergraduates, which would lead to produce more ethical law professionals.

## Acknowledgement

I gratefully acknowledge the participants of the study for their contribution and for their genuine feedback given to fulfil the objectives of this study.

#### References

Das, N., Panjabi, M., 2011. Plagiarism: Why is it such a big issue for medical writers? Perspect. Clin. Res. 2, 67–71. https://doi.org/10.4103/2229-3485.80370

Dhammi, I.K., Ul Haq, R., 2016. What is plagiarism and how to avoid it? Indian J. Orthop. 50, 581–583. https://doi.org/10.4103/0019-5413.193485

Godlee, F., 2007. Plagiarism and punishment. BMJ 335, 0. https://doi.org/10.1136/bmj.39392.6025 23.47

Ismail, K.H., 2018. Perceptions of Plagiarism Among Medical and Nursing Students in Erbil, Iraq. Sultan Qaboos Univ. Med. J. 18, e196–e201. https://doi.org/10.18295/squmj.2018.18.02.012

Kenny, D., 2007. Student plagiarism and professional practice. Nurse Educ. Today 27, 14–18. https://doi.org/10.1016/j.nedt.2006.02.0 04

Khan, B.A., 2011. Plagiarism: An academic theft. Int. J. Pharm. Investig. 1, 255. https://doi.org/10.4103/2230-973X.93003

Kim, S.Y., 2013. Plagiarism Detection. Korean J. Fam. Med. 34, 371. https://doi.org/10.4082/kjfm.2013.34.6.3

Kodikara, R.C., Kumara, ADB, 2015. Plagiarism amongst research students in the University of Moratuwa (UoM) in Sri Lanka.





Kumar, A., Mohindra, R., 2019. Exploring Awareness and Attitude on Plagiarism among Research Scholars: A Case Study of Panjab University, Chandigarh (India) 15.

Kumar, P.M., Priya, N.S., Musalaiah, S., Nagasree, M., 2014. Knowing and Avoiding Plagiarism During Scientific Writing. Ann. Med. Health Sci. Res. 4, S193–S198. https://doi.org/10.4103/2141-9248.141957

Macdonald, R., & Carroll, J. (2006). Plagiarism—A complex issue requiring a holistic institutional approach. *Assessment & Evaluation in Higher Education*, *31*(2), 233–245.

https://doi.org/10.1080/0260293050026 2536

Memon, A.R., Mavrinac, M., 2020. Knowledge, Attitudes, and Practices of Plagiarism as Reported by Participants Completing the Author AID MOOC on Research Writing. Sci. Eng. Ethics 26, 1067–1088. https://doi.org/10.1007/s11948-020-00198-1

Prohaska, V. (2012). Strategies for encouraging ethical student behavior. In *Teaching ethically: Challenges and opportunities* (pp. 79–88). American Psychological Association. https://doi.org/10.1037/13496-007

Ramzan, M., Munir, M.A., Siddique, N., Asif, M., 2012. Awareness about plagiarism amongst university students in Pakistan. High. Educ. 64, 73–84. https://doi.org/10.1007/s10734-011-9481-4

Roig, M., n.d. Avoiding plagiarism, self-plagiarism, and other questionable writing practices: A guide to ethical writing 63.

Ryan, G., Bonanno, H., Krass, I., Scouller, K., Smith, L., 2009. Undergraduate and Postgraduate Pharmacy Students' Perceptions of Plagiarism and Academic Honesty. Am. J. Pharm. Educ. 73.

Stevenson, A. (Ed.), 2010. Oxford Dictionary of English. Oxford University Press.

## **Author Biographies**



Wasana Sudusinghe is currently undertaking her Master in Linguistics and further she is serving as a visiting instructor in English at

the Department of Languages, Faculty of Management, Social Sciences and Humanities, KDU. Applied Linguistics and Educational Psychology are her major research interests.



WGC Kumara is a lecturer attached to the Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University, Sri

Lanka and he is currently extending his service as the Faculty Counsellor at the same institute. Educational Psychology and Medical Education are his major research interests.



Dinithi Vidanage is a lecturer attached to the Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University, Sri Lanka.

'Undergraduate Education' and 'Medical Ethics' are her major research interests.

Paper ID 249

## Influence of Socio-economic Imbalance in ELL with Special Reference to Kalkudah Education Zone, Batticaloa, Sri Lanka

Kennedy Jeevaretnam#, Sakthy Ravichendran

Eastern University, Sri Lanka

#kennedyj@esn.ac.lk

Abstract: English language is the first lingua franca, and English Language Learning (ELL) is an essential one for everyone around the world. If anyone wants to continue her/his education, she/he needs English language proficiency. The impact of globalization and economic development has made English the 'language of opportunity' and a vital means of improving prospects for well-paid employment too. High proficiency in English is seen to be essential for socio-economic development of Sri Lanka, and English Language is a compulsory subject in Sri Lankan school education system. This paper reveals the influence of socio-economic imbalance in English Language learning with special reference to Kalkudah Education Zone, Batticaloa, in Sri Lanka. Sri Lankan system of school education categorises schools, and only 1AB schools are taken for this survey. The samplings were selected randomly from grade 8, 9, and 10 since these are the grades leading to G.C.E. (0/L)examination. Data were collected to examine the correlation between the economic status of the parents and the ELL. The data were analyzed scientifically and empirically. The results indicate that fathers' occupation has a slight influence on the students' marks in the English language, but mothers' occupation is not indicated to have an influence on the same. However, the results indicate that the methodology adopted by influences more on the students' English language learning. The paper recommends the Educational Authorities to enhance knowledge and

skills of the teachers of English constantly for the improvement of ELL of students in Sri Lankan schools.

**Keywords**: English Language Teaching, English Language Learning, Parents' occupation, Marks obtained

#### Introduction

Learning language is always a fascinating process. But it becomes a fearful one as well; when a language is forcefully imposed to someone where that language is not the learners mother tongue, then the part of learning process also becomes tough which leads to a fearful process. This is applicable in one's mother tongue also. "Mother primary tongue, language, native tongue/language, etc. are some of the names given to first language" (Sinha et al., 2009). Speaking (more appropriately in the vernacular) is always an easy task whereas when it comes to a learning process, then the job becomes an unwanted one. Further, teaching a foreign language is another "heavy" task to any teacher whose mother tongue is not the teaching language. According to Muriel Saville-Troike and Karen Barto (2016) the human success of leaning a new language appears all the more remarkable when she/he considers a shortened list of the areas of knowledge where all the first or second language learner should obtain/acquire at the different levels of linguistics (21).

English language becomes inevitably the global language, and, further, the language for furthering. The word *furthering* contains many meanings such as education



(both secondary and higher), world of work, communicating with the other group of people who do not know the speaker's Thus, English language language, etc. learning/teaching is now becoming a global need, which makes a higher demand among the global economy. This above scenario is also applicable in the Sri Lankan context as well - being a part of the globe. The English language, though one of the official languages in Sri Lanka, is the second language for many Sri Lankans, except a negligible per centum of its citizens. The Government of Sri Lanka realized the truth - to make the English language essential had taken many steps at the dawn of the 20th Century. Therefore, the Government of Sri Lanka had established the National Education Commission under the National Education Commission Act 19 of 1991 which comprises eminent educationists including university academics. The task of the Commission is to recommend suitable educational policies and practices to His Excellency the President. Later the Commission was extended by establishment of the Presidential Task Force on General Education which had submitted its recommendations known as General Education Reforms of 1997. One of the main recommendations of the said Reforms was to restart English language education which was the root for the introduction of General English in the General Certificate of English (Advanced Level) from 1998.

Therefore, English language learning/teaching in Sri Lanka experiences the pros and cons of the said learning/teaching. English Language as a Second Language begins from the schools, particularly from kinder gardens but becomes a compulsory subject from Grade 3 G.C.E (A/L). Later this learning/teaching English Language as a Second Language becomes mandatory in the higher education as well whereas the respective university decides the frequency of learning/teaching on it.

The School Education System in Sri Lanka

The schools in Sri Lanka have been categorized as National Schools and Provincial Schools. Among the nine provinces in Sri Lanka, each province has National schools and these National Schools are monitored and aided by the Central Government. The Provincial Schools are categorized into four types viz. 1AB schools, 1C schools, Type II and type III. The grades are scheduled as follows:

- 1AB Schools with G.C.E (A/L) with Bio Science, Arts, Mathematics, Commerce, and Bio Technology streams.
- **1C Schools** with G.C.E (A/L) with only Arts and Commerce streams.
- **Type II** Schools having up to grade 11 only.
- **Type III** Schools having up to grade 08 only.

The age limits of the Sri Lankan education system according to grades are as follows:

Table 01: School System in Sri Lanka

Levels	Grades	Age
		limit
Primary Classes	1 – 5	6 - 10
Junior Secondary	6 – 9	11-
Classes		14
Senior Secondary	10 - 11	15 -
Classes		16
General Certificate of	12 - 13	17 -
Education in		18
Advanced Level		
Classes		

The Effect of Socio-Economic Factors in Learning L2

Sri Lanka is a developing country and socio-economics is one of the major factors affecting the learning/teaching process.



This is usually common in many developing countries, though many countries give free education to its citizens, as in the case of Sri Lanka. A study on the effect of socioeconomic factor on learning by Graetz (1995) says that children who come from under-privileged socio-economic background perform lower than that of the children who come from socio-economic privileged background. Further, Hardy's (2006) extends term 'socio-economic' to 'socio-cultural' that affects the learning process of a child as poverty, parents' educational background and their income level which are basically come under their occupational level, and harmful cultural practices. However, Hardy states that poverty is the core factor that affects the learning process of the children, mainly in the developing countries (45 – 50). Though English language learning is compulsory to all the school children and free of cost in Sri Lanka, difficulties arise in many ways in learning/teaching process. Basically, the problem arises due to lack of trained English teachers and teachers do not want teach rural areas whereas many schools are located in the rural areas.

#### Research Problem

The parents' occupation which is highly connected with the economy of the family that leads to the socio-economic pattern of the family and finally that affects English Language learning.

#### Research Question

There is a correlation between the socioeconomic status of the family and English Language Learning of the children.

## **Objectives**

The objectives of the research are to find out;

a) The relation between the socioeconomic status of the family and

- the students' performance in English Language Learning,
- b) How the income of the parents supports ELL of their children,
- c) How the educational level of the parents supports their children's ELL, and
- d) Recommend the authority to make the status of the ELL equal by teaching, if there is a correlation.

## Hypothesis

1. Association between father's occupation and student marks

 $H_0$ : Father's occupation does not have an effect on student marks

 $H_1$ : Father's occupation has an effect on student marks

The independent variable (father's occupation) was measured in nominal scale whereas the dependent variable (student marks) was measured in continuous scale. Therefore, One-way Analysis of variance test was carried out to test the hypothesis.

2. Association between mother's occupation and student marks

 $H_0$ : Mother's occupation does not have an effect on student marks

 $H_1$ : Mother's occupation has an effect on student marks

The independent variable (mother's occupation) was measured in nominal scale whereas the dependent variable (student marks) was measured in continuous scale. Therefore, One-way Analysis of variance test was carried out to test the hypothesis.

## **Literature Survey**

Many literature has been done and advocated on English language learning/teaching as a second language process, and how economy is influencing on it.

Muñoz (2008) states that there is a strong link between socio-economic status and



the students' achievement level that the students from different social background have access to different kinds of schools such as government and private and attending different kinds of target language related extracurricular exposure such as attending participating language related performances (drama, poetry, writing, etc.) private tuition classes, using different learning resources, etc. (578 -595). Further, the socio-economic of the students affects more than that of the expected learning L2, it affects other matters of the child as well. Fan (2011) argues; "socio-economic status not only affects the outcomes of the language learning but also it has a strong influence on motivation to learn, students' selfrelated beliefs, and self-regulations" (157-175).

It is also noteworthy that the socioeconomic of the parents' have an effect on socialization of the students which affects the L2 learning process. Holmes (1992) articulates that the difference between women and men on their interaction could be the result of their respective social interactions, which in broader terms determined as socialization and acculturation patterns (330). This above statement is further strengthen by Janaca Cryder (2016) quoting Oaks; "In the premodern era, SES may have been based on physical strength, intelligence, and/or choice of parents (a quip worthy of considerable thought). In the modern era, wealth, income, educational attainment, and occupational prestige have been defensible indicators of SES." Whatever the achievements of the students', brilliance of her/him, the socio-economy of her/his family has a big drawback. This has more effect on the school level rather on the higher educational level such as university or other higher educational institutions. For instance, Sirin (2005) argues, "the socio-economic status of the family is a big hurdle on the way to the students' academic performance, and the correlation of it is stronger at the school level" (417 – 453).

Judit Kormos and Thom Kiddle (2103) state on the influence of socio-economic factors on L2 learning. "Students' immediate environment: their family and friends, and the broader socio-economic context play an important role in goal setting ... learning task. The wider social educational context also considerable impact on motivational and self-regulatory variables and manifestations of autonomous language learning behavior" (399 - 412).

Therefore, it is clear that students whose parents have different socio-economic status and different levels of education may have an influence on the educational level of their children. This is applicable more on the L2 learning, especially, when it comes to English language learning in the school levels.

#### Methodology

The research was carried out in three schools in the Kalkudah Education Zone of the Batticaloa District where there are five education zones. Kalkudah Education Zone has the following schools:

Table 02: Type & No. of Schools in /kalkudah Education Zone

No	School Type	No. of Schools
1	1 AB	06
2	1 C	09
3	II	28
4	III	40
Total		83

Source: http://kalkudahzone.edu.lk/index.php

For this research, only three 1 AB schools have been selected, since these are the highest type of schools available in the



zone. Further, other types of schools have lesser facilities comparing with the 1 AB schools. Three schools have been selected to carry pout this research as follows:

KK/Valaichchenai Hindu College KK/Vantharumoolai Maha Vidiyalam KK/Chenkalady Central College

Investigation were carried out through a structured questionnaire and individual and focus group interviews. Therefore, this research follows both scientific and empirical methods where the data were collected through structured questionnaire and were analyzed scientifically with the help of MS-Excel/SPSS packages and the data collected through individual and focus group interviews have been summarized.

The structured questionnaire has been prepared to measure the information:

- gender of the child,
- the occupation of the father/mother and movable/immovable assets they have,
- highest educational level of the parents,
- the mode of transport to the school,
- whether the child goes to private tuition classes or not, and if yes, how many places does the child go,
- hours spend at the tuition,
- the amount of money is being spent for the English language learning,
- whether the tuition teacher is the same at school.
- the help extended by the parents/friends to learn English,
- desire of learning from the students: whether the child likes the subject or not, and the reason for like/dislike, and
- marks they obtained in the last 3<sup>rd</sup> term (because the 3<sup>rd</sup> term marks will indicate the competency level that the child has obtained in English language learning throughout the year).

For the survey, the following grades have been selected: 8,9, and 10, since these three

grades usually determine the G.C.E (O/L) results of the children.

Based on the data received from the questionnaire, the occupational level of the parents have been classified as follows to test the hypothesis to check the association between the parents occupation and the marks obtained by the students through scientific software, SPSS:

- Business
- Labor level
- Agricultural
- Managerial level
- Teacher and academic level
- Abroad
- No job

The received data have been analyzed with the help of the SPSS (Ver. 2.1.2.0).

## Samples

The names of the selected schools, their respective population and the size of the samples are given as follows:

Table 03: Population & Sample Size of the Selected Schools

	3616616	u sci	10013				
No	Name of the	Total			Sample		
	Schools	Pop	ulati	on	Size		
		Gr 8				Gr 9	Gr 10
1	KK/Valaichche	143	132	112	15	14	15
	nai Hindu						
	College						
2	KK/Vantharum	193	166	127	20	17	15
	oolai Maha						
	Vidiyalam						
3	KK/Chenkalady	193	181	164	20	18	16
	Central College						
	Total	529	479	403	55	49	46

Total population is 1411 and the total sample size is 150, the percentage is 10.63%. Schools have been selected based on the population, and the samples have been selected randomly and the questionnaire have been filled with their



respective class teachers. The selected samples are in their following grades viz. Grade 8 students are in Grade 9, Grade 9 are in Grade 10, and Grade 10 students are in Grade 11. But their marks have been gathered from their respective grades in their previous years, since the marks have been used for this research is the marks obtained in the third term of the respective sections, and those samples are in their first term.

#### **Results and Discussion**

Based on the numerical data received from the students, the following results have been obtained and their subsequent interpretations are given.

#### Gender Distribution

The following figures show the gender distribution of the samples, as Figure -1 shows that 55 students are taken from Grade – 8 and out of that males are 24 and females are 31, 49 students are taken from Grade – 9 and out of that 23 makes and 26 female, and in Grade – 10, 46 students are the samples and out of them 1 males and 36 female students are tested.

Figure - 2 indicates the overall gender distribution of the samples taken for this research. Accordingly, 93 female students and 57 male students have been selected which is 62% and 38% respectively on the final sample size. While we look at the gender distribution from the Figure - 1 and Figure – 2, female representation is higher than that of the male representation, the reason for this is that almost all the schools have more number of female students (only mixed schools have been selected for this research). It is generally observed from the interviews with the teachers that female students are more is because of the drop out of the male students when they go to higher classes, usually from Grade - 8 onwards due to poverty of the parents. Therefore, female students continue to study.

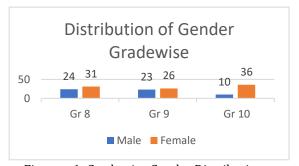


Figure – 1: Gradewise Gender Distribution

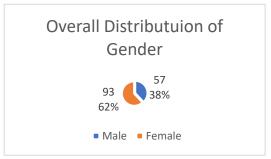


Figure – 2: Overall Gender Distribution

# Details of the Father

The occupation of the parents plays a major role in the performance of the students. Therefore, separate questions have been employed to assess the profession of the fathers and mothers. Accordingly, Figure – 3 exhibits the occupations of the fathers of the samples.

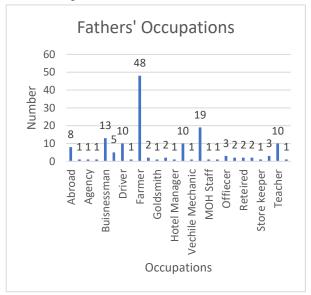


Figure – 3: Occupational paterns of the fathers



According to the above figure, the most occupational profession of the fathers are farmers which is 48 in number that covers 32% of overall occupations. Masons occupy the second most occupations which is 19 that covers 12.67%. The third occupied profession is businessmen that comes 13 in number covers 8.67%. The fourth most occupation are dirver, labourer, and teachers which are 10 in number each that covers 6.67%. Out of 150 fathers, 8 are in abroad in various jobs, mostly labourer jobs except one is a carpenter, this covers 5.33%. Then comes carpenter with 5 in total population comes around 3.33%. The following professions viz. government and private officers and tailors are 3 in each catregory comes 2%. Fishmonger, Grama Niladari, church paster, retaired persons, and self employed people occupy 1.33% which is 2 in each profession. Finally; accountant, foreign employer agent, blacksmith, electrician, goldsmith, hotel manager, vechile mechanic, health sector, OES, store keeper, and resturent waiter are the professions that covers 0.67% of overall occupations comes one in each category.

At the same time, fathers' educational level also makes some kind of impact on the education of their children. Accordingly, the educational level of the fathers has been checked and the follwing Figure – 4 is representing it:

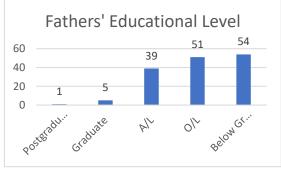


Figure – 4: Educational level of the fathers

Only one father got his postgraduation (MED) who is subsequently a teacher that covers 0.66%, 5 fathers have completed

graduation, counted 3.33%, 39 attended G.C.E (A/L) qualification covers 26%, 51 fathers completed G.C.E (O/L), comes 34%, and finally 54 are below Grade – 10 which is the majority of the fathers that covers 36%. This shows that most of the fathers' qualification comes either G.C.E (O/L) or below Grade – 10, which may be one of the prime facters affecting the studies of the male students.

# Details of the Mother

In the education of the children, mothers play a vital role, especially in the school education where their children are below G.C.E (O/L). This is one of the social aspects in the region. Therefore, it becomes inevitable that the contribution of the mothers and their economic nature have to be checked whether they have any impact on the attainment of education. As in the case of the fathers' occupation and the educational level, the mothers' occupation and their educational level have been checked and their subsequent resulths have been given in Figure - 5 and Figure -6 respectivelly.

First, the occupational pattern of the mothers have been checked and the results are given in figure – 5. Accordingly the follwing conclusions are arrived:



Figure - 5: Mothers' Occupation

0.67% of the mothers occupy as having a small shop at home and government job, 1.33% of the mothers occupy as tailors, 3.33% of mother are in abroad as servant maids, 4% of them are working in the



garment factories, 9.33% of them are teachers, and the rest of the mothers which covers 80.67% are housewives. mothers who are in abroad keep their children under the guardianship of their fathers or closed (sometimes blood) relatives; mostly with their grandmothers. Those children are not being attended either by their fathers or mothers which covers 5 in number out of the total population. Further, 6 mother who are working in the garment factories go to their work between 5:00 and 5:30 AM and return between 7:00 and 8:00 PM. They too do not attend their children's education due to their work schedule. Monday to Saturday they work and Sunday may be occupied with their remaining house works such as washing and marketing. teachers, tailors, shop keeper, and the government job holders which are 14, 2, and 1 in number respectivelly look after their children's education to some extend. but they too have their own pros and cons in looking after their children fully. The rest of the population which numbers 121 are homemakers. Their children are the most previledged ones since they take the utmost care of their children's education, irrespective of their qualifications. For instance, they take care of the trasport of their children to the schools and private tuition classes, help the children in doing their homeworks and other such helps. The above were revealed when a focul group interviews and personal interviews are held during the data collection.

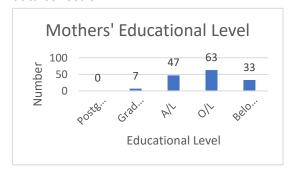
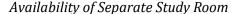


Figure – 6: Educational level of the mothers

Figure – 6 explains that none of the mothers hold any postgraduate degree whereas 4.67% of them have completed graduation, both internally and externally. 22% of the mothers attended below Grade – 10 education, 31.33% are holding G.C.E (O/L) qualification, and 42% of them are having G.C.E (A/L) qualification that comes 7, 33, 47, and 63 respectively in numbers.

#### Facilities Available

Apart from checking the professional level and educational attainment of the parents, it was found out to recheck the facilities available to the students. Based on the above the availability of the following facilities were checked: separate study room and mode of transport to the school. The reason for checking the above variables was that they too have some kind of impact on the learning process of the students. The following were the responses from the samples:



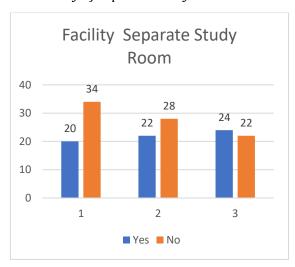


Figure – 7: Availability of Separate Study Room in the Houses

No. 1 indicates Grade 8 students, out of 54 students, 20 responded that they have separate study room, and 34 stated that they don't have. This comes to 13.33% and 22.67% respectively on the total sampling. No. 2 shows Grade 9 students, out of 50 students, 22 said that they have separate



study room and the rest 28 said that they don't have, which comes closer to 14.67% and 18.67% respectively on the total population. Further, No. 3 indicates Grade 10 which shows that out of 46 samples, 24 said that they have separate student room and the rest 22 said that they don't have one such facility. This comes closer to 16% and 14.67% respectively on the total samples.

On the whole out of 150 samples 66 said that they do have separate study room and the rest 84 said that they do not have a separate study room at their homes. This comes about 44% and 56% respectively. This further indicates that more students do not have separate study rooms and the reasons for the lack of separate study room may differ.

In the focal group interviews, the reason for the unavailability of separate study room was raised and various responses were received such as; lack of money to build a separate study room (or rather many of them did not build their own houses but NGOs or INGOs or government had supported to build houses), some of them live in one-room houses, social sentiments to make the children study (or stay) in separate rooms in order to monitor them, etc.

#### Mode of Transport to the School

Further, on the facilities that the students are privileged, the mode of transport to their respective schools have been checked in the questionnaire. Accordingly, the following result has been received:

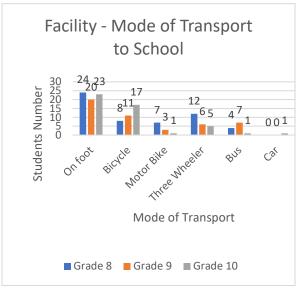


Figure 8: Mode of Transport to Schools

On the whole, 67 students come to school on foot which covers 67.67%, 36 students come on bicycle which is 24%, 23 come by three-wheelers that comes 15.33%, by bus, it is 12 which is 8%, another 11 come by motor bicycle which is 7.33%, and only one student comes in car which is 0.67%.

This result indicates that more students come on foot and the reasons was; school is closer to their homes, lack of financial facility to purchase a vehicle, etc. The mode of transport also makes some kinds of influences on the learning process such as time of arrival and departure to school and other study environments like private tuition classes.

#### Range of Marks Obtained by the Students

The marks received by the students is another indicator which shows the relationship between the parental income and their learning process. The following marks range has been developed to measure the marks obtained by each grade of students, and further the gender distribution of obtained marks had been checked. Accordingly, the following range has been scheduled: 0 – 10 marks, 11 – 20 marks, 21 – 30 marks, 31 – 40 marks, 41 – 50 marks, 51 – 60 marks, 61 – 70 marks, 71 – 80 marks, 81 – 90 marks, and 91 – 100



marks. These marks were the marks obtained by the overall three schools with the sample size of 150, and the marks were obtained in the 3<sup>rd</sup> term of the samples' previous grades. The following results had been obtained:

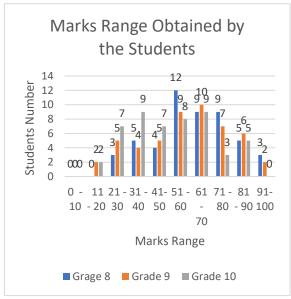


Figure – 9: Marks Rage Obtained by the Students

The following table indiates the marks range, the marks obtained by the students, and their respective percentage:

Table – 04: Marks Obtained by Grade – 8

No	Marks	No. of	Percentage
	Range	Students	
1	0 - 10	0	0
2	11 - 20	0	0
3	21 - 30	3	6
4	31 - 40	5	10
5	41 - 50	4	8
6	51 - 60	12	24
7	61 - 70	9	18
8	71 - 80	9	18
9	81 - 90	5	10
10	91 - 100	3	6
Tota	Ì	50	100

The above table – 04 indicates that more students from Grade 8 fall on the 51 – 60 rqange of marks. That is, more than a general pass range is covered. Also it is noted that the ranges 61 – 70 and 71 – 80

cover 18% each, that is, they count a total of 36%. This indicates that more students from Grade 8 obtained more than the avarage marks in the English Language Further, the table shown no students scored betrween 0 and 20 marks, which is a good sign that students from Grade 8 score more than 20 marks. However there are about 8 students out of 50 which covers 16% score below 40 marks which is noted to be the fail marks generally in the school system of Sri Lanka. At the same time there are 3 students of 6% scored marks between 91 and 100 which is also a good sign of the Grade 8 students' affinity towards learning English language and the credits go to the teachers as well in this regard.

Table – 05: Marks Obtained by Grade – 9
Students

No	Marks	No. of	Percentage
	Range	Students	
1	0 - 10	0	0
2	11 – 20	2	3.92
3	21 – 30	5	9.80
4	31 – 40	5	9.80
5	41 – 50	5	9.80
6	51 - 60	9	17.66
7	61 – 70	10	19.61
8	71 – 80	7	13.72
9	81 – 90	6	11.77
10	91 – 100	2	3.92
Tota	ĺ	51	100

Table – 05 given above shows the marks obtained by Grade 9 studets. This results that more students, 10 out of 51, scored marks between the range of 61 and 70 that covers 19.61% of the total sample population in Grade 9. Also the table indicates that about 29.41% of the students scored above 71 marks. However, 12 students scored below 40 marks, which is below the pass marks, which covers 23.52% which is further just less than one fourth of the total sampling population that



would not be a good sign for the learning of English language environment.

Table – 06: Marks Obtained by Grade – 10 Students

No	Marks	No. of	Percentage
	Range	Students	
1	0 - 10	0	0
2	11 - 20	2	4.07
3	21 - 30	7	14.28
4	31 - 40	9	18.37
5	41 - 50	7	14.29
6	51 - 60	7	14.29
7	61 – 70	9	18.38
8	71 – 80	3	6.12
9	81 - 90	5	10.20
10	91 - 100	0	0
Tota	l	49	100

Table – 06 specifies that there are no students from Grader 10 scored below 10 marks and between 91 and 100 marks. But it is mentioned that 36.72% of the students scored below 40 marks, that is the pass marks. Yet, 9 studnets out of 49 scored between the range of 61 and 70 marks that informs a good sign, and totally 63.28% scored more than the expected pass marks. This shows the interest of the students and the teaching ability of the teachers for the Gade 10 students. Also these and the students now following Grade 11 where they are going to face G.C.E (O/L) examination this year.

Table – 07 indicates the overall marks obtained by all three grades. This table gives a positive sign that only 25.33% of students obtained below 40 marks and the rest took more than 41 marks. That is, 74.67% of students, about three quarter of the total samples, scored more than the expected pass marks, irrespective of the profession of their parents.

Table – 07: Overall Marks Obtained

No	Marks	No. of	Percentage
	Range	Students	
1	0 - 10	0	0.00
2	11 - 20	4	2.66
3	21 - 30	15	10.00
4	31 - 40	19	12.67
5	41 - 50	16	10.67
6	51 - 60	28	18.67
7	61 – 70	28	18.67
8	71 – 80	19	12.67
9	81 - 90	16	10.67
10	91 - 100	5	3.32
Tota	l	150	100

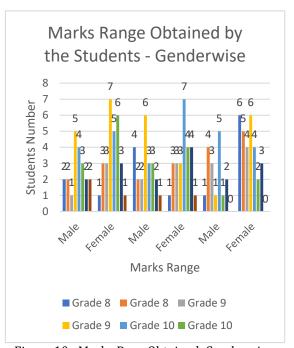


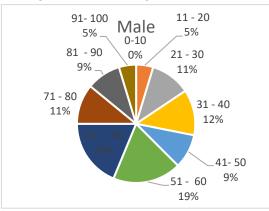
Figure 10: Marks Rage Obtained Genderwise

The above Figure – 10 shows that 64 males and 86 female students' marks obtained in English language in their third term have been given as grade 8, grade 9, and grade 10 respectivelly. Further no students scored 0 - 10 marks range, 3 males and 1 female students obtained marks range between 11 and 20, 7 and 8 students obtained 21 – 30 as their range of marks as male and female respectivelly, 8 and 11 males and females respectivelly obtained the range between 31 and 40 marks, 6 and students (males and females respectivelly) scored between 41 and 50



marks, 12 and 16 males and femles respectivelly obtained in each range 51 – 60 and 61 – 70 marks, 7 and 12 males and females respectivelly obtained the marks between 71 and 80, 6 males and 10 female students obtained the marks range between 81 and 90 marks, and 3 males and 2 female students got the highest range of 91 – 100 marks.

Figure 11: Marks Rage Obtained Male



Students (Overall)

Figure – 11 says that no male student obtrained 0 – 10 marks, and obtained 19% of students obtained the marks between 51 and 60 and 61 and 70. That is, 38% of male students fall in the better pass category of 51 – 70 marks range. At the same time, only 5% and 9% of male students obtained the highest range of marks such as 91 – 100 and 81 – 90 marks range respectively which could be considered as distinction pass. Also it is noteworthy that 11% of male students in all three grades obtained the merit range of 71 – 80 marks.

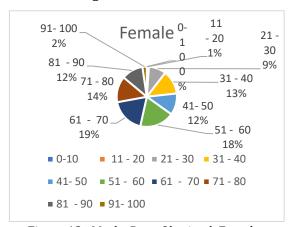


Figure 12: Marks Rage Obtained Female Students (Overall)

Figure – 12 indiactes that no female student obtained 0 – 10 marks range and only 1% obtained the second range 11 – 20 marks. The highest percentage, 19%, of female students obtained was 61 – 70 marks range, next was 18% of the marks range 51 – 60 marks. In total the most number of female students fall in the 51 – 70 marks range which covers 27% in total which indicates that they have a "better" category. 2% and 12% of female students obtained the considered distinction pass category of the 91 – 100 and 81 – 90 marks ranges respectively, that is 14% of the total samples.

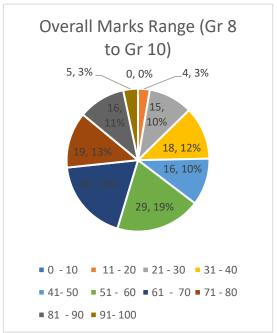


Figure 13: Marks Rage Obtained both the Genders (Overall)

Figure 13 represents the marks range obtained by both male and female students in all grades such as Grade – 8, Grader – 9, and Grade – 10 students. Accordingly, no student took the minimum range of 0 – 10 marks which is a positive sign. At the same time 3% and 11% of the students scored 91 – 100 and 81 – 90 marks range which is considered as distinction pass in the G.C.E (O/L) category. Further, 10% and 19% of the students scored 41 – 50 and 51 – 60 marks range respectively which could be considered a pass. Finally, 19%, and 13%,



obtained the marks range of 61-70 and 71-80 respectively which totals 32% in the total samples which could be considered a merit pass in the G.C.E (O/L) standards.

#### Conclusion

Association between father's occupation and student marks

# Hypothesis:

H<sub>0</sub>: Father's occupation does not have an effect on student marks

 $H_1$ : Father's occupation has an effect on student marks

The independent variable (father's occupation) was measured in nominal scale whereas the dependent variable (student marks) was measured in continuous scale. Therefore, One-way Analysis of variance test was carried out to test the hypothesis. The output tables are shown below:

Table08: ANOVA Marks

	Sum of		Mean		
	Squares	Df	Square	F	Sig.
Between	8109.39	6	1351.5	3.929	.001
Groups	6		66		
Within	49194.0	143	344.01		
Groups	97		5		
Total	57303.4	149			
	93				

Table09: Test of Homogeneity of Variances Marks

Levene Statistic	df1	df2	Sig.
.796	6	143	.574

The F-statistics from the ANOVA test is 3.929 with a significant value of 0.001 (see table 08). As the significant value is less than 0.05, it can be concluded that there is a significant effect of father's occupation on student marks. In order to get an in-depth finding from the survey, Post hoc analysis was carried out. Test of homogeneity of variances (see table 09) proved that the variances are equal (sig. value = 0.574>0.05). Hence, Scheffe test was selected as the mode of Post hoc analysis. The results of the analysis are presented in table 3.

According to table 10, only the difference between agricultural workers and teacher and academic workers is significant at 0.05-significance level. Teacher and academic workers' children get an average mark of 75.1 whereas the children of agriculture worker get an average mark of 51.4. The differences in other categories are not significant. A clear graphical description of the scenario is portrayed by the means plot in figure 14.

Table 10: Post Hoc Analysis - Multiple Comparisons Marks Scheffe

		IvI	arks Schene			
		Mean			95% Interval	Confidence
(I) Father		Difference			Lower	Upper
	0,7	(I-J)	Std. Error	Sig.	Bound	Bound
Business	Labour level	4.274	4.836	.992	-13.15	21.69
	Agricultural	11.558	4.606	.396	-5.03	28.15
	Managerial level	7.292	6.558	.974	-16.33	30.91
	Teacher and academic level	-12.113	6.238	.707	-34.58	10.36
	Abroad	-8.375	8.466	.986	-38.87	22.12
	No job	9.958	8.466	.966	-20.54	40.45
Labour level	Business	-4.274	4.836	.992	-21.69	13.15
	Agricultural	7.284	3.992	.765	-7.09	21.66
	Managerial level	3.018	6.142	1.000	-19.11	25.14
	Teacher and academic level	-16.387	5.799	.247	-37.27	4.50
	Abroad	-12.649	8.148	.877	-42.00	16.70
	No job	5.684	8.148	.998	-23.67	35.03
Agricultural	Business	-11.558	4.606	.396	-28.15	5.03
	Labour level	-7.284	3.992	.765	-21.66	7.09
	Managerial level	-4.267	5.962	.998	-25.74	17.21
	Teacher and academic level	-23.671*	5.608	.009	-43.87	-3.47
	Abroad	-19.933	8.013	.408	-48.80	8.93
	No job	-1.600	8.013	1.000	-30.47	27.27
Managerial	Business	-7.292	6.558	.974	-30.91	16.33
level	Labour level	-3.018	6.142	1.000	-25.14	19.11
	Agricultural	4.267	5.962	.998	-17.21	25.74
	Teacher and academic level	-19.405	7.297	.321	-45.69	6.88
	Abroad	-15.667	9.274	.826	-49.07	17.74
	No job	2.667	9.274	1.000	-30.74	36.07
	Business	12.113	6.238	.707	-10.36	34.58
	Labour level	16.387	5.799	.247	-4.50	37.27
i	1		1			



Teacher and	Agricultural	23.671*	5.608	.009	3.47	43.87
academic level	Managerial level	19.405	7.297	.321	-6.88	45.69
	Abroad	3.738	9.050	1.000	-28.86	36.34
	No job	22.071	9.050	.434	-10.53	54.67
Abroad	Business	8.375	8.466	.986	-22.12	38.87
	Labour level	12.649	8.148	.877	-16.70	42.00
	Agricultural	19.933	8.013	.408	-8.93	48.80
	Managerial level	15.667	9.274	.826	-17.74	49.07
	Teacher and academic level	-3.738	9.050	1.000	-36.34	28.86
	No job	18.333	10.708	.816	-20.24	56.91
No job	Business	-9.958	8.466	.966	-40.45	20.54
	Labour level	-5.684	8.148	.998	-35.03	23.67
	Agricultural	1.600	8.013	1.000	-27.27	30.47
	Managerial level	-2.667	9.274	1.000	-36.07	30.74
	Teacher and academic level	-22.071	9.050	.434	-54.67	10.53
	Abroad	-18.333	10.708	.816	-56.91	20.24

The mean difference is significant at the 0.05 level.

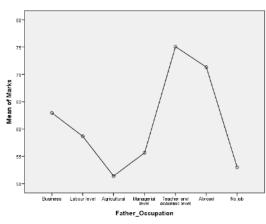


Figure 14: Means plot

Association between mother's occupation and student marks

# Hypothesis:

H<sub>0</sub>: Mother's occupation does not have an effect on student marks

 $H_1$ : Mother's occupation has an effect on student marks

The independent variable (mother's occupation) was measured in nominal scale whereas the dependent variable (student marks) was measured in continuous scale. Therefore, One-way Analysis of variance test was carried out to test the hypothesis. The output tables are shown below:

Table 11: ANOVA Marks

	Sum of		Mean		
	Squares	Df	Square	F	Sig.
Between	4669.800	6	778.300	2.115	.055
Groups					
Within	52633.69	143	368.068		
Groups	3				
Total	57303.49	149			
	3				

The F-statistics from the ANOVA test is 2.115 with a significant value of 0.055 (see table 11). As the significant value is greater than 0.05, it can be concluded that there is



no significant effect of mother's occupation on student marks.

Therefore, it can be concluded that fathers; occupation has a direct impact on the socioeconomic background which leads to the good/poor environment of the English Language learning. But the mothers' occupational background does not have any direct impact on the socio-economic nature which also does not affect the English language learning system.

However, the overall results indicate that there are no significant impact on the socioeconomic background to the learning of English language at school level, but the different teaching methodologies of the teachers have direct imoact on learning English language.

Therefore, it is recommended to give continuous training to the English teachers and continuous motivations must be given to those teachers. Further, the government must implement "good practices" adopted by the teachers.

Also, it is recommended to train the English teachers to work in the rural areas rather the urban and semi-urban setups, since the urban and semi-urban students can have outside classes (tuitions) facilities but not the rural students.

#### References

Cryder, Janaca. (2016). "The Effects of Socioeconomic Status on English Learning in the Peruvian Andes." Sep 14, 2016. Shttps://medium.com/@cryderje/the-effects-of-socioeconomic-status-on-english-learning-in-the-peruvian-andes-ad59878c7ce4.

Fan, W. (2011). "Social Influences, School Motivation, and Gender Differences: An Application of the Expectancy-value Theory." *Educational Psychology Review,* 31. 157-175.

Graetz, B. (1995). "Socio-economic Status in Education Research & Policy." In John Ainley et al., *Socio-economic Status and School Education*, DEET/ACER, Canberra.

Hardy, L. (2006). "Separate Our Pupils by Race and Income to Meet NCLB." *American School Board Journal*, 193, 45-50.

Holmes, J. (1992). *Introduction to Sociolinguistics*. Longman, London. 330.

Kormos, Judit. and Kiddle, Thom. (2103). "The Riole of Socio-economic Factors in Motivation to Learn English as a Foreign Language: The Case of Chile." System, Volume 41, Issue – 2, June, 2013. https://www.sciencedirect.com/science/article/abs/pii/S0346251X13000523?via% 3Dihub 390 – 412.

Muñoz, C. (2008). "Symmetries and Asymmetries of Age in Naturalistic and Instructed L2 Learning." *Applied Linguistics*, 29. 578 – 595.

Saville-Troike, Muriel and Karen Barto (2016), *Introducing Second Language Acquisition*, CUP, 2018, 21.

Sinha, A. & Shastri, R. (2009). "Interference of First Language in the Acquisition of Second Language." *Journal of Psychology and Counseling*, 1(7), 117 – 120.

Sirin, Selcuk, R. (2005). "Socioeconomic Status and Academic Achievement: A Meta-Analytic Review of Research." *Review of Educational Resource*, 75. New York university, Steinhardt. 417 – 453.

Paper ID 259

# Identifying Root Causes for Defects of Solid Tires: A Case of Tire Company in Sri Lanka

KG Berugoda Arachchige<sup>1#</sup> and Asanka D Dharmawansa<sup>2</sup>

<sup>1</sup> Department of Marketing, Dasa Hygiene Solutions (Pvt) Ltd <sup>2</sup>Department of Industrial Management, Wayamba University of Sri Lanka

# kithmigayara@gmail.com

**Abstract:** The quality of a product is vital in this competitive world. In the tire industry also, customers expect to consume errorfree products. The tire manufacturing industry is focusing much attention on producing quality products to generate delighted customers and to reduce the production cost. This research is based on solid tires, and the objective is to identify root causes for repairs in the solid tire. Raw material issues, machine failures, employee involvement, lack of supervision, and managerial decisions were considered as independent variables of this study, and they were derived from the literature. The dependent variable was the repairing percentage of the solid tire. The research sample consists of the repairs of the tires that are produced throughout a year. The gathered data were analyzed using a Minitab statistical tool. Multiple linear regression analysis was used as the data analysis method. The results of the analyzed data indicated that all the factors, i.e. raw material issues, machine failures, employee involvement, lack of supervision, and managerial decisions have a positive impact on repairs in solid tires. Although all the factors have affected, employee involvement and machine failures are seen to have a significant impact on repairs in solid tires.

**Keywords:** Tire industry, Solid tires, Defects

### Introduction

The tire manufacturing industry is one of the most important industries in the world

since solid tires are one of the most expensive products within the world context. As a profit-oriented industry, it is important to maintain the status of the business to gain more profit. In modern society, vehicles are becoming an essential element that almost everyone needed. A tire is the most vital part of any vehicle. And also, those should have replaced time to time according to the requirement. Then, the tire manufacturing industry is one of the most important industries considering the present situation.

Delighted customers are the most important asset of any organization. Customer satisfaction may largely be affected by the quality of the product or service. Therefore, one of the main goals of the tire manufacturing industry is to enhance the quality of the tires. The quality of the tire depends on the repair rate of the tires.

Repairs in solid tires may impact the quality of the tire, profit of the organization as well as time consumption to the production process. When there is a repair in a tire, the quality of the tire is varying from the originally produced tire. It may impact the durability, physical appearance, and strength of the tire. Hence, customer satisfaction may be reduced due to the mentioned repairs.

Furthermore, other than the quality of the tires, repair of the tires have some other negative impacts to the organization. Extra time, cost, and workforce should be allocated to the repairing purpose that is



external to the basic manufacturing process. Therefore, this may impact on profit of the organization. The profit of the organization can be affected based on the rate of the defects directly and indirectly.

Reducing the repair rate should be more important when considering the success of the business since business is mainly considered about profit and customer satisfaction. Therefore, it could attract loyal customers to the organization by creating a winning environment over the competitors by identifying causes for repairs and reducing or eliminating them.

In a particular organization in Sri Lanka, the average production of the solid tires is about 1200 and the average repairing amount of the tires is about 250 per day according to the internal records. It is 20.8% as a percentage from the daily total production. Therefore, it could identify that a considerable number of tires from the daily production are sent to the repair area for repairs.

Hence, it is already identified by the practitioners and responsible persons within the organization that this large percentage of repair rate is impacted to the organization negatively since the quality of the tire can be affected by customer satisfaction. If the repair rate is high, quality comes to the low range. Therefore, one of the main goals of the tire manufacturing industry is quality enhancement of the tires cannot be achieved due to repairs are existing. Thus, determining causes for repairs in solid tires and take necessary actions to reduce the repair rate should be a benefit to the organization. This may cause to quality improvement of the tires to increase customer satisfaction.

Accordingly, the repair rate reduction is the most important thing in the tire manufacturing industry. Hence, the

objective of this study is to identify root causes for repairs in solid tires.

#### **Literature Review**

Tire manufacturing industry

Considering the present environment, the tire industry can be well influenced to the economy and to the wellbeing of the human as the tires are used for many purposes in different ways. Tires are almost essential to fulfill transportation facilities as well as the agricultural fields with large capacities.

Tire products are used in many industries. Vehicles and equipment that are using tires can be divided into three different categories. Those identified categories are mentioned below.

Accordingly, tire products include:

- small implement tires: bicycle to motorcycle tires.
- motorsport, passenger car, and truck tires
- large agricultural and earthmoving vehicle tires to the field of aviation tires (Evans, 2002).

Factors affecting repairs in solid tires

From the beginning of the tire manufacturing process, it should go through several stages. Therefore, repairs of the tires may occur due to any stage of this process.

By considering those steps of the manufacturing process in solid tires, it can be identified that defects can be occurred in any stage of this process due to many reasons. According to the records, they have currently identified twenty types of defects that can be occurred in the solid tires. There will be many reasons for those identified defects that are,

- Using recycle
- Compounds out of standing time
- Bad dispersion of raw material
- Discharge temperature





- The irregular thickness of layers
- Incorrect application of bead strip
- High feeding speed on compound online
- High extrusion temperature
- Irregular cutting angle or blade cooling

#### 1. Raw material issues

The tire manufacturing process is starting with raw material selection. Raw materials should be selected according to the size of the tire, the color of the tire, the purpose that the tire is going to use, etc. In this step, it should not only select rubber materials but also select materials particular to the tire as carbon, gum, bead wires, etc. The recipe of the raw materials is consisting of different weights of specific components. To produce the final product with better quality, these recipes should be more accurately measured and use relevant components to relevant tire type (Gupta, Jain, Meena and Dangayach, 2018). According to Fragassa and Ippoliti (2016) mentioned in their research paper, compounds that used to produce a tire can vary based on the manufacturer and the requirement of the tire being used. Further performance of the tire may also depend on the raw materials used in production.

By considering factors of the abovementioned past research papers, issues of raw materials can be affected by the quality of the solid tires. But defects of the tires are not depending only on the quality of the raw materials or mixing error of the compounds used.

#### 2. Machine failures:

Considering the study of Suripa and Chaikittiratana (2008), solid tires are used in vehicles and equipment to handle heavy materials and goods. Those should be tolerated, heavyweights. Therefore, the design of solid tires should be better improved due to the purpose of handling heavy loads. It should maintain the

mechanical properties beginning with the production process. If the design of the solid tire is not up to the quality or if there are any damages it could affect the durability of the tire. Rubber mixing is one of the important stages in the tire manufacturing process. According to Abou-Ali and Khamis (2003), it uses several machines in this stage. Therefore, those machines should be in better condition to get a better result from the mixing stage.

By considering those studies, it can be identified that machine failures have an impact on quality tire manufacturing and occurring defects in the tires.

# 3. Employee involvement:

According to the tire manufacturing process, almost all steps should require human involvement. Therefore, they should follow specifications according to the standards. Otherwise, it may occur some defects in the final product that could be an extra cost to the organization (Abou-Ali and Khamis, 2003).

In the tire manufacturing process, tire curing time, pressure, and temperature are more important factors. It should be maintained the appropriate conditions to expect quality products. Therefore, first of all, compound designers should be aware of those factors and when the system is not automated, employees should have a clear understanding of the curing conditions (Evans, 2002).

According to the mentioned points from past researches, it could be identified that employees should involve positively in the manufacturing process as well as inspection criteria.

## 4. Lack of supervision:

One of the most important requirements of the tire manufacturing process is to maintain tire surface quality. For that, it should be considered about the tire molding process. Evans (2002) stated that



mold cleaning and techniques of mold surface design effect clean black and smooth product surfaces which enhance the final appearance of the tire. In that case, the tire molding process should be supervised to omit the imperfections and misleading activities of this process. According to researches Abou-Ali and Khamis (2003), by considering defects identification process during the manufacturing procedure, supervisors play a major role and it is very important to detect those defects to eliminate or reduce percentage. Furthermore, scrap eliminating or reducing the scrap rate of the tires causes enhance productivity and the profit of the organization by reducing unwanted costs for reworks. Therefore, as an organization scrap minimization should be a strategy for the organization. Better supervision is an important factor during the tire manufacturing process as well as inspection for reducing defects in solid tires according to the above-mentioned past research papers.

#### 5. Managerial decisions:

According to the study of Abou-Ali and Khamis (2003), defects detection of the final product as well as during the production process plays an important role the tire manufacturing process. Therefore, management of the organization should take necessary actions to fulfill this requirement for a better outcome from their business. Accordingly, researchers proposed a managerial decision to implement an integrated intelligent defects diagnostic system for tire production and service. It is a computer-based system to identify the defects in tires. Curing the tire is one of the most important parts of the tire manufacturing process. It should be maintained appropriate curing time, temperature, and pressure. Concerning Evans (2002), to predict cure times and carry out scenarios to help reduce overall cure times, finite element computer models are now available. They can call upon nonisothermal cure data, Arrhenius reaction rates, tire shapes, and mold characteristics.

According to the above-noted factors, managerial decisions can be made a major impact on the defects rate in the tire industry by introducing new technologies to the organization and make some restrictions that can only be made by the management.

Repairs in solid tires are affected by the root causes mentioned above in the review. Occurring those repairs may harm the organization. It can be affected by the quality of the product that they provide to their customers. Therefore, the purpose of the particular organization is to identify the causes of the repairs in the solid tires as well as to identify the ways of reducing those repair rates to some extent.

As considering past research papers, researches have mentioned that the abovenoted factors are affected by the repairs in solid tires. Hence, the variables mentioned above may affect the repairs in solid tires.

III. methodology and experimental design

This research is carrying out to identify root causes for repairs in solid tires. Past observations will be taken to identify the number of defective items and the frequency of occurring them according to the repair types.

The research model consists of dependent variables and independent variables.

- Dependent variable: Repairs in solid tires
- Independent variables: machine failures, employee involvement, issues with raw materials, managerial decisions, lack of supervision

In this study, regression analysis was applied to identify root causes for repairs in solid tires, by using the above-mentioned



dependent variable and independent variables.

Figure 1 shows the conceptual framework of the study.

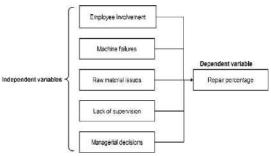


Figure 1: Conceptual framework

#### **Results**

Descriptive statistics are used to get a general idea about the data which are collected using records. Then the final part of the analysis is to identify the relationship between variables using regression analysis.

#### Descriptive analysis

Initially, descriptive analysis was conducted to identify the behavior of data. Here, it summarizes the dataset with mean, variance, median, etc. to get an overall idea about the data.

Table	1	Descri		A	:-
Tanie		TIPCCTI	MIN/A	Ana	11/010

Table 1. Descriptive Allalysis					
Variable	Total Count	Mean	Standard Deviation	Variance	Median
Repair percentage	206			2.13	10.20
Employee involvement	206	0.79	0.41	0.17	1.00
Machine failure	206	0.73	0.44	0.20	1.00
Raw material issue	206	0.07	0.26	0.07	0.00
Managerial decisions	206	0.52	0.50	0.25	1.00
Lack of supervision	206	0.73	0.45	0.20	1.00

## Regression analysis

The regression analysis was used to check the interaction between the dependent variable (repair percentage) and independent variables (employee involvement, machine failure, raw material issue, managerial decisions, and lack of supervision).

The summary of coefficients of the model can be illustrated as shown in Table 2.

Table 2. Coefficients table

Term	Coefficient	T-Value	P-Value	VIF
Constant	7.158	57.31	0.000	
Employee involvement	1.245	9.92	0.000	1.40
Machine failure	1.171	9.56	0.000	1.55
Raw material issue	0.849	4.67	0.000	1.18
Managerial decisions	0.766	5.70	0.000	2.37
Lack of supervision	0.937	8.42	0.000	1.29

The P-value of the independent variables can be considered to identify the significances of the variables.

According to the summary of coefficients, p-values of all the five independent variables are less than 0.05 (p-value <0.05) as shown in Table 02. Therefore, all the five variables are significant at 5% level of significance.

Hence regression equation can be written as follow,

Repairs in solid tires = (1.245\*employee involvement) + (1.171\*machine failures) + (0.849\*issues of raw materials) + (0.766\*managerial decisions) + (0.937\*lack of supervision) + 7.158

As considering Table 02 and the equation, it can be concluded that all five factors are



affected by the repair percentage of the solid tires.

VIF (Variation inflation factor) in the coefficient table checks the multicollinearity of the variables. As considering VIF values of all the five independent variables, it can be concluded that there is moderate multicollinearity in regression analysis since all the values are less than 5.

Analysis of Variance (ANOVA)

Table 3. Analysis of variance table

Source	DF	Adj SS	Adj MS	F-	P-
				Value	Valu
					e
Regressio	5	357.46	71.492	182.7	0.00
n	3	2	4	8	0
Error 20 0		78.228	ი 2011		
		70.220	0.3911		
Total	20	435.69			
	5	0			

The F-ratio in the ANOVA is used to check the overall regression model as shown in Table 03.

In this study, the p-value (0.000 < 0.05)) which associated with F-value (182.78) is very small. Therefore, the independent variables can reliably predict the dependent variable.

The goodness of the fitted regression

Table 4. Model summary table

S	R- squared		Predicted R-squared
0.566582	82.05%	81.60%	80.93%

According to Table 04, R<sup>2</sup> value (coefficient of determination) is equal to 82.05% which means 82.05% in the dependent variable can be explained by the independent variables.

#### Discussion and conclusion

All the independent variables (employee involvement, machine failures, raw material issues, managerial decisions, and lack of supervision) have an impact on the dependent variable (repair percentage in solid tires). The overall model is significant and 82.05% of the total variation in the dependent variable can be explained by the fitted regression line.

Further, according to the statistical analysis, employee involvement and machine failures have the highest impact on repairs in solid tires. Therefore, when paying attention to employee involvement, it can be more beneficial to reduce human eliminate interaction. and manual activities. It will cause to reduce the possibility of employee involvement being a root cause for repairs. And also, using new technologies as automated systems and machineries will be reduced the repair percentage up to a considerable level.

In the tire manufacturing process, employees have to work with a greater number of machines and they should have better knowledge about how to operate them. It is better to organize, training and awareness programs in planned time slots for appropriate workers. Machine failures can be reduced by paying attention to ontime maintenance and repairs of the machines.

Since all the factors are affected by the repair percentage, raw material issues, managerial decisions and lack of supervision also have an impact. Hence, there is a responsibility to maintain the standards in raw material selecting and mixing stage. There should have a proper systemized and semi or fully automated format to select the raw materials according to the recipes. And also, more responsible and effective management decisions will reduce the repair percentage. In the manufacturing process, there are



employees to supervise machine operators and other laborers. Their responsibility is taking necessary actions to remain the standards and requirements as mentioned in the standards. Accordingly, guiding employees in right way cause to reduce the repair rate of the solid tires.

By considering those mentioned factors and implementing those suggestions, the organization can reduce the repair percentage while enhancing the benefits.

#### References

Abou-Ali, M. & Khamis, M., 2003. TIREDDX: an integrated intelligent defects diagnostic system for tire production and service. Expert Systems with Applications.

Chu, C.-H. & Hsu, C.-H., 2013. Precise 5-Axis Grooving of Tire Mold Based on Surface Re-Parameterization. *International journal of precision engineering and manufacturing vol.* 14, no. 10, pp. 1811-1816.

Cristiano Fragassa & Martin Ippoliti, 2016. Technology assessment of tire mould cleaning systems and quality finishing. *International Journal for Quality Research* 10(3) 523–546.

Evans, M., 2002. *Tyre Compounding for Improved Performance.* s.l.:Kumho European Technical Centre.

Hardik V Patel & Brijesh D. Kayasth, 2015. A literature review on design and analysis of tyre envelope expander for tyre retreading process. *International Journal Of Engineering Innovation And Scientific Research.Vol.1* (2)-P.P-10-13 ISSN: 2395-6372.

Pavel Koštial, Jan Krmela, Karel Frydrýšek & Ivan Ružiak, 2012. *The Chosen Aspects of Materials and Construction Influence on the Tire Safety.* s.l.:s.n.

QiangGuo, CaimingZhang, HuiLiu & XiaofengZhang, 2016. Defect Detection in Tire X-Ray Images Using Weighted Texture Dissimilarity. *Hindawi*, p. 12.

Thomas L. Ford & Fred S. Charles, 1988. Heavy Duty Truck Tire Engineering, *SAE International Congress and Exposition*, p. 52.

Vikash Gupta, Rahul Jain, M. L. Meena & G. S. Dangayach, 2018. Six-sigma application in tire-manufacturing company: a case study. *CrossMark*.

Wen-Hsien Tsai & Yin-Hwa Lu, 2018. A Framework of Production Planning and Control with Carbon Tax under Industry 4.0. *Sustainability*, p. 3221.

# **Author Biographies**



Undergraduate of BSc. The joint major in industrial management and mathematics, mathematical modeling, and statistics.



Asanka D. Dharmawansa obtained his Ph.D. and M.Sc. degrees in Management and Information systems engineering from Nagaoka

University of Technology, Japan. He obtained his B.Sc. Degree in Industrial and computing Management and Information Systems from the Wayamba University of Sri Lanka. He has published peer-reviewed research articles reviews in the fields of information Science, human-computer e-Learning, and interaction.

Paper ID 260

# Application of Lean Six Sigma for Sample Checking Audit Procedure Process Improvement in the Apparel Sector in Sri Lanka

Sanduni Sulakkhana<sup>1</sup>, RASA Perera<sup>2#</sup>

<sup>1</sup>Hela Intimates, Narammala <sup>2</sup>National Institute of Business Management, (NIBM)Kurunegala Campus

#shahein.aruna@gmail.com

Abstract: Lean Six Sigma has become a well-known tool to improve operational excellence in manufacturing as well as service organisations. Lean Six Sigma generates a significant positive contribution to an organisation's performance in improving processes by reducing cycle time and waste in the process. This study is focused on real practical scenario of Hela Intimates (Pvt) Ltd, Narammala which is having lengthier time periods for the Acceptable Quality Level (AQL) Audit procedure than the Standard Operating Procedure time periods. This is a qualitative and quantitative research in nature. The main research objective of this study is to improve the process quality by reducing the current cycle time using Lean Six Sigma of the Acceptable Quality Level audit process of the sample checking process at Hela Clothing Ltd Narrmmala. Both primary and secondary data are used to reach the study objectives. Two thousand three hundred and twenty-six AQL audits in the month of June are considered for the sample. Cluster sampling method under Probability sampling method is used to draw the sample and the direct observation method is used to gather AQL audit cycle time. In addition to that, three auditors are interviewed in order to identify the waste types in the AQL process. To analyse the data, Lean Methodology and DMAIC methodology which is used under Six Sigma is used. Under this methodology Process control chart, Non-value-added

activities calculations, descriptive statistics and Perato chart are considered to analyse the data. To analyse the interview data, the contents and pattern matching method is used. The results of the analysis revealed that the present AQL Audit process is stable and yet the process can be improved further. Based on its AQL audit procedure, cycle time is reduced to 35 minutes from 45 minutes and it is a 22% process improvement from the current process by using Lean Six Sigma methodology. Therefore, it clearly evident that Lean Six Sigma can be used as a process improvement tool for apparel sector in order to meet customers' requirements.

**Keywords:** Lean Six Sigma, Process improvements, Cycle time

#### Introduction

organisations in globalized Business market are marching towards to improve the business processes to address the customers' requirements by reducing the waste and adding value in producing high quality products with fewer defects with customer focus in lower cost.( Itkin, 2008; Chee, 2008, Kaushik et al 2012). They are using many business strategies such as Lean manufacturing, Six Sigma, Blue Ocean theory to overcome this business competitiveness in this highly modern competition in this market place. Six Sigma is an asset of Statistical tool, which is a process driven approach used to process improvements reducing the defect in an



organizational process focusing customers' requirements in greater value (Kwak and Anbari 2006 Goh and Xie 2004, McAdam and Evans 2004). Lean thinking is a set of methodologies developed in Japan which aim for maximizing the value of the product, based on value addition of the process and elimination of waste. The term Lean is defined in many ways by many lean philosophers and all are discussed with the view point of eliminating waste in the system (Womack et all 1994, Bhasin and Burcher 2006 Aitiken et al 2002 ). Taiichi Ohono 1988 highlights that the main objective of this practices is to increase the production efficiency by consistently and thoroughly eliminating the waste. Further Taiichi Ohono discussed about the method to identify forms of waste in organization with his "Seven waste" model called is as "seven MUDA" which become cardinal approach in academic and industries. Seven ways of waste sources identified by Taiichi are transport, inventory, motion, waiting, over processing, over production, and defects. Recently another waste type was added to this cluster, called nonutilized talents of employees. Mura means lack of uniformity or non-uniformity, inequality and business process improvement method based on Just in Time method which indicated keeping less inventory or no inventory. The waste Muri means unreasonableness or impossible in production which can be eliminated through the standardized work. According to Stolzer and Halford (2004) studies, they have identified that this application is more sophisticated and relevant to gain more return on investment of particular air carrier organization. (Prasad et al 2012)

The blend of these two are called Lean Six Sigma(LSS) which generate considerable amount of Contribution to the organisations and Industries are widely use it as one of the business improvement

methods. (Nonthaleerak & Hendry, 2006; Schroeder et al., 2008).

LSS methodology is primarily driven through the application of the five stage six sigma DMAIC approach which stands each letter respectively Define, Measure, Analysis, Improve and Control. These five stages are defined my many researches. (Antony 2006) identified Define stage is as the identification of the problem, scope of the work effort of the project team. Measure stage is defined as measuring the current process of performance of problem identified company. Analysis stage is defined as the process of analysis the current performance data by using statistical analysing tools. Improve stage is defined as improve the process stages by selecting proper and critical solutions based on analyzed data. Final stage control of Six Sigma methodology is defined as maintain and improve the process. All the Lean and Six Sigma tools are comprised by the DMAIC methodology toolkit and the success of them depend on ability to use these toolboxes in a systematic and disciplined manner.

This DMAIC process is widely used methodology to quality improvement and it can be extended to total quality Management (TQM) (Black and Reverer 2006).DMAIC framework is practically validated to provide significant positive contribution towards the both operational environmental benefits (Ruban, Vinodh Asokan 2017). This methodology was successfully applied to Indian automotive component manufacturing firm by the research team of (Ruban, Vinodh and Asokan 2017) and resulted positive overall performance and environmental performance reducing of defects and reducing process variation. It will lead to the leads to reduction in consumption of raw materials, energy, and reduced scrap which in turn reduces the overall environmental impacts.



They have taken the environmental benefits by improving the process and it provides path to this study to apply DMAIC methodology for process improvement. (Psychogios 2010) identified that lean Six Sigma practices can be applied in airline services industry to avoid unnecessary mistakes and costs provoked by employees which can led to continuous improved programs which is one of the main goals in air industry as well as ground process.

It is highlighted that Lean Six Sigma can be applied into any organizations(Mahanthi and Antony 2005) and it generated significant advantages to the field of Healthcare Sector (Laureani, Brady, & Antony, 2013), construction sector (Van den Bos, Kemper, & de Waal, 2014) and, (Thomas et al., education sector. 2015). According to (Laureani, Brady, & Antony, 2013) they applied Lean Six Sigma to the Irish hospital in Ireland and get generated more benefits such as better operational efficiency, higher process quality, improved cost-effectiveness and better value for money departments in the hospital in shorter time period. According to (Van den Bos, Kemper, & de Waal, 2014) they applied Lean Six Sigma to the Dutch constructions company and resulted that lean manufacturing system reduced the throughput time speed, and impact of it, in terms of project completion.it discussed that DMAIC process of the Six Sigma contributed to reduce the Lead time of the constructions projects. Therefore, it provides the basis for the reduction of the process time of this study. Also (Thomas et al., 2015) applied this Lean Six Sigma to the in an aerospace manufacturing company and resulted time reduction of 20.5%, improved on-time-infull delivery to customer by 26.5%, reduced value added time by 5% and reduced Nonvalue added time by 44.5%. Also, estimated financial savings of over £2 Million are proposed.in improving the production

process by eliminating waste and reducing the lead time this research paper provides better foundation on it.

Therefore, previous researchers found that applying Six sigma in any organization can improve their busines process to address customers' requirements. Narammala pvt ltd also looking for the process improvement in their AQL audit procedure because it is a critical issue of having a lengthy process time compare with the standard operating procedure. research paper address requirements of the producers' quality perspective of process development to enhance the customers' satisfaction.

# **Study Objectives**

Hela clothing (pvt) ltd is a apparel industry which is manufacturing global recognized apparel brands. Their process time of the Acceptable Quality Level (AQL) audit procedure is lengthier than the Standard Operating Procedure. It is nearly Fourty five minutes in average per garment. Thus, when we consider about the total orders of the Organization it is a huge waste and the cost for the organization. Therefore, organization is looking methodology to improve the business process by reducing the process time of AQL Audit procedure. Based on the literature review, it provides better foundation of Lean Six Sigma to apply to the process by reducing waste.

Therefore, The main objective of this study is to improve the process quality by reducing the current cycle time using Lean Six Sigma of the Acceptable Quality Level audit process of sample checking process at Hela Clothing Ltd Narrmmala.

#### Methodology

This is a qualitative study in nature. Number of monthly AQL audits conducted in last six months (Jan - Jun) in the year



2019 is considered as population of the study. Within the considered time period of six months fourteen thousand two hundred forty five AQL audits have carried out. Month of June is selected for the sample by using Cluster Sampling method under Probability sampling method is used to draw the sample. Two thousand three hundred twenty six AQL audits conducted in the months of June is considered as sample size of the study.

Both Primary data and Secondary data are used to reach the study objectives. Number of audit failures are taken from the system and The cycle time taken to proceed the AQL audits are manually calculated by using stop watches. Direct observation method is used to gather data. And three auditors are interviewed to identify the waste types in the AQL process.

To analyses the data, Lean Methodology and DMAIC methodology which is used under Six sigma is used. DMAIC is the problem-solving which has five-phase Define, Measure, Analyze, Improve and Control for improving existing process problems with unknown causes. Measure stage is used to measure the current process of the performance. By using statistical tools and quality tools, quality problem is analyzed in the stage of Analysis. In the Improve stage the current process is improved by selecting critical solutions for the quality issue. Control stage highlights to maintain the improved process and leads continues improvement.Under this methodology Process control chart, Non-value added activates calculations, descriptive statistics and Perato chart are considered to analyses the data. To analyses the interviews information Conents and pattern matching method is used

#### **Analysis and Discussion**

Kanban system under Lean philosophy and DMAIC Process under Six Sigma is applied

to reach the study objectives. Current status of the Acceptable Quality Level audit process is as follows. It takes 45 minutes of working process. Table no 01 is the summary of the average time that the current process is performing.

Table no 01 Activities and current time performing- Appendix no 01

As per the AQL process the following wastages are identified through the direct observations.

Transportation waste occurs when there are unnecessary movements of products and material. Due to the improper placement gap between of packing table and the AQL table. Transportation waste was observed. It was observed.

Inventory waste is the excess products and materials which are not being processed When the packer offer the AQL audit beyond the order AQL of the carton. Motion is the unnecessary movements by people materials etc. when the ready to the audit they need style files and other detail files. When they haven't specific place to keep the above mentioned files it creates unnecessary movements. Due to this issues in the audit process the gap between AQL table and the AQL room, motion waste can be observed through the unnecessary long distances travelled by the auditor. Waiting time occurs when time is wasted waiting for next audit. Waiting time can be observed when the auditor waiting for next audit, Andon lights on but not ready the audit. Wait for a period of timeOver processing happens when more work is been performed than what is really required. Therefore over processing waste did not prevail in the observation time.

Figure no 01 Highlights the current Analysis System chart of Audit procedure.

Figure no 01- Current Analysis of the process- Appendix no 02



To make the better understanding about the customer requirements across the process, Kanban System was used. Interviews ideas were analysed and they were highlighted in Table no 02

Table no 02- Analysis of Kanban system-Appendix no 03

Six Sigma Methodology Application

#### **Define Stage**

Reduce the current cycle time of the Acceptable Quality Level audit process of sample checking process using Lean Six Sigma up to 35 min at Hela Clothing Ltd Narrmmala.the total time reduction is expected to 22% from existing time period.

#### Measure Stage

Two types of variables are thoroughly drew into attention such as Number of audits fails and Time taken to process the AQL audit. Number of audits conducted during the sample time period and the pass and fail audits were the measureable units of the variable in order to identify whether the process is stable before reducing the AQL audit time of the process. Minutes were considered as measureable units of the variable, Time taken to process the AQL audits in order to identify the Non value added activities to reduce the cycle time.

Current average cycle time was discussed in the table no 01. And the defects calculation was identified as follows, Six sigma DPMO (Defects per Million Opportunities) was calculated under Six Sigma Methodology.

$$DPMO = \frac{Total\ Defects}{Total\ Opportunities} * 1000000$$

# (Mcadam, Evans 2004)

134 audits were failed (time) during the period of Jan – July 2019 and total opportunities identified were 14245. Therefore DPMO is calculated as

$$\frac{134}{14245} * 1000000 = 9406.8$$

Current sigma level identified the Six Sigma level (Mcadam, Evans 2004) is between 3.8 to 3.9.

The DPMO for the month of June is as follows, 27 audits time failures for the 2326 AQL audits  $\frac{27}{2326} * 1000000 = 11607.9$ .

Current sigma level identified the Six Sigma level table (Mcadam, Evans 2004) is between 3.8 to 3.9.

#### **Analysis Stage**

Total AQL audit failures in the period of January to June in 2019 is recorded as 1% of total audits and it is shown in figure no 01. It is due to the Random variation of the process.

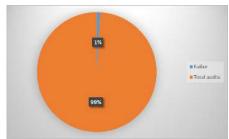


Figure no 01 – AQL audit faliures from Jan - June

It was confirmed by the data analysis of the Total AQL audit failures in the month of June 2019.



Figure no 02 – AQL audit faliures in the month of June

To clarify the process stability np Control chart is constructed.np chart is used that the observation data was attributes data. By using observation data it was constructed to identify the current process. Np chart of the data is shown in Figure no 03

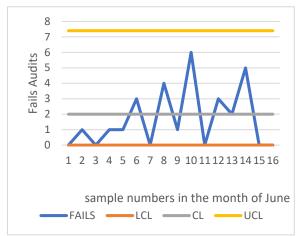


Figure no 03 – np chart for the AQL audit procedure

All the sample points were between the upper control level and the lower control level and it can be concluded that process is under control. no any assignable variation in the process. To check the stability of the process in total population Pareto Analysis is conducted. It is shown in the Figure no 04. It highlights that the process is under control without having Assignable variation in AQL Process in population time period. Therefore further improvements can be done to the process.

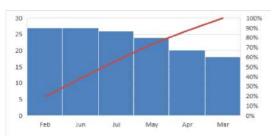


Figure no 04- Pareto Analysis

Non value added time for the total AQL procedure is attached in the Table no 03. If the activity or the time can be eliminated or shifted or not generating value to the process, it is defined as non-value added times in activities for this study

Table no 03-Non value Added activities calculations Appendix no 04

#### Improve stage -

Non value added calculations were done in order to identify the improvement area of

the process. Therefore waste types in the process identified under Lean philosophy was considered for the improvements. Time for the activity numbers 04 05 06 are critically reduced by eliminating time and time for the activity numbers 10 11 12 are critically change with allocating more time for it. Table no 05 highlights the time comparison between previous and redesigned new process after applying Lean Six Sigma.

Table no 04- Comparison between the previous and redesigned process-Appendix no 05

Figure 05 highlights that the redesigned system of the process.

Figure no 05 –Redesigned process Appendix no 06

Layout changes has done to achieved the target foolowing Figures no 06 and 07 highlighted and previous redesigned layouts of the process.

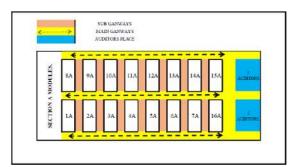


Figure no 06 - Current process layout



Figure no 07 - Current process layout

#### Control Stage -

Under this stage following control methods are suggested to follow the process in future activities. Before get the audit



arrange all necessary document to the AQL table and keep under the table.

- Remove poly bags with hanger.
- Arrange AQL table near the packing table of the line.
- Get the audit before seal the packs.
- Arrange packing trims information sheet and keep with the auditor.
- The records are taken from the ISO 9001:2015 records files and the process is identified through the inspections.
- For the control purpose which leads for the continual improvement following documents will be used.
   (System audit)
  - Internal audit.
  - Inspections
  - Ideas from Team AQL auditor and the QAGL.
  - Observations

#### Conclusion

DMAIC Methodology provides better foundation to identify the process issues and help to improve the process by reducing the cycle time. Analysed data indicate that the AQL Process of the company is running in stable position without having the assignable variation within the study time periods. Therefore future improvements can be done to the process as it was stable.

Expected time to reduce the cycle time is 22% from the current process and it is operating between 3.8 to 3.9 Sigma levels in with 9406.8 Defects per million opportunities under Six Sigma calculations.

After critical analysis of time calculation of process activity observations The Total Cycle time of the AQL audit procedure was reduce up to 35 minutes from 45 minutes by applying Lean Six Sigma methodology.

According to (Zasadzień 2017) studies, they applied Six Sigma methodology a

maintenance process in Poland and improve the process in significant amount. successfully applied Thev **DMAIC** methodology for process improvement. Also (Thomas et al., 2015) applied this Lean Six Sigma to the in an aerospace manufacturing company and resulted time reduction of 20.5%, improved on-time-in-full delivery to customer by 26.5%, reduced value added time by 5% and reduced Non-value added time by 44.5%. Therefore It is a significant amount of 22% of cycle time reduction of procedure AQL Audit at Hela Intimates(Pvt) Narammala.

#### References

Aitken, J., Christopher, M., & Towill, D. (2002). Understanding, implementing and exploiting agility and leanness. International Journal of Logistics, 5(1), 59-74.

Antony, J. (2006) 'Six Sigma for Service Processes', Business Process Management Journal, 12(2),Approaches', 4th Ed, Illustrated, Rowman Altamira.

Ben Ruben R, Vinodh S, Asokan P. Implementation of lean six sigma framework with environmental considerations in an Indian automotive component manufacturing firm: A case study. Production Planning & Control. 2017;28(15):1193-1211. DOI: 10.1080/09537287.2017.1357215603.

Bhasin, S., & Burcher, P. (2006). Lean viewed as a philosophy. Journal of Manufacturing Technology Management, 17,56–72.

Black, K. and Revere, L. (2006), "Six Sigma arises from the ashes of TQM with a twist", International Journal of Health Care Quality Assurance

Chee, C. S. (2008). Measuring success. Enterprise Innovation, 4(1), 16-17.



Coleman, S. (2008), "Six Sigma: An opportunity for statistics and for statisticians", Significance,

Goh, T. N. and Xie, M. (2004), "Improving on the Six Sigma paradigm", TQM magazine

Itkin, D. (2008). The effect of business ownership changes on occupational employment and wages. Monthly Labor Review,

Itkin, D. (2008). The effect of business ownership changes on occupational employment and wages. Monthly Labor Review,

Kaushik, P.; Khanduja, D.; Mittal, K. A (2012) case study: Application of Six Sigma methodology in a small and medium-sized manufacturing enterprise.

Kaushik, P.; Khanduja, D.; Mittal, K. A case study: Application of Six Sigma methodology in a small and medium-sized manufacturing enterprise

Kwak, Y.H. and Anbari, F.T. (2006), "Benefits, Obstacles and future of Six Sigma approach", Technovation, local government: a framework and a case study. Total Quality Management & Business Excellence.

Laureani, A., Brady, M., & Antony, J. (2013). Applications of Lean Six Sigma in an Irish hospital. Leadership in Health Services, 26(4), 322–337

Mahanti, R. and Antony, J. (2005), "Confluence of Six Sigma, Simulation and Software development", Managerial Auditing Journal,

Mcadam, R. and Evans, A. (2004), "Challenges to Six Sigma in a high technology mass manufacturing environments", Total Quality Management,

Mcadam, R. and Evans, A. (2004), "Challenges to Six Sigma in a high technology mass manufacturing environments", Total Quality Management

Nonthaleerak, P., & Hendry, L. (2006). Six Sigma: Literature review and key future research areas. International Journal of Six Sigma and Competitive Advantage, 2(2), 105–138.

Ohno, T. (1988). Toyota production system: beyond large scale production. Cambrigde: Productivity Press

Psychogios A.G, Tsironis L.K and Galiatotos A.(2010)Towards an integrated framework for Lean six sigma Application; lesson from the Airline industry

Schroeder, R. G., Linderman, K., Liedtke, C., & Choo, A. S. (2008). Six Sigma: Definition and underlying theory. Journal of Operations Management, 26(4), 536–554. doi:10.1016/j.jom.2007.06.007

Thomas, A. J., Francis, M., Fisher, R., & Byard, P. (2015). Implementing Lean Six Sigma to overcome the production challenges in an aerospace company. Production Planning and Control, 27(7–8), 591

Van den Bos, A., Kemper, B., & de Waal V (2014). A study on how to improve the throughput time of Lean Six Sigma projects in a construction company. International Journal of Lean Six Sigma, 5(2), 212226.

Womack, J. P., & Jones, D. T. (1994). From lean production to lean enterprise. Harvard business

Zasadzień M.(2017), Application of the Six Sigma Method for Improving Maintenance Processes – Case Study; 84703140320 In Proceedings of the 6th International Conference on Operations Research and Enterprise Systems (ICORES 2017) Poland.

#### Acknowledgment

We thank you those who helped us in this study specially Hela intimates Plant Manger, Supervisors at Operations Department, AQL auditors. We gratitude them all.



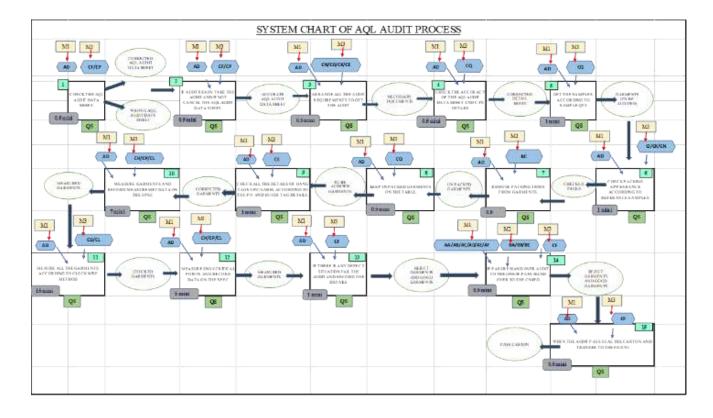
# **Appendix**

# Appendix no 01 - Table no 01 Table no 01 Activities and current time performing

No	Activity		Time	
1	when the andon lights on(orange color for aql audits)go to the sewing line and check the aql audit data sheet.			
2	when the audit is ready arrange the requirements to take the audit or when the audt is not ready cancel off the andon light and cancel the record in the aql audit data sheet.			
3	arrange all the audit requirements to get the audit (teck pack/style file/packing sample/production sample/buyer tag file)	2	mini	
4	check the accuracy of aql audit data sheet and CTN details (time/qty)	1	mini	
5	get the garmemnt from the carton according to the sampling plan.(32 pcs for 180 pcs)	1	mini	
6	check the packing appearance/packing trims according to the style file and approved trim card.	2	mini	
7	remove hangers and poly bags boxes of selected garments.	2	mini	
8	keep aside all removed trims and placed unpacked garments on the aql table to get the audit.	2	mini	
9	check the all details of hang tags,upc and the label according to the approved po sheet and buyer tag.	2	mini	
10	randomly select 01 garment from each 12 garments and get the full measurement and record only one mesuremnt on the spec sheet.	7	mini	
11	check the all other garments according to the clock wise checking method and strickly point out the constructions and the sewing defects of the selected garment.	15	mini	
12	randomly select 01 garment from each 06 garments and get the critical measurement and record 03 mesuremnt on the spec sheet.	6	mini	
13	in this audit if there is any damages beyond the sampling plan audit is fail.if it is fail record the failure in the pre delivery audit sheet and the aql data sheet.same as the process when audit pass.	2	mini	
14	in the failure hand over the fail carton to the line and inform the in line auditor to recheck.(team leader/in line auditor/examiner/qa gl/production gl/	1	mini	
15	when the audit pass seal the carton and hand over the carton to cni team with the signature of aql auditor.	1	mini	
	total time			



Appendix no 02 Figure no 01- Current Analysis of the process





Appendix no 03-Table no 02-Analysis of Kanban System

	Table no 02-Analysis of Kanban	System
No	Activity	Quality standards.
1	When the Andon lights on (orange color for aql audits) go to the sewing line and check the aql audit data sheet.	Accuracy of the data sheet and the audits of right qty and right quality.
2	When the audit is ready arrange the requirements to take the audit or when the audit is not ready cancel off the Andon light and cancel the record in the aql audit data sheet.	Accuracy of the data sheet and the audits right qty.
3	arrange all the audit requirements to get the audit (teck pack/style file/packing sample/production sample/buyer tag file)	According to customer style file all the packing trims should be correct.  Correct standards.
4	check the accuracy of aql audit data sheet and CTN details (time/qty)	According to customer needs ctn details should be correct. Right quality
5	get the garment from the carton according to the sampling plan.(32 pcs for 180 pcs)	According to sampling plan received from the customer 32 pcs for 180 pcs carton and there should not be any defects for the 32 pcs. right qty
6	Check the packing appearance/packing trims according to the style file and approved trim card.	Sewing trims should be correct according to the customer trim card. right quality
7	Remove hangers and poly bags boxes of selected garments.	It should necessary remove all the packing trims before audit.
8	Keep aside all removed trims and placed unpacked garments on the aql table to get the audit.	Prevent from mix up. Right quality and right process.
9	Check the all details of hang tags, upc and the label according to the approved po sheet and buyer tag.	Accuracy of the all details related to po sheet.
10	Randomly select 01 garment from each 12 garments and get the full measurement and record only one measurement on the spec sheet.	For check correct measurements. Right product
11	Check the all other garments according to the clock wise checking method and strictly point out the constructions and the sewing defects of the selected garment.	For accuracy.
12	Randomly select 01 garment from each 06 garments and get the critical measurement and record 03 measurement on the spec sheet.	For accuracy.
13	In this audit if there is any damages beyond the sampling plan audit is fail. If it is fail record the failure in the pre delivery audit sheet and the aql data sheet. Same as the process when audit pass.	Customer specification.
14	in the failure hand over the fail carton to the line and inform the in line auditor to recheck.(team leader/in line auditor/examiner/qa gl/production gl/	Necessary to recheck and re audit before transfer to the cni area.
15	When the audit pass seal the carton and hand over the carton to cni team with the signature of aql auditor.	Customer specification due to accuracy of the audit details.

# Appendix no 04 Table no 03- Non value added time calculations

	Table no 03- Non value added time calculations		1/4	N 13 / A
No	Activity	TIME in min	VA time in min	NVA time in min
1	when the andon lights on(orange color for aql audits)go to the sewing line and check the aql audti data sheet.		0.5	0.5
2	when the audit is ready arrange the requirements to take the audit or when the audt is not ready cancel off the andon light and cancel the record in the aql audit data sheet.		0.5	0.5
3	arrange all the audit requirements to get the audit (teck pack/style file/packing sample/production sample/buyer tag file)	2	0.5	1.5
4	check the accuracy of aql audit data sheet and CTN details (time/qty)	6	0.5	5.5
5	get the garmemnt from the carton according to the sampling plan.(32 pcs for 180 pcs)	15	1	14
6	check the packing appearance/packing trims according to the style file and approved trim card.	7	1	6
7	remove hangers and poly bags boxes of selected garments.	2	0.5	1.5
8	keep aside all removed trims and placed unpacked garments on the aql table to get the audit.	2	0.5	1.5
9	check the all details of hang tags, upc and the label according to the approved po sheet and buyer tag.		1	1
10	randomly select 01 garment from each 12 garments and get the full measurement and record only one mesuremnt on the spec sheet.	2	2	
11	check the all other garments according to the clock wise checking method and strickly point out the constructions and the sewing defects of the selected garment.	1	1	
12	randomly select 01 garment from each 06 garments and get the critical measurement and record 03 mesuremnt on the spec sheet.	1	1	
13	in this audit if there is any damages beyond the sampling plan audit is fail.if it is fail record the failure in the pre delivery audit sheet and the aql data sheet.same as the process when audit pass.	2	1	1
14	in the failure hand over the fail carton to the line and inform the in line auditor to recheck.(team leader/in line auditor/examiner/qa gl/production gl/	0.5	0.5	0
15	when the audit pass seal the carton and hand over the carton to cni team with the signature of aql auditor.	0.5	0.5	0
_	Total time	45	35	10



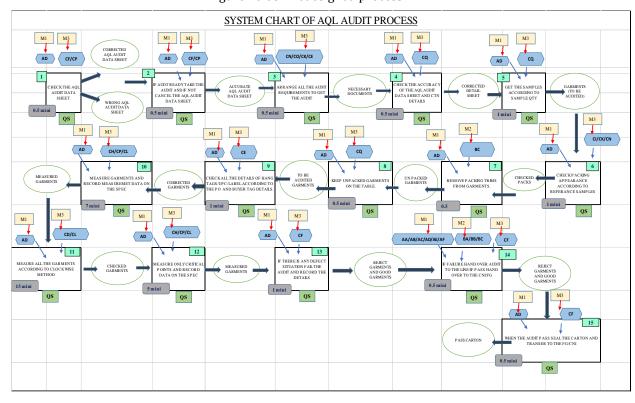
# Appendix no 05

Table no 04- Comparison between the previous and redesigned process

	Table 110 04- Comparison between the previous and redesigned proce		Expected
No	Activity	Actual Time(min)	time(min)
1	when the andon lights on(orange color for AQL audits)go to the sewing line and check the AQL audti data sheet.	1	0.5
2	when the audit is ready arrange the requirements to take the audit or when the audt is not ready cancel off the andon light and cancel the record in the aql audit data sheet.	1	0.5
3	arrange all the audit requirements to get the audit (teck pack/style file/packing sample/production sample/buyer tag file)	2	0.5
4	check the accuracy of AQL audit data sheet and CTN details (time/qty)	6	0.5
5	get the garment from the carton according to the sampling plan.(32 pcs for 180 pcs)	15	1
6	check the packing appearance/packing trims according to the style file and approved trim card.	7	1
7	remove hangers and poly bags boxes of selected garments.	2	0.5
8	keep aside all removed trims and placed unpacked garments on the AQL table to get the audit.	2	0.5
9	check the all details of hang tags,upc and the label according to the approved po sheet and buyer tag.	2	1
10	randomly select 01 garment from each 12 garments and get the full measurement and record only one measurement on the spec sheet.	2	7
11	check the all other garments according to the clock wise checking method and strickly point out the constructions and the sewing defects of the selected garment.	1	15
12	randomly select 01 garment from each 06 garments and get the critical measurement and record 03 measurement on the spec sheet.	1	5
13	in this audit if there is any damages beyond the sampling plan audit is fail.if it is fail record the failure in the pre delivery audit sheet and the AQL data sheet.same as the process when audit pass.	2	1
14	in the failure hand over the fail carton to the line and inform the in line auditor to recheck.(team leader/in line auditor/examiner/qa gl/production gl/	0.5	0.5
15	when the audit pass seal the carton and hand over the carton to cni team with the signature of AQL auditor.	0.5	0.5
	Total time	45	35



# Appendix no 06 Figure no 05 –Redesigned process



Paper ID 297

# Development of a Performance Measurement Framework on Bus Transport Reliability at Bus Stops

Piyumika Athapaththu#, Thimesha Weerasekara, Seminie Waravita and Sabeen Sharic

Department of Management and Finance, Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defence University

# piyulakshani98@gmail.com

**Abstract:** The purpose of this study is to develop a performance measurement framework for measuring bus transport reliability at bus stops. For this, time keepers' records at bus stop level have been collected. They consist of four factors, i.e. scheduled arrival, actual arrival, scheduled departure and actual departure. From these data, scheduled headway and actual headway were calculated. A measure on perceived waiting time (PWT) was developed as the difference between actual headway and a half of the average schedule headway for the particular time period. The performance measure was validated for 3 bus stops. Earliness index was developed as the number of observations, which was where the PWT was lesser than half of the average schedule headway. This Earliness index was validated for 3 bus stop records, and it was observed that along with the changes in the scheduled headway in time duration, the EI value is also changed. This measure helps for policy makers to decide on the reliability of public transport at bus stops.

**Keywords:** Perceived Waiting Time (PWT), Earliness Index (EI), Bus stops

### Introduction

There are many passengers leaving public transport because of public transport not being reliable. Reliability of transit service has been recognized as a significant determinant of quality of service (Ma, Ferreira, and Mesbah 2013). Performance measures of reliability of bus transport at bus stops portray the level of existing

condition of the service reliability. Policy makers can use these measures for better decision making towards optimal use of public transportation. These measures have not been developed in most of the developing countries for evaluating the bus transport service reliability at bus stops. Data is very vital for the development of performance measurements. Collection of useful data is very much important. The main drawback in performance measurements of the public transport systems in the developing countries is that data generation, recording and being saved in a systematic approach are not existing. Developing countries should go for the development performance of frameworks for measurement transport service reliability based on the relevant existing data mostly manually collected and not by using advanced technologies.

This main objective of this chapter is to develop an index for perceived waiting time (PWT) as a performance measure for bus transport reliability at bus stops in Sri Lanka using the existing secondary data.

#### Literature Review

The buffer time indicates extra travel time required to allow the passengers on time arrival. Generally, it is defined as the difference between xx percentile and the average travel time. The planning time is defined as the xx-percentile travel time. It indicates the total time that a passenger has to budget for the trip. Buffer time index is defined as the buffer time divided by the



average travel time. Reliability buffer time, defined as the difference between the upper percentile xx, and an intermediate or lower percentile yy, is the additional time that would be required to be xx-percent sure of arriving at the destination on time. Excess reliability buffer time (ERBT) is defined as the difference between the actual levels of reliability experienced by passengers and what they should have experienced had everything gone according to plan. The ERBT indicator can be used to capture the incident-caused additional unreliability above that was caused by recurrent factors (Ma, Ferreira, and Mesbah 2013). Most importantly, the buffer time calculation depends entirely on the travel time distribution. Automatic Vehicle Location (AVL) is used to calculate travel time in this study. But in terms of Sri Lankan scenario, travel time calculation using AVL is impossible and origin to destination bus arrival data are not recorded by the timekeepers too for many of the bus routes. Hence this approach can't be applied for Sri Lankan context to model bus reliability patterns at bus stops.

Transit service reliability at the time point level has been analysed with many performance measures such as headway variability, departure delay variability, mean scheduled headway, boarding variability, unscheduled stop variability etc. Automatic data collections systems such as automatic vehicle location and computer aided dispatch have been used for data collection. (Kimpel 2001). The measures used here are of the same existing in the literature and they suffer from all the weakness of those. And huge data set has been collected because of the automatic collection systems which is impossible in Sri Lankan contexts at the moment and no methodology for performance evaluation has been proposed.

A probability-based headway regularity metric for bus service reliability at stops has been proposed with the view to estimate the probability the next bus would be arriving within the certain time period after the last bus had arrived. Headway between two consecutive buses at stop, previous bus travel time on link, current bus travel time on link, previous bus dwell time at stop, current bus dwell time at stop, passenger arrival rate at stop and passenger boarding process rate at stop had been used to develop this metric and they had been collected by AVL and APC (Ruan and Lin 2009). As passenger arrival counts also play an important role in this metric, this is impossible in Sri Lankan contexts since there is less possibility to find the best way to count the passenger arrivals to the stops. Passenger arrival counts at Sri Lankan bus stops are not recorded.

On-time performance measures how well actual departures and arrivals conform to scheduled departures and arrivals. This is often the case for passengers using low frequency routes. If a vehicle departs early, then it is not "on-time" from the perspective of passengers because that will mean that passengers must wait a full headway until the next vehicle arrives. Ontime performance is often measured as a percentage of bus arrivals or departures at a given point within a predetermined range of time. A bus that departed no earlier than 30 and no later than 60 seconds compared to schedule departure time was set to be departing on-time (Firew, Weckström, and Mladenovic 2016). Even though delay and early arrival can be traced, this tolerance threshold is subjective and cannot be generalized for Sri Lankan context.

Headway is the time between two vehicles passing the same point traveling in the same direction on a given route. Headway adherence is a good measure of reliability for high frequency routes . Percentage



Regularity Deviation Mean is the average deviation from the scheduled headway as a percentage of the scheduled headway. Average headway deviation was taken as the difference between actual headway and scheduled headway and the coefficient of variance of headways was calculated (Firew, Weckström, and Mladenovic 2016).

Passenger perceived waiting time at bus stops was influenced by income, location, trip distance and purpose, and survey method whereas transit agencies considered reliability to be a priority, defining it in terms of OTP measures to achieve the objective of increasing customer satisfaction. They did not frequently report users' satisfaction regarding service reliability despite its perceived importance (Diab, Badami, and El-Geneidy 2015). To take the factors that affect the passengers perceived waiting times at bus stop in the article, one has to use AVL or any automatic systems and survey has to be conducted individually which is impossible in Sri Lankan contexts.

Excess wait time was measured as the difference between actual wait time and scheduled wait time. Actual wait time was the ratio between summation of square of actual headway and 2 times summation of actual headways. The same was applied for scheduled wait time. Standard deviation of difference between actual and scheduled headway was used as a measure of reliability at bus stops. This is suitable for a normally distributed data set. It does not differentiate the delay and earliness.

The Earliness Index (EI) is defined as the percentile rank of delay/headway deviation of zero. The percentile rank of a particular delay/headway deviation is the percentage of delay/headway deviations in its frequency distribution that are lower or equal to it. Let X denote the delay (for infrequent services) or headway deviation (for frequent services) and F(x) denote the

cumulative distribution function of x as follows:  $F(x) = P(X \le x)$ . Therefore, EI can be defined as F(x) when x=0: EI = F(0) (Saberi et al. 2013). This measure is significantly varying from others in terms of differentiating the delay versus early arrivals but predefined threshold for the waiting time is zero which is subjective to criticism as all the above measures have allowed a predefined threshold for waiting time.

In conclusion of the literature review, there are three main research gaps identified for the bus transport reliability measures for Sri Lankan bus stops. Firstly, measures need to focus both delay and early arrivals. Secondly, the data cannot be collected by AVL or APC. Hence, the researchers should look for secondary data. Third and important factor is the predefined amount of threshold to be allowed for passenger waiting time.

### Methodology

According to theoretical aspects a bus service can be categorized under frequent or non-frequent according to their 'Scheduled Headway'. If the scheduled headway is 10 minutes or less than 10 minutes it can be considered as a frequent service. The buses which have a scheduled headway which is more than 10 minutes can be considered as non-frequent bus service. This methodology is applicable for frequent service buses only.

First the data is collected under four categories as scheduled arrival time, scheduled departure time, actual arrival time and actual departure time of buses. Scheduled Headway is measured from the difference between the scheduled arrival time of two consecutive buses at the stop and Actual Headway is measured from the difference between the actual arrival times of the two consecutive buses at the same stop. Headway deviation is found from the difference between actual and scheduled



headways. After clustering the same scheduled headways together half of the particular clustered scheduled headway is taken as the tolerance. And the headway deviation is taken from deducting this value from the actual headway. This is identified as the perceived waiting time (PWT). For the particular cluster Earliness Index (EI) was found.

The EI (Earliness Index) is defined as the percentile rank of delay/headway deviation of half of averaged scheduled headway. The percentile rank of a particular delay/headway deviation is the percentage of delay/headway deviations in its frequency distribution that are lower or equal to it. (Saberi & Zockaie, 2013) The equation is modified by using assumption of tolerance. assumptions were taken as the passengers are willing to wait ½ of the time of Scheduled headway for a bus the tolerance level is added to the formula.

The equation is: F(x) when x=Half of averaged scheduled headway: EI = F(1/2\*Average scheduled headway); where F = Function, Average schedule Headway = percentile.

When we use the above equation in Microsoft XL it is applied as

=PERCENTRANK.INC (Headway Deviation Data range, 1/2\* Average Schedule Headway)

It is how the index is calculated for the proposed method.

Here the Earliness Index being in a high value means the service reliability is high of that bus service.

To apply these following data was collected. The data is collected for three bus routes per bus time keeper records for consecutive ten days including both week days and weekends.

Table 3.1 Number of observations of buses

Bus	Route		day	(Week end (
				`
Number	and	for 10	days )	for 10 days)
Stop				
221 -	At	726		162
Nittabuwa	stop			
(Giriulla-				
Nittabuwa				
174 – At E	Borella	1045		263
stop				
(Makumbu	ıra-			
Borella)				
192 – At M	alibun	426		105
Junction st	op			
(Maharaga	ma -			
Moratuwa]	)			

Source: Developed by authors (2020)



Figure 3.1 Sample of Time Table Source :By bus time keepers



## **Experimental Design**

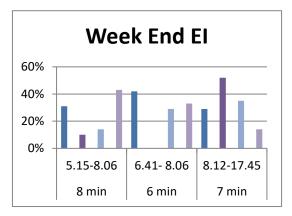


Figure 4.1 EI value for week end for 221 bus route Source: Developed by Authors (2020)

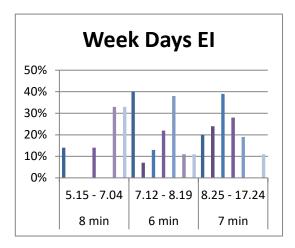


Figure 4.2 EI value for week days for 221 bus route
Source: Developed by Authors (2020)

Here shown in graphs, the 8 minuites, 6 minuites and 7 minuites are the scheduled headways for the time intervals of buses. Comparatively in the bus route 221 at Nittabuwa halt ΕI values the comparatively high in weekends to week days. The highest EI values are recorded nearly to peak times and in both week end and week days in the time slot of 7.12 a.m. to 8.19 a.m. and when it comes to off peak hours it is getting less gradually. In weekends the time slot 8.12 a.m.to 17.45 p.m. where scheduled headway is 7 minutes shows the highest EI values with a busy schedule.

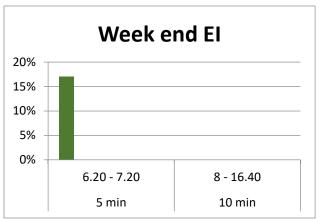


Figure 4.3 EI value for week end for 192 bus route
Source: Developed by Authors (2020)

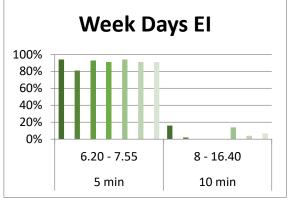


Figure 4.4 EI value for week days for 192 bus route
Source: Developed by Authors (2020)

The 5 minuites and 10 minuites shown in the graphs are the scheduled headways for the time intervals of buses at the stop. In the route number 192 at Malibun junction bus stop the week end EI values dosen't have a varitaion. For the time phase 6.20 – 7.20 a.m. the EI index is showing 17% of early arrivals or buses. And in week days also there's no busy schedule where varitaes among higher number of schedule headways. In the paek time from 6.20 to 7.55 where there's 5 minuites of schedule headway shows that buses are arriving early.

Figure 4.5 EI value for week end for 174 bus route
Source: Developed by Authors (2020)

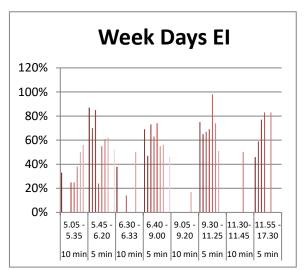


Figure 4.6 EI value for week day for 174 bus route Source: Developed by Authors (2020)

Here the times shown as 10 minutes and 5 minutes are the scheduled headways for the time intervals of buses at the borella stop. Comparing the route number 174 at Borella bus stop week days are busier than weekends. Most of the EI variations are recorded high in the peak hours of the days. And comparatively can be seen getting less only in off peak hours. Most of highest EI values are recorded in 5 minutes of schedule headway time phases. For weekends the EI values are recording not too less but not in a busy schedule.

This analysis shows that by using the existing data the performances of the buses can be evaluated taking the proposed measures. The analysis shows that in the peak hours the buses are arriving to the stop early. This means passengers assume for waiting time for a bus is getting less in peak hours, especially in morning. This shows a positivity of service reliably as people are lesser waste their time for a bus at a stop concerning their tolerance time.

#### **Discussion and Conclusion**

According to the study, in Sri Lanka Reliability is not an index that taken into concern when developing service quality in public transportation of buses. Throughout the discussion the findings disclosed that there is availability of data that can be used to measure reliability and the findings can be combined with scheduling of buses and it will help to manage a reliable service in traffic blocks also.

As per the practical aspects followed in Sri Lanka reliability is out of concern when taking system evaluation decisions. Even for bus scheduling they use only the passenger demand. They demand is taken by doing a "survey" from taking times that people gets crowed in the specific routes. For high crowds and peak times they crate approximately 5 minutes headways and develop the timetables and for low crowds they expand the headways and develop the time tables. There are no schedule developments or adjustments are done through any measurements. There are more practices can be developed by using this measurements rather than these basic collected actions. The data timekeepers provides scheduled arrivals and departures for each bus at the stop and actual arrival and departures are recorded by timekeepers. Most of recorded data are applicable for measurements. The data is sufficient for measuring EI.

This model allows tolerance. There is an improve version and the EI is also new index. This is literary improve for Saberi, K, Feng, & El-Geneidy, Definition and properties of alternative bus service reliability measures at the stop level, 2013 article. As recommendation, in here it is only considering about scheduled headway. But in future if anybody is considering about the actual headway and trying to develop a method for that, that might help for improve the development of



measuring bus service reliability at bus stops in public transport.

For future researches topics can be introduce as studying characteristics of headway distributions and delays using more data, networks and knowledge; Cost variance happens along with unreliability services at stop levels and practical side implementing of high technology BRT systems in Sri Lanka for service quality improvement of public transport. The study shows the limitations of data collection availability and the study is limited by technological systems used by other countries where Sri Lanka doesn't have. Mostly in every research articles transport data is collected through AVL (Automated Vehicle Location) systems where Sri Lanka is doing it manually, the accurate level of the information cannot be compared with the systematic results of information.

#### Acknowledgement

We wish to express our gratitude to the transport division of Borella Regional centre for giving important information to write up our research and clarifying our issues. Further we would sincerely express our gratitude to all our academic members of Department of Logistics Management for help hand and encouragement throughout these years. The special thanks for all the timekeepers for giving us the secondary data for the research in timely completion of the research report

## References

Diab, Ehab I., Madhav G. Badami, and Ahmed M. El-Geneidy. 2015. "Bus Transit Service Reliability and Improvement Strategies: Integrating the Perspectives of Passengers and Transit Agencies in North America." *Transport Reviews* 35 (3): 292–328.

https://doi.org/10.1080/01441647.2015. 1005034.

Firew, Tsegaye, Christoffer Weckström, and Milos Mladenovic. 2016. "Tsegaye Firew Analysis of Service Reliability of Public Transportation in the Helsinki Capital Region: The Case of Bus Line 550 Thesis Submitted for Examination for the Degree of Master Of," 1–107.

Kimpel, T J. 2001. "Time Point-Level Analysis of Transit Service Reliability and Passenger Demand." *Urban Studies and Planning*, no. July: 146. https://doi.org/10.1017/CBO978110741 5324.004.

Liao, Chen Fu. 2017. "Metro Transit Service Reliability Measures Assessment." http://cts.umn.edu/Research/ProjectDeta il.html?id=2016050.

Ma, Zhenliang, Luis Ferreira, and Mahmoud Mesbah. 2013. "A Framework for the Development of Bus Service Reliability Measures." Australasian Transport Research Forum, ATRF 2013 - Proceedings, no. October: 1–15.

Ruan, Minyan, and Jie Lin. 2009. "An Investigation of Bus Headway Regularity and Service Performance in Chicago Bus Transit System." *Transport Chicago 2009 Annual Conference* 31 (9): 14. https://www.researchgate.net/publicatio n/228924950%0Ahttp://files/69/Ruan et Lin - An Investigation of Bus Headway Regularity and Ser.pdf.

Saberi, Meead, K. Ali Zockaie, Wei Feng, and Ahmed El-Geneidy. 2013. "Definition and Properties of Alternative Bus Service Reliability Measures at the Stop Level." *Journal of Public Transportation* 16 (1): 97–122. https://doi.org/10.5038/2375-0901.16.1.6.

Paper ID 369

## Impact of Trade Openness on Economic Growth in Sri Lanka

Tharangi Wanigasuriya#

University of Peradeniya

#tharangizzzz@gmail.com

Abstract: Whether trade openness has a positive impact on economic growth is still open for debate. A group of researchers found in their study that it has a positive impact on the economy, whereas another group found that it has no effect or there is a negative impact. Therefore, this study examines the impact of Trade Openness on Economic Growth of Sri Lanka, over the period from 1990 to 2018, in a multivariate framework including trade openness, labour force, population, inflation and Fixed Direct Investment as repressors. Secondary data used for this study are from various sources such as the Central Bank of Lanka and World Development Indicators (WDI). To test the stationarity of the data, the Augments Dickey-Fuller (ADF) (Dickey and Fuller, 19810) was used, and it uses the Auto Regressive Distributed Lag Bounds test for co-integration. The results of this study show that Trade Openness, which was the main variable, has a positive relationship with the Gross Domestic Product in Sri Lanka in the short run while a negative relationship is indicated in the long run.

**Keywords:** Economic growth, Trade openness, Sri Lanka

## Introduction

There have been done several studies on trade openness and economic growth. But the controversial is continuing over the last few decades, whether the trade openness is a blessing for economic growth, or it is negatively affecting the economic growth. In 1990s, the Washington Consensus, a set of 10 major development policy, recommendations from Washington based

institutions, such as the International Monetary Fund (IMF) and the World Bank (WB) regarded trade openness as essential to the achieve higher economic growth. Paudel & Perera (2009) found that in the long run, labour force and trade openness have a positive impact on economic growth of Sri Lanka. Gimhani K.W.K & Francis S.J. (2016) implies that trade openness has a positive impact on economic growth in Sri Lanka. Keho (2017) showed that trade openness has positive effects on economic growth both in the short and long run.

As well as Malefane M.R. & Odhlambo N.M. (2018) found that trade openness has a positive and significant impact on economic growth and also Herath H.M.S.P. (2008) confirm a significant positive relationship between trade liberalization and economic growth in Sri Lanka. When those studies presenting a positive relationship Mizan A.N. (2019), suggested that trade openness has no effects on growth and there is economic unidirectional relation found from Export to GDP to import while Aslam A.L.M. (2017) found that the trade openness negatively and significantly had the long run relationship with the economic growth.

When consider about Sri Lanka, Sri Lankan government liberalized its economy in the later part of 1977. After the liberalization, the geographical border of Sri Lanka which had been opened to enter other countries into Sri Lanka for economical purpose. Because of this reason Sri Lanka had to face positive and negative experiences. Figure 1



shows the GDP and Trade openness trend from 1990-2018 in Sri Lanka.

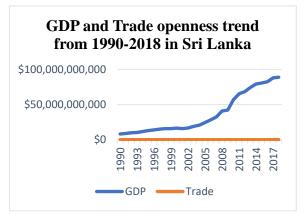


Figure 1: GDP and Trade Openness trend from 1990-2018 in Sri Lanka Source: Made by author

Against this background, the purpose of the current study is to examine the impact of trade openness and economic growth in Sri Lanka over the period 1990-2018. This study employs trade openness, inflation, population, labor force, fixed direct investment as the independent variables and Gross domestic Product as the dependent variable. The current study also takes into account the short-run and longrun impact of trade openness on economic growth using the autoregressive distributed lag (ARDL) bounds testing approach. The empirical findings of this study also add to the existing body of literature on openness and economic growth in Sri Lanka and to make policy changes.

This paper is organized into five sections. After the introduction, section 2 provides the reviews literature on trade openness and economic growth. Section 3 discusses the methodology used and the empirical results for the study is presented in section 4. Section 5 presents the conclusion of the study.

## **Objective**

#### Primary objective

To examine how trade openness impacts the economic growth in Sri Lanka in short run.

## Secondary objective

To examine how trade openness impacts the economic growth in Sri Lanka in long run.

#### Methodology

This research analysis is based on a multiple linear regression model, in which Gross Domestic Product is the dependent variable and 5 other independent variables where trade openness is the main independent variable. This study uses annual data covering the 1990 to 2018 and data were extracted from well-established data source of World Bank. In this research, data has been collected from the World Data indicators. A time series econometric method is employed for the study. The regression which was built using some selected variables following a study conducted by Paudel & Perera (2009) is shown below.

$$\begin{aligned} \mathit{LGDP}_t = \ \alpha_0 + \ \alpha_1 \mathit{LTO}_t + \alpha_2 \mathit{LPOP}_t \\ + \ \alpha_3 \mathit{LLF}_t + \alpha_4 \mathit{LINF}_t \\ + \ \alpha_5 \mathit{LFDI}_t + \mu_t \end{aligned}$$

Where, LGDP, LTO, LPOP, LLF, LINF and LFDI denote respectively logarithm of Gross Domestic Product, logarithm of Trade Openness, logarithm of Population, logarithm of labor force, logarithm of inflation and logarithm of Foreign Direct Investment.  $\mu_t$  is a white noise error term, t=1,2,T.

Trade Openness is the proportion of the total value of exports and imports of a country's good and services to the total GDP.

Trade Openness = 
$$\frac{Import + Export}{GDP}$$





Population is the total number of people of the country. Labor force is the total number of labor force in the country. Inflation is the current inflation of the country and FDI is the foreign direct investment.

empirical investigation involves following steps. The first step examines the stationarity of the variables using unit root tests. The second step tests the presence of long run and short run relationship. As the first step of the estimation, ADF and PP unit root tests were adopted to test the stationery property of data. When series stationary at I (0) and Autoregressive Distributed Lag (ARDL) model which was developed by Pesaran et al. (2001) can be employed to find out the long run and short run adjustment. The advantages of this method beyond other traditional methods are clearly specified in the econometric literature. The ARDL cointegration bound testing procedure is shown by following equation.

$$\Delta LGDP_{t} = \rho_{0} + \vartheta LZ_{t-1} + \sum_{i=1}^{p} n_{i} \Delta LGDP_{t-i}$$
$$+ \sum_{i=0}^{p} \pi_{i} \Delta LZ_{t-i} + \epsilon_{t}$$

Where,  $\vartheta = [\vartheta_1, ..., \vartheta_6]$  refers to the long run coefficients;

$$\begin{split} LZ_{t-1} &= \\ LGDP_{t-i}, LTO_{t-i}, LPOP_{t-i}, LLF_{t-i}, LINF_{t-i}, LFDI_{t-i} \end{split}$$

is the vector of explanatory variables with one lag;  $n_i$  and  $\pi_i = [\pi_{1i}...\pi_{3i}]$  refers to the short run dynamic coefficients.

$$\begin{split} LZ_{t-1} &= \\ \Delta LGDP_{t-i}, \Delta LTO_{t-i}, \Delta LPOP_{t-i}, \Delta LLF_{t-i}, \Delta LINF_{t-i}, \Delta LFDI_{t-i} \end{split}$$

denotes the vector of explanatory variables with lag i and  $\epsilon_t$  is the white noise error term. The error correction version of ARDL model is shown in following equation as a transformation equation of above equation.

$$\Delta LGDP_{t} = \beta_{0} + \sum_{i=1}^{p} n_{i} \Delta LGDP_{t-i}$$

$$+ \sum_{i=0}^{p} \pi_{i} \Delta LZ_{t-i} + \gamma ETC_{t-1}$$

$$+ \epsilon_{t}$$

Where  $\gamma$  is speed of adjustment which should be statistically significant and should have a negative sign.  $\epsilon_t$  is a pure random error term. The first stage of the estimation bound testing procedure is employed in order to investigate the existence of long run relationship. Meanwhile as this methodology considers both short run and long run relationships it facilitates policy making to attain expected changes of the economy through these variables.

#### **Results and Discussion**

In order to confirm the visual pattern between Trade Openness and Gross Domestic Product, the Confidential Ellipse is used. The following graph shows the Confidential Ellipse between the variables.

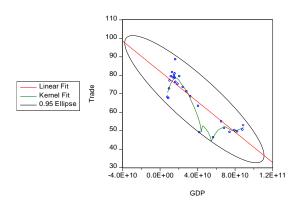


Figure 2: Confidential Ellipse between the variables

Based on the figure 2, it is confirmed that the Trade Openness and Gross Domestic Product are negatively correlated among them at 95% confidential level over the sample period for 1990-2018, since the regression line between the Trade Openness and Gross Domestic Product shows a negative relationship.



The descriptive statistics is the summary of all variables, which consists of Mean, Median, Maximum value, Minimum value, skewness and etc. Descriptive statistics can also be used to find the hidden features of the variables. To measure the dispersion of the data, standard deviation has been used.

The skewness value has been introduce to the shape of the bell curve. Jarque bera probability value has been described to test whether the data is normally distributed or not. The following table 1 shows the descriptive statistics of the variables.

Table 1: Descriptive statistics

	GDP	TRADE	POPULATION	LABOUR_FOR CE	INFLATION	FDI
Mean	3.66E+10	67.06213	19421225	7958380.	9.355182	473.0683
Median	2.07E+10	71.26118	19387153	8129521.	9.214160	272.0000
Maximum	8.89E+10	88.63644	21670000	8622275.	22.79926	1610.544
Minimum	8.03E+09	46.36389	17325773	7018310.	0.649042	43.35140
Std. Dev.	2.87E+10	13.28496	1224750.	500746.9	4.802910	417.0819
Skewness	0.719233	- 0.295760	0.093060	-0.584112	0.871421	1.072599
Kurtosis	1.877533	1.547736	1.962269	1.916301	4.133541	3.355753
Jarque-Bera	4.022679	2.971254	1.343095	3.068139	5.222918	5.713530
Probability	0.133809	0.226360	0.510917	0.215656	0.073427	0.057454
Observation s	29	29	29	29	29	29

For the descriptive statistics analysis, the raw data has been taken into account. In this data set there are 29 observations of the period from 1990 – 2018. In the descriptive statistics GDP's mean is 36 billion US\$ and the median is 20 million US\$. The maximum value of GDP is 88 billion US\$, in contrast the minimum value is 8 billion US\$.

Moving on the Trade Openness, mean is 67.06 and the median is 71.26. The maximum value of Trade Openness is 88.63 and the minimum value is 46.36. After liberalizing the economy in Sri Lanka, the trade openness is less volatile, which is proved by the standard deviation of the trade openness and GDP. Since the Trade Openness has less standard deviation

compared to GDP. According to the results, it denotes that there is a negative relationship.

In terms of population, the mean of the population is 19 million. The median is also 19 million. Moving on to the labor force, the mean is 7 million and the median is 8 million. The maximum value is 8.6 million while the minimum value is 7 million. In terms of inflation, the mean is 9.35 and the median is 9.25. The maximum value is 22.79 while the minimum is 0.64. In terms of Fixed Direct Investment, the mean is 473.06 and the median is 272. The highest value is 1610.54 while the minimum value is 43.35.



As mentioned in the research method, in order to test the integrated order of the variables, this study examines the stationarity of the variables by using Augmented Dickey Fuller unit root testing approach. The following table shows the co-integration position of the each variable.

Table 2: Stationarity of variables

	Augmented dickey fuller							
	level			1st differe				
Varible	intercept	intercept and trend	none	intercept	intercept and trend	none		
l_GDP	0.9996	0.8583	1	0.0165	0.0202	0.4358		
l_Inflation		0.0093	0.309	0	0	0		
l_Trade	0.8383	0.4494	0.4233	0.0015	0.0071	0.0001		
l_Labour force	0.8232	0.3956	0.966	0.0001	0.0004	0		
l_pop	0.8222	0.4001	0.321	0.0221	0.0011	0		

According to the results of ADF test, LINF is stationary at level while the other variables of the model are stationary at 1<sup>st</sup> difference implying that variables are stationary at combination of I(0) and I(1). Thus, series are of different integrating orders, so that it is suggested to proceed with ARDL model. According to the lag length automatic selection following Akaike Information Criterion (AIC) the best model is ARDL (2, 3, 3, 2, 3, 3) for the analysis.

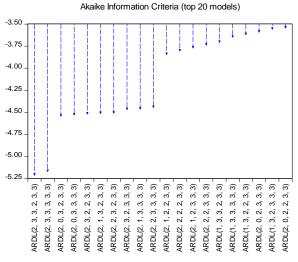


Figure 3: Akaike Information Criteria

As a pre-requisite for accurate estimations, diagnostic tests were employed and results are given in following table.

Table 3: The results of Diagnostic Tests

Test	Probability
Ramsey RESET test	0.2504
Heteroskedasticity test (BPG)	0.4675

Results of above mentioned diagnostic tests confirm that there is no specification error in the estimated model and disturbance term in the equation is homoscedastic, respectively. Meanwhile, recursive estimates CUSUM plot lies within the upper and lower critical bound at 5% significant level so that it ensures the stability of parameters.

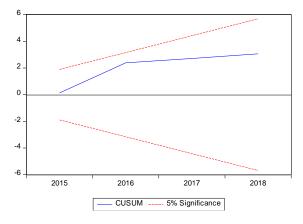


Figure 4: CUSUM plot

INTERNATIONAL RESEARCH CONFERENCE

As the next step of estimation Bound test was conducted.

Table 4: F- Test for the existence of a long run relationship

		utions					
F-Bound	95% L	evel	of	90%	Le	vel	of
test	Confidence			Confidence			
_	-	1		_	٦.	-	
F-	Lower	Uppe	r	Lowe	r  l	Jppe	er
Statistics	Bound	Bour	ıd	Boun	d E	Bour	ıd

22.903	2.62	3.79	2.26	3.35

The results of bounds test show that F-statistic is 22.90 which exceeds the critical value of upper bound, 3.79 ensuring the presence of long run relationship.

Table 5: Results of ARDL (2, 3, 3, 2, 3, 3) Model

Panel A: Lo	ong-run Coeffi	icient Estima	ates			
Constant	LTO	LPOP	LLF	LINF	LFDI	R <sup>2</sup>
	-1.289**	4.088	-2.211*	-1.0157	0.051	0.988
	(0.02)	(0.38)	(0.06)	(0.16)	(0.58)	
Panel B: Sh	ort run Coeff	icient Estim	ates	1		
Lag Order	ΔLGDP	ΔLΤΟ	ΔLΡΟΡ	ΔLLF	ΔLINF	ΔLFDI
0		1.008***	-0.879	3.668***	0.143***	-0.097***
		(0.0001)	(0.76)	(0.0004)	(0.0001)	(0.0004)
1	-0.9044***	0.017	51.848***	3.630***	-0.327***	-0.106***
	(0.0005)	(0.794)	(0.0003)	(0.0003)	(0.0001)	(0.0008)
2		0.287**	22.645***		-0.196***	-0.171***
		(0.011)	(0.001)		(0.0001)	(0.0003)
Panel C: Er	ror Correctio	n Represent	ation	1		
ETC(-1)	-0.586***					
	(0.0001)					

Note: probability values are given in parenthesis, \*, \*\*, \*\*\* show significant at 1%, 5% and 10% level respectively.

According to the results, the explanatory variable explained approximately 98 percent of the variation in GDP in Sri Lanka.

The independent variables which are trade openness and labour force are significant implying that these two variables affect the dependent variable, Gross Domestic Product in the long run. In line with one of the objectives of the study, trade openness negatively affects the GDP in the long run. Further this findings consistent with the findings of Aslam A.L.M. (2017).

Results of short run relationship and long run adjustment coefficients are represented in panel B and C respectively. With regard to short run relationship, labor force, inflation and FDI has positive and significant relationship with GDP in short

Accordingly, as expected, ETC (-1) carries a negative sign, which is highly significant, indicating that there should be an adjustment towards steady state line in the



long run equilibrium at the speed of 58.6 % one period after the exogenous shocks.

#### Conclusion

The results of this study have shown that trade openness, which was the main variable, has a short run and long run relationship with GDP in Sri Lanka. Trade openness and labor force have statistically significant relationship with GDP. This finding is consistent with Aslam A.L.M. (2017) who investigated the dynamics of trade openness in Sri Lanka. Therefore, this study conclude the reasons for having the negative relationship between the trade openness and gross domestic product that the import costing are greater than the export earnings. Therefore, this study advice to the government of Sri Lanka that the exports have to be increased rather than increasing the imports.

#### References

Andersen L. & Babula1 R. (2008). The link between openness and long run economic

growth. *Journal of International Commerce* and *Economics* 

Aslam A.L.M. (2017). Dynamics of trade openness in Sri Lanka. *World Scientific News*, 81(2):94-105.

Dao, A. T. (2014). Trade Openness and Economic Growth. *Mark A. Israel '91 Endowed Summer Research Fund in Economics.* 2. http://digitalcommons.iwu.edu/israel\_eco

nomics/2

Keho, Y. (2017): The impact of trade openness on economic growth: The case of Cote d'Ivoire, *Cogent Economics & Finance*, 5(1): 1-14. http://dx.doi.org/10.1080/23322039.2017.1332820

Paudel, R. & Perera, N. (2009). Foreign Debt, Trade Openness, Labor Force and Economic Growth: Evidence from Sri Lanka. The ICFAI Journal of Applied Economics, 8 (1), 57-64.

Paper ID 398

# **Examining the Use of Management Control Systems in Managing Perishable Goods: Evidence from Supermarkets in Colombo Area**

Ajaya Abeyrathne#, Heshani Perera and Harindu De Silva

Department of Management and Finance, Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defence University

#aabeyrathne119@gmail.com

**Abstract:** Managing perishable goods is a challenging job due to their short lifetime, the possible spoilage of the products with their nature, and the retail demand uncertainty. Majority of perishable goods get spillage due to lack of use of Management Control Systems. This study aims to examine the impact of managing perishable goods in supermarket performances. The research draws on Simons' (1995)Levers of Controls framework. The study is mainly based on diagnostic control systems and interactive control systems only. The quality of perishable goods assortment is becoming a core reason for many customers to deviate supermarket to another from one competitor. The MCS seems to have a critical impact on supermarkets when controlling perishable goods. A regression analysis was made on the data gathered through supermarkets based in the Western province by using a structured questionnaire, and the results revealed that perishable goods comprise a significant positive influence towards supermarket performance. As predicted, interactive control systems have a positively moderate impression on perishable goods in the direction of the supermarket performance. However, contrary to our expectation, diagnostics control systems also have a positive impact on managing perishable goods towards the supermarket performance.

**Keywords**: Management Control Systems, Perishable goods, Supermarket performance

## **Background**

The concept of supermarket is one of the blooming industries in Sri Lankan economy. The concept of supermarkets was delivered to Sri Lanka during early 1980's. Progressively they have captured a large quantity of consumers all over the Island and have established themselves as very dynamic and lucrative business within the country. Most of the supermarkets are owned by well-known leading corporations and companies throughout the country.

Supermarkets in urban areas have a higher demand as there are less number of flea markets for customers to buy fresh, quality perishable goods. Therefore, every supermarket needs a better Management Control Systems (MCS) to keep the richness of goods. MCS run a major role in controlling perishable goods. MCS is a measurement used to measure how well functions of a business performance help meeting the objectives and goals. MCS are the formal and informal structures that compare goals and strategy of a business adverse the actual outcomes (Chenhall, 2003). Both financial and nonfinancial measures are used in MCS (Chenhall, 2003). It is not incommensurate only consider the management control in supermarket. It should consider the chain of perishable goods from beginning to end of farmer to customer.

Nowadays, supermarkets are committed to provide better perishable goods for customers due to heavy competition in the



market, nowadays in Sri Lanka there are many number of emerging supermarkets. Therefore, it is their mandatory duty to provide better food to achieve the competitive advantage. For that there should be an efficient and effective management control system. The chain of supplying perishable goods plays a major influencing the management control system. It is crucial for the management to identify and understand the supply chain between the farmer and the supermarket. They must be considering the quality and the freshness of goods that are brought in to the supermarket premises. After the goods are brought in the perishable foods must be taken care of, necessary food must be stored in cold environment. The quality and safety of food being produced in a high consideration conditions are substantial degree influenced by the measure of the air coming into contact with the perishable goods.

In the present in Sri Lanka, supermarkets are emerging at a fast rate. In the early stages of supermarkets, they were only concentrated in locations in and around Colombo city, but nowadays leading supermarkets have established their outlets all over the country. The global marketplace for perishable goods as refrigerated products and prepared meals is becoming because of the dynamic lifestyles and in general diminishing duties. Due to their common fragility and restricted period of time, dealing with those goods is far more advanced and incorporates considerably higher dangers contrasted with durable items (Thron et al., 2007). Perishable goods are not safe every time that have acceptable level of risks including freshness, taste, status of quality (Siddh et al., 2015). If organizations do not properly manage perishable goods, it will have an impact on sustainability. United Nations sustainable development goals

also concern about preserving food (2007). UN evidence shows that majority of the people do not have enough food to eat and it has become very important in developing countries. One of the major reasons to arise this matter is the weakness of managing supply chain in food items. The purpose of this study is to examine how organization use MCS in managing perishable goods. The study draws on Simons's Levers of Controls (LOC) framework to examine how MCS are used to manage perishable goods. LOC consist of four controls, namely, belief system, boundary systems, diagnostic control systems and interactive control systems. Out of these four levers, this study refers diagnostic and interactive control systems.

#### **Problem Statement**

Majority of perishable goods get spillage due to lack of use of MCS. Specially, when transporting perishable goods to the supermarkets from villages, the quality and freshness are not in standard. But the cost of perishable goods has shown a serious increase across the world and perishable food supply chain quality is increasing rapidly but it is not still good in standard (Siddh et al., 2015). Supply chain integration has turned into a major approach for ensuring the reliable sourcing of fresh vegetables to urban supermarkets (Ruben et al., 2007). Wang Li- Juan (2012) recognized standard of distributing perishable goods in temperature controlled supply chains, namely, cold chains. Supermarkets should aware all activities in supply chain. By following the TQM supermarket can use the MCS in efficient and effective manner. In current scenario a large number of perishable goods are wasted due to lack of use of MCS. This is a common practice that most supermarkets have been experienced due to lack of understanding of their MCS.



#### Research Question

- 01. What extent MCS are used to manage perishable goods in supermarkets?
- 02. How perishable goods effect to the supermarkets' performance?

## **Objectives**

- 01. Examine the effect of perishable goods towards the supermarket performance.
- 02. Identify the effect of MCS when managing perishable goods.

#### Literature Review

Management Control Systems (MCS), as depicted in the English writing, obtain and utilize data keeping in mind the end goal to help the coordination of arranging and hierarchical control choices, with the objective of enhancing the aggregate choices inside the association (Horngren, Foster and Datar, 2000). MCS consider that the controls are portrayed by the utilization in business administration, covering execution estimation and reward frameworks by accomplishing foreordained levels (Otley, 1999). Simons (1995) characterizes the MCS as means for effective usage of the methodology. MCS contain formal and casual instruments and procedures utilized by associations to measure, monitor and manage with their execution to actualize techniques and accomplish their objectives (Horngren, Foster and Datar, 2000). More specifically, MCS play a significant role in (i) catching superior approaches and resources by generating new information, (ii) making dynamic competences, (iii) communicating internally in a more precise and vital way, and (iv) developing new products and services in a very systematic and strategic way. (Simons 1990, 1995, 2000; Chenhall 2003; Henri 2006; Grafton et al. 2010).

The purpose of this research is to examine how perishable goods are managed in supermarkets. Some authors have indicated to the different sorts of utilization of formal MCS (Simons, 1990, 1991, 1995a) or the different roles of MCS (Chapman, 1997, 1998) as clarifications for these clearly conflicting investigations. This research examines the use of MCS by using levers of controls (Simons,1995) in perishable goods with evidence from Supermarkets. In current time, the problem arises from the lack of freshness, quality of perishable goods.

There are four types of MCS that together work as levers of control (LOC): beliefs systems, boundary systems, diagnostic control systems and interactive control systems, which ought to be balanced so as to implement strategy effectively (Simons, 1994, 1995, 2000). These frameworks enable management to screen circumstances of improper goal setting and incompetence to achieve goals due to unexpected changes (Simons, 2000)

Below figure 1 shows the mechanism of the input, process and output functions and it is how engage with the management of an organization.

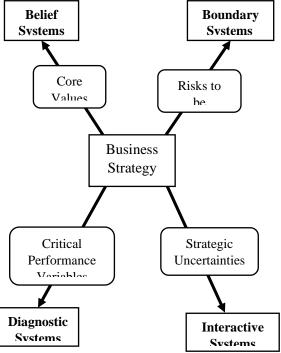


Figure 1. Controlling business strategy: Framework analysis (Simons, 1995) Source: Levers of Control



# A. Use of MCS in Managing Perishable Goods in Supermarkets

Management Control Systems are used in every aspect of supermarkets; it is very important to manage a good Management Control System in the supermarket. While MCS can be used in various activities such as input, process and output controls. This study focuses on how MCS van be used in managing perishable goods in supermarkets

## B. Theoretical Development

The present study looks to construct upon foregoing literature reviews focused on Simons levers of control framework (1990, 1991, 1995a, 2000). It focuses on the tensions between the organizational need for innovation and the organizational need for the achievement of pre-established objectives, and it points out the important tensions among mechanisms of formal MCS that need to be managed in order to successfully deal with these organizational needs. Depending on their design allocated, Simons classifies formal MCS in two categories: beliefs systems, boundary systems are feedback and measurement systems.

Furthermore. Simons clarifies the relevance of the style of use of control systems, recognizing two styles of use of feedback and measurement control systems: diagnostic control systems and interactive control systems. In particular, interactive control systems measurement systems that are used to focus attention on the regularly changing information that top-level managers consider to be of strategic importance. In difference to diagnostic controls, what symbolizes interactive controls is senior manager's strong level of contribution. Top managers pay every day and regular attention to interactive control systems, and get personally involved in them. (Bisbe and Otley, 2004).

## 1) Interactive Control System

This formal system used by top managers to regularly and personally involve themselves in the decision activities of subordinates (Simons1994). Interactive control systems are more likely to implement and encourage forward-looking creative ideas and strategic initiatives, and keep interactive relationships among employees (Simons 1995; Widener 2007).

considered this concept perishable goods the sale of perishable goods is vastly increasing while having considerable importance for supermarkets worldwide (Thorn, 2007), due to that managing them in good manner is highly important. Further to the above discussion regarding interactive control systems (ICS), it supports to reduce the gap between managers and employees. It could also consider similar as decentralization. Decentralization is the process by which the activities of an organization, particularly those regarding planning and decision making are distributed delegated away from authoritative location either group. Tee (2007,p.1355) described decentralization must be favored because it brings top management close to new technologies, the customer and the market. Usually MCS is doing a major role in quality, freshness, taste and fragrant in perishable goods which could affect the organization performance.

#### 2) Diagnostic Control Systems

This formal feedback system used to monitor organizational outcomes and correct deviations from preset standards of performance. Organizations also use diagnostic control systems to monitor employees to deliver tasks in line with organizational objectives by constraining their behavior (Simons 2000; Henri 2006; Widener 2007; Mundy 2010). In doing so, diagnostic control systems compare



organizational outcomes with preset standards. Therefore, diagnostic use of controls is recognized as a negative force that imposes constraints and emphasizes compliance with orders (Henri 2006).

The diagnostic control system is the formal system of organizational information that monitors results and corrects deviations from expected performance standards (Chenhall, 2007).

Levers of controls (Simons,1995) can summarize by using the what, why, how, when and who of the four basic levers managers use to control the formation and implementation of business strategy. Within measurement based control systems, a further distinction can be made according to the attention patterns of senior managers and the effects of these attention patterns on the formation and implementation of strategy.

## C. Difference between Diagnostic and Interactive Management Control Systems

Interactive Diagnostic and control frameworks are the parts of the systems that offer help in the execution methodologies or in adjusting concentrated conditions (Simons, 1995). The Diagnostic control framework tries to guarantee that choices line up with the objectives of the association (Simons, 1995). Oftentimes, when creators refer to MCS, they ordinarily just refer to the diagnostic data framework. The diagnostic control framework is the arrangement of hierarchical data that screens results and rectifies deviations from expected execution guidelines (Chenhall, 2007). Simons (1995) fortifies the significance of the interactive framework, which bypasses these issues and means give answers to administration components that were not considered in the already created vital process. arranging Therefore,

interactive control concerns the framework that includes administrators in the choices of subordinates; this present framework's focal point of consideration is on the parts of control that don't routinely show up in data frameworks (Abernethy and Brownell, 1999). The diagnostic framework includes two unique snapshots of control: (a) ex-ante, when goals and objectives are defined and at some point are approved for the short, medium, or long term; within the strategic planning, balanced scorecard, capital budget, and budget and rolling forecast; we can get a common view of the organization, common vocabulary, and focus on the critical success factors; and (b) the second very important moment concerns monitoring process when the organization follows up on goals, results, reviews key measures, and enables discussion on variations and provides inputs adjustments when they are required. The interactive control framework ought to animate the interest and discovering that make an association's new or developing procedures reasonable, not at all like the diagnostic control framework (Simons, 1995).

## D. Conceptual Framework and Hypothesis Development

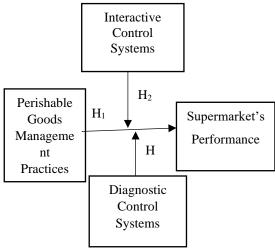


Figure 2. The conceptual framework of the study
Source: Developed by author



Figure 2 shows the conceptual framework and the proposed hypotheses in the study. The framework is conceptually grounded on the view of the firm and levers of control framework (Simons, 1995). We propose that the interactive use of MCS and the diagnostic use of MCS positively and negatively moderate the relationship between perishable goods management practices and supermarkets' performance, respectively. While the framework shows a direct perishable goods management practices between and supermarkets' performance.

**H<sub>1</sub>:** Perishable goods management practices have a positive impact on supermarkets 'performance.

When the perishable goods within the supermarket is in good condition it has a positive impact on the performance.

**H<sub>2</sub>:** The use of interactive control systems positively moderates the relationship between perishable goods management practices and supermarkets' performance.

We propose that the use of interactive control systems acts as an internal contextual moderator to the relationship between perishable goods management practices and supermarkets' performance

**H**<sub>3</sub>: The use of diagnostic control systems negatively moderates the relationship between perishable goods management practices and supermarkets 'performance.

Researchers proposes that diagnostic MCS have negatively moderated relationship between perishable goods management practices and supermarkets' performance as it reflect characteristics of mechanistic and traditional control systems.

#### **Data Collection**

In this study, population is the total number of supermarkets located in Colombo Metropolitan Area. Based on limited resources the sample was chosen from the all supermarkets in Colombo Metropolitan will consists of 50 supermarkets. The survey conduct by handing over a questionnaire among each supermarket in the selected sample. The questionnaire rating scale was the Likert format depicting responses on a scale of 1 to 7. "1" stands for "Not at all" and "7" stands for "To a great extent". There was basic information as demographic factors. educational qualification and working experience. They were designed in nominal and ordinal scale. Mainly there were four sub sets of questions which was built according to Likert format.

## **Data and Analysis and Discussion**

## A. Demographic profile

Regarding the position of the supermarket, the majority of the respondents were managers (48%) as well as around 36% were assistant managers and 16% were trainees contributed in this survey. This is very reliable information that 84% of respondent were managers. They are the people that having a considerable knowledge about the MCSs in the supermarkets. We sought to find out the gender distribution of the respondents and it was found out that 72% of the respondents were male representing 36 in number while female was 28% representing 14 in number according to survey. This is a reasonable sign that supermarkets situated in Colombo territory having higher portrayal of male representatives than female workers. The respondents were categorized into three groups under different age levels of 20-30, 30-40 and 40-50. Among them age group between 30-40 accounted for the majority (40%) of the respondents, and 34% of respondents are between the 20-30 age. The researcher sought to find out the working experience of the respondents and it was found out that 56% of the respondents were experienced 1-5 years.



34% of respondents have work experience more than 5 years. While 10% representing respondents who have experience below 1 year.

#### B. Correlation

Correlation coefficient (r) refers as a measure of the strength of the linear relationship between two variables. A positive correlation specifies that one variable increases the other variable also increase. A negative correlation shows that two variables are decreased (Bahna, 2009). Correlation value "1" indicates a perfect correlation and "-1" indicates an exact negative linear relationship. Based on the above results of correlation analysis, perishable goods and performance of supermarkets have positive correlation with other variables. The relationship between perishable goods 0.717performance is correlation coefficient. It is a high positive relationship. the diagnostic (0.582) interactive (0.212) control systems have positive relationship with perishable goods. Diagnostic (0.663) and interactive (0.219) control systems have positive relationship with performance. Therefore, diagnostic control systems have high relationship than the interactive control systems with perishable goods and performance.

## C. Regression

In this study Multiple Regression analysis was used to verify the consequences or impact of many independent variables on the performance of supermarkets branches. As results of below Table 1.

Table 1. Model Summary

Table 1. Model Summary							
Model	Model R		<sub>D</sub> R		Adjusted	Std. Error of	
Model	viodei K	square	R square	the Estimate			
1	0.717*	0.513	0.503	0.3364			

Source: Sample Survey (2018)

- a. Predictors (Constant): Perishable Goods
- b. Dependent Variable: Supermarkets' Performance

R2 value as 51.3% implying that the independent variable describes 51.3% of variance in dependent variable. This study dependent variable is performance while the independent variable is perishable goods. There is a 51.3% impact on the supermarket's branch performance from perishable goods. Not only perishable goods have an impact on performance, there are many variables which can make an impact on supermarket performance. employee empowerment, Such as, environmental factors, regulations and policies, personal beliefs.

The Table 2 is the ANOVA table that observed the overall regression model was significant under 95 % of confidence level. There are many criteria, but for this calculation only below stated criteria used. First one is to consider the "P" value, which is the significant value it should be below zero value. P can be described as the probability of finding the observed when null hypothesis is true. According to the results of ANOVA table, there can be so many independent variables, so out of them perishable goods seem to have a significant supermarket's performance. It can be identified by P < 0.05. F test is based on ratio of variances and used to perform a test. It is computed at mean square.

As results of below Table 2 "F" statistics computed at 5.726 and at 5% of confident level. This results implies that the regression model is sufficiently significant.



Та	ble	2:	AN	01	JΑ
1 0	DIC	- 4.	TILL	$\mathbf{v}$	<i>' ' ' ' ' ' ' ' ' '</i>

Model	Sum c	f	df	Mean	F	Sig.
	square			square		
1	Regressio	n	7.382	2.461	30.012	0*
	Residual		3.771	0.082		

Source: Sample Survey (2018)

#### D. Moderate Variables

The purpose of this study is to examine the moderating role of the use of MCS on the relationship between managing perishable goods and supermarkets' performance. More specifically with reference to Levers of Controls (Simons, 1995), the study examines the diagnostic and interactive use of MCS on the relationship.

The extent to which supermarkets appellant proper management control systems to managing perishable goods have a positive impact on performance. Yet degree to which supermarkets adopt enabling and controlling use of MCS seem to moderate the above relationship. Below equation indicates that method of calculate moderate variable.

$$[MV1 = (d.v*p.g)], [MV2 = (I.v*p.g)]$$

d.v - Standardized Diagnostic Variable

I. v. - Standardized Interactive Variable

p.g. - Standardized Perishable goods

Standardized regression coefficients are used for several purposes, selecting variables, deciding the relative importance of informative variables, examination the result of adjusting totally different variables etc. (Bring, 1994). In this study, we used standardized variables to examine the managing perishable goods toward the supermarkets' performance by adjusting different variables.

T" test used to compare means and check the different from each other. The Table 3 shows the t value and significant level of this study. "T" value should be "-1.97< t > +1.97". That is the standard range of t value. There is a 7.117 of "t" value at 5% of level

confidence and it is greater than 1.97. In Table 3 model 2 measured the t value of all three variables as perishable goods, diagnostic and interactive control systems. T value of diagnostic and interactive control system were 4.436 and 2.952 respectively. Therefore, the "t" value all three variables are greater than +1.97. The standardized beta coefficient measured the strength of the effect of each independent variable to the dependent variable. In this study, independent variable is perishable goods as shown in the Table 3 and dependent variable is supermarkets performance. By this coefficient, variable can easily compared to each other. High degree of beta coefficient indicates a high contribution to the dependent variable from independent variable. Therefore, in Table 3 model -1 indicates .717 of beta coefficient shows the high contribution of managing perishable goods effect to the performance of the supermarkets.

In model 2 of Table 3 measured beta coefficient of all three variables as perishable goods, diagnostic and interactive control systems. According that calculations beta coefficient of perishable goods is. 354. Diagnostic and interactive control systems have .539 and .305 of beta coefficient respectively. Three variables have a significant contribution to the supermarket performance.

When considering the significant values of each variable all three variables indicates significant values less than 0.05 (p < 0.05) under 95 % of level confidence. The final results of regression analysis can be constructed by using all three variables that are influenced to the supermarkets performance.

This study found out that supermarkets are used diagnostic and interactive management control systems. The way these MCS are used and which extend to these MCS are factors that effects



supermarket's performance. Thus, we have analyzed the fact that diagnostic and interactive control systems have a positive impact on supermarkets' performance. Further, diagnostic control systems have higher positive impact than the interactive control systems were proved out.

Diagnostic control systems were identified as a negative impact on organization performance according to prior literature (Wijethilake et al.,2016). Hence, it was a surprising nature that we have identified that diagnostic control system brought out a positive impact on supermarkets performance. The reason for such an unexpected result is the study made on perishable goods. Perishable goods are

fresh produce, dairy products, meat and drugs etc. Their freshness, taste, status of quality and fragrance may depend on the controlling method (Siddh et al., 2015). Therefore, tight control systems are required in order to control perishable goods.

We have understood that rather than employ empowerment and decentralization, tight control systems play a major role in controlling perishable goods as per the account of studies. As a final point. having considered above facts, diagnostic control systems includes positive impact in controlling perishable goods towards supermarket performance than interactive control systems.

Table 3. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	Constant	3.285	0.857		3.835	0.000
	Perishable Goods	0.441	0.147	0.354	3.002	0.004
	M Interactive C.S.	0.025	0.008	0.305	2.952	0.005
	M Diagnostic C.S.	0.045	0.01	0.539	4.496	0.000

M Interactive C.S = Moderate Interactive Control Systems

M Diagnostic C.S = Moderate Diagnostic Control Systems

Sources: Sample Survey (2018)

## Conclusion

Perishable goods are one of the main component to be found in supermarkets. This study sort to answer the questions to what extent the MCS effects to perishable goods towards the supermarket performance All the more particularly, MCS play a significant job in (i) catching prevalent methodologies and assets by making new knowledge, (ii) making dynamic capacities, (iii) conveying inside in a more efficient and key way (iv) growing new items and administrations in a methodical and vital way (Simons 1990, 1995, 2000; Chenhall 2003; Henri 2006; Grafton et al. 2010). Further, the study also focused on the Simons (1995) levers of control systems. We have concentrated only about diagnostic and interactive control systems out of four control systems in levers of control. Furthermore, it was examined that management of perishable goods and its effects to the supermarket performance.

The outcome result of the quantitative analysis was the identification of significant impact from perishable goods to supermarket performance. In light of these findings, not only interactive control systems but also diagnostics control systems both brought out a positive impact



in controlling perishable goods towards supermarket performance.

## Acknowledgment

Completion of this study would not be possible without the expertising of our research mentors. We would like to express our sincere gratitude for his continuous support, supervision, motivation and official guidance throughout the texture of our research in spite of his hectic schedule, who truly remained as a driving spirit in our research and his experience gave us the light in conducting the research well and helped in clarifying complex concepts. Besides our advisor, we would like to thank for all the support we received from our fellow senior brothers and sisters, staff members of Sir General John Kotelawela Defence University, and other officials who rendered their help to conduct the research. Last but not the least, we would also like to express our appreciation to all those, who are not mentioned but inspired us to make this research a success

#### References

Abokor, A., 2017. Supermarket Administration and Management system.

AL, K. H., Cole, C. & Guo, W., 2018. Analyzing the impact of different classical controller strategies on dynamic performance of production inventory using state space approach. Journal of Modelling in Management, 13(1), pp. 211-235.

Alt, E. D. '. -d.-C. E. &. L. '. -M. F., 2015. Linking employee stakeholders to environmental performance: The role of proactive environmental strategies and shared vision. Journal of Business Ethics, 128(1), p. 167–181.

Bahna, S. L., 2009. Annals of Allergy. Asthma & Immunology, 103(4).

Beuren, I. M. & Teixeira, S. A., 2014. Evaluation of management control systems in a higher eductaion institution with the

performance management and control. pp. 169-192.

Bisbe, J. & Otley, D., 2004. The effects of the interactive use of management control systems on product innovation. Accounting, Organization and Society, pp. 709-737.

Bo, W., 2011. The Cold Chain Management in Supermarket Case Study on the Fresh Food Logistics in a Supermarket, s.l.: s.n.

Chatzipetrou, E. & Moschidis, O., 2016. Quality costing: a survey in Greek supermarkets using multiple correspondence analysis. International Journal of Quality & Reliability Management, 33(5), pp. 615-632.

Chenhall, R. H., 2003. Management control systems design within its organizational context: findings from contingency-based research and directions for the future. Accounting, Organizations and Society, pp. 127-168.

Cunningham, G. M., 1992. Management control and accounting systems under a. Accounting, Auditing and Accountability Journal, Issue 5, pp. 85-102.

Deniz, B., 2007. Essays on Perishable Inventory.

Dillman, D. A., 2000. Mail and internet surveys: The tailored design method. 2nd ed. New York: NY: John Wiley and Sons.

Frezatti, F., De Souza Bido, D. & Machado, M. J., 2017. Impacts of Interactive and Diagnostic Control System Use on the Innovation Process. Brazilian Administration Review, 14(3).

Gajanayake, R., 2011. The Impact of Selected Visual Merchandising Techniques on Patronage Intentions in Supermarkets. Colombo District, s.n.

Griffith, C. J., 2006. Food safety: where from and where to. British Food Journal, 108(1), pp. 6-15.



Grønhaug, K. & Ghauri, P., 2005. Research Methods in Business Studies; A Practical Guide. 3rd ed. s.l.: Harlow: Pearsons Education Limited.

Henri, J.-F., 2006. MCS and strategy: A resource-based perspective. Accounting Organizations and Society, 6(31), p. 529–558.

Irani, Z., Beskese, A. & Love, P., 2004. Total quality management and corporate culture: constructs of orginizational ecellence. Technovation, pp. 643-650.

Jime'nez, J. M. R., Fuentes, M. d. M. & Arroyo, M. R., 2016. Knowledge Combination Capability and Innovation: The Effects of Gender Diversity on Top Management Teams in Technology-Based Firms. Journal of Business Ethics, 135(3), p. 503–515.

Kenney, J. L. &. G. S. P., 2006. Knowledge integration in organizations: An empirical assessment. Journal of Knowledge Management, 4(10), p. 43–58.

Kumar, S., 2008. A study of the supermarket industry and its growing logistics capabilities. International Journal of Retail & Distribution Management, 36(3), pp. 192-211.

Li, J. W., Hong, W. W. & Xi, C. S., 2012. Inventory control model for fresh agricultural products on Weibull distribution under inflation and delay in payment. Kybernetes, pp. 1277-1288.

Liao, Y. C. & Tsai, K. H., 2018. Innovation intensity, creativity enhancement, and eco-innovation strategy: The roles of customer demand and environmental regulation.

Liu, X., Tang, O. & Huang, P., 2008. Dynamic pricing and ordering decision for perishable food of the supermarket using RFID technology. Asia Pacific Journal of Marketing and Logistics, 20(1), pp. 7-22.

Lonng, J. T., Neogi, S., Caldwell, C. M. & DeLnge, M. P., 2017. Variation inflation factor based regression modeling of

anthropometric measures and temporalspatial performance: Modeling approach and implications for slinical utility.

Malmi, T. a. B. D., 2008. Management control systems as a package - Oppo-. Management Accounting Research, Issue 19, pp. 287-300.

Mugenda, O. a. M. A., 1999. Research Methods. Quantitative and Qualitative Approaches. s.l.: s.n.

Mundy, J., 2010. Creating dynamic tensions through a balanced use of MCS. Accounting Organizations and Society. 35(5), pp. 499-523.

Mwangi, A. G., 2013. Inventory management and supply chain performance of non-governmental organizations in the agricultural sector.

Porter, L. J. & Parker, A. J., 1993. Total quality management-the critical success factors. Total Quality Management, pp. 13-22.

Ramanathan, R., 2006. Stocking and discounting decisions for perishable commodities using expected profit approach. International Journal of Retail & Distribution Management, 34(2), pp. 172-184.

Rijipkema, W. A., G.A.J, v. d. V. J. & Rossi, R., 2014. Effective sourcing strategies for perishable product supply chains. International Journal of Physical Distribution & Logistics Management, pp. 494-510.

Saunders, M. L. P. & T. A., 2009. Research Methods for Business Students. 5th ed. s.l.: Essex: Pearson Education Limited.

Sebastian, S. H. W., Wilding, R., Yates, N. & Cotton, S., 2012. What drives perishable inventory management performance? Lessons learnt from the UK blood supply chain. Supply Chain Management: An International Journal, 17(2), pp. 107-123.



Sellers, R. R. & Mas, R. F., 2006. Economic efficiency in supermarkets: evidence in Spain. International Journal of Retail and Distribution Management, 34(2), pp. 155-171.

Sezen, B., 2004. Expected profit approach used in discount pricing decisions for perishable products. International Journal of Retain and Distribution Management, 32(4), pp. 223-229.

Shi, J., Zhang, J. & Qu, X., 2010. Optimizing distribution strategy for perishable foods using RFID and sensor technologies. Journal of Business and Industrial Marketing, 25(8), pp. 596-606.

Siddh, M. M., Soni, G. & Jain, R., 2015. Perishable food supply chain quality (PFSCQ): A structure review and implications for future research. Journal of Advance in Management Research, 12(3), pp. 292-313.

Simons, R., 1994. How new top managers use control systems as levers of strategic renewal. Strategic Management Journal, 15(3), pp. 169-189.

Simons, R., 2000. Performance measurement & control systems for implementing strategy.

Simons, R., 1990. The role of MCS in creating competitive advantage: New perspectives. Accounting Organizations and Society, 15(1), pp. 127-143.

Simons, R., 1995. Levers of control: How managers use innovative control systems to drive strategic renewal. Boston: Harvard Business Press.

Taherdoost, H., 2016. Sampling Method in Research Methedology: How to Choose a Sampling Technique for Research. International Journal of Academic Research in Management, 5(2).

Thron, T., Nagy, G. & Wassan, N., 2007. Evaluating alternative supply chain structures for perishable products. The

international Journal of Logistics Management, 18(3), pp. 364-384.

Watts, T. & McNair, C. C. J., 2012. New performance measurement and management control system. Journal of Applied Accounting Research, 13(3), pp. 226-241.

Widener, S. K., 2007. An empirical analysis of the levers of control framework. Accounting Organizations and Society, 32(8), p. 757–788.

Wijethilake, C., 2017. Proactive sustainability strategy and corporate sustainability performance: The mediating effect if sustainability control systems. Journal of Environment Management.

Wijethilake, C. & Lama, T., 2018. Sustainability core values and sustainability risk management: Moderating effects of top management commitment and stakeholder presure. Business Strategic Environment, pp. 1-12.

Wijethilake, C., Munir, R. & Appuhami, R., 2016. Environmental Innovation Strategy and Organizational Performance: Enabling and Controlling Uses of Management Control Systems. Journal of Business Ethics, 151(4), p. 1139–1160.

Woensel, T. V., Donselaar, K. V., Broekmeulen, R. & Fransoo, J., 2007. Consumer responses to shelf out of stocks of perishable products. International Journal of Physical Distribution & Logistics Management, 37(9), pp. 704-718.

Wonsuk, Y. et al., 2014. A Study of Effects of Multi Collinearity in the Multivariable Analysis. International Journal of Applied Science Technology, 5(4), pp. 9-19.

Zehir, C., Ertosun, O., Zehir, S. & Museldilli, B., 2012. Total Quality Management Practices' Effects on Quality Performance and Innovative Performance. Procedia-Social and Behavioral Sciences, pp. 273-280.



Zhu, X., Shi, Z., Zhang, Y. & Liu, F., 2013. Improvement of the Supermarket Management System based on Commercial Category.

## **Author Biographies**



Ajaya Abeyrathe is reading Executive MSc. Supply Chain at AeU University of Malaysia. He is completed B.Sc. in

Logistics Management – Specialization in Supply Chain at the General Sir John Kotelawala Defence University of Sri Lanka. He has a higher diploma in Accounting and Finance. He is also passed finalist in AAT Sri Lanka.



Heshani Perera is Reading Executive MSc. Supply Chain in AeU University of Malaysia. She is completed B.Sc. in Logistics

Management – Specialization in Supply Chain at the General Sir John Kotelawala Defence University of Sri Lanka.



Harindu De Silva is completed B.Sc. in Logistics Management – Specialization in Supply Chain at the General Sir

John Kotelawala Defence University of Sri Lanka.

Paper ID 399

## Effects of Inventory Management Practices on Perspectives of Employees in Apparel Sector of Western Province in Sri Lanka

RN Nishshanka#, ORS Jayaneththi, VADPK Vithana and DD Lokuge

Department of Management and Finance, Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defence University

#rosheth.nirasha@gmail.com

**Abstract:** Inventory items play a vital role in which it relates with all aspects of the warehouse. To manage the inventory items efficiently and effectively, warehouses adopt various inventory management practices in multiple aspects. As the working environment of employees recruited to the warehouse is affected much by those practices, the researchers met with the question whether practices do have an effect on the satisfaction and motivation of employees. Literature reveals that many other extrinsic and intrinsic dimensions which affect employee motivation and satisfaction have been reached, but a sufficient study has not been done to build a sophisticated body of knowledge on the impact of inventory management practices on employee motivation and satisfaction. The study was decided to conduct on a qualitative manner because it deals with human attitudes and behaviours. In order to conduct the study, two parties were interviewed in-depth until a saturation of data was observed. Thereby, the collected data were analysed using two analytical tools, namely thematic analysis and discourse analysis. The analysis generated the finding in which the inventory management practices have a remote relationship on the employee motivation and satisfaction together with other findings; in the current context, traditional policies which were included in theories not practiced in majority warehouses, and instead they have some customized practices.

Meanwhile it was found that employees were focusing more on other motivational aspects such as allowances, remuneration and welfare benefits other than the inventory management practices.

**Keywords:** Employee motivation and satisfaction, Inventory management practices, Employee perspective, Manager perspective

#### Introduction

Apparel industry provides a significant contribution to the Sri Lankan GDP as exports since 1986. The percentage of contribution is about 52% of the total exports earning is from the apparel industry. Apparel industry provides a great contribution to the level of employment of the country by contributing with a significant percentage of 5% with an employment count of about 330000 employees over 1060 garments island wide (central bank report of Sri Lanka-2018)

At one time, employees were considered just another input into the production of goods and services. What perhaps changed this way of thinking about employees was research, referred to as the Hawthorne Studies, conducted by Elton Mayo from 1924 to 1932 (Dickson, 1973). This study found employees are not motivated solely by money and employee behaviour is linked to their attitudes (Dickson, 1973). One of the greatest challenge organizations face today is how to manage turnover of work force that may be caused by migration of a lot of industrial workers.



This may be because of their lack of Motivation and commitment for the organization; this point of view emphasizes the importance of the study of Motivation and its relationship to Job Satisfaction (Singh and Tiwari, 2011). Every successful organization is backed by a committed employee base, and the commitment is the outcome of motivation and job satisfaction. It is the energy that compels employees towards organizational objective. It would be impossible for the organization to generate performance without commitment. In order to create a competitive advantage organization, need to have a competitive employee policies and practices (Varma, 2017)

When considering employee the perspectives, this research mainly focuses on the outlook of the employee motivation and satisfaction. Motivation is an important which directs stimulation human behaviour. No individual has same attitude or behaviour, hence in midst of this diversity organization are supposed to frame practices which will be able to satisfy the group and not just an individual (Varma, 2017). According to Chan and (1991).the organizational Lynn, performance basis must attach the profitability, productivity, market effectiveness and customer satisfaction with the confidence of the employees, whereas the behaviour of employees holds a crucial role in the organization. As per Gungor (2011), pointed out organizations are seeking to develop, motivate and increase the performance of their employees in a variety of human resource applications.

When consider the ongoing processes in the organization, it is important to pay much attention on inventory management and warehouse practices in the inventory management systems. As per Lavely (1996), Inventory management is the active control plan of actions, which

permits an enterprise to conduct its manufacturing, purchases, payments, sales, and distributions. So, to keep the inventory management in warehouse in an effective and efficient way, there are well prepared and maintained management practices in the warehouse to keep the work flow in an effective way continuously. As the part of warehouse, the management must concern on employees and implement warehouse practices which effect on employees in a better way. When the employees are satisfied with their working schedules, it is benefit to the organization. According to Duncan (2000) satisfied shell and employees are more positive work environment for organizations to create work, because job satisfaction is more important for the organization.

## Statement of Problem

This research is mainly focus on the relationship of the inventory management practices in the perspectives of employees regarding motivation and satisfaction of the employees in apparel industries in western province. Here in this study it refers on inventory management practices which effect on the perspectives of employee in the operational and executive levels express the use of traditional inventory management practices on modern warehouse processes. Finally, it pays attention on the awareness of employees towards the inventory management practices.

When studying in this area, many researchers payed attention on effects of inventory management practices for development of employee satisfaction and also there are studies which concern on connection of effects of other respective areas on the employee motivation or talk about perspectives of employees such as Mpwanya, 2005 (Inventory management as a determinant for improvement of customer service (Lewis et al., 1998). But



there is no any study which concern on effects of inventory management practices on the perspectives of employees in apparel industry. It will be the gap of the study.

Objective of the Study

The objectives consider in the studies is to investigate the effects of inventory management practices on employee perspectives on motivation and satisfaction in garment/apparel manufacturing industry

#### **Experimental Design**

The problem statement will articulate how the inventory management practices will influence on the employees who are work in warehouses. Thereby, the research is adjoining with behaviours, feelings, emotions, attitudes of employees. Thus, it is better to adopt Qualitative methods since it is dealing with motives and attitudes of employees (Creswell,1998). Furthermore, McDaniel and Gates (1999) had also underscore the usefulness of maintaining the qualitative methods when the overall research objectives are interpretations and understanding of meanings.

Accordingly, the summary of Research onion can be expressed as, a qualitative research with Interpretivism philosophy, inductive approach, multiple method qualitative choice, and cross-sectional time series, respectively. Moreover, data analytical tools would be both thematic and discourse analysis which will be further illustrates in following sessions.

The researchers have gathered data about the attitudes and feelings of executive and operational level employees in relation to the inventory management practices through a semi-structured interview guide with 16 questions for managers and 12 questions for employees. The data have been gathered in cross sectional time

period by the researchers for 3 months (90 days) time period

Managers and employees who are work in apparel sector warehouses in Sri Lanka has been conceded as the population. Under Non Probabilistic convenient sampling method the researchers have conducted research and after visiting organization in the apparel sector the researches have come to a data saturation point because the researchers found that unique information are being provided by elements in the sample. With that the researchers have concluded the data collection.

Furthermore, Thematic analysis is an independent qualitative data analytical tool which describes methods for identifying, analyzing, and reporting themes within data Braun and Clarke (2006) also researchers have followed up the basic six steps of familiarisation with data, coding, searching for themes. Reviewing themes, defining and naming themes and writing up. In order to ensure the reliability of the outcomes, the researchers have also further analysed data under discourse analysis as well.

The research was conducted with the primary purpose of finding the effect of inventory management practices on the perspectives of the employees' mind-set in relation to the apparel industry in the western province of Sri Lanka. Thereby the researchers identified eight categories after conducting open coding and axial coding.

#### **Analysis**

As per the thematic discussion, the responds were recorded at the data collection was analysed using managers and the employee perspectives separately. At the manager perspective analysis researchers have recognized open codes such as Outsourced, Frequency of audits,



Base of audits Per order issue, Availability, make order. Customized integration of two or more above, Issuing based on a pre-planning. The axial codes which derived through the open codes utilized to conduct in-depth interviews with respondents are announced. unannounced/sudden, Order chart. Priority chart. The researchers identified that in the contemporary inventory management practices what are the salient factors considered at the inventory management. Meanwhile the managers exploited the view of them, how will the inventory management practice effect on the employee mind-set. In case the first theme identified was Warehouse Utilization. For the respective theme, the managers have responded as follows, 'We use a decentralized structure', 'We have got warehouses for each sub businesses', 'We use a centralized structure. Because we always try to use the warehouse as minimum as possible and adopt Just in time concept', 'We use a centralized structure', 'We have a centralized warehouse. As we only have 2 retail outlets we found it easy to use a central warehouse', 'earlier we have practiced decentralized warehouse system but now we have planned to have a centralized warehouse because, by having warehouse for each branch will cost and sometimes it may go out of control', 'We have a centralized warehouse system because it is very much easy for us to handle all the inventories from a centralized point since reduces unnecessary costs and wastages'

When it is considered with the employees the employees were interviewed by the researchers in deep along with a separate interview guide. When revealing with the facts it was identified that the employee intention, courage towards working in the warehouse environment are affected through the inventory management practices of the warehouse. Both positive

and negative perceptions were revealed through employee responds. As an example when it comes to the first theme derived by the employees' interviews was 'Types of Inventory Items Hold in Warehouses' and the respondents responded 'There are mainly 2 types of inventory items that we hold in our warehouse. They are raw materials which includes fabric and cut panels. 'We basically handle the inventories such as silk, cotton, poplin, satin, lace and finished garment items. 'We are handling women's wear such as skirts, blouse, frocks, kids wear such as frocks, shirts, napkins, men's wears such as shirts, trousers, t-shirts, collarless shirts and sport wears such as bottoms, body armours, tights, fancy items such as watches, shoes, bags etc.'. 'We only handle the ladies wear garment items like casual wear, party wear, night dresses, under wears for female and trousers, skirts, salwar, sarees etc.'. 'Mainly inventories such as fabric rolls, cut panels, buttons, zip, polythene, hard boxes etc. also the finished garments', 'Basically, raw material is the main type of inventory held by the warehouse in addition to that other materials which adds the value of garments such as sequence, buttons, zip etc.'

#### **Discourse Analysis**

In the discourse analysis both operational level employees and the managerial employees' responds were taken into a single platform in which the contradicting points were considered with the similar points revealed through respondents were discussed at once. The first section of the discourse analysis can be elaborated as follows, 'Firstly, when take the information and details of the organization 1, there are gathered data from the managerial viewpoint and employee view point. So when it comes to the knowledge of what kind of inventories that holding in the warehouse, the warehouse manager he has a clear idea on



the items that holding inside the warehouse since he explains how the sub items and main inventory items that hold in the warehouse. When it comes to the employee, he knows the basic idea on the inventory items that his ware is managing. He stated as "There are mainly 2 types of inventory items that we hold in our warehouse. They are raw materials which includes fabric and cut panels." There by the knowledge on the inventory items that are handled inside the warehouse, have a little gap but both sides have the idea from different levels. Thereby through this research it can be suggested that Organizations need to take necessary steps to educate employees which lead to increase the confidentiality of employees in order to increase the productivity of the employees in the warehouse. Meanwhile steps to increase employee literacy on inventory management should be taken in order to get the employees motivated in the warehouse

#### Conclusion

The study was carried with the primary objective of finding the nature of the relationship from inventory management practices to the employee perspectives.

Thereby the key finding can be concluded that the inventory management practices have a remote relationship for the employees' perspectives in which it can be integrated with the other motivation and satisfaction aspects such as allowances, remuneration and welfare benefits in order to increase the motivation and satisfaction of the employees of the warehouse. In addition, as per the findings of the study it was found that the warehouses are currently utilizing much customized warehouse inventory management of the practices. Average amount warehouses utilize the basic concepts in the traditional practices when they are designing the warehouse practices. Meanwhile additional findings of the study reveals that the majority of the employees who are working in the warehouse are not aware on the inventory management practices but in fact they are familiar on the basic aspects of the practices practiced inside the warehouse. When considering on this study the new theory of 'inventory management practices are minor tools for generating perspectives on employees' motivation and satisfaction

As per the findings of the research the researchers were able to conclude the research findings through a thematic map



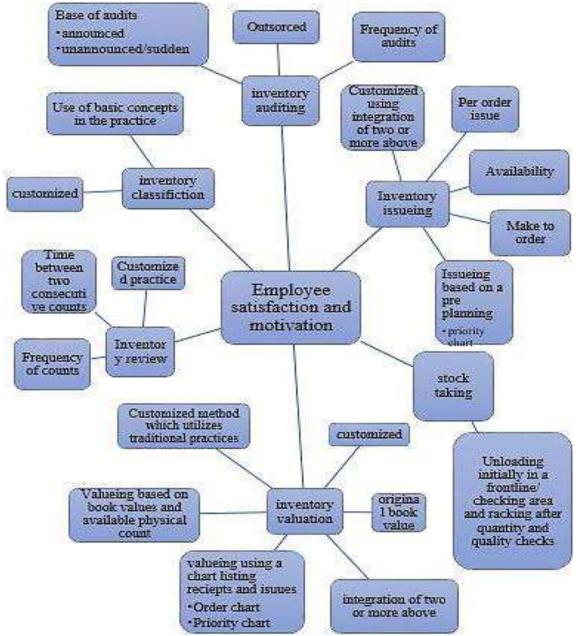


Figure 1: Theoretical framework(thematic map)
Source: Authors

#### References

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qual.Res. Psych*, Issue no. 3, pp. 77–101.

Chan, L. and Lynn. (1991) 'Performance evaluation and the analytic hierarchy process.' *Journal of Management Accounting Research*, Volume 3, pp. 57-87.

Creswell, J. (1998) 'Qualitative Inquiry and Research Design.' *Choosing among Five* 

*Traditions,* Thousand Oaks, Calif.: Sage Publications.

Dickson W. J., 1973. Hawthorne experiments, In C. Heyel (ed.), The encyclopedia of

management, 2nd ed. (pp. 298-302). New York: Van Nostrand Reinhold

Duncan, K. (2000) 'Recent development in labor theory of value.' *SAGE journal*.



Gungor, P. (2011) 'The Relationship between Reward Management system and Employee Performances with the Mediating Role of Motivation.' *Procedia-Social and Behavioral Sciences*, 24, pp1510-1520

Lavely, R., 1996. 'Can you profit from improved inventory management.' *Auto Inc Magazine*, Volume XLIV No.3.

Singh S. K .and Tiwari, V., (2011) 'Relationship between motivation and job satisfaction of the white collar employees: a case study, SMS Varanasi', Vol. VII, No. 2; Dec 11, pp 31-39.

Varma, D. (2017) 'Importance of employee motivation & job satisfaction', *International Journal of Social Science & Interdisciplinary Research.* 

Paper ID 424

# Factors Associated with Employee Job Satisfaction: A Case Study on National Film Corporation, Sri Lanka

LN Liyanage#

Department of Social Statistics, University of Kelaniya

#lashi.navi@gmail.com

**Abstract:** The aim of this study is to determine the most important factors affecting the job satisfaction of employees. Job satisfaction means the amount of favourableness towards one's job. This was a case study at the National Film Corporation in Sri Lanka, which applied a descriptive research design and a crosssectional analysis. The study involved collection of primary data from a sample of 52 employees from various departments of the National Film Corporation. This study is based on questionnaire method, and the non-probability sampling method of convenience sampling was used in the study. Through a widespread literature research, few factors were identified. Out of those factors most influential factors were identified using the collected data. The data was analyzed using SPSS and Excel software. A normality test was done to check on the data given by respondents, and a reliability test was carried out to test the degree of reliability of the data gathered from the respondents. Correlation Analysis was done to find the association between variables. This study revealed that there are five main factors associated with employee job satisfaction. They are fringe benefits, organizational structure, job security, and freedom and relationship with colleagues. Numerous recommendations of this research are emphasized and recommended to the government and stakeholders. Limitations and course of action for future direction of research were also discussed.

**Keywords**: Employee satisfaction, Human capital, Job satisfaction

## Introduction

In the modern world employees have become the main strength of the company or the organization that they work for. The productivity of the company depends on the performance of its employees. So the satisfaction of employees is becoming a part of organizational strategy. Job satisfaction is a vital part of any professional organization. It affects to the attitude that one develops towards one's job in due course of time or the positive feeling one gets from the job. With the growth of industrial revolution this topic has expected tremendous significance as the success of any organization depends on the competence of its employees and it can only be achieved if a worker is satisfied with his working conditions. It is observed that if a worker is not satisfied with his work, then both the quantity and quality of his output tend to agonize. On the other hand, if the satisfaction of employees increases, then there is an improvement in both the quality and the quantity. An organization has a great chance of being successful when employees are properly directed towards accomplishing corporate goals (Gupta & Subramanian, 2014).

Promotional opportunities and learning prospects are important in an organization. Next, the employee will be motivated and satisfied if the business grows in time while expanding their operations both locally and internationally (Ozsoy, 2019). In a complex and dynamic environment, leader of the organization used to create the



environment in which employee feel trusted and are empowered to take decisions in the organization which leads to enhance motivation level of employee and ultimately organizational performance are enhanced. Smith and Rupp (2003) stated that performance is a role of individual satisfaction, organizational strategy, and resistance to change. Likewise, Luthans and Stajkovic (1999) concluded that the advancement of human resources through rewards, monetary incentives, organizational behaviour modification has generated a large volume of debate in the human resource and sales performance field. A study done in Sri Lanka found out that pay and benefits, interpersonal relationships, and job security greatly affect the level of employee motivation and to the level of job satisfaction. That study stated that the company should motivate their employees to achieve better company bt providing higher employee satisfaction (Kumarasinghe, 2012).

Though the Sri Lankan film industry is doing a great service to the country, day by day its presence gets demolished. Due to the easy access to internet people watch films at their homes without going to film halls. This situation makes employees in the film corporation less motivated and less satisfied to do their work. Hence, when compared with other organizations, it has been identified that the Sri Lankan Film Corporation could also achieve a higher production level than the current rate, if the employees in it have a higher job satisfaction.

So the main objective of this study is to identify the factors associated with the job satisfaction among the employees in the National Film Corporation, Sri Lanka. This study also intended to reveal the current level of satisfaction among the staff members of the National Film Corporation, Sri Lanka.

## Methodology

This was a case study at the National Film Corporation in Sri Lanka, which implemented a descriptive research design and a cross-sectional analysis. The study involved collection of primary data from a sample of 52 employees from various departments of the National Film Corporation, Sri Lanka.

The non-probability sampling method of convenience sampling was used in the study. Convenience sampling is a non-probability sampling method where subjects are selected based on their accessibility and this causes less hassle for both researcher and participant to fill the questionnaire given to them (Kothari, 2004). Questionnaires were used to collect primary data. The questions covered five areas in relation to fringe benefits, organizational structure, job security, freedom and relationship with colleagues, which are the variables that affect employee job satisfaction.

The data has been analysed using statistical models so as to arrive at the established research hypotheses and objectives. The descriptive data was analysed using SPSS and Excel software. A normality test was done to check on the data given to respondents and a reliability test was carried out to test how reliable the data which was gathered from the respondents was. Correlation Analysis was done to find the association between variables.

To come up with conclusions the following hypotheses were made.

H1: There is a significant relationship between employee job satisfaction and fringe benefits

H2: There is a significant relationship between employee job satisfaction and organizational structure



H3: There is a significant relationship between employee job satisfaction and job security

H4: There is a significant relationship between employee job satisfaction and freedom

H5: There is a significant relationship between employee job satisfaction and relationship with colleagues

#### **Data Analysis**

## A. Demographic Features of the Sample

This study aimed to establish the gender structure of the identified sample. So 75% (39 respondents) were male and 25% (13 respondents) were female. There were 32 married respondents (61.5%) while the percentage of unmarried respondents was 38.5% (20 respondents). Accordingly, the majority of the sample was the married respondents. The majority of the sample had more than 15 years of experience (44.23%). The second majority at 32.69% includes those who have experience of between 10 to 15 years. The lowest number of respondents had experience of less than 5 years (9.62%). Only 13.46% of the sample had experience of 5 to 10 years.

In the case of race, 92.3% of the sample was Sinhala respondents and the percentage of Tamil and Muslim races were respectively

5.8% and 1.9%. When it considering religion, 76.9% of the sample was Buddhist respondents and the percentage of Christian, Hindu and Islam religions were respectively 15.4%, 5.8% and 1.9%. When this research considered the level of education of the sample, the majority, 18 respondents (34.6%) of the sample mentioned their maximum level of education was G.C.E. A/L, 13 respondents (25%) were educated up to their first degree. The groups who had been educated up to G.C.E. O/L and obtained a diploma were similar in this sample. They consisted of 8 respondents (15.4% of the sample). There were only 5 people who have completed the postgraduate education. That was only 9.6% of the sample.

In the case of the age group of the sample, a majority of 46.15% (24 respondents) belonged to the age group of 24 to 30, 34.62% (18 respondents) belonged to the age group of 31 to 40, and 11.54% (6 respondents) belonged to the age group of 19 to 23. This sample consisted of only 4 respondents (7.69%) who belonged to the age group of 41 and above.

#### B. Normality Test

Normality of the variables of this study is measured using the Skewness and the Kurtosis.

Table 1: Normality Test

	N	Skewness		Kurtosis	
	IN	Statistic	Std. Error	Statistic	Std. Error
Jo Satisfaction	52	669	.310	633	.650
Fringe Benefits	52	354	.310	930	.650
Organizational Structure	52	618	.310	588	.650
Job Security	52	584	.310	013	.650
Freedom	52	174	.310	593	.650
Relationship with Colleagues	52	618	.310	588	.650

Source: Survey Data, 2019



The variables were normally distributed because of the average value of skewness for all the variables is between -1 and +1 while the average value for kurtosis of all the variables is between -2 and +2 (George & Mallery, 2010).

## C. Reliability Test

The reliability of the questionnaire was determined using the Cronbach Alpha value which was derived from independent variables and the dependent variable of this study.

Table 2: Reliability Test

Table 2. Reliability Test						
Factor	Number of	Cronbach's				
ractor	components	Alpha value				
Jo Satisfaction	04	0.812				
Fringe	04	0.716				
Benefits	04	0.710				
Organizational	04	0.732				
Structure	04	0.732				
Job Security	04	0.804				
Freedom	04	0.732				
Relationship						
with	04	0.792				
Colleagues						

Source: Survey Data, 2019

Since the Cronbach's Alpha is > 0.7 for all variables, we can conclude that the consistency level of the scale and sample is high (George & Mallery, 2010).

### D. Correlation Analysis

To come up with the factors affecting the motivation of employees working at the National Film Corporation, Sri Lanka, the following hypotheses were tested using the Pearson's Correlation Test.

Table 3: Correlation Analysis

Hypotheses	Correlation	Sig value	Decision
H1	0.861	0.000	Accepted
Н2	0.641	0.000	Accepted
Н3	0.782	0.000	Accepted
H4	0.654	0.000	Accepted
Н5	0.772	0.000	Accepted

Source: Survey Data, 2019

According to the results it can be identified that there are significant relationships between dependent variable of employee satisfaction and the independent variables of fringe benefits, organizational structure, job security, freedom and relationship with colleagues. All the independent variables show positive relationships with the dependent variable.

So when each and every independent variable increases, the employee satisfaction will also increase. The variable of fringe benefits shows the highest association with employee motivation. The lowest relationship shows by the independent variable of organizational structure.

#### **Conclusions and Recommendations**

Salary and the benefits are a key factor in employee satisfaction in an organization. Employees do jobs to get a salary hence how much they get paid plays a vital role towards retaining employees in a job. Organizational structure in an organization is the human resources and infrastructure facilities and logistical arrangements provided by an organization for the staff. Nowadays, most organizations are focused on achieving their business targets and hence, it requires additional commitment from staff. Hence organizational structure also should have a decent consideration in order to increase employee satisfaction. The relationship among employees and with management also plays a significant role in job satisfaction. Good supervision



will guide staff towards achieving the organization goals, whereas bad supervision can lead to heavy absenteeism and high turnover which are factors of poor motivation levels. In any company, employees should get a considerable amount of freedom too. If they are limited by many restrictions, they tend to dissatisfy over them. So its also necessary to have a favourable working conditions in a company.

The National Film Corporation of Sri Lanka should have a structured salary scheme customized for each role / job and grade. Necessary arrangements should be taken launch actions to shift arrangements from one to another. Regular training and mentoring opportunities should be given to the supervisors to upgrade their leadership skills. There should be a well-structured performance evaluation scheme wherein good/ bad talent is identified transparently and is recognized by ways of promotions / demotions. The Open Door culture wherein staffs are encouraged to meet the top hierarchy without prior appointments and also where the staffs are also given an opportunity to voice their opinion and partake in decision making should be done. By doing so, the level of employee job satisfaction in the National Corporation of Sri Lanka can be increase.

## References

George, D. and Mallery, P. (2010) SPSS for Windows Step by Step A Simple Guide and Reference 17.0 Update. 10th Edition, Pearson, Boston.

Gupta, B., & Subramanian, J. (2014). Factors affecting motivation among employees in

consultancy companies. *International journal of engineering Science Invention*, 3(11), 59-66.

Kothari, C. R. (2004). Research Methodology: Methods & Techniques. New Age International (P) Ltd. https://doi.org/10.1017/CBO978110741 5324.004

Kumarasinghe W. H. (2012). Factors Influencing Employee Motivation: A Case Study in Ceramic Tile Manufacturing Industry in Sri Lanka (Master's Thesis). University of Moratuwa, Moratuwa, Sri Lanka

Luthans, F., & Stajkovic, A. (1999). Reinforce for performance: The need to go beyond pay and even rewards. *Academy of Management Perspectives*. 13(2), 49-57.

Ozsoy, E. (2019). An empirical test of the Herzberg two-factor theory. *Journal of Marketing and Management of Innovation*, 1, 11-20.

Smith, A., & Rupp, W. (2003). Strategic online customer decision making: leveraging the transformational power of the Internet. *Online information review*.

#### **Author Biography**



Lashini Navodika
Liyanage is a graduate of
University of Kelaniya
and currently for her MSc
degree in Applied
Statistcs at University of

Colombo. She has published numerous journal articles in national and international journals. And also she has participated in many national and international research conferences.

Paper ID 458

# Factors behind the Success of International Competitiveness of Apparel Industry in Sri Lanka with Special Reference to Vertical Integration Strategy

Dilshan Rathnayake#, Hashini Malsha, Chathuri Dissanayake and Lahiru Gunathilaka

Department of Management and Finance, General Sir John Kotelawala Defence University

# dilshanrathnayke@gmail.com

**Abstract:** Textile and apparel industry occupies a prominent position in the Sri Lankan economy as the main export income earner. However, the imported raw materials for apparel industry is recorded as the second largest import of the country, while most of the apparel manufactures do contract

manufacturing for world renowned brands . Accordingly, it is a challenge for the apparel producers in Sri Lanka to increase total value addition in both upstream. With downstream and this background, the study aims to identify factors behind the international competitiveness of Sri Lankan apparel industry associated with the vertical integration The strategy. secondary data were initially gathered from reliable sources, and the primary data were collected using semi-structured indepth interviews with the industry experts. The gathered data were transcribed and then analysed using the thematic analysis. As per the findings, the two main apparel producers successfully implemented the vertical integration strategy while other companies do not focus on such strategy. When analysing the findings, it is revealed that the sub codes, codes and themes that were found through data analysis are quite relevant to the famous theory of "Michael porter's diamond model". As such researchers were able to theorize the Porter's Diamond Theory as the complement to achieve a successful vertical integration strategy.

**Keywords:** Apparel industry, Vertical integration, International competitiveness

#### Introduction

A. Background of the study

1) Apparel industry in Sri Lanka: The apparel and textile industry in Sri Lanka is one of the largest contribute to the economy and the major foreign exchange earner (export.gov, 2019). Sri Lanka has traditionally been agricultural based economy but with the time government of Sri Lanka interpret the need to have an industrialization strategy for development of the economy of Sri Lanka (Embuldeniya, 2015).

According to Central bank of Sri Lanka in (2014) the improved performance of all categories of Factory Industry contributed to the overall growth, specially export market oriented industries such as textile, wearing apparel and leather products category (wanaguru, jegajeevan, samarathunga, 2012). Among the sub sectors, Apparel sub sector is the one of leading export oriented industry and that contribute continued Sri Lanka's growth. Individual growth of wearing apparel sub sector recorded a 19.7 percent in 2014 (Embuldeniya, 2015).

Apparel sector of Sri Lanka has been recognized for its excellence in speedy delivery and reliability. The maintaining quality and reliability to meet with global brands such as, Victoria's secret, Nike, triumph, speedo. (Gunathilake & De Mel, 2016). Moreover, good industrial practices



(free of forced labour, free of child labour, eco-friendly international standards), and environmental conservation has made for apparel industry. Confirming to Export, earnings from exports of textile and apparel is accounted for 43 percent of total exports earnings of the country (sri lanka export development board, 2015).

Considering the country classification of Apparel Exports, there is a high demand for Sri Lankan apparels to export in European countries including United Kingdom, Italy, Germany, Belgian, Australia, Netherlands, etc. Also similar demand in United Status America as well as. Canada, China, Hong Kong, Japan and United Arab Emirates are also the buyers of Sri Lankan apparels overseas who bring export earnings to the country (Central Bank of Sri Lanka, 2014) Sri Lankan apparel industry can catch the global market but that is not enough prove for Sri Lankan apparel industry is can sustain for long time. The reason is price, quality and on time delivery are only be entry qualifications to enter the global market. Today, with the globalization, consumers ask more value for less money. Therefore, Sri Lankan apparel industry should increase its competitive advantage in order to be sustainable in the global apparel market. Further the integration of apparel sector within the country is at a lower level. This would cause adverse impact on competitive of the industry as well as economic implication due to less value addition.

Textile manufacturing reported growth of 3.6 percent in 2018, compared with growth of 2.3 percent in the previous year. Together, the wearing apparel and textile subsectors contributed approximately 78 percent of the overall growth in the manufacturing sector in 2018. Despite the local clothing and textile industries have the potential for further growth, the lack of economies of scale, infrastructure limitations and high input costs adversely

affect the industry's competitive power. In addition, the advent of relatively new textile production hubs in the area has continually challenged the role of Sri Lanka in a competitive global market. Even though the GSP+ system has been restored to demand in the recent past has required constructive action by the clothing industry minimize continued dependence on such schemes, enabling increased resilience to external vulnerabilities.

Sri Lankan exports are could be copied by other competitive export countries easily because of the most of the products are simple. Value of high-tech exports in Sri Lanka have hit a low level from US \$102 million in 2008 to US \$ 57million in 2010. Sri Lankan apparel industry contributes in High-tech exports averages at 1.8 percent comparing to 75 percent in Korea, 27 percent in Thailand and 50 percent in Singapore and Malaysia (Dilanthi, 2015). In the other hand lack of solid raw material base is also a huge challenge to the industry. In Sri Lankan apparel industry, it has been identifying as a major issue and it has affected the competitiveness of local garment exports and as comparison with the other competitors in Asia. 70 percent of total raw fabrics used in the industry and 70 percent - 90 percent accessories used in production are accounted as imported to the Sri Lanka (Dheerasinghe, 2016). Country is in difficult situation because regard to this dependence in importing raw materials which simultaneously increases the production cost and the cost of final output. These areas can identify as main challenges to the apparel industry in Sri Lanka.

The purpose of this study is to explore the factors behind the success of international competitiveness in global apparel market using vertical integration strategy and find how to overcome the challenges in apparel industry.



2) Vertical integration: With the globalization there have been a drastic change in some sectors in the economy. That change could have led market to requirements customized market (Gunathilake & De Mel, 2016). In that scenario manufacturers believed supply chain management can raise customer value and achieve an enduring competitive advantage. Development of the integrated supply chain is the most considerable contribution to the delivery of goods and services in the past decade (Gunathilake & De Mel, 2016). The Organization which has adopted the vertical integration strategy can gain control over supplier, increased competitiveness, increased market share, decreased cost and secure suppliers. Vertical integration is when a company controls more than one stage of the supply chain. Vertical integration ensure control over the supply of the raw materials to manufacture its product as well as empowered it in market place. In vertically integrated organizations, Activities which were formerly being outsourced would tend to be brought under a one roof. This means that the organizations now has to undertake the responsibility of performing all its upward and downward processes in equally efficient a manner as it was being formerly done, as the long term perspective is on information accuracy, cost saving, and organizational control (Scudder Byramjee, 2012) .Vertical integration can be carried out in two ways such as backward integration and forward integration. Where backward as integration, is a business model where by a company takes direct control how its products are supplied (Sharma, Khatri, & Mathur, 2014).

Forward integration, is a model where a company takes direly control of how product are distributed (Bawaba, 2014). Accordingly, forward integration may involve the company acquiring the retailer

#### **Literature Review**

Sri Lanka's economic growth has been among the fastest in south Asia in recent years. Apparel sub sector is one of the leading export oriented industry in Sri Lanka. It gives dynamic contribute to the economy. According to world context Sri Lankan apparel industry is at a reputed place (Embuldeniya, 2015). Today, with the globalization, consumer ask more value for less money. Therefore, Sri Lankan apparel industry should increase its competitive advantage in order to be sustainable in the global apparel market. The integration of apparel sector within the country is at a lower level. This would cause adverse impact on competitive of the industry as well as economic implication due to less addition (Mataraarachchi Heenkenda, 2012).

#### A. Backward Integration

Examining the Sri Lankan context, due to the higher capital requirement and lack of local raw material base having local textile miles to meet total requirements needed for apparel industry. However, it is a difficult task even with less backward linkages, the apparel industry in Sri Lankan has contribute significantly. According to these reasons expanding possibilities raw material base is very important. With the expansion of raw material base apparel manufactures can reduce the lead time in raw material procurement and also shipping cost (Fernando, 2002). certain strategy of backward vertical integration is using for achieving two major objectives, mainly increasing the control of the business and to gain cost related advantages. Through the process of integrating backward, companies control their value chain in a more efficient manner (Gunathilake & De Mel, 2016).

#### B. Forward Integration

When firms applies forward integration it can gain control operational reach to



product retailing, tightening its grip on the demand side (Parlakt & Swaminathan, 2012). According to the industry survey the evident that most of the Sri Lankan apparel manufactures are not in a position having their own design and development units as well as market unit (Embuldeniya, 2015)

#### C. Porters Diamond Theory

While we collecting data and once we analyze the data we can found that, these data can be conveniently group under porter's diamond theory, accordingly we identified porter's diamond theory as our theoretical framework.

#### a) Factor Condition.

- 1) Human Resource: Traditionally low labor cost which is main advantage for Sri Lanka, but that factor no longer being deciding factor achieving competitive advantage. Now cost advantage moving to countries like Vietnam and Bangladesh (Mataraarachchi & Heenkenda, 2012).
- 2) Material: Under material factor raw material base is a major weakness for Sri Lankan apparel and textile industry. Since larger amount of raw materials are imported which wants to apparel industry (Mataraarachchi & Heenkenda, 2012).
- 3) Knowledge: Knowledge in design and product development technical knowledge and market knowledge, which are the important in apparel manufacturing industry (Mataraarachchi & Heenkenda, 2012).
- 4) Capital: Sri Lanka provide positive capital facilities towards foreign investments (Mataraarachchi & Heenkenda, 2012).
- 5) Infrastructure: The cost of infrastructures like electricity and water which mostly wanted to apparel industry remains higher in Sri Lanka (Mataraarachchi & Heenkenda, 2012).
  - b) Demand Condition.

Demand condition is based on buyer's requirements about price, quality and service in an industry. Demand condition effect on the product development and direction of innovation of product.

Examining the local apparel industry demand conditions are not up to the standard to competing in apparel industry. Compared to USA and EU, Sri Lankan consumers do not have very fashion conscious / brand conscious (Mataraarachchi & Heenkenda, 2012).

#### c) Supportive and related industries.

According to porter there are no single successful industry without strong supportive and related industry. When considering international competitiveness rivalry is very important. Reason for that, when there is a strong challenging competitors, firms compete energetically and develop innovative creations (Bakan & Dogon, 2012).

#### d) Strategy, Structure and Rivalry.

Companies' strategy, structure, and rivalry are circumstances that describe how a sector is formed, systematized, and controlled, and the essence of domestic competition that could help a nation attain a sustained competitive advantage.

Rivalry is very relevant in global competition when successful firms compete aggressively at home and constrain each other to grow and innovate (Bakan & Dogon, 2012)

#### Methodology

With the aim of understanding the situation in sri lankan apperal industry the researchers used realism research philosophy to understand the nature of study by its reality. The researchers have used deductive research approach and adopted a qualitative embedded secondary data review at initial stage and later carried out several interviews with the Industry



Experts (Supply Chain Managers, **Operations** Managers, merchandise manager, human resource manager) through in-depth semi-structured interviews using open ended questionnaires in order to gather primary data. Under deductive approach, Thematic analyses was used to analyses qualitative data. Secondary data have been gathered from related research articles, publications and internet search and it was necessary to verify the accuracy of the primary data specially provided by interviewee of different apparel manufacturers.

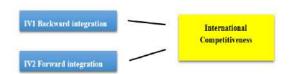


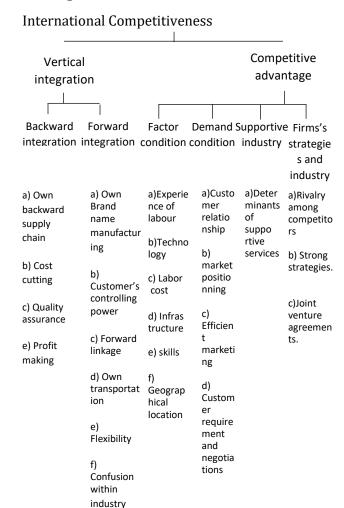
Figure 3.1 conceptual framework Source: Developed by researches.

According to the conceptual framework researchers measured the integration impacts mostly towards international competitiveness. These Propositions were identified as below

- i. Companies applied backward vertical integration to create international competitiveness.
- ii. Companies applied forward vertical integration to create intentional competitiveness.

The possible methodological limitations can be identified regarding the sample population; the selected sample size as it was limited only to an industry among large scale apparel industry in Sri Lanka.

#### **Findings**



#### 1. Own backward supply chain

With regards to respondent 1, by maintaining an own backward supply chain process, they can improve the efficiency and cost savings rather than acquiring or merging with other outside companies

#### 2. Cost cutting

As the respondent acknowledge that they make their own price quotas and cost reductions and get more price advantages by their own fabric supplies, rather than getting supplies by outer supplies

#### 3. Quality assurance

The respondent insists that before take decisions to be fully integrated particular company needs go through a brief cost benefit analysis with equally concern about the qualitative side of the products.



#### 4. Profit making

The respondent also acknowledges that the make profits in their apparel sector provide the raw materials them and meantime selling to other companies.

#### 5. Own Brand name manufacturing

By making company's own brand name it helps to achieve the home market first. After enter to the market company can increase own brands by efficient promotion and then can have access to the international market as well.

#### 6. Customer's controlling power

As per the information it has found that Most of the customers are nominated their raw materials suppliers, therefore sometimes companies cannot integrate in downstream as per it is effortless if they produce their own raw materials because even if they made their own they unable to use for production

#### 7. Forward linkage

One of interviewee mention that they have their own medium for distribution process. When company able to take control of distribution channels to offer products directly to consumers it helps to eliminate the middleman cost and able to save cost

#### 8. Own transportation

Respondent 2 has mention that they have their own transportation service for their employees. Through this might able to cost savings. Otherwise they may incur additional transporting cost for external transporting channels.

#### 9. Flexibility

Respondent 2 has mention that they have their own transportation service for their employees. Through this might able to cost savings. Otherwise they may incur additional transporting cost for external transporting channels.

#### 10. Confusion within industry

There must be wiser knowledge to conduct and good managers' needs to take strategic decisions. according to interviewee to conduct vertical integration strategy there must be good evaluating process at all.

#### 11. Experience of labour

According to respondent 1, Firms having long time running in the industry have experienced labor. Through that they can achieve working efficiency and competitive advantage too.

#### 12. Technology

As per the interviewee apparel industry cannot fully automated due to some functions like designing garments. According to respondent 1 they believed that company has enough technology by compared to other players within the industry

#### 13. Labor cost

in the view of respondent 2.all apparel manufacturer's major objective is produce lower price product with high quality.to satisfy that objective it is easy if labor cost can minimize further such as taking actions to prevent labor turnover.

#### 14. Infrastructure

Infrastructure is a main factor which is indirectly affect for the supply chain process. The apparel industry has been influenced by industrialization and globalization.it is need for investments in infrastructure development and process standards.

#### 15. skills

The technical skills and soft skills are lesser than other countries according to respondent 2. However, labor productivity in apparel sector is improved slowly. Good working conditions and job training centers has been established in their companies in order to that



#### 16. Geographical location

According to respondent it is stated that international customers intended to choose their supplier as Sri Lanka because of the location benefits.

#### 17. Customer relationship

As respondent 1 said, to go fr international competitiveness there must be long time customer relationship.by having long term relationship it Leeds for a strong bond.as long as customer associate supplier for a longer period they may not be shift or change to another supplier at any circumctances.to ensure strong customer relationship it is important for having service agreements like joint ventures.

#### 18. market positioning

market according to respondent 2 opinions, to go for that there must be home market as first. Because international customers assign their orders by reviewing home market position

#### 19. Efficient marketing

reference to respondent 3 it is mentioned that that company own brand market failure because of lack of promotion

according to respondent 2 it is found that verbal marketing is the most powerful marketing as an example when international customer looks for garment manufacturer supplier customer looks for their website reviews as first.

# 20. Customer requirementand negotiations

Always customer looks in to lowest price from multiple choices.one of customer requirement is they nominate their raw material supplier. Also that is one of barrier to go for vertical integration strategy according to respondent 2.

#### 21. Determinants of supportive services

When supply chain process expanding with vertical integration Strategy Company

needs supportive services like financial institutions.

#### 22. Rivalry among competitors

accordance with respondent 2 rivalry among competitors affects for the success of the vertical integration because when there is a competition one company tries their best than other one, therefore final outcome is all are performing quality product to rise up in the competition

#### 23. Strong strategies.

It is found that one of strong strategy followed by the company is there are considerable material stock is remaining when company is going to full fill the minimum order quantity because there are more excessive materials

#### 24. Joint venture agreements

Joint ventures are the One of most successful agreements to collaborate with customer and to maintain the favorable relationship at all according to respondent 2 point of view.in this occasion both customer and supplier experience the benefits through industry

#### **Dissussion**

In this chapter concentrated on discussing the factors behind the international competitiveness of apparel industry in Sri Lanka with special reference to vertical integration strategy. By using successful strategy company can achieve international competitiveness. In the stage developing Asian production countries cannot make adequate profits because of law value addition to overcome this problem some of the firms are vertically integrated. The main objective is to go for vertical integration is to gain competitive advantage from this study it has been identified the factors behind successful vertical integration strategy in



this research those factors is discussed through the identified propositions.

#### A. Proposition 1

Companies applied backward vertical integration strategy to create international competitiveness.

#### B. Proposition 2

Companies applied forward vertical integration to create international competitiveness.

#### Conclusion

Since apparel industry has become prominent industry in worldwide, Sri Lanka needs to pay more attention for strategies using to perform value added product in order to achieve international competitiveness. Therefore, Sri Lanka needs to follow specific strategies like "vertical integration".in order to get the advantage of vertical integration there are some factors behind the success of that vertical integration. However, the functions of vertical integration are massive, it is necessary to invest high technology and automatically vertical integration becomes capital intensive. Even though it is capital intensive it is able to get more benefits. Most companies that larger in size currently understand the price offering to the customers can be controlled better by vertical integration than being traditional manufacturer in the industry. When considering the price points, the apparel manufacturer should provide the product under lowest price with high quality as per the findings it is stated that obviously manufacturer can produce profit margins and make the price advantages of it. With the development of the industry import dependency for raw materials could be reduced through backward vertical integration where fabrics are produced domestically. Accordingly, industry as a whole it is important to having joint ventures as the most sufficient strategy to minimize risk and maximize profits.

According to the findings it has identified there are various factors affect for the vertical integration in apparel industry. Most of factors are directly influence the success of vertical integration too. Companies following vertical integration strategy can achieve more advantages as well as some disadvantages due to lack of factors presence within the country. Some factors need to be developed more to achieve international competitiveness and existence of the industry such as efficient infrastructure including communication, transportation and technology.

#### Acknowledgment

We are like to express our deep gratitude towards our lecturer and supervisor Mr.M.M.L.C. Gunathilake for his valuable suggestions and guidance during the research work. We are very thankful for his great support when planning development of this research. willingness to give his valuable time is much appreciated. We are sincerely grateful to our parents for their encouragement throughout this study. We would like to thank the staff of General Sir John Kotelawala Defense University for provide supportive required conditions and facilities to do the research work. We would also extend our thanks to our friends whoever everyone helped throughout the whole research. Finally, our special thanks should be given to Merchandise managers and Human resource managers of MAS Holdings, Brandix Lanka Ltd, Polytex garments and Ramya holdings for their immense support when collecting required information.

#### References

Bawaba, A. (2014). United Kingdom: High Demand for Rare Earth Materials Drives Robust CAGR of 7.0% from 2018 to 2025.



Retrieved from https://www.thefreelibrary.com/United+ Kingdom+%3a+High+Demand+for+Rare+ Earth+Materials+Drives+Robust...a0594389834

board, S. L. (2019). *SRI LANKA EXPORT DEVELOPMENT BOARD.* Retrieved from http://www.srilankabusiness.com/appare l/

Dheerasinghe, R. (2016). *Garment industry in Sri Lanka challenges, prospects and strategies.* https://www.academia.edu/.

Dilanthi, S. (2015). A Review on the Current Profile and Challenges of the Sri Lankan Apparel Industry. Kuliyapitiya: International Journal of Management, Accounting and Economics.

Embuldeniya, A. (2015). Retrieved 2015, from

 $http://repository.kln.ac.lk/bitstream/han \\ dle/123456789/10625/1-$ 

14.pdf?sequence=1&isAllowed=y

export.gov. (2019). *Sri Lanka - Textiles*. Retrieved from https://www.export.gov/article?id=Sri-Lanka-Textiles

Gunathilake, M., & De Mel, w. (2016).

kelegama, s. (2013). Export sector in sri lanka: issues and challenges. colombo: National chamber of exports of Sri lanka.

Lanka, c. b. (2018). *Annual Report of central bank of Sri Lanka*. central bank of Sri Lanka.

Masakorala, M. R. (2019). *financial Times, Daily*. Retrieved from http://www.ft.lk/columns/Sri-Lanka-apparel-exports---5-b-milestone--what-lessons-to-learn-and-what-does-it-meanfor-SL-/4-673218

masakorala, R. (2019, 01 12). *Sri Lanka* apparel exports \$ 5 b milestone, what lessons to learn and what does it mean for SL? Retrieved from http://www.ft.lk/columns/Sri-Lanka-apparel-exports---5-b-milestone--what-

lessons-to-learn-and-what-does-it-mean-for-SL-/4-673218

Scudder, B., & Byramjee, F. (2012). The Vertical Integration Strategies Approach for Organizational Risk Reduction. *GSTF Journal on Business Review (GBR), Vol.2 No.2.* 

Sharma, D., Khatri, A., & Mathur, Y. B. (2014). *Backward Integration of Supply Chain Management*. International Journal of Emerging Technology and Advanced Engineering. Retrieved from The free dictionary by farlex: https://financial-dictionary.thefreedictionary.com/forward+integration

sri lanka export development board. (2015). *sri lanka export development board.* ANNUAL REPORT-. Retrieved from https://www.parliament.lk/uploads/documents/paperspresented/annual-report-srilanka-export-development-board-2015.pdf

United States Companies Exports. (2019, 07 22). https://www.export.gov. Retrieved from

https://www.export.gov/article?id=Sri-Lanka-Textiles

wanaguru, jegajeevan, & samarathunga. (2012). the annual report of central bank of sri lanka. the central bank sri lanka. Retrieved from https://www.cbsl.gov.lk/pics\_n\_docs/10\_pub/\_docs/efr/annual\_report/AR2013/en glish/content.htm

#### **Abbreviations**

**GDP** - Gross Domestic Product

HR - Human Resource

VI - Vertical Integration



#### **Author Biographies**



Lahiru Gunathilake
Senior Lecturer-Grade II
Department of
Management and Finance
Faculty of Management,
Social Sciences and

Humanities. General Sir John Kotelawala Defence University.



Dilshan Rathnayake
Undergraduate.
Department of
Management and
Finance. Faculty of
Management, Social

Sciences and Humanities. General Sir John Kotelawala Defence University



Chathuri Dissanayake
Undergraduate
Department of
Management and
Finance. Faculty of
Management, Social

Sciences and Humanities. General Sir John Kotelawala Defence University



Hashini Malsha
Undergraduate
Department of
Management and
Finance. Faculty of
Management, Social

Sciences and Humanities. General Sir John Kotelawala Defence University

Paper ID 516

## Patterns and Challenges of Social Identity: An Analysis of Third Space Perspective on Afro-Sri Lankans in Sirambiadiya

KMNU Akmeemana<sup>1#</sup> and T Kamalrathne<sup>2</sup>

<sup>1</sup>Department of Geography, Faculty of Arts, University of Peradeniya <sup>2</sup>Department of Sociology, Faculty of Arts, University of Peradeniya

# nayaniupeksha@gmail.com

**Abstract:** This study explores a community that is less known in Sri Lanka - Afro-Sri Lankan community or Kaffirs, that is considered as the smallest ethnic minority in the country. Earlier their members were scattered in few places in Negambo, Jaffna, Kalpitiya and Puttalam, but one of the remaining and known community now lives in Sirambiadiya. It has been studied as having a distinctive culture especially focusing on their unique music and dance 'Maanja'. This known as research Sirambiadiya investigated as marginalized space with reference to Edward Soja's notion of Third Space. Soja's third space insists us to look at places such as Sirambiadiya focusing on their lived experiences, rather than setting them as objective/perceived (first spaces) subjective/conceived (second spaces) spaces. Here, in order to understand formulation of social identity challenges of this ethnic minority, a field research with in-depth interviews and focus group discussions were done. Results revealed that the ethnic identity of Afro-Sri Lankans is neglected in the category of "other" in the official discourses and therefore their ethnic identity is at stake. Because of the lack of recognition, they are marginalized as a separate space amidst other villages. Their physical appearance reminding the African descent helps to formulate their identity. Yet, they now try to formulate their social identity while trying to exhibit their creole culture. The study concludes that in the case of people in Sirambiadiya, looking at it as a third

space, their identity has become a problem in the rendering of their everyday life.

**Keywords:** Afro-Sri Lankans, Third Space, Sirambiadiya

#### Introduction

Afro-Sri Lankan community, an ethnic minority is a group lacking clear identity and consideration of governance. They live Sirambiadiya, **Puttalam** in northwestern province of Sri Lanka. They have been known to have a distinctive culture based on their unique music and dancing practices. While most studies highlight this fact, many studies have a less or unsubstantial attempt in exploring their position in terms of identity. This orientalists view elides factions and communities from an identity that is true to themselves. This research Sirambiadiya as a marginalized space. The conceptual foundation of this research is Edward Soja's notion of third space. Edward Soja's Third Space invites us to look at places such as Sirambiadiya by focusing on their living/lived experiences. This excludes orientalist notions that play to the western appetite and focus solely on the elides as a subject on its own worth devoid of west-led logocentric practices.

The third space is a perspective which can fairly employ to study the world or society based on everyday life practices. It is a lived, experiential world. From the third space (lived space) perspective, identifying the places undistinguishable by the first (perceived space) and second (conceived



space) spaces. 'Third Space' (lived space) is explained as multisided, contradictory, and critical to the imagination of space (Soja, 1996:74).

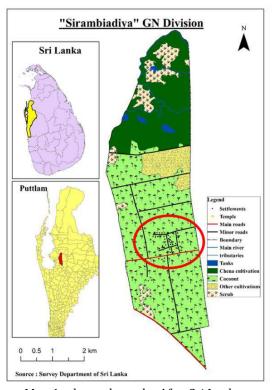
By definition identity is that unique introduction to who am I or who we are? Identity is people and concepts of who they are of what sort of people they are and how they related to others. With the time being, social identity of Afro-Sri Lankan has become a challengeable issue. identity is being formulated and created by several key features of the identities with historical facts. This Afro-Sri Lankan community is fighting for their identity while also being marginalized due to lack of unique identity in the wider spectrum. The objective of this paper is to examine the patterns and challenges of the social identity of Afro-Sri Lankan community based on Edward Soja's notion of the third space perspective.

#### Methodology

Post-positivist researches acknowledge a world that is ambiguous and variable, research that can be intuitive and holistic, researchers that can be subjective and collaborative, methods that can inductive and exploratory and findings that can be ideographic and qualitative (Leary, 2004:8). Therefore this research is a 'Postpositivist' research in humanistic geography, because this research conducted as part of a subjective world reality. In order to study such a place, starting the research framework with a hypothesis is impossible. Therefore, approach of this research is inductive and certainly grounded.

Study area of this research is 'Sirambiadiya' village located in the Puttalam district of the Northwestern province in Sri Lanka (See map 01). Earlier this community was concentrated in several places such as Sirambiadiya, and some locations in Puttalam, Negambo, Trincomalee, Colombo

and, Galle. However, now Sirambiadiya is the only place where this community lives at present (See map 02).



Map 1: place where the Afro-Sri Lankan community lives in Sirambiadya village



Map 2: Early concentrated areas of Afro-Sri Lankans



Typically the unit of analysis in social research are the individuals, families, groups of a community, or social artifacts. Acordingly unit of analysis of this study is the entire Afro-Sri Lankan community in the Sirambiadiya village as a whole. Total number of population in the area is 60 representing 37 males and 23 females. All they are included in to 19 families.

A field research was conducted to gather data on everyday life practices of the Afro-Sri Lankan community. Further, field research urges the need of non-availability of data particularly related to the study context. The field research was strenthned by using a set of data collection techniques including direct observations, open-ended interviews, in-depth interviews, and focus group discussions. During the field study, researchers were able to visit the Sirambiadiya school for observing the way and nature of the children being educated and passing through their particular formative years. Fifteen open-ended interviews were conducted by selecting at least one member from one family in the Sirambiadiya village. In addition to focus group discussions, in-depth interviews, gathering data refering dairy writings of the school children, and photograps collection also were used for the analysis. The Afro-Sri Lankan community has maintained a logbook about their day today activities and researchers were able to collect some information using that log notes. A set of qualitative methods were used for data collection and analysed using qualitative techniques.

Under that, transcribed the recorded data on the same day and analyzed the data related to words, concepts, linguistic devices and non-verbal cues using thematic analysis.

#### **Results and Discussion**

The term 'identity' is not new to social sciences. Identity can be conceptualized as

a way of making sense of some aspect or part of self-concept (Turner, 2004). Identity, defined simply, is that unique introduction to who am I or who we are? The outcome never conforms on one 'right' way. It differs from person to person, place to place and object to object. People's identity is conceptualized who they are or what sort of people they are, and how they related to others (Hogg and Abrans, 1958). Group identity is formulated emphasizing the invariable heterogeneity of the notion of identity.

Identity is one of the most significant dimensions of social and spatial analysis. Simply, identity concerns the psychological sense of self, its nature and importance, and how it is related to others, and how such links shape the boundaries of human experiences (Tuner, 2004). Identity simultaneously reflects personal phenomenon and social phenomenons as an aggregrete. Further it shapes individual behaviours and collective behaviour as identity creates a collective consciousness on what they inherited as identity. Everyday life reproduces and reproduces each and everyone's identity (Warf, 1956). Identities are naturally embodied with several social and cultural fundamentals. Social construction describes this as an embodied identity which is related to historical experiences. The body is also the most personalized form of politics. Ethics, morality, personality, and even disciplines are defined in various ways but speak of identity all the same.

The notion of exhibits that identities are always social, not merely individual, with roles such as class, gender, age, and ethnicity factors. Some argue that in a social world, identities are constituted according to historical significance. Yet, it is understood that all formulations are historically significant and mostly rooted in the everyday life of people in their class, gender, ethnicity, and sexuality. Therefore



identity reproduces the way of everyday life. On the other hand, everyday life reproduces each and everyone's identity (Warf, 1956). This community is commonly known as "kaffirs" due to historical significance as migrated community from Mozambique and of course, that is the so called unique identity which is being culturally constructed for them in the local context.

The explorations of identity led researchers to analyze its significance from multiple sides by it diasporas, disabilities, citizenships, and/or emotions. All of these dimensions include a specific identity. Thus, the term 'identity' is not merely a static penomena. Changes are taken place always with identity, but what should be understood as important is its act of reproducing our everyday life practices. From ancient times, the Afro-Sri Lankan community went by several names. Some records were written by explorers and travelers also detailed about community. Earlier they were known as 'Kaapiri' or 'Kaffirs'. The etymology of the term 'Kaffir' points to a non-believer, and a non-Muslim person. However, members of the community specified that they don't allow themselves to be called *Kaffir*. They always try to assert themselves as Afro-Sri Lankan. Therefore, it shows that the identity that they crave is one calling them Afro-Sri Lankans. The records in 'The Cevlon directory calendar and the compendium of useful information for 1883', by A.M Ferguson called this community as "Caffers". Moreover, Brohier also in his work of "The Discovering Ceylon" noted them like this, "I cannot forget the singular picture in mind of the first visit to the kaffir colony; this small ethnic group of people was the descendants of the solidary who kept the British flag over the fortlet at Puttalam" (Broheir, 1973: 40). Largley this community is seen to be named by different names like Kaffirs, Kaapiri, caffer and

*Ceylon Africans*. According to the responses by the community it is noted that now they want their identity to be called Afro-Sri Lankans.

Afro-Sri Lankans constitute a small minority in a multicultural country which consists of Sinhalese, Tamils, Moors, Malays, and Burghers. The ethnic composition of contemporary Sri Lanka is Sinhalese 73.95%, Sri Lankan Tamils 12.70%, Sri Lankan Moors 7.05%, Indian Tamils 5.52%, Malays 0.32%, Burghers and others 0.20% (Department of Census and Statistics 2013). However, there is an exclusion in recording the ethnic identity of Afro-Sri Lankans. Their identity is hidden and introverted in the category of "other" in many official discourses (See table 1) i.e. the Afro-Sri Lankans are not properly mentioned as a ethnic group in the recent census. But there are other minor ethnic groups such as Malays, Chatty, Veddas, and minority other such groups represented with their ethnic identity in the census. This marginalization and exclusion is really a gap to shove an identity under an umbrella term as blasé as 'other'. This may be because of the less number of members forcing the bureau to include them under the category of "other", but it doesn't deny the fact that this provides for them a lack of recognition when recognition is the very thing they need to consolidate their group identity within the larger society.

This Afro-Sri Lankans are apperently similar to the African people or the orthodox human race known as Nigro. Of course, the physical appearance is completely vary from the ordinary Sri Lankans including aborgians. They have big lips, curly hair, black skin, and a great height to boot. During the interview with a young member of their community, Sajith Gayan, said that he faced a lot of social and cultural consequences because of his physical appearance. He further



emphasized that the real problem occurs when he marks his identity in certain occasions. This problem, indeed, because of the contradiction ceated between his name and the physical appearance. His name goes with Sinhalese identity and the physical appearance looks like an African citizen. Therefore, their identity is at stake, subject to stigma, and at the mercy of compassion. As their identity creates problems in society, some have even resorted to changing their appearance to better amalgamate with larger context. During the interviews, it is proved that their new generation is hardly trying to change their appearance to more engage with others who are non-Afro-Sri Lankans.

Afro-Sri Lankans are marginalized spatially as a community in their creation of a separate space, which they call "watta", amidst other villages. Adding to this is how the outsiders perceive and term their lifespace; for they too call their home-space as "Kaapiri Watta". While conducting interviews with some outsiders, they made connections to the Afro-Lankan space via the term "Kaapiri Watta". This proves how this particular community is marginalized within a space created and propagated by those who aren't self-same. They come to call themselves 'watta' as it is what is used to describe them. The research found that how difficult them to capitalized their

identity over the cultural hegemony that confines them to the term, 'watta'.

There is an organization called "Afro-Sri Lankan Society" which concerns itself with the social needs of the members among Afro-Sri Lankan community. The particular society maintains a music band and their music identity is known as the "Ceylon African Maanja Group". This music tradition sometimes encompasses and described the group identity of this community and they try to exhibit their cultural identity by fighting back with the stigma placed on them. Of course, this music tradition and the Creole culture has a certain recognition at present and some performance were taken in to the national context.

realizes how ontologically Society asphyxiating it is to be reprimanded for how someone is born. This community is denied recognition and hence, acceptance simply because they apperently do not look self-same. They are stuck in their own entity in Sri Lanka, held by the gaze that wants of them to remain exotic and the 'other'. So who are they? What is their real identity? True that they are of Portuguese descent, hailing from Mozambique and speaking "Maanja", their language, but this identity of past cannot be their reality now that a lot of mixing and cultural infusion has happened. (Jayasooriya, 2003).



Table 01: Number of the population by ethnicity 1911 to 2012 Source: Department of census and Statistics

Ethnicity	Year									
	1911	1921(4)	1931(5)	1946	1953	1963	19471	1981	2001(3)	2012
Sri Lanka	4,106.40	4,498.60	5,306.00	6,657.30	8,097.90	10,582.00	12,689.90	14,846.80	16,929.70	20,359.40
Low- Country Sinhalese	1,716.90	1,927.10	2,216.20	2,902.50	3,469.50	4,470.30	5,425.80	10,974.4 <sup>(2)</sup>	13,876.2 <sup>(2)</sup>	15,250.1 <sup>(2)</sup>
Up- Country Sinhalese	998.6	1,089.10	1,256.80	1,718.00	2,147.20	3,042.60	3,705.50	10,574.4	15,070.2	15,250.1
Sri Lanka Tamil	528	517.3	598.9	733.7	884.7	1,164.70	1,424.00	1,886.90	732.1	2,269.10
Indian Tamil	531	602.7	818.5	780.6	974.1	1,123.00	1,174.90	818.7	855	839.5
Sri Lanka Muslim	233.9	251.9	289.6	373.6	464	626.8	828.3	1,046.90	1,339.30	1,892.60
Indian Muslim	32.7	33	36.3	35.6	47.5	55.4	27.4	(1)	(1)	(1)
European Burgher	7.6	8.1	9.2	5.4	6.5	(1)	(1)	(1)	(1)	(1)
& Eurasian	26.7	29.4	32.3	41.9	46	45.9	45.4	39.4	35.3	38.2
Malay	13	13.4	16	22.5	25.4	33.4	43.5	47	54.8	44.1
Sri Lanka Chetty	-	-	-	-		-	-	-	10.8	5.6
Bharatha	-	-	-	-	e e	9	-	-	2.2	1.7
Veddhas	5.3	4.5	5.2	2.4	0.8	0.4	(1)	(1)	(1)	(1)
Other	12.7	22	27.4	41.1	32.2	19.5	15.5	28.4	23.9	Activat

#### Conclusion

The aim of this study was to examine the challenges of the social identity of the Afro Sri Lankan community living Sirambiadiya. To undertake this. pioneering works of Edward Soja's notion third space and concept marginalization was used as the theoretical foundation of the study. Edward Soja's notion of third space was instrumental in unpacking their lives and experiential world brought about by their everyday life practices. Afro-Sri Lankan community is an ethnic minority that lacks and faces challenges in official recognition. Therefore their ethnic identity is misled or hidden in the category of 'other' in many formal confirmations in the state. Afro Sri Lankans' intensity of exclusion considerably higher than the other ethnic minorities. They are the only people who live in Sri Lanka of its kind and spatially trapped in a small geographical entity. According to the third space perspective, they are both spacially and culturally marginalized and identity is reformulated as a hybrid community. Instead of being ill-defined by names used to call them in the days of yore, they now argue for a new identity as 'Sri Lankan Africans'. This identity based on their social identification is constantly changing and remaking, in making their identity politics a contestable issue in their everyday lives.

#### Acknowledgment

I would first like to express my deep appreciation and indebtedness to the Afro-Sri Lankan community of Sirambiadiya and the interviewees and participant who consented o taking part in my study, thank you for permitting me entry into your life experinces.



#### References

Brohier, R.L.(1973). *Discovering Ceylon*. Colombo: Sooriya Publishers.

Chandra, K. (2006). What is Ethnic Identity and Does It Matter?. Department of Politicas, NewYork University: New York.

De Silva Jayasooriya, S. (2005) *The Portuguese Identity of Afro-Sri Lankans*. Department of Portuguese & Brazilian studies: University of London, XII(1-2): (21-32).

Forguson, A.M. (1883), *The Ceylon directory Calendar and Compendium of Useful information for 1883*. Colombo: Observer press, MIXCLXIII.

Kopinath, C. & Herath, H.M.D.R. (2005). *The Present of Past Slaves: The Socio Economic Situation of Sri Lankan Kaffir People*. Peradeniya economic Research symposium: University of Peradeniya.

Leary, M.R. (2012). *Hand book of self and Identity*. New York: The Guilfird press.

Leary, O.Z. (2004). *The Essential guide to Doing Reseach*. London: SAGE Publications Ltd.Mehretu, A., Pigozzi, B.W., Sommer, M.L. (2000). *Concepts in Socail and Spatial marginality*. Gegr.Ann,82 B (2): 89-101.

Shields, R. (1991). *Places on the Margin: Alternative Geographies of Modernity*. London: Routledge.

Silva, N. (2002). *The Hybrid Island: Culture crossings and the invention of identity in Sri Lanka.* Colombo : Social Scientists Association.

Soja, Edward.W. (1999). 'Third Space: expanding the scope of the Geographical Imagination' In. J.Allen, D.Messey, P.Sarre (eds). *Human Geography Today*. Malden: Blackwell publishers.

#### **Authors Biographies**



Upeksha Akmeemana is a geography student at department of geography, University of Peradeniya, Sri Lanka.. I Completed a BA.Hons in geography with

second class uppers division. Currently I'm reading a MA in Geography, University of peradeniya.



Mr. Thushara Kamlrathne is a senior lecturer at department of sociology, faculty of arts, University of Peradeniya. He earned his

Mphil mastering in medical Sociology from the university of Peradeniya. Areas of expertise are anthropology, participatory research methods and criminology.

Paper ID 545

# A Comparative Study of the Characteristics of Domestication and Foreignization in the Sinhalese First Translation and the Retranslation of Chinua Achebe's 'No Longer at Ease'

NM Wijebandara#, JAM Hansani

Department of Languages, Sabaragamuwa University of Sri Lanka

#nethmiewijebandara@gmail.com

**Abstract:** 'Retranslation' is a new-born concept still under the research process. which has a number of research gaps to be fulfilled. The most curious part is that the latter is still in hypothetical form, which implies that it needs to be tested furthermore until it reaches towards a theoretical concept. Presently researchers are trying hard to determine the reasons behind this hypothesis and its features globally but not yet in the Sri Lankan context. Domestication and foreignization are such features which have been addressed by researchers as determining features in retranslation within the foreign context. The present study aims at identifying the contrasting features in the two concepts, examine the situations where these two strategies have been used in texts and also the contrasting effect that the first translation and the retranslation have produced towards readership. In the methodology, the study was based on selected extracts from the Source Text (ST) and their corresponding first translation and retranslation. Samples were selected under purposive sampling technique and were qualitatively analysed with content analysis by employing descriptivecomparative analysis method. The major difference in the translated texts were marked and analysed. The data analysis has confirmed major characteristics regarding culture specific terms, vocabulary, style, sentence structure, literal translation, free translation, readability, and extent of faithfulness. The research concludes with a distinguished margin between

foreignization and domestication in the selected two translations that the first translation has reduced the otherness while the retranslation has embraced the foreignness of the ST.

**Keywords**: Characteristics, Domestication, Foreignization, Source Text (ST), Retranslation

#### Introduction

At the present age 'Translation' is not a strange concept, but retranslation is worth defining in the local context since the scenario already exists although the theoretical concepts are somewhat alien in the academic research. Newmark (1988) states translation is about "rendering the meaning of a text into another language in the way that the author intended the text." Therefore, there is a question that if a translator has focused on rendering what author has intended in the text then why do the readership need 'Retranslations' of the same source text? The process of retranslation occurs due to various reasons and also various studies have proved significant features about retranslation throughout the evolution of versions of translation. When the process retranslation is considered, it is about translating the same source text into the target language for multiple times by different authors. According to Koskinen and Paloposki (2010) "retranslation (as a product) denotes a second or later translation of a single source text into the same target language and when



retranslation (as a process) is thus prototypically a phenomenon that occurs over a period of time, but in practice, simultaneous near-simultaneous or translations also exist, and retranslations can occur over a period of time and also simultaneously." The retranslation concept marks its origin with the introduction of 'Retranslation Hypotheses' (RH) by in 1990's. Bensimon and Bermon were the scholars who pioneered in introducing the 'Retranslation Hypothesis (RH). Paul Bensimon was the first theorist to state about the hypotheses among the two translations and further has claimed that there are significant differences and features between the first translation and retranslations.

First translations, according to Bensimon (cited in Koskinen and Paloposki 2001), are often' "naturalizations" of the foreign works and that they are "introductions", seeking to integrate one culture into another, to ensure positive reception of the work in the target culture and also later translations of the same originals do not need to address the issue of introducing the text: they can, instead, maintain the cultural distance.' As Bermon states, (cited in Koskinen and Paloposki 2001), 'the first translation always tends to be more assimilating, tends to reduce the otherness in the name of cultural or editorial requirements, the retranslation, in this perspective, would mark a return to the source-text, emphasis in the text.' This assimilating quality and the otherness tend to produce 'Domesticating' 'Foreignizing' translations, the two terms were coined by Lawrence Venuti in 1995. As Lawrence Venuti distinguishes the two translation strategies, the translator can either bring the author closer to the reader (Domestication) or the reader closer to the (Foreignization). As author Venuti mentions, domestication is a translation strategy which uses 'a transparent, fluent,

'invisible' style in order to minimize the foreignness and strangeness of the target text' (cited in Munday 2008, p. 144). Foreignization, on the other hand, according to Venuti, 'entails choosing a foreign text and developing a translation method along lines which are excluded by dominant cultural values in the target language.' (Venuti, cited in Munday 2008). He also states that domestication involves 'an ethnocentric reduction of the foreign text to target-language cultural values,' (Venuti 1995, p.20) where the process makes the translator invisible due to the translated text is read like an original with a promising readability and also where the foreignization performs as its opposite.

Chinua Achebe is an award winning Nigerian novelist whose author profile starts from the publication of his trilogy including three novels namely 'Things Fall Apart' (1958), 'No Longer at Ease' (1960) and 'Arrow of God' (1964). He is considered as the father of African literature. Since his works appeared in the postcolonial periods the stories he has written were based on the identity crisis back at the time of ruling period of British in Africa during the colonisation period. His works are a result of this chaotic time where Africans were experiencing a transitional period. Clash of identity and falling apart of culture are portrayed vividly in Achebe's trilogy. This particular study's storyline is based on the colonialism in the British period in Nigeria, In 1974, the first Sinhalese translation of 'No Longer at Ease' as zneoafoka isodèhgZ, (Badden Sidādiyata) was done by P. R. H. Wijesinghe. The second retranslation done by Gamini Viyangoda and was published as zysre nei .sh miqZ (Hiru Bäsa Giya Pasu) in 1999. Then the retranslation third was done Seelawathie Manike Piyasena as zlud l<uek iñ÷ksZ (Kamā Kaļamäna Saminduni) in 2008. The present study is based on the



first translation and the first retranslation of the source.

Since these features are described based on foreign text, it is crucial to study the characteristics behind domesticating and foreignizing in the local context by connecting to retranslation. Up to now no have been done regarding retranslation and also about characteristics of the two terms locally. Retranslation is still new since the boom in the research studies was started within last five to ten years. At present scholars are interested to research extensively about retranslation due to its contrastive features and also because still it is under-researched and under-discussed area of study. Therefore, this study aims at addressing the research question of what are the characteristics of 'Domestication' and 'Foreignization' compare which and translation is more domesticating or foreignizing. The main objectives are to examine domestication and foreignization characteristics practically and identify translation strategies used within the local context and also to investigate the instances where the domestication and foreignization strategies have been used in the translated texts. The present study will also test what is being said in the RH and how much it is valid and will make an effort to relate RH to the Sri Lankan context.

#### Methodology

Qualitative techniques like content analysis and comparison was used to analyse the texts. Data collecting was done primarily and secondarily. Under primary data ST (Source Text) - 'No Longer at Ease', TT1 (Target Text 1) - zneoafoka isodÈhgZ, (Badden Sidādiyata), and TT2 (Target Text 2) - zysre nei .sh miqZ (Hiru Bäsa Giya Pasu) were used. Samples were selected from the first chapter in all three text in order to explain the concepts within a narrow frame. As secondary data journal articles,

textbooks, magazines, reports were used. Descriptive-comparative analysis method was used to analyse the data. The content analysis method was employed for the explanation of the research problem. Examples was selected by purposive sampling technique, where the researcher read the chapter thoroughly and mark significant and seeming differences as the first step and analyse the collected extracts to identify the strategies and features of domestication and foreignization.

#### **Results and Discussions**

The two translations display a significant difference in translating cultural specific vocabulary. In the following examples the TT1 has replaced ST word 'Palm Wine' and 'Pot of Stew' with ්රා පිප්පත and මස් කට්ටියක් respectively by adopting to the local cultural setting, while the translator in TT2 has borrowed the foreign words into the target text and rendered keeping the foreignness just as it was in the ST and translated as ීවයින් පිප්ප and ීඉස්ටු ඇතිළියක් respectively.

ST - "Two stalwarts emerged from the kitchen area...a simmering **pot of stew** hot from the fire. Kegs of **palm wine** followed, and a pile of plates and spoons...."

TT1 - හැඩිදැඩි දෙන්නෙක්....උනු උනුවේ තිම් දාන **මස් හට්ටියක්** ලිපෙන් උස්සාගෙන ආවා. **රා පීප්පත්**....හැඳි පිගන් තොගයකුත් ගෙනාව.

TT2 - විශාල බන් මුට්ටියක් ඔසවා....ඉස්ටු ඇතිලියක් ඔසවාගෙන ආවෝය. කුඩා වයින් පීප්ප.....නිබූ පිගන් සහ හැදි රාශියක්ද ඉන් පසු ශාලාවට සැපයුණේය'

The following example shows how literal or word-to-word translation will lead to lack of comprehension. TT1 has employed free translation where TT2 has translated the sentence literally without expressing its meaning. TT1 in the text has accompanied the reader with a footnote explaining the story behind the expression which is unique to African culture and communities.



ST - "Whenever Mr. Justice William Galloway, Judge of the High Court of Lagos and the Southern Cameroons, looked at a victim he fixed him with his gaze as a collector fixes his insect with formalin. He lowered his head like a charging ram..."

TT1 - —, ලේගෝස් ඉහළ උසාවියේත්. දකුණු කැමරුත්වලත් තඩු විසඳන විලියම් ගැලෝවේ නඩුකාර හාමුතිරුවො උසාවියේ යමෙකු Èහා බැල්ම හෙලනවා. ඒ බැල්ම දඩයමට ගොතිරුවුන කෘමියෙකුට තොසැලී ඉත්ත, ගල් ගැහී ඉත්ත පිම්බ විස වායුවක් වගෙයි.~

The following extract is also the same that TT1 has translated from sense-to-sense and has been able to achieve a good expression rather than the TT2 which has been literally translated. —මට තේරෙන්නෙ නෑ ඔය හාදයා ඔය වැඩේට **මොකට අත** ගැහැව්වද කියල'~ is more expressive than° මට නං හිතාගන්න බැහැ මිනිහා **ඇයි ඔහොම** කළේ කියලා. The words and expressions in TT1 are more familiar to the readership where the same extracts in TT2 is somewhat alien which means the readers identify it as a raw translation. —හොඳ හැටි හිතලා මතලා~ is more natural and colloquial than —කල්පතාවේ තිමග්තව~, in which the expression is formal.

ST - "I cannot understand why he did it," said the British Council man thoughtfully. He was drawing lines of water with his finger on the back of his mist-covered glass of ice-cold beer."

TT1 - —මට තේරෙන්නෙ නෑ ඔය හාදයා ඔය වැඩේට **මොකට අත ගැහැව්වද කියල**. බුනානෳ තානාපති කා¾යාලයේ සේවකයා **හොඳ හැටි** හිතලා මතලා කිව්වා. ඔහු සිතල බීර විතිරුව පිට පැත්තේ ඇරීල්ලෙන් Èය සලකුණු ඇන්දා.~

TT2 - —ිමට නං හිතාගන්න බැහැ මිනිහා ඇයි ඔහොම කළේ කියලා. කල්පතාවේ නිමග්තව සිටි බිතාතෳ කවුන්සිලයේ නිලධාියා කීය. ශීත බීර වීතිරුව වටේට බැදී තිබූ හුමාලය මත ඔහු සිය ඇ0ීල්ලෙන් වතුර ඉි අදිමින් සිටියේ ය.~

The following extract is a pure African expression unique to Nigerians. TT1 has achieved a natural narrative style with interesting choice of words adopting to local context. Replacing the ST with the words like විගෙ එකාට and විගෙ ඇත්තෙක්. Further the exact sentence structure has not been followed by the translator, instead the expression has more natural taste than TT2. The translator of TT2 being faithful to the ST considering its sentence structure, form and style, has followed ST features as a whole. The contradiction between the two translation is that TT1 has an indigenous touch and adopted into the Sri Lankan dialect with the use of specific words related to Vedda people. Therefore, the readership feel the text close to the own culture than the foreign thoughts.

ST - "For, as the President pointed out, a kinsman in trouble had to be saved, not blamed; anger against a brother was felt in the flesh, not in the bone."

TT1 - අනතු 34 වැටිච්ච විගෙ එකාට දොස් කිය කිය ඉන්න එකයැ හි.....විගෙ ඇත්තෙක් එක්ක නෝක්කාඩු වෙන්න ඕන මතුපිටින්. ඒ තොහොඳ නෝක්කාඩු ලේ මස් විදගෙන ඇටකටු වලට කිදා බහින්න ඕනැයැ. ~

TT2 - ීමන්දයත්. සභාපතිතුමා පෙන්වා තින් පිEි. තමන්ගේ ගෝතිකයෙකු අමාරුවේ වැටුණු විට ඔහු එයින් ගොඩගැනීම මිස. කළ යුත්තේ ඔහුට බැන වැ ීම නොවන බැවිනි. සහෝදරයෙකුව එරෙහි කෝපය මසව දැනුණත් ඇට මිති;වලට දැනිය යුතු නොවේ. ී

In the following extract TT1 projects a unique narrative style polished with the help of additions and omissions. TT2 has achieved a faithful translation by following the sentence structure of the original. The TT2 conversion ී ලැහැබට හොට පාතවට කිකිළිට දෙස් තියන්න. has become an improvised rendition and has got rid of word-to-word rendition of the expression.



ST - "The fox must be chased away first; after that the hen might be **warned** against **wandering into the bush.**"

TT1 - ීහාහාපූරා කියලා ලුහුබදින්න ඕනෙ සි0ාලයාවයි. දෙවනුව බැියැයි ලැහැබට හොට පාතවට කිකිලිට දෙස් තියන්න. ~

TT2 - මූලින්ම නියා පලවා හැිය යුතුයි. ප÷රක් ප÷රක් ගාතේ ිංගන්නෙ නැතුව පරෙස්සමෙන් ඉන්නා ලෙස දෙවනුව කිකිළියට අවවාද කළ හැකිය.

The following extract clearly displays how TT1 is being creative with a rhythmical style than of literal or word-to-word rendition. TT1 reader does not feel it as a translation as it supports a fluent reading and successfully rendered the ST effect on target readers. The prayer 'Amen' has been omitted and replaced with "Demod to reduce the strangeness adopting to the thoughts of the readership during the specific time period of the publication. At present 'Amen' is not a strange word and TT2 the latest translation has used the same word without any alteration.

ST - "He that brings kola nuts brings life," he said. "We do not seek to hurt any man, but if any man seeks to hurt us may he break his neck." **Amen** 

TT1 - ිකෝලා ගෙනෙන්නා ආයු වඩන්නා. අපගෙන් කාටවත් අතවරයක් නැහැ. අපටත් ඒ වගේ අවහිරයක් නැහැ. අතවරකරුවන් ගෙල සිඳ ගතිල්ලා. **එහෙමයි එහෙමයි** 

TT2 -කෝලා ඇට අරගෙන එනකොට Ôවිනේද අරගෙන එනවා. අපි කිසි කෙනෙකුට ිද්දන්න බලන්නෙ නැහැ. ඒත් කවුරුහි අපිට ිද්දන්න බලනවා නං උගෙ බෙල්මෙ කැඩිලා පලයන්. ආමෙන්

This extract provides the example that TT1 being adhering to the colloquial usage of terms than direct translation of the words. The TT2 translation is being loyal to the content of the ST. TT1 renditions කතියේරු කත්තයෙක් is a local term used by the Sri Lankan people and කැතිකිස්වොදියෙකු in TT2 is the exact term for 'catechist'.

ST - Being a Christian convert—in fact a catechist—he could not marry a second wife. But he was not the kind of man who carried his sorrow on his face.

TT1- කිතු දහම වැළඳගෙන **කතිසේරු මහත්තයෙක්** වෙච්ච ඔහුට දෙවැනි බීයක් කාර බැඳගන්න ඉඩක් ලැබුණෙ නැහැ. ඒ වුනත් හිත් තැවුළේ එළිපිට දක්වන්නෙක් නොවෙයිනෙ ඔහු.

TT2 - කුස්තියාති ආගමට හැරුණු කෙතෙකු වශයෙන්. සත්තකින්ම **කැතිකිස්වොදියෙකු** වශයෙන්. ඔහුට දෙවැනි විවාහයක් කරගත තොහැකි විය. එහෙත් ඔහු වූ කලි සිය මනස්තාපය මූහුණින් පළ කළ පුද්ගලයෙකු තොවීය.

Following extract provides the instance where TT1 has omitted religious reference 'blood of the Lamb of God' to avoid the reader from strangeness. TT2 has literally translated the sentence without hindering its foreignness to provide the reader with each and every information in the ST. Further TT2 has followed the sentence structure of the ST.

ST - "Umuofia would have required of you to fight in her wars and bring home human heads. But those were days of darkness from which we have been delivered by the **blood of the Lamb** of God.

TT1 - ඉස්සර කාලෙ එහෙම නං මේ ගැටයා ඕනෑ වෙන්නෙ හටන් වැÉලා **හරකුන් බිම** හෙළල උන්නෙ ඔලු ගෙඩි ගමට ගේන්නයි. ඒ අ÷රු යුගේනෙ. **දෙවියන් වහන්සේගේ** පිහිටෙනුයි අපි ඒ අ÷රු යුගෙන් මිනිනෙ.~

TT2 - ඉස්සර නං මේ වගේ ගැටයෙක්ව උමෝෆියා පළාතට ඕන කළේ යුද්දෙට ගිහිල්ලා මිනිස් ඔලු අරගෙන එන්න. ඒත් ඒ අන්ධකාරෙන් අපි අද නිදහස් වෙලා තියෙනවා. දෙවියන් වහන්සේගේ බැට; පෝතකයාගේ ලේවලට පිං සිද්ධ වෙන්න අද අපි මේ ළමයාව යවන්නේ දැනුම අරගෙන එන්න.



#### Conclusion

According to extracts, domestication and foreignization provide clear cut contrasting features. One point out can and differentiate translations and their qualities easily. As the RH denotes that first translations are more domesticating than retranslations, the present study also supports the hypotheses and showed results partial to the concept. When concerned about the features of domestication, the translator has used dialectal words and vocabulary to imply the reader that they are reading a true piece of writing without letting them to feel strange. TT1 translator has attempted to translate the text minimizing strangeness by omitting culture specific terms, religious connotations to avoid the reader from miscomprehensions. It was common to see slight omissions and additions when adopting to the target culture. Most importantly the translator has focused mainly on free or sense-forsense translation than following the exact sentence structure of the rendition of exact equivalent in to target language with the help of a creative narrative style. Foreignization the other hand on completely takes the opposite direction. This strategy is completely faithful to the ST and the translator has tried to follow the exact content, style, form, sentence structure strictly just as in the ST and to render it to the target language. Sometimes too much foreignness has resulted in inability to understand the meaning since the translator has been too much literal during the rendition. At some instances translator has tried to be moderate while adhering to colloquial terms in the target audience. But as a whole TT2 has kept the faithfulness to the utmost level. TT1 is difficult to identify whether it is a translation or not as it keeps the translator invisible and thus it is naturally read like an original work. In TT2, as it kept the

foreignness and faithfulness towards content the readers can identify that it is a translation, as it has tried to translate foreign cultural elements and has kept the translator visible. No omissions and additions were not to be seen in the TT2 text but the loyalty and faithfulness throughout by translating each and every detail in the ST. Translators could also adopt a moderate combination of these two strategies which will lead to a successful translation in all aspect since too much foreignness will cause problems in comprehension and adequacy and too much domestication will certainly question about faithfulness.

#### References

Allan, K (ed.) 2016, *Routledge Handbook of* Linguistics, Routledge, London.

Baker, M 2008, *In Other Words*, 3<sup>rd</sup> edn, Routledge, New York.

Baker, M, & Saldanha, G (ed.) 2020, Routledge Encyclopaedia of Translation Studies, 3<sup>rd</sup> edn, Routledge, London.

Catford, J. 1965, *A Linguistic Theory of Translation*, Oxford University Press, London.

Hanna, S. 2016, Bourdieu in Translation Studies: The Socio-cultural Dynamics of Shakespeare Translation in Egypt (pp.128-165). New York: Routledge.

Koskinen, K, & Paloposki, O (ed.) 2001, 'A thousand and one translations: Revisiting retranslation' in *Claims, Changes and Challenges in Translation Studies*, pp. 27-38, John Benjamins, Amsterdam.

Koskinen, K, & Paloposki, O (ed.) 2010, 'Retranslation' in Handbook of Translation Studies, pp. 294-298, John Benjamins, Amsterdam.

Munday, J. 2008, *Introducing Translation Studies*. 2<sup>nd</sup> edn, Routledge, New York.



Newmark, P. 1988, *A Textbook of Translation*. Prentice Hall, New York.

Nord, C. 1997, Translating as a Purposeful Activity: Functionalist Approaches Explained. St Jerome Publishing Company, Manchester.

StudyMoose. 2016 Domestication and Foreignization in Translation. [Online]. Available at: https://studymoose.com/domestication-and-foreignization-in-translation-essay [Accessed: 27 Jul. 2020]

Sunday Times. 2013, He Introduced Achebe to Sri Lankan Readers. *Pressreader*.1 September, viewed 27 July 2020, <a href="https://www.pressreader.com/srilanka/sunday-times-srilanka/20130901/282991102569058">https://www.pressreader.com/srilanka/sunday-times-srilanka/20130901/282991102569058</a>.

Taylor & Francis. 2020. Retranslation: Literature and Reinterpretation. [online] Available at: <a href="https://www.tandfonline.com/doi/full/10.1080/14781700.2015.1075417">https://www.tandfonline.com/doi/full/10.1080/14781700.2015.1075417</a> [Accessed 26 July 2020].

Paper ID 549

# Social Construction of Personality: An Assessment on the Perceptions of Introversion and Extroversion among Undergraduates of Colombo, Sri Lanka

TN Wijewickrama<sup>1#</sup> and LS Liyanage<sup>2</sup>

Department of Social Sciences, Faculty of Management, Social Sciences and Humanities General Sir John Kotelawala Defence University

# tiraniwijewickrama@gmail.com

**Abstract:** This study explored the ways in which undergraduates of Colombo, Sri Lanka perceive introverted extroverted personalities, with the main objective being to understand how the participants viewed introversion and extroversion and the possible contribution that can be made by these perceptions to form systems that are designed to facilitate only one personality type and the consequent problems caused by them. The data was collected by conducting 21 semistructured interviews with undergraduates from public universities coming under the University Grants Commission (UGC), public universities not coming under the UGC and private universities in Colombo, Lanka. In the interviews. participants were asked open-ended questions about their perceptions of introversion and extroversion. Gathered qualitative data was analyzed using the thematic analysis method. The findings of this study show that among many other things, introverts are perceived mostly as less social people, who are more suited for individual work than group work, and extroverts are perceived mostly as social people who are capable of group work. This study is significant because by exploring the ways in which the participants perceive personality, it creates awareness of oppressing effects of social constructions of personality, and lay a foundation for the ultimate transformation of systems geared

towards one personality type, be it extroversion or introversion.

**Keywords:** Extroversion, Introversion, Perceptions, Undergraduates

#### Introduction

#### A. Background of the Study

Introversion and extroversion explain two attitude-types characterized by the concentration of interest on one's inner psychic activity or the concentration of interest on the external world respectively (Jung C., 1995), and is thought to be the single most important aspect of personality that influences almost all facets of life.

This study talks of 'social constructions' because perceptions the public has of introverts and extroverts are constructed understandings of personality that form the basis for shared assumptions of reality. Personality may also be thought of as a social creation based on behaviors and the social meanings attached to them (Hampson, 1988). Based on the therefore established fact that personality is a social construction, this study questions the ways in which the participants define the reality of personality.

Research shows that most cultures have a bias towards either introverts or extroverts. For example, American culture is one that has always at least to some degree favored action over contemplation (Cain, 2012), where action is a trait of





extroverts and contemplation a trait of introverts. Some traditional classrooms in Asian countries, on the other hand, tend to discourage students speaking freely in classes through reprimanding etc., there by not allowing extroverted students to function according to their inborn tendencies. These systems, ideals, cultures as well as perceptions, that lead to introverts and extroverts being prevented from functioning according to their innate inclinations result in them not functioning at their full potential and causes a large wastage of energy and talent. This loss of potential is evident in a study which proved that introverts and extroverts need different levels of stimulation from the external environment to function at maximum efficiency (Geen R. G., 1984). It was found that when introverts and extroverts were given math problems to solve in environments of varying background sound that the extroverts performed better while listening to more sound, while the introverts performed better in quieter environments (Cain, 2012).

#### B. Problem Statement

An increasing number of important institutions of daily life such as, the education system and corporate office are designed to facilitate only one personality type. Examples include, open plan offices and traditional classrooms that discourage students from speaking freely. These biases stem from how people view different personalities or in other words how personhood is socially constructed. This problem affects both introverts and extroverts in varying forms in almost all cultures, and left unaddressed leads to an inefficient use of human talent and energy. Therefore, the objective of this research was to understand how undergraduates of Colombo, Sri Lanka perceive introverts and extroverts in order to draw conclusions about how these perceptions may be causing the formation of stereotypes and other challenges.

#### C. Rationale

The significance of this study is threefold:

- 1. It explores the ways in which the population perceive introverts and extroverts.
- 2. It creates awareness of the oppressing effects of social constructions of personality, and lays a foundation for their ultimate transformation.
- 3. It seeks to make an empirical contribution to existing knowledge about introversion and extroversion in Sri Lanka.

As for why this issue is worth being studied in Sri Lanka, it is because as a nation subject to heavy westernization Sri Lanka is prone to imitate the same extrovert bias present in western cultures. This study will also not only be a precautionary action taken to prevent Sri Lankan culture from potentially imitating the same bias of western cultures, but that these problems already exist in the Sri Lankan context up to a certain degree. For example, open plan office spaces that bring in high stimulation and classroom teaching methods that call for excessive group activity, active class participation, many brainstorming sessions etc. are already present in both the education and office cultures of Sri Lanka, without any consideration to their disadvantages, particularly to introverts but also to extroverts, since extroverts too require a certain amount of solitude for creativity etc.

#### D. Main Research Questions

How do undergraduates in Colombo, Sri Lanka perceive introversion and extroversion and how do these perceptions contribute to the formation of stereotypes and other challenges unique to the two personality types?



- E. Specific Research Questions
- 1. How do the participants conceptualize introversion and extroversion and what indicators of these do they look for being exhibited by people?
- 2. What personality traits do participants infer to introverts and extroverts?
- 3. What are the participants perceptions of how introversion and extraversion relates to career and academic success?

#### **Methodology and Experimental Design**

A. Research Approach, Population and Sample

A purely qualitative, inductive research approach was used. This was mainly due the positivism of a mixed or quantitative approach being unable to account for how the social reality is shaped and maintained, or how people interpret their actions and others (Blaikie, 2007).

The population taken for this study were the undergraduates of Colombo, Sri Lanka, studying in universities under the private sector, universities under the University Grant Commission of Sri Lanka (UGC) and Other Government Universities in Sri Lanka which are not under UGC. The sample for data collection was selected using Purposive sampling. Since this research was directed at assessing the public or general perception among the participants, diverse variety participants were looked for in order to gain as robust an insight as possible into the perception of introversion and extroversion, with equal numbers of participants from the three types of universities considered. Bearing in mind Sandelowski's suggestion that, in in-depth approaches a sample which is very large does not permit the deep, case-oriented analysis and Boddy's recommendation that any qualitative sample size over 30 (per market/geography) becomes too unwieldy

to administer and analyse the sample size has been kept to a limited 21 (Sandelowski, 1995) (Boddy, 2016).

B. Data collection and data analysis methods

The data gathering of this study was done using semi-structured interviews with 21 participants. An interview schedule with open-ended questions was used. However, the interview schedule was not strictly adhered to and questions were asked in the order that was felt as most suitable as the interview progressed.

It was understood prior to data collection that most participants did not have a proper understanding of the terms "introvert" and "extrovert". Therefore, in order to avoid any biases that could be caused due to misconceptions of the given terms, it was decided to explain the terms at the beginning of the interview. Furthermore, for this explanation the definitions given by Carl Jung and Susan Cain for introversion and extroversion were used.

The thematic analysis method was used for data analysis, and research ethics were addressed by protecting privacy and anonymity by using consent forms, securely storing recordings and transcripts, and avoiding the use of the names of interviewees.

#### **Results**

A. Qualitative Data Analysis

The data was analysed by first transcribing the interviews, coding them, and categorizing and deriving themes. The analysis below is presented under the main themes derived.

1) Conceptualization of Introversion and Extroversion:

Participants definitions of the terms introvert and extrovert based solely on their own knowledge: 10 out of the 21





participants, said they had not heard the terms "introvert" and "extrovert" (in Sinhala or English) earlier and did not answer the question. Out of the participants who did answer the question, most of them referred to the social aspect of an individual when defining the terms. Out of them a considerable amount of the answers, such as the example given below, bare resemblance to definitions similar to that of Carl Jung and other definitions found in scientific literature.

An introvert is someone who does not gain energy from being around people. An extrovert is someone who gains energy from being around people." – Interviewee 8

The other ways in which the participants described the word "introvert" were by making no references to the social aspect of a person and second, as people who are less open. The non-social aspect related characteristics describing the introvert were thoughtful, independent, empathetic and "a person who doesn't let other bring them down"; while they were described as less open as, people who do not show their emotions very freely, and as people who you take time to get to know. "Extrovert" was defined as a person who is social, expresses himself and works well in groups. Same as for "introvert", some participants took special effort to attribute an extrovert being a social person to their temperament, a choice they have made or a need they have to be social, while other participants did not.

Participants' thoughts about introverts and extroverts after the terms introvert and extrovert were explained according to definitions given by Jung and Cain:

The main characteristics, traits and behaviors used to describe **extroverts** could be categorized under the themes of those related to being social, those possibly inferring kindness, those related to being well-rounded individuals, those about

group work, those which explained physical behaviors and those which are commonly thought of as negative characteristics to possess. The most common terms used to describe extroverts were those related to being social; and they included, talking a lot, liking to be among people, being outgoing, easy to talk to, easy to be friends with, liking to meet new people, being active on social media and engaging in a multiple number of activities. It could be seen that many participants associated behaviors such as smiling a lot, not holding grudges, showing affection and being childlike all traits that generally suppose kindness. extroversion. Another observation was that traits which are related to being a well-rounded individual were associated with extroverts. Thev included. descriptions of having the confidence to work alone despite usually working well in groups, being considered as having high self-esteem and confidence and engaging in many activities. In addition to those, terms such as 'flexible' and 'balanced' were also used. Another characteristic participants used to describe extroverts, is as people who have the ability to work well in **groups**. They thought extroverts are good team players, who can get along and work well with others. Behaviors and traits which are usually thought of as negative used to describe extroverts were listening less, not paying attention to detail, finding it difficult to live alone, needing people to be at their most creative and innovative and being demanding, and being bland.

The main characteristics, traits and behaviors used to describe **introverts** could be categorized under the themes of those related to being less social, those related to being independent, those related to being bad at team work and good at individual work, those which are positive and can loosely be categorized under humanity, and those associating mental



health related conditions. The most common way of describing introverts was as being less social or unsocial. Characteristics used for description were, being less outgoing, not having many friends, keeping to themselves, liking not going out, needing alone time, being better in one-on-one conversations, being lonely, living in their own worlds and being people who require a lot of time to really get to know. Introverts were also described as being opinionated, independent, able to do things by themselves and not needing help from others which are all characteristics which infer a sense of independence. Another recurring theme seen in how the participants described introverts is, a reference to how they are good at working **alone** or by themselves, and not as capable of working in groups. The greatly positive characteristics that are linked in general to humanity, associated with introversion are loyalty to friends, thoughtfulness, being understanding and attentiveness.

A recurring theme about introverts, were references to mental health related conditions. Associations were made with fear, self-loathing, depression, anxiety, low self-esteem and loneliness. Other examples include, describing introverts as people who critique themselves very harshly and ones who might be having a fear of being let down. Here, it is important to note that no associations were made with mental health when participants described extroversion. Another observation is that, there were indications of acknowledging in some way certain underlying negative views of introversion and extroversion that society has. For example, one participant started an answer by saying,

"I don't think introvert behaviours are a weakness" – Interviewee 21

Here for him to say so, without being prompted in anyway by a previous question or a comment or any such thing hinting that introverted behaviours are a weakness, he has to has to be referring to something he considers to be a norm in society. Another participant, while answering the question of what sort of people he thinks extroverts are mentioned that,

"Extroverts might be misjudged as careless." – Interviewee 7

Here, he believes that society quite wrongly perceives extroverts as careless.

Another observation is that certain participants have had a tendency to make justifications when speaking of what they see as negative behaviors of introverts and extroverts. An attempt at being understanding with a hint of sympathy is seen.

Participants views on what it is like to work with introverts and extroverts separately:

In general, it could be seen that participants had mostly positive things to say about their experiences of working extroverts, except one participant who felt extroverts can be domineering. The main themes seen here were, extroverts being easier get along with, straightforward, more capable of making the people around them work, and being reliable, honest and trustworthy. Most participants thought it is not just easy, but comparatively easier to get along with and in general work with extroverts than introverts. It was seen that they also associate qualities such as being friendly and respecting of others decisions with extroverts. They are also perceived as people who are straightforward in stating their opinions and as people who value unity and have the skill to make a group of people work, while also being able to solve issues with cooperation. Some traits that are not related to being social such as being, trustworthy, honest and understanding were also attributed to extroverts.



On the other hand, introverts were viewed in a different and not very favorable manner to work with. Except for one interviewee who thought introverts could be trusted to get a certain task completed, all other participants had negative things to say about working with introverts. They were mostly those implying negativity, and could be broadly categorized as not being expressive enough, being difficult to work in groups and more suited for individual work, keep their opinions and talents to themselves, and harder to get along with.

"On the other hand, I have seen that more introverted people only prioritize their work and wants to get their work done fast. I also feel that if a mistake happens an introvert would tend to react more aggressively whereas an extrovert will work with everyone to resolve the matter." – Interviewee 3

As seen above, participants also see introverts as less of team players, selfish, unfriendly and better working by themselves than in groups.

The ways in which participants perceive an extrovert's strengths and weaknesses:

The main strengths of being an extrovert are being social (meaning they perceive being social, as a strength) and having good communication skills, being cooperative when working with others, being well liked and being able to take leadership, and in some way or another believed that extroverts are social, have many friends, are good speakers, can be persuasive, and are good at working with other people. Several participants also thought that an advantage of being extroverted is that you will be well liked by others and society in general. It is seen in the following example,

"They're labelled as normal people." – Interviewee 21

The main weaknesses participants saw in extroverts are that they might be too social

in situations that do not require it and might end up being a bother to others, less able to maintain close relationships since they have many friends, bad at keeping secrets, and might not put in a lot of effort and thought to work.

Introverts in contrast, were attributed a completely different set of qualities as their strengths and weaknesses. As for strengths, the main points brought up by participants are, they are very capable of focusing on a given task, paying attention to it and ensuring a well-done job, they can maintain very close relationships the people they associate, and can be trusted with secrets.

As for weaknesses of an introvert, or the disadvantages of introversion, the main points highlighted by the participants were, that they are not well likes by others, they cannot work well with others, they are not good at being social, their skills and talents are hidden and hence of no use, finding it difficult to build relationships, having fewer friends, not expressing their skills and abilities to the world with some participants even stating that introversion has more disadvantages than advantages.

They are further elaborated in the following examples,

"An introvert will suffer from the weakness of not being able to work with others." – Interviewee 3

"It's hard to say that introverts have much strengths. They may excel in certain things which need a lot of thought but in most cases whatever strengths they have won't be of use to society if they won't work with others." - Interviewee 5

"When you're introverted, you won't know many people, you won't know how to even get help from another person. And in reality, it is very hard to work on anything by yourself. But if you're social, there're more chances for you to get help from others." - Interviewee 20



2) Trait Inference to Introversion and Extroversion: Almost all of the participants interviewed mentioned qualities or traits that are related to being less social as ones they think are possessed by an introvert. It was concluded that some of the main traits attributed to introverts coming under being less social, include being shy, quiet, keeping to themselves, not talking much, being reserved, not being friendly, not being outgoing, working alone that in groups, staying by themselves etc. Other common trait participants said would be seen in an introvert is seriousness, thoughtfulness, less humorous, guarded, not relaxed, and scared. It was also observed that there was a repetition of certain negative traits such as being selfish, proud and less confident in the answers of multiple participants. For instance,

"They are a little selfish. Might not be so all the time, but about 90% of the time they come off as selfish. They can be insensitive too. When you work in a group you'll learn to care for others, but when you perform individually you won't care for others as long as you're doing alright. So, they might have a bit of selfishness and insensitivity too. Their self-motivators. They might even think I can produce better results working alone than in a group with the others and motivate themselves through that." - Interviewee 20

On the other hand, almost all of the participants interviewed mentioned qualities or traits that are related to being very social as ones they think are possessed by an extrovert. It can be seen below,

"In a group of people the extroverts would be the really loud, social, active ones, who are always cracking jokes and trying to make people laugh." - Interviewee 8

Other traits attributed to extroverts by the participants were having confidence, being energetic, being bubbly, being happy, being experienced, being straightforward, being

funny and humorous, being sensitive and emotional, being kind, humble and helpful and being fun-loving. It can also be noted that no traits that are necessarily deemed as negative traits to have were attributed to extroverts.

3) Association of Introversion and Extroversion with Academic and Career Success: It was seen that participants thought of introverts as better suited for jobs, that are done individually, jobs that require attention to detail and confidentiality.

They saw them as being capable of focusing on the job and performing the given task well. However, they also thought that introverts would not be very successful career wise in jobs that require group work. In fact, the main weakness they saw in introverts in the workplace is that they are unfriendly, less open, less approachable and generally less appealing to work with, work for or work under.

As for extroverts, many participants believed that they are better suited for jobs with team work and will be capable of leadership roles, especially ones that require rallying and motivating people. They also thought they would be easier to talk to, more understandable and approachable work colleagues. It was also seen that extroverts were perceived to have better networking skills, persuasive powers and communication skills in the workplace.

#### Conclusion

#### *A) Key research findings*

The main findings of this study were that in terms of conceptualization of introversion and extroversion, participants viewed them mainly under the aspect of how social they are. They perceived introverts to be less social and extroverts as more social. Other ways in which they perceived introverts are as being independent, bad at





group work, better at individual work and thoughtful, attentive and loyal individuals. Negative perceptions they had of introverts were that they are selfish, hard to work with, unapproachable, having mental health related issues. On the other hand, extroverts were seen as more social individuals with good communication skills who are easy to work with, well rounded and approachable. Negative perceptions about them were that they are demanding, less attentive, do not pay attention to detail, bland, and less able to adapt to living alone

In terms of trait inferences, extroverts were seen as again social, fun, energetic, funny, relaxed and active, while introverts were seen as reserved, quiet, selfish, independent, tense and serious.

In terms of career success, it was perceived that extroverts are better for positions in groups and leadership more appealing to work in many aspects. Introverts were thought of as better working by themselves and overall more capable of doing a task well, with more focus and attention to detail.

#### B) Limitations of the research

Lack of prior researches done on the topic was a limitation faced. It was required that this study be exploratory in nature rather than explanatory, as well as for an entirely new research design to be created. Most of the theoretical perspectives and previous research findings not being from very recent times was another limitation.

Additionally, the nature of the sample is also a limitation. Firstly, they are undergraduates and hence of a particular level of literacy which may not be representative of another special or ordinary group. Secondly, the sample consists of students who study in Colombo only and hence does not necessarily represent the perceptions of undergraduates hailing from or living in a particular district.

#### C) Recommendations of the research

According to the findings of the study it is seen that participants perceive introverts and extroverts in certain ways and that they have constructed certain stereotypes of them. These perceptions are not always true, since as seen in research extroverts do not necessarily need less talking or quiet and peace to concentrate and perform well (Geen R. G., 1984). The prevalence of these perceptions become disadvantageous in environments such as classrooms where extroverted students are reprimanded for being too interactive or when people skills and networking is given all the importance, and as a result natural introvert tendencies to perform to their potential when being by themselves are hampered. Therefore, the recommendation of this study is to not let the stereotypes, the misconceptions and the social constructions we have of personality types, give way to situations where we see qualities of only one personality type as favorable, and hence create systems and build environments that facilitate the efficient functioning of only one personality type, while another two thirds to half of the population are left struggling to function in an environment that goes against all of their inherent needs (such as a need for less stimulation or a need for more stimulation from the environment), ultimately resulting in an enormous wastage of energy, potential and efficiency.

#### D) Suggestions for future research

Future studies will benefit by conducting similar research on a larger and more widespread population sample that covers all age groups and areas of residence and by focusing on how these perceptions or stereotypes affect the classroom environments and work spaces of Sri Lankans, and what can be done to correct such issues in the system if they do exist.



#### Acknowledgement

I wish to thank my supervisor Dr. (Mrs.) LS Liyanage for her expertise and sincere and valuable guidance and encouragement, and my lecturers Dr. WMAGHA Premarathne, Dr. (Mrs.) KKNP Rathnayake, Mr. HMN Herath and Ms. HMAGK Ekanayake for their guidance throughout this assignment. I would like to acknowledge the administrative staff of the Faculty of Management, Social Sciences and Humanities for their assistance. I am also thankful to my family for their inspiration and encouragement, and my friends and colleagues for their unfailing support.

#### References

Blaikie, N. (2007). *Approaches to social enquiry (2nd ed.)*. Cambridge: Polity Press.

Boddy, C. R. (2016). Sample size for qualitative research. *Qualitative Market Research: An International Journal*, 4(19), 426-432.

Cain, S. (2012, June 19). The power of the introvert in your office. (D. Rousmaniere, Interviewer) Harvard Business Review.

Geen, R. G. (1984). Preferred Stimulation Levels in Introverts and Extraverts: Effects on Arousal and Performance. *Journal of Personality and Social Psychology*, 1303-1312.

Hampson, S. E. (1988). *The Construction of Personality: An Introduction* (2nd ed.). London: Routledge and Kegan Paul.

Jung, C. (1995). *Memories, Dreams, Reflections.* London: Fontana Press.

Sandelowski, M. (1995). Sample size in qualitative research. *Research in nursing and health*, 18(2), 179-183.

#### **Author Biography**



The corresponding author has completed a BSc in Social Sciences from the General Sir John Kotelawala Defence University (KDU) in 2019, and Dr. LS Liyanage is a

senior lecturer of the Department of Social Sciences at KDU.

Paper ID 558

### Students' Perception on Learning English through Distance Education: An Online Survey Conducted in Higher Education Institutes, Sri Lanka at the Time of COVID-19

WS Sudusinghe<sup>1#</sup> and WGC Kumara<sup>2</sup>

<sup>1</sup>Post Graduate Student (MA in Linguistics), University of Kelaniya <sup>2</sup>Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University

#wssudusinghe@gmail.com

Abstract: The importance of distance education became very significant in Sri Lanka with the outbreak of the COVID-19 pandemic specially among the students who are enrolled in compulsory English courses, diplomas, and intensive courses via distance education. Hence, the assessment of the students' perception of learning English via Distance learning is essential to enrich the education process. This online survey was conducted among 253 students who study compulsory English Language courses via distance learning education. A questionnaire composed of questions on demographic information, language usage, and a fourdimensional instrument on student perceptions of learning English through distance education was shared online for a period of two weeks to collect data. This instrument was composed of 18 items which were related to Personal suitability, Effectiveness, Teachability, and Study Habits. Descriptive statistics were analysed using SPSS 23.0. The mean (±SD) age of the participants was 21.29 (±1.37) years. The majority of the participants were females (75.5%, n=191), 92.9%. Moreover, most of them were at the undergraduate level (91.3%; n=231). Many of the participants had no previous experience with Distance Learning Education (73.9% n=187). The average of all the items on the fourdimensional instrument was at the level of 'Neutral' or 'Disagree'. It was noted that various teaching methods should be utilised in the process of online teaching to

address the needs of every student in the classroom. It will enhance their level of motivation and make distance learning a promising experience. Further, empowering the students in completing online assessments and activities on time is also recommended.

**Keywords:** Distance learning education, English language, COVID-19

#### Introduction

COVID-19 is the most crucial challenge that the national education systems have ever faced. governments Many have implemented policies which made the education institutions to terminate face-toface instruction for most of their students, requiring them to switch to Distance Learning Education (Daniel, 2020). Distance learning education is used indefinitely in the modern world, and it is named as e-learning, online learning, and web-based learning as well (Moore et al., 2011). Distance learning carries both advantages and disadvantages to the English language learners. Firstly, Distance education breaks all the barriers and provides the language learner to learn a language free from the constraints of time and space (Altunay, 2019). However, Distance learning carries its share of disadvantages as well, namely the issues with the technology, isolation, sense of anxiety and low motivation (King, 2002).

The development of modern technology has expanded new horizons in education



systems all around the world, including Sri-Lanka. As a result, distance learning, elearning, the concept of smart classrooms, access to e-libraries are used as novel mechanisms in the higher education system. As the demand for English language proficiency grows at a steady pace, many higher education institutes in the world provide distance learning opportunities for English courses, and Sri-Lanka is no exception to this. However, the importance of Distance Education became very significant in Sri-Lanka with the outbreak of the COVID-19. As per the WHO guidelines, the best mechanism to prevent the contamination of COVID-19 virus is social distancing, hence the distance learning education is widely used by many higher education institutes of Sri-Lanka as a means of continuing the academic activities. Therefore, many Sri-Lankan students of higher education institutes participate in compulsory English courses, Diplomas and intensive courses through Distance learning. Hence the assessment of their perception of learning English via Distance learning is essential.

There are some studies conducted all over the regarding student world the perceptions of learning English via distance education. However, only few studies have been carried out in the Sri-Lankan setting. However, it will be necessary to assess the student perceptions for the future modifications of the online education programs. It will enable the policymakers to pay attention to the strengths and weaknesses of teaching English via distance learning and adjust them accordingly. The research question of this study was "what is the students' perception of learning English through distance education among the students who are enrolled in higher education institutes in Sri Lanka?". Therefore, the main aim of the study was to investigate the student perceptions of learning English via distance education in Sri Lanka.

#### **Literature Review**

Literature indicates that there are multiple factors which affect the student's perceptions on distance learning. One of the studies revealed that students enrolled in an elective course had rated online classes positively, whereas the students enrolled in a compulsory course rated negatively (Smart and Cappel, 2006). This highlights that the level of motivation and the self -discipline of the students regarding the specific course may influence their ratings. Moreover, the level of their competency in Information Technology. is identified as a fundamental factor for the motivation shown in online classes (Smart and Cappel, 2006). It is identified that with better exposure students technology have a higher tendency of preferring online classes (Smart and Cappel, 2006). It was noted that students' computer Anxiety (Sun et al., 2008) and the affects personality their perception regarding distance learning education. The students with extroversion personality prefer face to face interaction with the instructor and peers (Smidt et al., 2014). Moreover, some students preferred to use mobile devices on distance learning education since they think that it is motivating (Mockus et al., 2011).

Literature also revealed that the students' satisfaction on the course work depends on the perception of support (Gilbert et al., 2007; Lee et al., 2011). Further, it was noted that insufficient resources and updated material destructively affect students' perception of distance learning. Moreover, the six barriers that online learners face were identified. They are following the schedule and studying regularly; getting hold of classmates and finding a suitable time for working together; pairing/teaming up and working



collaboratively; ensuring constant engagement with the class; keeping self-motivated and being a self-directed learner and socialising (Sun, 2014). Further, a study conducted in Indonesia revealed that the students have more difficulties in learning Grammar and vocabulary via distance education when compared to direct interaction with the instructor (Budiman, 2015).

A research study carried out in Thailand revealed that students with low English proficiency remain as the disadvantaged in the process of distance education (Kuama and Intharaksa, 2016). Another study aimed at assessing the students' language learning strategies in a Moodle-based language learning program has identified that the involvement of the modern technology in language teaching and learning has adverse effects on learner autonomy due to the challenges in the new forms of technology (Khabbaz and Najjar, 2015).

Many studies have been conducted in Turkey to assess the student perception on learning English through distance education. One of them has revealed that the students have felt a sense of relaxation with e-classes conducted on an Advanced Reading course and it has made those students more familiarised with the new learning environment (Yuzer et al., 2009). Another study carried out among a group of university students revealed that the virtual classes conducted on distance learning education had given them an excellent opportunity to practice during the lessons without restraints of time and place. However, it was noted that they were not satisfied with the technical issues related to distance education (Altunay and Mutlu, 2010). A research study conducted among the Turkish students who were enrolled in EFL (English as a Foreign language) course revealed that they were not happy about the examinations and

assignments conducted via distance education. (Ekmekçi, 2015).

Further, they were very much impressed distance education considering the easiness to follow lectures at any place and at any time of the day. A study conducted among EFL learners who study via distance education revealed that the learners' lack of self-directed behaviour towards language learning (Özüdoğru and Hismanoglu, 2016). The reasons behind the lack of self-directed behaviour were the high responsibilities attached to adulthood, insufficient skills and the experience that they have gained from secondary school 2013). Another (Altunay, research conducted among freshmen students revealed that majority of the participants preferred face-to-face instruction over distance education (Özüdoğru and Hismanoglu, 2016).

#### Methodology

The data collection of the study was initiated two months after the government announced to conduct distance teaching in the higher education institutes in Sri Lanka with the outbreak of COVID-19 and once the ethical approval for the study was granted from the Ethics Review Committee, Faculty of Medicine, K.D.U. An online questionnaire developed in English was shared on the social media networks (i.e. Facebook, WhatsApp, Viber) during a period of two weeks to receive the completed questionnaires. The survey targeted on the students who are in their freshman and second year, those who study compulsory English language courses via distance learning education. The consent for attending the study was also taken online from the participants, once the purpose and the objectives were explained through an online statement before the questionnaire. A pilot study was conducted among ten University undergraduates to determine the difficulty level of the items,



ease of understanding of concepts in the items, any discomfort when responding, and the appropriate length of the instrument before the data collection. The students who have participated in the pilot study were removed from the main study.

A questionnaire consisted of two sections (Section A and B) was used for the data collection of this study. Section A composed questions regarding demographic information and language usage. Section B adapted from an instrument developed in a previous study (Altunay, 2019) regarding student perceptions of learning English through distance education. This instrument was composed of 18 items and six dimensions which were related to Personal suitability (items 1,6), Effectiveness (items 7,11), Teachability (items 12,15), and Study Habits (items 16,18). The Cronbach's alpha for the questionnaire was 0.864 (Altunay, 2019). Response to each item was scaled on a Likert scale of one to five (1- Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree). The descriptive statistics, independent sample t-test and one-way ANOVA were performed in SPSS 23.0 in order to find the mean differences among the variables.

#### **Results**

#### Socio-Demographic Data

During the given two weeks, 253 participants had responded for the study. According to the data, the mean (±SD) age of the participants was 21.29 (±1.37) years. Majority of the participants were females (75.5%, n=191), 92.9% were Sinhalese (n=235) and 43.5% were from Western province (n= 110). When considering the learning programme of the participants, 91.3% (n=231) were at the undergraduate level, and 38.3%(n=97) of the study participants were Law undergraduates. The study revealed that many of the participants had no previous experience

with Distance Learning Education (73.9% n=187). However, 79.4%(n=201), 78.7% (n=199), 53.8% (n=136), 38.3% (n=97), 44.7%(n=113), 1.2%(n=3), 0.4%(n=1) were using LMS, Email, Google Class Room, Microsoft Teams, Zoom, WhatsApp, Skype respectively for distant learning purposes during this period (Table 01).

Table 01. Descriptive Statistics

Table 01. Descripti	_					
Parameter	Status					
Demographic data:						
Age						
Mean	21.29					
Median	21.00					
Mode	22					
Std.eviation	1.371					
Gender						
Male	24.5 % (n=62)					
Female	75.5 % (n=191)					
Nationality						
Sinhala	92.9% (n=235)					
Muslim	2.8% (n=7)					
Tamil	2.4% (n=6)					
Christianity	2.0% (n=5)					
Province						
Western	43.5% (n=110)					
Southern	27.7% (n=70)					
Central	9.9% (n=25)					
North-Western	6.3% (n=16)					
Uva	3.6% (n=9)					
Sabaragamuwa	3.6% (n=9)					
North-Central	2.0% (n=5)					
Eastern	1.6% (n=4)					
North	1.6% (n=4)					
Learning Programme						
Undergraduate	91.3% (n=231)					
Diploma	8.7% (n=22)					
Stream of Study	, ,					
Law	38.3% (n=97)					
Allied Health Science	26.9% (n=68)					
Medicine	14.2% (n=36)					
Engineering	11.5% (n=29)					
Training College	9.1% (n=23)					
Previous Experience on						
Distance Learning						
No	73.9% (n=187)					
Yes	26.1% (n=66)					
Method of distance						
learning						
L.M.S.	79.4% (n=201)					
Email	78.7% (n=199)					
Google Class Room	53.8% (n=136)					
Microsoft Teams	38.3% (n=97)					
Zoom	44.7% (n=113)					
WhatsApp	1.2% (n=3)					
Skype	0.4% (n=1)					
экуре	0.4% (n=1)					





Students' Perception of Learning English through Distance Education

The Students' perception on Learning English through Distance Education was evaluated from the data received from the section B in the questionnaire. Each participant's response for each item in the relevant dimension was summed, and it was divided by the number of items to receive the participant's average score for each item (Table 02).

## Personal Suitability

The first dimension, 'Personal Suitability', was composed of six items and five out of them were at the level of "Disagree" (Table 02). Further, the findings of the study revealed that both male (2.42± 0.51) and female (2.38± 0.49) students' perception of the personal suitability is at a "Disagree" level. However, there was no significant difference between male and female students' views regarding distance language learning in terms of suitability (P=0.614).

#### Effectiveness

The second dimension 'Effectiveness' was composed of five items, and four of them were at the level of 'Neutral' (Table 02). The findings of the study revealed that both male (2.78± 0.65) and female (2.59± 0.65) students' perception of the 'Effectiveness' is at a "Neutral" level. There was a significant difference between male and female students' views regarding distance language learning in terms of 'Effectiveness' (P=0.042).

#### **Teachability**

The third dimension 'Teachability' was composed of four items and all were at the level of 'Disagree' (Table 02). Further, the findings of the study revealed that both male (1.93± 0.67) and female (2.39± 0.68) students' perception of the 'Teachability' is at a "Disagree" level. However, there was a significant difference between male and

female students' views regarding distance language learning in terms of 'Teachability' (P=0.000).

## **Study Habits**

The fourth dimension 'Study Habits' was composed of three items, and all were at a 'Neutral' level (Table 02). The findings of the study revealed that both male (2.65±1.01) and female (3.36±0.91) students' perception of the "Study Habits" is at a "Neutral" level. There was a significant difference between male and female students' views regarding distance language learning in terms of 'Study Habits'(P=0.000).

Further, One-way ANOVA test reveals that there are no significant differences in all the four dimensions on their stream of study with the provinces that they are located (P > 0.05)

Items	Perce	Mean	S. D	Level
	ntage (%)			
Personal suitabili	ty (1 -6	5)		
It is convenient for	46.0	2.30	0.76	Disagree
me to learn				
English through				
distance				
education				
Learning English	48.8	2.44	0.84	Disagree
through distance				
education is				
suitable for my				
lifestyle				
Distance	47.6	2.38	0.88	Disagree
education serves				
as an excellent				
mechanism to gain				
the English				
knowledge I need				
Distance	42.2	2.11	0.85	Disagree
education saves				
my time a lot				
I need the	45.0	2.25	0.68	Disagree
flexibility of				
participating in				
the lessons				



without time and				
place constraints				
I prefer learning	57.6	2.88	1.00	Neutral
English from				
home rather than				
going to the				
educational				
institute				
Total Mean of	47.86	2.39		Disagree
Personal				
suitability				
Effectiveness (7-1	1)	1	ı	
Distance	57.2	2.86	0.92	Neutral
education makes				
the student more				
active in terms of				
learning English				
Distance	51.8	2.59	0.90	Neutral
education offers		,	0.70	- routius
the opportunity to				
do various				
activities to learn				
English				
Distance	42.6	2.13	0.65	Disagree
education allows	_	2.10	0.00	Disagree
the students to				
learn English at				
their own pace				
Distance	54.0	2.70	0.85	Neutral
education helps to			0.00	Trought dr
learn English				
more effectively				
with no				
distractions				
Distance	58.4	2.92	0 99	Neutral
education is more			0.55	reacrai
effective than				
traditional				
education				
	52.8	2.64		Neutral
Effectiveness	52.0	2.01		reactai
Teachability (12-1	<u> </u> 5)			
Face-to-Face	46.0	2.30	0 94	Disagree
interaction is		2.50	0.74	Disagice
necessary for				
English learning				
Communication in	41 2	2.06	0.84	Disagree
face-to-face	71.2	2.00	0.04	Disagi ee
Tace-to-race English learning is				
more instant and				
more precise than				

in distance				
learning				
English education	47.8	2.39	0.87	Disagree
is offered better				
through				
traditional				
education				
compared to				
distant learning				
I need face-to-face	47.2	2.36	0.94	Disagree
communication to				
learn English				
Total Mean of	45.55	2.28		Disagree
Teachability				
Study Habits (16	- 18)	•	•	•
I have the habit of	65.0	3.25	1.17	Neutral
postponing the				
assignments given				
online				
Most of the time I	68.6	3.43	1.10	Neutral
do not finish the				
homework or				
exercises given				
I wait until the last	57.8	2.89	1.13	Neutral
moment to do my				
homework or to				
study for the exam				
Total Mean of	63.8	3.19		Neutral
Study Habits				

## **Discussion**

This study evaluated the students' perception on learning English through distance education with the outbreak of COVID-19 global pandemic among the students enrolled in higher education institutes of Sri Lanka. Since most of the higher education institutes of Sri Lanka have started distance education with the COVID-19 outbreak, the majority of the students have stated that this is their first experience on distance learning.

The University Grants Commission (U.G.C.) and Telecommunication Regulatory of Sri Lanka (TRCSL) have agreed with network providers in Sri Lanka to provide free access to University L.M.S. for the academic community during this outbreak (LEARN's Support, 2020). This study reveals that



students are currently taking the maximum benefit from this service as L.M.S. is the most popular learning method among the study population. The Zoom and the Microsoft teams are considered as the most convenient means of video conferencing for academic purposes around the world during this period. However, the usage of these two web applications was minimal among this study population. This might be because most of the students might have had difficulties when accessing the higher data consumption required for video conferencing. However, it was noted that the ZOOM Video Conferencing facility has also been made freely available for many academic institutes in Sri Lanka (LEARN's Support, 2020) to facilitate the students to have a better learning experience with no personal data consumption. Empowering this virtual face to face interaction method would facilitate the students to adjust to the distance learning from traditional face to face interaction in the classroom.

In terms of the dimension 'Personal Suitability', five out of six items were at the level of "Disagree". According to the responses given on the items by the participants, it indicates that the distance learning is not convenient, not suitable for their lifestyle, not serving as an excellent mechanism to gain the English knowledge and not saving time. However, a similar study conducted in Turkey stated that the study participants were at the level of 'Neutral 'on the dimension 'Personal Suitability' (Altunay, 2019). In terms of the dimension' Effectiveness', four items out of five were at the level of 'Neutral'. Further, they have disagreed with the item 'Distance education allows the students to learn English at their own pace'. It implies about the importance of obtaining student feedback on the pace of the course content delivered, whether it is tolerable or not. The study conducted in Turkey in the same context stated that the study participants

were also at the level of 'Neutral 'on the dimension 'Effectiveness' (Altunay, 2019).

All the items of the dimension 'Teachability' were at the level of 'Disagree' which means that the participants disagree with the perception of 'traditional face to face learning method is better than distance learning'. However, a study conducted in Turkey among the freshman students participating in foreign language courses revealed that the students prefer face-to-face learning over education (Özüdoğru and Hismanoglu, 2016). Further, the study conducted in Turkey in the same context revealed that the study participants were at the level of 'Neutral' on the dimension 'Teachability' (Altunay, 2019). The three items included in the dimension 'Study habits' were 'Neutral' and revealed that there is a high tendency of the students in skipping and postponing the assessments and activities given online by their instructors. The study conducted in Turkey in the same context stated that the study participants were also at the level of 'Neutral' on the dimension 'Study Habits' (Altunay, 2019). Moreover, another study conducted among Thailand students enrolled for a distance learning course in English revealed that the weak students would be disadvantaged by distance learning and they need selfdirecting guidance through a tutor (Altunay and Mutlu, 2010). Therefore, the instructors should empower each student to keep up with the deadlines on given assignments or activities.

#### **Conclusion**

The average of all the items on the four dimensions was at the level of 'Neutral' or 'Disagree'. However, there are both positive and negative aspects to be taken from this study. It was noted that the methods of teaching should be blended with various teaching methods (from sharing learning material to a virtual face to



face interactions) and to address every student in the classroom to make distance learning more enjoyable. Further, it will be necessary to pay more attention in providing the students with the necessary technical support in order to enhance their satisfaction on distance learning.

The study also revealed that the students have issues with autonomy and the level of motivation as they tend to have a delay in finishing the assignments given on time via distance education. Therefore, student feedbacks should be taken on the lessons carried out, and several interventions should be taken to empower the students completing regarding the assessments and the activities on time. Consequently, the future studies should be aimed at assessing the students' autonomy, the level of motivation, technical difficulties and pedagogical support in order to understand the difficulties faced by the students in distance learning and to modify the system accordingly. It will enhance their level of motivation and make distance learning a promising experience.

## Acknowledgement

I gratefully acknowledge the participants of the study for their contribution and for their genuine feedback given to fulfil the objectives of this study.

#### References

Altunay, D., 2019. EFL Students' Views on Distance English Language Learning in a Public University in Turkey. Stud. Engl. Lang. Teach. 7, 121. https://doi.org/10.22158/selt.v7n1p121

Altunay, D., 2013. Language Learning Activities of Distance EFL Learners in the Turkish Open Education System as the Indicator of Their Learner Autonomy. Turk. Online J. Distance Educ. 14, 296–307.

Altunay, D., Mutlu, M., 2010a. Use of I.C.T. in Distance English Language Learning: A

Study With Anadolu University, Open Education Faculty EFL Students.

Altunay, D., Mutlu, M.E., 2010b. Use of I.C.T. in Distance English Language Learning: A Study With Anadolu University, Open Education Faculty EFL Students.

Budiman, R., 2015. Distance language learning: students' views of challenges and solutions. IJONTE 6, 137–147.

Daniel, S.J., 2020. Education and the COVID-19 pandemic. Prospects 1–6. https://doi.org/10.1007/s11125-020-09464-3

Ekmekçi, E., 2015. Distance-education in Foreign Language Teaching: Evaluations from the Perspectives of Freshman Students. Procedia - Soc. Behav. Sci. 176, 390–397.

https://doi.org/10.1016/j.sbspro.2015.01. 487

Gilbert, J., Morton, S., Rowley, J., 2007. e-Learning: The student experience. Br. J. Educ. Technol. 38, 560–573. https://doi.org/10.1111/j.1467-8535.2007.00723.x

Khabbaz, M., Najjar, R., 2015. Moodle-based Distance Language Learning Strategies: An Evaluation of Technology in Language Classroom. Int. J. Appl. Linguist. Engl. Lit. 4, 205–210.

https://doi.org/10.7575/aiac.ijalel.v.4n.4p .205

King, F., 2002. A virtual student: Not an ordinary Joe. Internet High. Educ. 157–166.

Kuama, S., Intharaksa, U., 2016. Is Online Learning Suitable for All English Language Students? 30.

LEARN's Support for the Challenges of COVID-19 | Lanka Education and Research Network [W.W.W. Document], n.d. URL https://www.ac.lk/covid-19 (accessed 5.18.20).

Lee, S.J., Srinivasan, S., Trail-Constant, T., Lewis, D., Lopez, S., 2011. Examining the





relationship among student perception of support, course satisfaction, and learning outcomes in online learning. Internet High. Educ. - INTERNET HIGH EDUC 14, 158–163.

https://doi.org/10.1016/j.iheduc.2011.04. 001

Mockus, L., Dawson, H., Edel-Malizia, S., Shaffer, D., An, J., Swaggerty, A., 2011. The Impact of Mobile Access on Motivation: Distance Education Student Perceptions.

Moore, J., Dickson-Deane, C., Galyen, K., 2011. E-Learning, online learning, and distance learning environments: Are they the same? Internet High. Educ. 14, 129–135.

https://doi.org/10.1016/j.iheduc.2010.10. 001

Özüdoğru, F., Hismanoglu, M., 2016a. Views of freshmen students on foreign language courses delivered via e-learning. Turk. Online J. Distance Educ. 17. https://doi.org/10.17718/tojde.18660

Özüdoğru, F., Hismanoglu, M., 2016b. Views of freshmen students on foreign language courses delivered via e-learning. Turk. Online J. Distance Educ. 17. https://doi.org/10.17718/tojde.18660

Smart, K.L., Cappel, J.J., 2006. Students' Perceptions of Online Learning: A Comparative Study. J. Inf. Technol. Educ. 5, 201–219.

Smidt, E., Bunk, J., McGrogy, B., Li, R., Morgan, T., 2014. Student Attitudes about

Distance Education: Focusing on Context and Effective Practices. IAFOR J. Educ. 2, 40–64.

https://doi.org/10.22492/ije.2.1.02

Sun, P.-C., Tsai, R., Finger, G., Chen, Y.-Y., Yeh, D., 2008. What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction. Comput. Educ. 50, 1183–1202. https://doi.org/10.1016/j.compedu.2006. 11.007

Sun, S.Y.H., 2014. Learner perspectives on fully online language learning. Distance Educ. 35, 18–42. https://doi.org/10.1080/01587919.2014. 891428

Yuzer, V.T., Aydin, B., Gonen, S.I.K., 2009. Learners' Perceptions toward Online Learning: An Application for a Synchronous E-Class. J. Educ. Technol. 6, 30–40.

## **Author Biographies**



Wasana Sudusinghe is currently undertaking her Master in Linguistics at University of Kelaniya. Further, she is serving as a visiting instructor in

English at the Department of Languages, Faculty of Management, Social Sciences and Humanities, KDU. Applied Linguistics and Educational Psychology are her major research interests.

Paper ID 567

# A Study on Compensation Strategies of Subtitling Culture Bound Terms and the Intimate Register with Special Reference to Selected Sinhala Movies

JAM Hansani# and HN Gamage

Department of Languages, Sabaragamuwa University of Sri Lanka

#madukahansani89@gmail.com

**Abstract:** Subtitling is one of the most significant sub-disciplines of Translation, yet, it is one of the under-researched and less discussed topics that hardly appears in researches in Sri Lanka. The amalgamation of technology and art of translation have made this field more fascinating, and the researchers decided to select this topic due to the urge to pay a better consideration to this sub discipline of translation in the academic field of Sri Lanka. The primary purpose of the research is to investigate the compensation strategies employed by subtitle writers when they were subtitling intimate registers and culture bound terms in Sinhalese films to English language. As per the methodology the researchers have used seven Sinhalese films rich in culture and diverse registers and then noted down the strategies that the subtitle writers have used to make the culture bound contexts and intimate registers comprehensible to the target audience to meet their expectations. The strategies were categorised under the 'six strategy method' of Diaz Cintas and Ramael (2007). The data demonstrated that all analysis strategies have been used by the subtitle writers of the selected films. And they have used the strategy of transposition in most occasions. Furthermore, it was examined that subtitle writers of the selected films view cultural adaptations as the most popular strategy as it has been used in almost every selected film. As the conclusion, the research observes that subtitle writers use many compensation strategies when they confront difficulties in

making culture bound terms and intimate registers appealing to the target audience.

**Keywords:** Culture bound terms, Intimate registers, Strategies, Subtitling, Translation

#### Introduction

Subtitling is one of the most significant areas lays under the discipline of translation. The concept belongs to the sub category of audio-visual translation; the other division being dubbing. In simple terms, subtitling refers to texts that appear in the same language of the audio visual work (Intra-lingual subtitling) or in another language (Inter-lingual subtitling). The research has only considered the inter - lingual subtitling of Sinhalese and English Languages. According to Baker and Hochel (2001) dubbing is an oral translation activity that makes use of acoustic channels in screen translation and subtitling is a visual translation activity that involves superimposition in a written text on to the screen. Gottileb (2004), one of the pioneers in the subtitling discipline defines it as a which entails process technically transferring a Source Language (SL) movie or audio visual media to a Target Language (TL), synchronized with the original verbal message. Ivarson (1992) has expressed his views about the importance of subtitling and according to him, the subtitle writer is ought to pay his or her consideration to cultural awareness of the target audience in the process.

The process of subtitling demands cognitive process that is loaded with



problems which makes it intricate to employ. There are so many constraints that the subtitle writer has to overcome since the process is an amalgamation of Technology and Art of translation. Apart from addressing to the heart of the target audience, the subtitle writer should be able to deal with some technicalities as well. In subtitling, according to Gottileb (1992), there should be only two lines with 35 characters. In general it is proven that the reading speed of the viewer is around 150-180 words per minute which may vary based on lexical density and linguistic information presented in the text.

The center of attention of the research is the way to manipulate culture - bound terms and intimate register in subtitling. and Translation share unbreakable bond. According to Newmark (1988), "Culture is the way of life and its manifestation which are peculiar to a community that uses a particular language as its means of expression". He further discusses about culture bound term as "Culture bound terms, whether single unit lexemes, phrases or collections are those which are particularly tide to the way of life and its manifestations that are peculiar to a community that uses a particular language as its means of expression". Many linguists have defined and classified registers in different ways. Registers can be generally defined as an area of subset of language used for a particular purpose or social setting and when considered about the classification of registers, the research has adopted Martin Joos's classification of registers. He has divided registers into Frozen, Formal, Consultative, Informal and Intimate. The study is based on the intimate register which is associated with the language of intimates or and sexuality.

Though there are many linguistic and nonlinguistic challenges that the subtitle writer has to overcome in the process, this area can be considered as one of the under

researched areas of translation. There are no recorded traces that a local researcher has done a study related to subtitling which bears the witness that it has not been practiced or developed as an academic discipline in Sri Lanka. However, many foreign researches have manifested their inclination towards subtitling. Noun Alwa (2011) has done her Master thesis regarding subtitling where he discusses about culture representation through culture. Naomi Ventria has done a research on "Subtitling Strategies based on "Real Steel" movie'. Rr. Gustin Zora's (2015) research is also based on subtitling strategies and she further discusses about the connection between subtitling and translation readability with interference to Indonesia, subtitling of Maleficent movie. Bhilad Khalid (2016) has also done a study title "An Introduction to Subtitling; Challenges and Strategies" which have been supportive when doing the research.

Therefore, the research encourages to infuse that research shortage by investing the translation strategies employed by Sinhalese films when English subtitles are used for the films. The researcher's ultimate emphasis is to detect the approaches the subtitle writers have taken to do justice to the culture bound terms and the intimate register that have appeared in those selected films. The researchers have accompanied seven Sinhalese films with English subtitles during the research and the strategies used in subtitling of those films will be broadly analyzed using the "six strategy method" provided by Diaz Cintas and Remael (2007).

### Methodology

Research Design

Researchers have used a qualitative approach for the research since the research's purpose is to describe the concept of subtitling which comes under audio-visual translation. Utterances where



culture bound terms or / and intimate register do appear have been taken as the data sampling. The research has taken seven Sinhala films with English subtitles to conduct their study. Data for the research were taken from seven selected movies ;Akasa kusum, Surabi Dena , Machan, Anantha Rathriya, Deewara Diyani,Baddeama and Stuti Nawatha Enna. Subtitles for the above movies were taken from online. The rationale behind selecting these films is that all of them are presumed to be rich in culture bound terms and intimate register. Data collection method of the research is watching films, collecting utterances with culture bound terms and or intimate register and comparing them with its English subtitles. So the data is collected through observation method and as the final step, the utterances found in the movies were classified as issues confronted by subtitle writers have faced and as the strategies they have used or could have used to entertain the target audience by providing an accurate and effective output.

#### Discussion

In this core part of the research, the data gathered will be analyzed and results are broadly discussed. As it was mentioned, the data are categorized under six strategy method proposed by Diaz Cintas and Remael (2007). The researchers have analyzed the strategies used in the selected subtitles of the selected seven films and categorized under the above mentioned strategy. The researchers observed that the subtitle writers were dealing with many issues regarding culture bound terms and intimate registers and however most of the subtitle writers have attempted the below six strategies to get rid of those issues. Thus under the discussion part those strategies employed will be discussed with examples taken from the selected films.

The first technique introduced by Diaz Cintas and Ramael (2007) is "Calque". The

term calque or loan translation refers to the case where the translator imitates in his translation, the structure or manner of expression of the source text (ST). In the film "Deewara Diyani"(ධීවර දියණි) which has fully focused on fisheries, the cultural phrase of the ST "Atha Kaduna wage" (අත മുല്ലക്കാ ഉത്രി has been replaced by the term "crippled". Here the equivalent is not the same as the source subtitling, but carries the message. Similarly in the film "Sthuthi Nawatha Enna" (ස්තූතියි නැවත එන්න) the literary culture bound phrase "Ahasa minissunta ochcham karanakota"(ಇಐಜ මිනිසුන්ට ඔච්චම් කරනකොට) is translated as ""when the sky ridicules people", "katu attaka ellenna balanne" (කටු අත්තක එල්ලෙන්න බලන්නේ) as "try to cling to even a branch of thrones" and "Daivaya tawa dorak arinne na" (ලෛවය තව දොරක් අරින්නේ නෑ) as "destiny won't open another door". Here though the taste of the ST phrase has loosen, the accuracy of the message is preserved. Here the target language borrows an expression but translates literally its elements. This way quite clears that the selected films have effectively used calque as one of their effective strategies.

Transposition or shift as Catford called reflects the grammatical change that occurs in translation from Source Language (SL) to Target Language (TL). In Transposition, the ST cultural items are subtitled into equivalent TT cultural concepts. The TT item may not be equivalent to the ST item, yet it sounds culturally acceptable in the TL. There are many transposition strategies employed in the subtitling of selected films. In the film "Machang" (මවං) the colloquial term "hujja" (නුජ්ජ) is translated as "piss" and the term "sudda" ( ್ಷಕ್ರೀನ್) is translated as "white man". In the film "Akasa Kusum" (ආකාස කුසුම්) the term "pataw" (පැටව්) is translated as "children". In "Anantha Rathriya" (අනන්ත රාතුය), the terms "Appo" (අප්පො) and "keli" (කෙළි) are



translated as master and daughter. Similarly in the film "Deewara Diyani" (ධීවර දියණි), the terms "Mariyawa" (මාරියාව), a term in fisheries register is translated accurately as "storm". In the film "Sthuthi Nawatha Enna", the term "Kiri sappaya" (කිරි සප්පයා) and "maddumaya" (මද්දුමයා) are translated as "baby" and "second fellow". So what the subtitle writers have done is since that culture bound terms and intimate registers do not have direct equivalents, they have been translated as culturally acceptable versions.

The next strategy is explication where the subtitle writer has made an effort to translate the untranslatable linguistic units comprehensible and accessible to the target audience by describing them. In the film "Sthuthi Nawatha Enna" (ස්තූතියි නැවත එන්න), the unique cultural and a term in folklore "mahadana muttage katha" (මහා දැන මුත්තාගේ කතා) is something which is familiar only to the target audience thus when replacing the phrase, the subtitle writer has used "some interesting stories" which describes or explains the terms. Similarly, the terms "Wessanthara Jathaka" (මවස්සන්තර ජාතක) since it is only appealing to the target audience, they are replaced by "theatre dramas". This is also considered as a good example for the strategy of generalization.

Cultural adaptation can be divided into three groups as, Limited UniversalizationAbsolute Universalization and Cultural Substitution Naturalization.In adaptation, the translator changes the content and form of the ST in a way that conforms to the rules of the target language and culture. In the selected seven films the above three types of adaptation can be seen. In Limited Universalization, a subtitle replaces an ST culture bound term with another term in the TT culture which more common. In the film is "Machang"(මචං), phrase "yana the tanakata yamuko rattaran"( යන තැනකට

යමුකො රත්තරන්) is translated as "Can't live without you". When talking of Absolute Universalization, a subtitle replaces the SL culture bound term with a neutral term in the TL. For example in the film "Iramadiyama" (ඉරමැදියම), the term "Bibila" (බිබිල) is translated as "far" which is accessible to the target audience. In the last one, which is Cultural Substitution, a subtitle replaces the SL culture bound term with the TL culture bound term. For example in the film "Machang"(මවං) the "kelawenawa" (කෙලවෙනවා) terms replaced by "fucked up" and in the film "Sthuthi Nawatha Enna"(ස්තූතියි නැවත එන්න), the colloquial phrase, "suddhek wage inna thibuna"(සුද්ලදක් වගේ ඉන්න තිබුණා) is replaced as "can live like a king" which is a familiar expression in the target culture

In using the strategy of Generalization,, the subtitle writer decides to use a hyponym. In the film "Sthuthi Nawatha Enna" (ස්තුතියි නැවත එන්න), the local symbol to show disgust "tuu vitharak" (තු විතරක්) is subtitled as "nonsense". The last strategy, loan is particularly used when SL names are translated in to the TL.. In the film "Sthuthi Nawatha enna"(ස්තුතියි නැවත එන්න) the culture bound terms like "Nivan"(නිවන්), "Siddhartha" (සිද්ධාර්ත), "Yatadola"(යටදොළ) have been transliterated. So it is proved that in the selected films, six strategy method proposed by Diaz Cintas and Remael (2007) is used to tackle with culture bound terms and intimate register.

Though it is evident that the subtitle writers have used all the six strategies when translating culture bound terms and intimate registers, the frequency of using the six strategies vary. When subtitling the twenty six utterances, the strategy that has been mostly used is Transposition. The particular strategy has been used in 10 utterances. Calque, explication, cultural adaptation , generalization and loan



translation have appeared in 05,03,05,01 and 03 utterances respectfully.

#### Conclusion

To conclude, in this study the researcher mainly aimed at examining the challenges the subtitle writers have confronted and the strategies they have used or could have used to overcome these challenges while subtitling the intimate registers and culture bound terms which appeared in these seven selected Sinhalese films. To analyse the strategies, the research has used Diaz Cintas and Ramael's 'six strategy method'(2007). The result of the study observed that the 'six strategies' proposed by Diaz Cintas and Ramael(2007) have been used in subtitling by the subtitle writers as strategies in order to overcome the challenges they confronted. Mostly in the selected films, when translating twenty seven utterances, the subtitle writers have used the strategy of transposition whereas only one utterance has been translated by using the technique of generalization Further to this, besides successful subtitles, this study examined a number of serious errors and mistranslations subtitle writers have made while subtitling the intimate registers and culture bound contexts which made it difficult to meet the expectations of the target audience. The research further encourages executing more researches on the discipline of Subtitling to investigate more possible strategies that can be employed to deal with the intimate registers and culture bound contexts appear in the films.

#### References

Cintas,D and Remael, A.( 2007). Audiovisual Translation: Subtitling. Manchester:St. Jerome Publishing,.

Ghaemi, F and Benyamin, J. (2010). Strategies Used in the translation of interlingual

subtitling. J. Engl. Stud.pp. 39-49.

Pedersen, J. (2005). How is culture rendered in subtitles. In: Gerzymisch-

Arbogast, H, and Nauert, S. (Eds.), Challenges of Multidimensional Translation, Pro-Ceedings of the MuTra Conference in Saarbreucken, Germany: 26 May 2005, pp. 113-129. Available at: www.eurocon-ference.info/proceedings.

Nedergaard-Larsen, Birgit. (1993). Culture-Bound Problems in Subtitling. In Perspectives: Studies in Translatology. pp.207-242.

Mohamed Abdelaal, N.(2019). Subtitling of culture-boundterms: strategies and quality assessment. Available at: www.cell.com/heliyon/home.

Khalid Khalaf, B.(2016). An introduction to subtitling: Challenges and Strategies. Available at: www.researchgate.net/publication.

Paper ID 569

# Study on Glass Ceiling Factors Affecting Women's Career Development with Special Reference to Sri Lankan Construction Industry

WNN Alwis<sup>1#</sup> and KKNP Rathnayake<sup>2</sup>

<sup>1</sup> Canterbury Christ Church University, North Holmes Road,
 Canterbury, Kent CT1 1QU, United Kingdom
 <sup>2</sup> Department of Social Sciences, Faculty of Management, Social Sciences and Humanities,
 General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

#nu\_nis\_al@yahoo.com

**Abstract:** The Glass ceiling is one of the foremost compelling metaphors, which is used to analyse the imbalance between male and female workers within the work environment. The purpose of this study is to understand the glass ceiling factors affecting on women's career development in Sri Lankan construction industry. The study aims to get a good understanding of the underrepresentation of females in top management positions and the reluctance to cultivate their professional careers in the industry. To accomplish the objective both qualitative and quantitative research approaches were used. By means of quantitative analysis, a structured questionnaire was distributed among a sample consisting of 53 female middle managers. The results of regression analysis discovered individual factors, and gender stereotype has positively affected the career development while family responsibilities do not have a significant influence on career development. The findings reveal that some of the barriers mentioned in the literature are prevalent in the Sri Lankan context except family responsibilities. For qualitative analysis, five lady senior managers in the construction industry were interviewed. According to their perception organizational culture. social-cultural factors and environmental factors are the significant factors which affect the career development of women. The study findings

further offer some strategies to break those glass ceiling factors in an organizational context as well as personal characteristics. The company should give more opportunities for female employees. Apart from that people must individually have a thirst for developing their professional careers, and they must be willing to take risks and always think out of the box.

**Keywords:** Glass ceiling, Women career development, Individual factors, Family responsibilities, Gender stereotype

#### Introduction

Males and the females are the pillars of the society, without considering the equal participation of them in all domains of life there is no significant growth. Since the Stone Age females have been contributing to the social-economical life with males, but considerably less labour (Sadaquat, M.B., & Quarr-tul-ain A.S., 2010). In the past, people thought that woman ought to act as a full time housewife and takes care of her family rather than being a portion of the labour force. This understanding has changed considerably over the years as ladies have shown their capability in skills and knowledge to men (Domenico, D.M., & Jones, K.H., 2006). Meyerson (2001) also highlighted that in past men were treated as the monetary suppliers while women were seen as domestic guardians and caretakers. Only a



few or no women allowed to enter the business world and let alone to hold managerial positions. That is why the industry is dominated and run by men (Meyerson, 2001).

International Labour Organization (2018) recorded that the female labour force participation rate is only 47.88%. (ILO, 2018). In Sri Lanka, the female population is above fifty per cent of the total population, but their contribution to the workforce is only 33.6% as of 2018. Also noted that economically inactive people is about 7.8 million and the majority are females (74.1%). According to the Sri Lanka Labour Force Survey Annual Report (2018), out of 74.1% economically inactive females are engaged in housework and, it is more than 60%.

Although the number of female entry into the labour force has slightly improved, they get significantly lower wages compared to men (Tinklin, T., Croxford, L., Ducklin, A., & Frame, B., 2005). Society looks down to discriminate the women by thinking they are only skilled to fulfil the lower managerial position (Rashid, A.M., Bakar, A.R., Asimiran, S. & Loh, P.T., 2009). In many countries in the world, women have a good rate of entering primary schools and universities. However, they are not getting equal openings at higher levels of establishments (Wentling, R. M., 2003). In (ILO, 2016) also reported that even though there is an important improvement in women's education in past years, it has not been translated into similar advancement in the working industry where gender inequality exists.

According to Grant Thornton (2012), there was only twenty-one per cent of senior management position are universally held by ladies in both private as well as the listed businesses (Thorton, 2012). So it is vital to understand why females under presented in senior management positions in the

organizations (Hoobler, J. M., Wayne, S. J., & Lemmon, G., 2009). Grant (2017) again highlighted that internationally, 1 in 4 senior points is currently seized by a woman and compared to 2016 it is a slight increment, but apart from that number of businesses with zero women in senior positions also gone up. The report reveals that only 1% of women in top management category has climbed from 2016 to 2017 (24% in 2016 and 25% in 2017) and at the same time quantity of organizations with zero female input into management has also risen at the same rate (from 33% in 2016 to 34% in 2017).

The construction industry is globally considered as one of the key contributors to the national economy. This applies to the Sri Lankan construction industry too. According to the Central Bank Annual Report (2018), the contribution of Sri Lanka's construction industry to the country's GDP was 6.8% in 2018. The construction industry in Sri Lanka reflects an upward drift, because of the post struggle.

Typically a construction industry is a masculine industry and female have been going steadily towards occupations, professionals and managerial jobs which were reserved for men previously. Despite this welcome, there are only very few ladies who hold higher management positions in the construction industry. It is created that ladies are stood up by noteworthy barriers to joining the industry and as well as to reach the senior positions in the organizations.

The study was conducted to obtain the following objectives. "To find out the key glass ceiling factors affecting on women carrier development", "To determine how Individual factors, Family responsibilities and Gender Stereotype impact the career advancement of middle management female employee in the construction



industry" and, "To find out the strategies to overcome the above factors". The review was done by choosing 6 key construction companies which are holding membership of "Major Constructors of Sri Lanka" (MCSL) Association. It was found that a very low proportion of women ( 12.7%) reported being occupied in the construction industry. There distinguished difference in the top-level female managers the in industry. Percentage breakdown of male and female in senior management category is 95.3% and 4.7% respectively. Sri Lankan Labour Demand survey in 2017 stated that when considering the occupational group there is only 5.5% of managers are in the construction industry. Here the manager group contains chief executives, corporate managers, and managers who developed and coordinate strategies and activities of the organizations. Generally, they are in the higher management category. All others are middle and lower flat employees. Such as engineers, lawyers, economists (Sri Lanka Labour Demand Survey, 2017). The objective of this survey is to get better thoughtful of the factors that affect women career development in the industry.

#### **Literature Review**

The objective of this survey is to get better thoughtful of the factors that affect women career development in the industry. The study was reinforced by many theories and models which provide clarification of the blockades to women career progression.

#### Theoretical Literature Review

The "Gender role theory" states that convictions be in the society regarding the roles that are suitable for every sexual orientation and males and females are need to have or develop the features steady with the one's relegated part (Wood, 2008)."Social cognitive theory on the individual characteristic" by Browns and Hackett in 1987 recognizes the

collaboration of individual attributes, exterior nature variables, behaviour in career development. The theory emphases on the impact of self-efficacy convictions and results desired on targets and (Stitt-Gohdes, behaviours 1997). Behavioural difference between male and females are described in the 'Social Role Theory' which was developed in 1980 (Eagly, 1987). As per the theory, the behaviour happens due gender to stereotype, that means the typical roles related to gender (Strodtbeck, F. L. & Mann, R. D. 1956). The Feminism Theory was trying to lighten the sexual discrepancies and the overthrow of ladies. By this theory, it is trying to reach the generous and endorsement of women through the present scheme in a good way. This encounter all practice of favouritism. Generally, people think through that female worry with the stuff which are not grave and reduce affinity to sensitive answers rather than views. Generally females help men and are not good in the decision So according to the Feminist making. Liberal Theory, there is a high requirement for gender equality in financial, political and societal development (Korda, 1974). According to the theory of "Reproduction of labour", that females are adopted to the traditional roles, may expect the irregular and smaller patterns. They have fewer ambitions when compared with a male colleague. So it is the main reason that only a few females are upgraded their career to managerial level. This reflects organizational discrimination practices. They are discrimination when appointing, upgrading and other enlargement stages. Selection and development will depend on socialization. According to the pipeline theory, there is a women shortage in the pipeline. This means there is no sufficient qualified females are available to grand top executive positions. According to Mariani (2008), male and female do not come to the pipeline in the equal root. Opportunities



that males can get is higher than the females' chances.

## Empirical Literature Review

The glass ceiling concept begins to present in 1986, through the journal called Wall Street Journal and after that this concept was very quickly incorporated (Jackson, J.F.L. & O'Callaghan, E.M, 2009). Glass ceiling is a figure of speech which tells the unseen, unpredictable and artificial barriers which stop female or people of colours from progressing the corporate path to higher positions (Federal Glass Ceiling Commission, 1995). It reflects the social and economic gender imbalance (Wirth, 2001). Glass Ceiling index " Glazenplafind – index " which can measure the thickness of glass ceiling was created by De Olde and Slinkman (De Olde, C. & Slinkman, E., 1999). This can measure the potential for upper functional level. Here the Glass ceiling =  $100 \times (b - a)/b$ , a stand for upper functional level and b stand for the lower level of the functionality. If the final result is too high, thicker the glass ceiling.

According to Anderson (2007) profession development is a permanent behavioural process and impact individually which hints to select the profession, formation of career design, decision-making pattern, character combination, self and career uniqueness (Anderson, 2007). Watts (2004) also stated that career development as a constant process of movement through every day learning and working (Watts, 2004). Another study by Adekola (2011) also said that career development as a lifetime process that consists of approaches or behaviour that take place in a person's work-life to complete career goals (Adekola, 2011).

According to John (2013), in general women are less self-confident which indicate the minimum risk-taking and very careful in career picks. Furthermore, the

author pointed out that they must educate to show themself unquestionably and recognise that their qualities are similar to male partners. The author too noticed women have minimum desired and ambitions (Johns, 2013). Williams and Cuddly (2012), stated that in the event if the women bearing a child, will reduce their chances by 79 per cent and she is fifty per cent as likely to be advanced as an infertile woman (Williams, J.C. & Cuddy, A.J.C., 2012). Furthermore, the income level of the person who is having children is 2 to 11 per cent less than women without children (Kmec, 2011).

Wilson in 2013, focused out there is a high possibility to give up the job due to some family matters. Anyway, it shows that women turnover rate is highly affected due to the dissatisfaction of the openings for progression, not due to family responsibilities (Wilson, 2013).

Gender Stereotype is generally backing the out-dated sex roles, and linked to the surrounding culture (Wood, 2008). Abdallah & Kartin, 2010 highlighted that stereotype states the suitability of various professions for male and females. Women are measured as caretakers, homemakers and maintenance of relationships, whereas males are breadwinners and leaders (Abdallah, M.,&Kartin, O.M., 2010).

## **Methodology and Experimental Design**

This section articulates the study philosophy underpinning the research as well as the techniques and strategies applied.

## A.Methodology

*I) Research design:* This is a scientific study which includes answering the research questions, which includes planning and execution. The researchers used mixed research design consisted with both qualitative and quantitative approaches. To measure the relationship and impact of



variables, quantitative method was used. Furthermore, a structured questionnaire was used for this investigation. Qualitative data enlarges the fruitfulness of the mathematical data while fulfilling the objectives of, to investigate the key factors distressing on women carrier advancement and to find out the strategies to overcome those factors. The study population in this regard comprised all female workers in middle management category attached to the construction industry in Sri Lanka. The size of the population had to be estimated since there is an unavailability of published data about the total numbers of middlelevel female employees attached to the construction industry. The study focused on the major six construction companies in Sri Lanka. The six chosen companies are the biggest and most inspiring companies in the industry and it is a realistic illustration of the whole construction industry. Hence the projected population of middle-level female employees in the construction industry is 60. Primary data collected through structured were questionnaire and in-depth interviews based on six major private construction companies. As recommended by previous researchers, if the estimated population for the study is known and limited, all elements in the population could be used for the study (Krejcie and Morgan, 197). Thus, a sample of 52 middle-level females who are working in the construction selected industry were for questionnaire to be given (Krejcie and Morgan, 1970). Based on the research objectives and hypothses developed, a conceptual model was constructed (Figure 1). Accordingly, a structured questionnaire was developed to collect the data for its main variables. A purposive sample of 05 women managers representing higher level management category of those companies were choosen. For them, the researchers developed a comprehensive interview guide in order to get their in-

depth opinion on remaining objectives of the study.

II) *Measurements:* The structured questionnaire consists of two main sections. Section 1 of the questionnaire gathered respondents' background information such as marital status, age, level of education. Section 2 consisst of four parts. Part 1 consists of eight opinions on personal/individual characteristics that hinder the career advancement of women (e.g. hesitate to take up promotion opportunities, unable to gain credibility from others, do not have enough professional qualifications, no clear idea on future career goals etc.). Part 2 of the questionnaire asked the opinion on eight obstacles on family responsibilities that hinder career advancement. (e.g. difficult to balance the family affairs and job responsibilities, guilty of not spending enough time with family, breaks in employment due to maternity leave etc. ). Part 3 comprised questions on gender stereotype which asked respondents theirs on eight items which hinder career advancement. (e.g. organization does not promote to higher positions because of a woman, man has higher chance to get appraisal and incentive promotion, systems favour men, perception of that women should not be headed over men etc.). All the items in Part 1, 2 and 3 in Section 2 are based on Nchabira's (2013) and Lun et al.'s (2012) developed measurements. Measuring items for the factors which contribute to the career advancement of women were adopted from Afza, et al.'s (2008). Factor 1: "how the appearance of a woman contributes the career advancement?" was measured by four items (e.g being a single omen rather than married, being physically attractive spending more time in the workplace, being younger than older women). Factor 2: "how the attitude towards organization



contributes the career advancement?" was measured by using three items (e.g being cooperative and non-threatening towards others, express the interest in high stake, challenging and visible assignments, having higher education and membership in professional organizations). Factor 3: "how the career-focused contributes the career advancement?" was measured by using 4 items (e.g willingness to take the business risks, being entrepreneurial and taking initiatives, having the right connections with top management and having decision-makers, specialized training and a variety of work experiences). Factor 4: "how the family support contributes the career advancement?" was measure by using two items (e.g having a supportive husband or family members, balancing work home demand more effectively). All the variables considered in the study were measured by five-point Likert Scale which ranges from Strongly Disagree (1) to Strongly Agree (5). The questionnaire was in English medium and the web-based questionnaire was directed to the middle-level female employees in the selected 6 companies. There was no need of translating the questionnaire as the respondents were professionals and were able to understand the English Language sufficiently. In addition, an interview guide was prepared with semi-structured and open-ended questions. Five interviews were conducted on one to one basis among the researcher and a single participant, so the interviewee was able to answer the topic freely.

III) Data Analysis: quantitative data were analyzed using SPSS software version 20.0 at 0.05 alpha levels. Both descriptive as well as the inferential statistical analysis methods such as correlation and multiple regression were adopted. To test reliability and validity, factor analysis and Cronbach's alpha (upper 0.70) for the internal

consistency were done. In terms of construct validity, the cutoff for item loading on factor was 0.50. Qualitative data were analysed using thematic analysis. Cronbach's Alpha test was used to measure the internal consistency of the measurements (Sekaran, 2003). According to the values reflected in past research and the newly found values in the study are almost identical as of *Table 1*. Hence the selected reliability of these factors were acceptable.

Table 5: Comparison of Cronbach's alpha values

	varac	,	
Dimension	Cronbac	Cronbach'	Cronbach
	h's alpha	s alpha	's alpha
	Value	Value	Value
	Source :	Source :	(research
	(Nchabir	(Keenawin	ers
	a, 2013)	na, 2015)	develope
			d values)
Individual	0.818		0.762
Factors			
Family	0.782	0.779	0.845
Responsibilit			
ies			
Gender	0.763	0.816	0.817
Stereotype			
Women		0.713	
Career			
Development			
	1		

Source: Developed for Research purpose

#### B. Experimental Design

Previous research in organizational studies indicated considerable factors which determine women career development. However, in this study, researchers mainly focused on major significant factors such as individual factors, family responsibilities and gender stereotype. A conceptual model has been developed after reviewing empirical studies on how these factors predict women career development. Figure



1 shows the conceptual model with main independent and dependent variables.

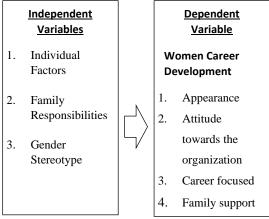


Figure 2: Conceptual Model Source: Developed for Research purpose

I) Individual factors and Women Career Development: According to John (2013), women are less self-confident which indicate the minimum risk-taking and very careful in career picks. She has pointed out that they must educate to show themself unquestionably and recognise that their qualities are similar to male partners. She too noticed women have minimum desired and ambitions (Johns, 2013). Williams and Cuddly, 2012 stated that in the event if the women bearing a child, will reduce their chances by 79 per cent and she is fifty per cent as likely to be advanced as an infertile woman (Williams, J.C. & Cuddy, A.J.C., 2012). Furthermore, the income level of the person who is having children is 2 to 11 per cent less than women without children (Kmec. 2011). Because of responsibilities that women have at home and the pressure of work, their stress level has increased and it has a high impact of the success (Schneer, J.A. & Reitman, F., 2002). Thus, researchers propose:

*H1*. There is a significant relationship between individual factors and women career development in construction industry.

II) Family Responsibilities and Women Career Development: Career development

of females is connected with family responsibilities, which may reduce the openings for the career plan (Wolfinger et al., 2008). The study observed that widespread of family responsibilities, structure, and work-family conflicts, the number of children are the significant factors for the development (Cross, 2009). Wilson in 2013, focused out there is a high possibility to give up the job due to some family matters. Anyway it shows that women turnover rate is highly affected due to the dissatisfaction of the openings for progression, not due to the family responsibilities (Wilson, 2013). Thus, researchers posit:

*H2*. There is a significant relationship between family responsibilities and women career development in construction industry.

III) Gender Steretype and Women Career Development: Gender stereotype normally backing the out-dated sex roles, and linked to the surrounding culture (Wood, 2008). Abdallah & Kartin, 2010 highlighted that stereotype states the suitability of various professions for male and females. Women are measured as caretakers, homemakers and maintenance of relationships, whereas males are breadwinners and leaders (Abdallah, M.,&Kartin, O.M., 2010). Gender stereotype generalizes to apply a critical impact in key ranges of career advancement of women. The stereotype is detailed to instrumental in looming the section of ladies into management level when managerial roles are seen as more suitable for men focusing "think manager think male" (Lyness, K., &Heiman, M., 2006). Thus, researchers propose:

*H3*. There is a significant relationship between gender stereotype and women career development in construction industry.



#### **Results**

All questionnaires were reviewed and found 100 percent response rate as a result researchers obtained 52 valid responses. According to the data recorded in *Table 2* for Kolmogorov – Smirnov (K-S test) and Shapiro Wilk statistics significance levels for all four variables are above the threshold of 0.05 level. Thus, it was considered as all the factors are normally distributed.

Table 2: Test of Normality

	Kolmogorov-			Shapiro-Wilk		
	Smiri	10V <sup>a</sup>		Shaph 0-Wilk		
	Stati			Stati		
	stic	df	Sig.	stic	df	Sig.
Individual	.120	53	.055	.976	53	.358
Factors						
Family	.087	53	.200*	.980	53	.520
Responsibil						
ities						
Gender	.099	53	.200*	.987	53	.830
Stereotype						
WCD	.089	53	.200*	.870	53	.050

Source: Developed for research purpose

To investigate the appropriateness of the measurements researcher used the Kaiser – Meyer Olkin (KMO) of sampling adequacy. Values which are closer to 1, are useful and the KMO values which are less than 0.50 are not significant (Tabachnick, B. G., Fidell, L. S., & Osterlind, S. J., 2001). As presented in *Table 3* all the KMO are above the acceptable level.

Table 3: KMO Test results

Tubic 5: Ri-10 Test	
Variable	KMO
Individual Factors	0.65
Family Responsibilities	0.82
Gender Stereotype	0.75
Women Career Development	0.73

Source: Developed for research purpose

When the employees' statistic characteristics and individual highlights are examined, it is seen that majority (52.8%) of the middle management level females are in the mid category while 18.9% are in the top category. This 18.9% of employees are the people whose next stage will be the senior managerial level. The researchers found that most of the employees are married which contribute 77.4%, while 22.6 % are single. Study reveals that 54.7% of females have children under 18 years and 45.3% are without children. This may generally be credited to the truth that numerous women these days delay in setting down the career progress. The findings show that 3.8% of women employees in the industry have a doctoral degree or above, 24.5% of the people had a Masters degree while 28.3% had a diploma. Here the percentage of the Bachelor degree is the dominant group in the Education category (43.4%). Findings show that women in the middle management level are highly educated and qualified, as more than 70% are attained a bachelor's degree and above.



Table 4: Mesurement Model

		l	l			
Variables	Dimension	Item	Loading Factor	Average Variance	Composite Reliability	Cronbach 's Alpha
Independent Var	<u>iables</u>	•	•			
Individual		IF1	0.477	0.534	0.936	0.762
Factors		IF2	0.749			
		IF3	0.638			
		IF4	0.802			
		IF5	0.561			
		IF6	0.876			
		IF7	0.776			
		IF8	0.868			
Family		FR1	0.560	0.498	0.926	0.845
Responsibilities		FR2	0.751			
_		FR3	0.517			
		FR4	0.736			
		FR5	0.892			
		FR6	0.560			
		FR7	0.876			
		FR8	0.649			
Gender		GS1	0.582	0.547	0.942	0.817
Stereotype		GS2	0.761			
		GS3	0.700			
		GS4	0.824			
		GS5	0.740			
		GS6	0.804			
		GS7	0.857			
		GS8	0.598			
<u>Dependent Varia</u>	<u>ble</u>					
Women Career	Appearance	WAP1	0.814	0.558	0.965	0.749
Development		WAP2	0.738			
		WAP3	0.648			
		WAP4	0.799			
	Attitude	WAT1	0.565			0.642
		WAT2	0.689			
		WAT3	0.717			
	Career	WCF1	0.793			0.854
	Focus	WCF2	0.700			
		WCF3	0.783			
		WCF4	0.742			
	Family	WFS1	0.830			0.744
	Support	WFS2	0.844			

The respondents were inquired to demonstrate the time period with their particular company and also to indicate the period in the current position. The sample description revealed that most of the

respondents (52.8%) were held in the least tenure of practice in the same company that was up to 5 years. The next level of 39.6% of respondents stated their job experience in the company from 6 to 10



years. Besides that, 7.6% had 11 to 15 years of history in the relevant company. Apart from that findings showed that majority of the respondent, 29 out of 53 (54.7%) are worked in their current position for the period of 1 to 3 years. In addition, 32.1% are performing in the same position for 4 to 6 years while 9.4% are in 7 to 9 years of range. Moreover, 2 respondent did not change their position for the period exceeding 10 years.

Prior to testing the hypotheses the reliability and convergent and discriminant validity were tested. Table 4 depicts that all the Cronbach's alpha values for variables excluding "Attitude variable" are above the accepted threshold of 0.7 (Hair, J.F. Jr, Anderson, R.E., Tatham, R.L. and Black, W.C., 1998). So the internal consistency of factors is at an acceptable level. Similarly, all the loadings were higher than the normal threshold level of 0.45 (Comrey, A. L., & Lee, H. B, 1992). Here the average variance extracted (AVE), which reflect the total amount of variance in the indicators accounted were in the range of between 0.498 and 0.549. Notably not every Average Variance Extracted was exceeded the recommended level of 0.5 (Hair, J.F. Jr, Anderson, R.E., Tatham, R.L. and Black, W.C., 1998). Similarly, the composite reliability (CR) were also exceeded the recommended level of 0.7 (Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W.C., 1998).

Each variable had a greater square root of AVE compared to the correlation within and with other variables. *Table 5* shows that all the variables have met the criteria of discriminant validity (Fornell, C., & Larcker, D. F., 1981)

Table 5: Discriminant Validity

Variable	1	2	3	4
IV - Individual Factors	0.731			
IV - Family Responsibilities	.510**	0.706		
IV - Gender Stereotype	0.249176	0.057011	0.739	
DV - Women Career			1 0 0 data	
Development	.399**	0.097278	.409**	0.747

Source: Developed for research purpose Note: Values in the bold face represent the square root of the average variance extracted

Table 6: Means, Standard Deviations and Correlations

		CIUCIOIIS			
Variable	Mean	Std.	1	2	3
		Deviati			
		on			
1.	2.5354	.57092			
Individual					
Factors					
2. Family	2.9458	.73768	.510		
Responsibil			**		
ities					
3. Gender	2.9198	.74481	.249	.057	
Stereotype					
4. Women	3.9194	.39642	.399	.097	.409
Career			**		**
Developme					
nt					

\*\* Correlation is significant at the 0.01 level ( 2 tailed)

Source: Developed for research purpose

As presented in *Table 6*, there is a moderate positive relationship exists in between individual factors and the women career development (  $r=0.399^{**}$ , p<0.01). Also it was noted that the relationship among gender stereotype and women career development has a moderate positive relationship ( $r=0.409^{**}$ , p<0.01). Furthermore, there is a very weak positive association between family responsibilities and women career development (r=0.097, p<0.01).



Tal	Testing				
Hypothesis	Beta	Std. Error of the Estimate	T- Value	Sig.	Decision
H1	.399	.3671	3 3.103	.003	Accepted
Н2	.097	.3983	9 .698	.488	Rejected
Н3	.409	.3652	8 3.201	.002	Accepted

Source: Developed for research purpose

Table 7 reports the results of regression analyses on women career development. The multiple regression coefficient of all the independent variables with the dependent variable was 0.520 (R value) in this study. However, the R square value is only 0.27 which means only 27% is explained by the variance of the glass ceiling factors (all independent variables in the model). Hence it can be said that other barriers have 73% effect on women career development. However, the overall model was significant with sig. 0.001 (F value = 6.054, p < 0.001). Furthermore, regression analyses in the overall model show that only two predictors were statistically significant at p< 0.05. They are, Individual factors and gender stereotype which show statistically significant results of .003 and .002 respectively. Whereas the family responsibilities (P-value is 0.433) are not significantly affect career development. Furthermore, the standardized coefficient (Beta) values for the individual factor and gender stereotype are 0.376 and 0.322 respectively which indicate theses two factors nearly have an equal effect on women career development while family responsibilities has a negative and weak impact (Beta = -0.113) on career development.

As shown in *Table 7*, regression results for the effect on WCD by the individual factors ( Beta = 0.399, p < 0.01) shows there is a significant impact of individual factors on WCD. Thus, Hypothesis one (H1) can be accepted. Hypothesis two (H2) suggests that there is a significant relationship between family responsibilities career development in women industry. However. construction regression results for the effect on WCD by the family responsibilities illustrates -0.97 of standardized Beta value at a significant level of 0.488. Thus, the results indicates that there is no significant relationship between family responsibilities and WCD. Finally, it is observed that there is a significant relationship between gender stereotype and women development. Its Beta value is 0.409 (p< 0.01), which leads to accept the Hypothesis three (H3). Through the interviews with the decision-makers of the companies, some major reasons were revealed and they were identified as main themes which show obstructions for women career upward. According to the results of Thematic analysis, main themes included "Organizational culture, Social Cultural factors, and Environmental factors" of career obstructions.

## Respondent 1: Organizational Culture

"Structure and the culture of our organization do not favour the expanded commitment and contribution from females, as enrolments, promotional and the salary increment policies is in favour of men over women."

## Respondent 2 : Social Cultural factors

"I experience a few challenges which have influenced my advance in work such as the perception of the society towards ladies, in spite of working hard, women are not qualifies always. Men are way better than them, lack of giving training facilities, workshops, and the participation of overseas conferences"



## Respondent 1 : Environmental factors

"Here the construction sector is a male dominated industry, so there is no many female partners or the leaders to empower women to reach higher level of management."

Organizational leaders' believe that women's quality of work is not up to the required level due to the lack of efficiency, high rate of leave-taking, minimum interest on development and poor understanding of the instructions. Under social-cultural factors, gender stereotype is one of the foremost critical impediments to women get to authority positions. The interviewees highlighted that there are some individual characteristics such as persistence and commitment which considered as more important overcome to career development. Furthermore, organizational context and culture plays an important role to break the glass ceiling effect which is different from organization organization.

Respondent 2: Personal Characteristics

"I do not want to sit back and wait, I'm quite hunger for my own success so I always try to push myself out of the box "

Respondent 3: Personal Characteristics

"I learned what I needed to learn and developed the required skills to suit the senior managerial level. I didn't want to rush in the position. It took me long period to come to this level "

Respondent 1 : Organizational Context

"Company can combined women and men qualities to gain more to the company. While incorporating the family friendly policies."

#### **Discussion and Conclusion**

The study aimed to gain a good understanding of the female underrepresentation of top management position and the disinclination of women to

grasp the top managerial positions in the Sri Lankan construction industry. The research questions underpinning this study were, what are the key glass ceiling factors which hinder the women career advancement, how Individual factors, responsibilities Family and Gender Stereotype impact the career advancement of middle management female employee in the construction industry, and how to overcome those factors that hinder the women career advancement? Previous studies found various factors affecting on development women career in construction field globally but comparatively less attention has been given to the Sri Lankan context. Thus, this study fills the research gap in the literature of women career development in the construction industry, Sri Lanka. The study concluded that a number of females in the construction industry are comparatively low as the industry is male-dominated. Women under-representation in managerial category in all classes could result in limiting the entrance to the industry. In addition, the absence of role models is another factor which hinders the moral. Results show that a significant number of factors which influence women career progression including attitudes, gender stereotype, rewards promotions, lack of training, work-family balance, geographical factors and lack of confidence. The most common point that every highlighted respondent was organizational culture. To overcome this matter the management can incorporate proper policy decisions. Secondly cultural beliefs such as negative perception and negative attitudes towards the female leaders. Thirdly some external environmental factors related to the industry may affect the female to leave the industry. According to the findings in quantitative analysis, there was significant positive impact of individual factors on women career development, and



also between gender stereotype and women career development. Apart from that, it was noted that there is no significant impact of family responsibilities on women career development. Furthermore, to overcome the identified glass ceiling factors, there are some strategies to develop in both at organizational level as well as by individuals themselves. More professional training development programs should be provided to middlelevel female managers and also the company can assign some family-friendly environment, supportive working networking and some mentoring program to the female employees. Dedication and passion for success would help female employees to overcome those barriers by themselves.

## Acknowledgement

In preparations of this study, immense support and guidance were received from many respected people, who deserved our deepest gratitude. Finally, we would like to thank all the participants who shared their experience for this research and thank all the organizations who provide us the data we needed for this study.

#### References

Abdallah, M., & Kartin, O.M. (2010). Male's attitude towards working females in Saudi Arabia. *Personnel Review*, 13(2).

Adekola, B. (2011). Career planning and career management as correlates for career development and job satisfaction A case study of Nigerian bank. *Australian Journal of Business and Management Research*, 100-112.

Anderson, A. N. (2007). *Investigating career* barriers of women of color in the 21st century.

Clarke, L., Michielsens, E., Snijders, S., Wall, C., Dainty, A., Bagilhole, B. and Barnard, S. (2015). "No advancement in academic

surgery: views of senior residents and early career faculty".

Comrey, A. L., & Lee, H. B. (1992). A first course in factor analysis. *2nd edit*.

Cooper, D.R., & Schindler, P.S. (2006). *Business Research Methods.* New: Tata McGraw-Hill.

Creswell, J. W., & Clark, V. L. (2010). Designing and conducting mixed methods research.

Cross, C. (2009). Barriers to the executive suit:evidence from Ireland. LeadershipandOrganization Development Journal, 32(2), 104-119.

D'Agostino, M., &Levine, H. (2010). The career progression of women in state government agencies. *Gender in Management*, 25(1).

De Olde, C. & Slinkman, E. (1999). Het glazen plafond: een inventaris van cijfers, literatuur en onderzoek met betrekking tot de doorstroom van vrouwen naar de top.

Domenico, D.M., & Jones, K.H. (2006). Career Aspirations of women in the 20th Century. *Journal of Career and Technical Education*, 1-7.

Eagly, A. H. (1987). Sex differences in social behavior: A social-role interpretation.

(1995). Federal Glass Ceiling Commission.
Recommendations of the Federal Glass
Ceiling Commission. Washington DC:
Department of Labour.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39-50.

Galea, N., Powell, A., Loosemore, M. and Chappell, L. (2015). Designing robust and revisable policies for gender equality: lessons from the Australian construction industry. *Construction Management and Economics, Vol* 33(5/6), 375-389.





Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate analysis.

Hair, J.F. Jr, Anderson, R.E., Tatham, R.L. and Black, W.C. (1998). Multivariate Data Analysis.

Hoobler, J. M., Wayne, S. J., & Lemmon, G. (2009). Bosses' perceptions of family-work conflict and women's promotability: Glass ceiling effects. *Academy of Management Journal*, *52*, 939-957. Retrieved from http://dx.doi.org/10.5465/AMJ.2009.446 33700

ILO. (2016). Women at Work: Trends 2016.

ILO. (2018). World Employement Social Outlook Women.

Ismail M., & Ibrahim, M. (2008). Barriers to career progression faced by women. *Gender Management.*, 23(1).

Jackson, J.F.L. & O'Callaghan, E.M. (2009). What do we know about Glass Ceiling Effects? *Research Higher Education,, 50*, 462-480.

Johns, M. (2013). Breaking the Glass Ceiling: Structural, Cultural, and Organizational Barriers Preventing Women from Achieving Senior and Executive Positions. *Perspectives in Health Information Management*,

Keenawinna, K. &. (2015). Impact of Glass Ceiling on Career Development of Women: Study of Women Branch Manager in State Oned Commercial Banks in Sri Lanka. *2nd International HRM Conference*.

Kmec, J. (2011). Are motherhood penalties and fatherhood bonuses warranted? Comparing pro-work behaviours and conditions of mothers, fathers, and non-parents. *Social Science Research*, 40, 444-459.

Korda, M. (1974). Male Chauvinism: How it works. Krejcie and Morgan. (1970).

Lyness, K., &Heiman, M. (2006). When fit is fundamental. *Applied Psychology*, *94*(4).

Mariani, M. (2008). A Gendered Pipeline? The Advancement of State Legislators to Congress in Five States. *Politics & Gender*, 285-308.

Meyerson, D. (2001). *Tempered Radicals: How People Use Difference to Inspire Change at Work.* Cambridge: Harvard Business School Press.

Nchabira, K. M. (2013). Barriers to women career progression in Kenya's Civil Service.

Rashid, A.M., Bakar, A.R., Asimiran, S. & Loh, P.T. (2009). Career development interventions in secondary school in the state of Terengganu, Malaysia. *European Journal of Social Sciences*, 62-67.

Rodríguez-Garzón, I., Lucas-Ruiz, V., Martínez-Fiestas, M. and Delgado-Padial, A. (2015). Association between perceived risk and training in the construction industry. *Journal of Construction Engineering and Management, Vol 141 No 5*. Retrieved from http://dx.doi.org/10.10/(ASCE)CO.1943-7862.00009

Sadaquat, M.B., & Quarr-tul-ain A.S. (2010). Employment situation of Women in Pakistan. *International Journal of Social Economics* (38(2)).

Schneer, J.A. & Reitman, F. (2002). Managerial Life Without a Wife: Family Structure and Managerial Career Success. (2. 38, Ed.) *Journal of Business Ethics*, *37*(1).

Sekaran, U. (2003). Research Methods for Business: A Skill Building Approach.

(2017). *Sri Lanka Labour Demand Survey.*Department of Census and Statistics Ministry of National Policies and Economic
Affaires.

Stitt-Gohdes, W. (1997). Career Development: Issues of Gender, Race, and Class. *Clearinghouse on Adult, Career, and Vocational Education*.

Strodtbeck, F. L. & Mann, R. D. (1956). Sex role differentiation in jury deliberations. 3-11.



Tabachnick, B. G., Fidell, L. S., & Osterlind, S. J. (2001). Using multivariate statistics.

Thorton, G. (2012). *Grant Thorton International Business Report.* Retrieved 12 27, 2019, from http://www.internationalbusinessreport.com

Tinklin, T., Croxford, L., Ducklin, A., & Frame, B. . (2005). Gender attitudes to work and family roles: The views of young people at the millennium. *Gender & Education*,, 129-142.

Watts, T. (2004). Why Career Development Matters. Careers England: Promoting prosperity and social inclusion. Retrieved from

http://www.hillssip.com.au/Files/Upload s/File/Careers/Why%20Career%20Devel opment%20Matters.pdf

Wentling, R. M. (2003). The career development and aspiration of women in middle management revisited. *Women Management*, 18.

Williams, J.C. & Cuddy, A.J.C. (2012). Will working mothers take your company to court? *Harvard Business Review*, *90(9)*, 94 - 100.

Wilson, S. (2013). A Research Proposal: Does the Glass Ceiling Show Signs of Breaking in the 21st Century? *The Alan Shawn Feinstein Graduate School*.

Wirth, L. (2001). Breaking through the Glass Ceiling. Women in Management.

Wood, G. (2008). Gender stereotypical attitude. *Equal Opportunity*, 27 (7).

## **Author Biographies**



WNN Alwis is a Civil Engineer at Access Engineering PLC. She has over 8 years of experience in the construction industry. Alwis received the

National Diploma in Engineering Sciences ( 2012 ) and the Bachelor's degree in Engineering, B.Eng ( UK ) in 2012. She completed the final year exam of Institution of Engineers Sri Lanka in 2014. Alwis received the **PGdip** in Business Management from University of Colombo Sri Lanka (2018) with 3.80 GPA and the MBA from Canterbury Christ Church University (UK) in 2020. She is reading the Master degree leading to M.Sc Construction Law and Dispute Resolution at Unversity of Moratuwa. She is an Associate Member of Institution Incorporated Engineers Sri Lanka since 2019 and a Technical member of Institute of Quantity Surveyors Sri Lanka since 2015.



KKNP Rathnayake is a Senior Lecturer in the Department of Social Sciences of General Sir John Kotelawala Defence University. She completed

her undergraduate studies in BSc (Hons) in Management (Public) Degree with a Second Class Upper Division Pass at the University of Sri Jayewardenepura, Sri Lanka. She has successfully completed a Postgraduate Diploma and a Master's Degree in Development Studies at the Faculty of Graduate Studies, University of Colombo, Sri Lanka. In 2018, she obtained the Degree of Doctor of Philosophy in Management specializing in Administrative Management from the College of Public Administration, Huazhong University of Science and Technology, Republic of China.

Paper ID 573

## Talent, Talent Management & its Practices: A Critical Review

MHR Sandeepanie<sup>1#</sup>, GDN Perera<sup>1</sup>, TL Sajeewani<sup>1</sup>, and PN Gamage<sup>2</sup>

<sup>1</sup>University of Sri Jayewardenepura <sup>2</sup>University of Kelaniya

# sandeepanie20@gmail.com

**Abstract:** Talent management practices are one of the inspiring aspects in ultramodern stage's HRM practices. Prevailing conceptual confusions can be observed due to ambiguities in the underlining concepts called "Talent" and "Talent Management". Different global manufacturing and service industries are operating numerous talent management practices. There are two key objectives of this research, and the archival method was adopted by the researchers. The systematic reviewing process has covered empirical research on talent, talent management and talent management practices, which has been published between 1990 and 2019 in academic journals and published books. Based on the "objective approach" talent was defined as multiplication of three characteristics of people; competence, commitment and contribution. Based on the 'subjective approach", talent may be exclusive or inclusive or a combination of both. Thus, "Talent" was considered as an subset of the organization's population or entire employees of an organization. Talent Management was defined as a collection of functions, practices and activities categorized into talent acquisition, talent development, talent retention, career management and succession management of talent pool and talent generically in implementing the business strategies in fruitful mode. It was identified that, the global manufacturing industries, namely cement manufacturing, steel case manufacturing, coal and mining industry, energy; automotive and service sectors, namely healthcare, hospitality, fast

service. banking, education. telecommunication and IT services are operating numerous talent management in attracting, practices acquiring, developing and retaining high performing talents. Talent acquisition, talent development, talent retention, career management and succession management are the key identified talent management practices in global contexts.

**Keywords:** Talent management practices, Talent, Global contexts

#### Introduction

The concept "Talent Management Practices" is one of the inspiring aspects in ultra-modern stage's Human Resource Management (HRM) practices. Talent management is a "blistering fresh topic" for the Human Resource (HR) practitioners and HR managers in their excessive involvement in organizational HR activities. Effective talent management involves driving of the business goals and objectives successfully while having a rewarding organizational "talent pool". In the world, business entities are trying their level best to hire the people who can be reflected as an asset for them, specifically dealing with the talent management practices (Maurya and Agarwal, 2017). Further, the significance of talent management practices has been extensively accredited by both the scholars and HR practitioners in the world (Bjorkman and Makela, 2013; Hartmann et al., 2010; Thunnissen, 2016; Khoreva et al., 2016). The concept termed "Talent Management Practices" is established



primarily consisting with two significant underlying concepts called "Talent" and "Talent Management". Nevertheless, prevailing conceptual confusions can be observed throughout the literature, due to existing ambiguities to having underlining concepts called "Talent" and "Talent Management". Although concept of talent management was rising popularity over a decade of period with the debating nature, the construct of talent management had conceptual confusion and there was a severe deficiency of clarity on its definition, the scope and the overall goal (Lewis & Heckman, 2006; Tansley et al., 2007; Gallardo-Gallardo et al., 2013). When it comes to the first underlying concept called, "Talent Management", an inherent ambiguity to the concept can be observed, because of the insufficient operationalization of the underlying construct called "Talent" (Garrow and Hirsh, 2008; Lewis and Heckman, 2006; Reilly, 2008; Tansley et al., 2007; Gallardo-Gallardo et al., 2013). Though, the concept called "Talent" has not been visibly defined. In evidencing that, in the numerous research articles on talent management (such as, Collings and Mellahi, 2009; O'Reilly and Pfeffer, 2000) and numerous books (such as Cappelli, 2008; Lawler, 2008) the "Talent" as a fundamental construct is taken for approved and hence is not defined openly (Gallardo-Gallardo et al., 2013).

All over the research history HR specialists and academics from numerous regions throughout worldwide discovered the talent management practices related to diverse industries. There is a tendency to be a discrepancy between the intended and actual talent management practices and immensely experienced particularly in Small and Medium Enterprises (SME) of the hospitality industry where there is a lack of resources, time and HR initiatives (Chung and Annunzio-Green, 2018). Currently,

diverse talent management practices are operated by the HR practitioners in different levels. According to Sutherland et al. (2002) in this extremely competitive market, only attracting and recruiting talents to the business establishments are not enough, because there is a high risk of losing them to the competitors, which is reflected as a severe threat to the progress of the organizations. However, every single establishment is practicing numerous set of strategies in ending this challenging condition. Talent management practices are operated in numerous business industries in different manner and different levels. After having a keen exploration of the prevailing literature, it was recognized that, different global manufacturing and service industries are operating numerous talent management practices in attracting, acquiring, developing and retaining high performing talents specifically in achieving the organizational goals and objectives in fruitful mode. For instance, the service sectors namely, healthcare, hospitality, fast service, banking, education, telecommunication and IT services have been identified of functioning diverse talent management practices. Along with, the manufacturing industries namely, manufacturing, steel cement manufacturing, coal and mining industry, energy and automotive also have been identified of operating varied industry specific talent management practices in achieving the business goals and objectives in successful manner.

With this view, there are two key objectives in this exploratory study. The first objective is to resolve the existing conceptual confusions to the variable "Talent Management Practices" and to develop the working definitions for the underlining concepts called, "Talent" and "Talent Management". Afterward, the second objective is to explore the different "Talent



Management Practices" operated in numerous global contexts including both manufacturing and service sectors.

## Literature Review

In the talent management exploration history in year 1997, McKinsey and Company, which is a leading consultancy firm in United States of America (USA) coined the term titled "War for Talent" in response to the shortage of the skilled workers in the market place (Chambers et al., 1998). In view of that, the concept called, talent management was initially invented within USA as a finding of McKinsey and Company's 1997 survey study (Chambers et al., 1998). According to Collings and Mellahi (2009), talent management practices accomplish the necessity for organizations to encounter the future desires specifically for the highpotential organizational human capital. Bjorkman and Makela (2013) revealed that, talent management practices can be defined as the demanding assignments which enlarge the capacity of the organizational high-potential employees in performing the universal leadership roles in future. However, the deficiency of effective talent management practices could lead to unsuccessful assignments and noteworthy financial costs (Yan et al., 2002), or else this leads to high-potential employees organization shying away from the developmental high-risk activities (Bjorkman and Makela, 2013). Numerous research displays that, the business establishments normally practice roughly the convergent, nevertheless divergent, talent management practices (Stahl et al., 2012). Accordingly, although the HR managers are not particularly aware of the talent management terminology, in truth most of them have already "talent management practices" in their place (Valverde et al., 2013). Likewise, the talent management practices are considered as

the priority practices extensively used by many business entities particularly for the development of the high-potential employees (Hartmann et al., 2010; Khoreva and Vaiman, 2015; Thunnissen, 2016; Khoreva et al., 2017). According to Kuvaas (2008) talent management practices may needs fulfill the of high-potential employees and generate the satisfactory attitudes and behaviors which can result in the superior performance. Not only that, the organizational also management practices permit highpotential employees of the organization in becoming more agile, which is required to complete in a modern and unpredictable world of business, as well as to expand the capacity of high potential employees of the organization (Khoreva et al., 2017).

## Methodology

In achieving the objectives of the research study, the archival method was adopted by the researchers. Similar methodological approaches were used linked to the field of talent management throughout the prior research history (Gallardo-Gallardo and Thunnissen, 2015; Lewis and Heckman, 2006). Under the archival method the systematic reviewing process has covered the empirical research on talent, talent management, talent management practices and related areas which has been published between 1990 and 2019 in academic journals and published books. The data bases and search engines such as Emerald, Taylor and Francis, Willey Online, Science Direct and Google Scholar have been utilized during the systematic reviewing process. A total of 126 research articles were scrutinized in order to check the applicability of them for the research phenomenon, then 96 research articles were selected and reviewed finally in identifying the three key concepts named, "talent", "talent management" and "talent management practices", the scholarly



definitions of each concepts and various currently practicing talent management practices in different global contexts. This research study comprises in identifying the existing conceptual confusions towards the concepts called, "talent", "talent management" and "talent management practices", establishing definitions for them, exploring various currently operating talent management practices in different global contexts.

## **Results and Findings**

A. Resolving the Existing Conceptual Confusions to the Variable "Talent Management Practices"

The concept named "Talent Management Practices" is established principally consisting with two noteworthy underlying concepts termed "Talent" and "Talent Management". In the prevailing talent management literature, the concept "talent management" is growing popular among both researchers and practitioners in numerous global contexts. Although the concept of talent management was growing popularity over a decade of time with the debating nature, the construct of talent management had conceptual confusion and there was a severe deficiency of clarity on its definition, the scope and the overall goal (Lewis & Heckman, 2006; Tansley et al., 2007; Gallardo-Gallardo et al., 2013). most of However, the conceptual confusions are prevailing associated to the concept "Talent Management", because of the ambiguity nature of the underlying concept called, "Talent". In prevailing literature, the concept called "Talent" has not been clearly defined. In evidencing that, in the numerous research articles on talent management (such as, Collings and Mellahi, 2009; O'Reilly and Pfeffer, 2000) and numerous books (such as Cappelli, 2008; "Talent" Lawler, 2008) the fundamental construct is taken approved and hence is not defined openly

(Gallardo-Gallardo et al., 2013). Moreover, as there are broadly held implied theories on "what is the "Talent", quite amazingly talent management scholars are exact rarely about what precisely they mean by (Barab and Plucker, 2002; Gallardo-Gallardo et al., 2013). Further, there is an insufficient operationalization of the underlying construct called "Talent" (Garrow and Hirsh, 2008; Lewis and Heckman, 2006; Reilly, 2008; Tansley et al., 2007; Gallardo-Gallardo et al., 2013) and accordingly, the conceptual confusions towards the concept "Talent Management" has been risen. Finally, it is more vital in exploring the different schools and philosophies which defined the concept called "Talent" and decisive in discovering the numerous definitions on the concept "Talent" in exactly understanding what is meant by "Talent". Accordingly, conceptual confusions regarding variable called "Talent Management Practices" can be suitably clarified for further development of the concept.

#### B. The "Talent" Concept

The term "talent" was originated long ago throughout the ancient history. According to Tansley (2011) the term "talent", is around thousands of years old and further specified that, lexicologists recognized as how it has diverse highly with time, people and locality. The foremost dictionary definition of the term "talent" denotes to "a denomination of weight, which was used by the Assyrians, Babylonians, Greek, Romans, and other prehistoric people in the world" (Tansley, 2011). Subsequently, with the time edge, the "talent" was used as a measure of money. When the talent is used as a measure of money, it denotes to a talent weight of gold or silver. However, the talent became a monetary unit, when the value was endorsed to one talent of silver (Tansley, 2011). The term "talent" was entered to the English Viathe Bible.



Accordingly, in Matthew 25:14, a reference was mentioned as, "a man who, about to go on a journey, entrusts his property to his servants, giving each five talents, two and one respectively "according to his ability" (Tansley, 2011). In the thirteenth century, the term "talent", was highly focused on "inclination" (the feeling that create an individual do somewhat) "disposition" (the natural qualities of an individual's character) (Gallardo-Gallardo et al., 2013). In the fifteenth century, talent was related to treasure, riches, mental endowment and natural ability (Tansley, 2011; Gallardo-Gallardo et al., 2013). However, when it comes to the seventeenth century, the "talent" was related to a special natural ability or aptitudes and faculties of different kinds such as; mental orders of a superior order, mental power or abilities (Tansley, 2011). Ultimately, in the nineteenth century, the talent was considered as embodied in the talented, henceforth, an individual of talent and capability. Subsequently, with the time frame from the ancient history, the term "talent" and its meaning was developed step by step.

1) Reviewing "Talent" Definitions: All the way through the research history, number researchers have provided various definitions for the term "talent" under different perspectives. According to Tansely (2011), there is no any universal definition for the term "talent" in all languages. Gallardo-Gallardo et al. (2013) explored two key approaches for the concept "Talent" namely the objective approach and the subjective approach. According to the objective approach "Talent" is considered as the characteristics of the people or employees such as talent as natural ability, talent as mastery, talent as commitment and talent as fit. In contrast, according to the subjective approach "Talent" is considered as people or employees. Further, under the subjective

approach there are two sub types namely, exclusive vs. inclusive. Under subjective exclusive approach "Talent" is considered as only high performers or high potentials of the organization. Under subjective inclusive approach "Talent" is considered as all the employees of the organization (p. 297). Throughout the research history several scholars have defined the term "Talent" similar to the objective approach which was established by Gallardo-Gallardo et al. (2013). In 2012 Ulrich and Smallwood expressed a holistic view with their definition on "Talent" according to the below equation.

Talent = Competence \* Commitment \* Contribution --- (1)

According to the formulation of Ulrich and Smallwood (2012), the competence means that, individuals have the knowledge, skills and values which are required for today and tomorrow. The commitment means that, employees work hard and giving their discretionary energy to the organization's success. The contribution means that, they are making a real contribution through their work finding meaning and purpose in their work. According to Ulrich and Smallwood (2012), competency deals with the head, commitment deals with the hands and feet, finally, the contribution deals with the heart. Further, Silzer and Dowell (2010) also defined "Talent" as the individual's skills and abilities (talents) and what the person is capable of doing or contributing to the organization (p. 14).

Moreover, a number of scholars have defined the term "Talent" similar to the subjective approach which was established by Gallardo-Gallardo et al. (2013). In early history, Lunn (1992) defined the term "Talent" as an individual who can use their capacity to achieve a near perfect performance (p. 25). On the contrary, Williams (2000) defined the term "Talent" as the employees who have exceptional



abilities and successful in organize the activities or in a specific field. Likewise, according to Michaels et al. in 2001, "Talent" is a code or a word for effective leaders and managers which can support an organization to reach its goals and objectives. Moreover, according to Morton (2004) "Talent" is considered as the individuals, who are capable enough of creating a key transformation to the key functions of the organization. Naim and Lenka (2017) also defined "Talent" as the employees with high potentials or those key/pivotal positions, which holding contribute to the superior directly organizational performances. Axelrod et al. (2001) also defined the term "Talent" which is similar to subjective exclusive approach of Gallardo-Gallardo et al. (2013) which considered high performers. Accordingly, Axelrod et al. (2001) defined the term "Talent" as "the best and the brightest". Similarly, the talent refers to "the best and the brightest" and many organizations adopted the term to refer to their "A level" employees who rank in the top 10 to 20% (Axelrod et al., 2001). According to subjective inclusive approach of Gallardo-Gallardo et al. (2013) "Talent" is considered as all the employees of the organization. Similar to the subjective inclusive approach both Lewis and Heckman (2006) and Silzer and Dowell defined the term "Talent". (2010)According to Lewis and Heckman (2006) "Talent" is essentially a euphemism for "people". They considered all the people of the organization as "Talent" without grouping or selecting a limited number of employees. After few years, according to Silzer and Dowell (2010) "Talent" might refer to the entire employee population.

2) Working Definition for "Talent": The working definition was established in this research study for the term "Talent" based on two definitions of Gallardo-Gallardo et

al. (2013) and Ulrich and Smallwood (2012) as follows;

"There are two key approaches of "Talent". there Accordingly, are two main dimensions; objective approach (characteristics of people) and subjective approach (talent as people). According to the "objective approach" talent is defined as the multiplication of three main characteristics of the people; competence, commitment and contribution. According to the 'subjective approach", talent may be exclusive or inclusive or a combination of both. Accordingly, "Talent" is considered as an elite subset of the organization's population or entire employees of an organization".

## C. The "Talent Management" Concept

The concept called, "Talent Management" is one of the greatest inspirational aspects in the ultra-modern era of HRM practices. According to Ashton and Morton (2005), "Talent Management" is beyond a fresh language for long standing HR work, otherwise just the subsequent "hot novel entity" for both HR managers and practitioners. Ever since the emergence of the profession of HR in the business world, numerous identifiers have been employed describing duties the responsibilities of the cluster performs from the beginning to present as in different eras such as, personnel management, HRM, strategic HRM and Talent Management (Chuai et al., 2008). In exploration history of talent management, the first-hand concept of talent management with relevant to the field of HRM was originally invented by the McKinsey and Company in 1997 with the invention of the term called "War for Talent" as a finding of their 1997 study (Chambers et al., 1998). Afterwards, "Talent Management" was continued to be topmost significance for HR practitioners, HR managers and



consultants. Until then, the term "talent management" was highly manifested as a jargon among the HR practitioners and executives of the organizations in handling the regular HR functions and practices. Though, the concept of talent management is still in its infancy level as a particular field of study, along with even though the present HR practitioner community has enormously recognized the values of the concept (Tansely, 2011). Furthermore, in current context the academic community also more slow in talking theoretical and practical gaps, with narrow considering field of training development in HRM (Tansely, 2011). Nevertheless, according to Khoreva et al. (2017) academics and HR practitioners agree that talent management lasts to be one of the top priorities for worldwide organizations, as talent management can represent a basis of sustainable competitive advantage in this extremely dynamic as well as frequently uncertain 21st century global market environment. Moreover, according to Bolander et al. (2017) in the middle of step up global competition, weakening bonds between employers and their employees, as well as the constant shift towards the knowledge based economies, the concept of talent management has become a vital business activity and a critically significant decision making area.

1) Reviewing "Talent Management" Definitions: According to Ashton and Morton (2005), visibly there is not a single steady or concise definition for the concept "Talent Management". After having a keen review regarding the existing literature, numerous definitions have been provided different scholars on "Talent Management", which belong to various schools of thoughts.

As the most initial explanations, Schweyer (2004) defined "Talent Management" as encompassing all HR processes,

administration and technologies. It commonly refers to the sourcing, screening, selection, on-boarding, retention, development, deployment and renewal of the workforce with analysis and planning as the adhesive, overarching ingredient. In other words, talent management is what occurs at the nexus of the hiring, development and workforce management processes and can be described alternatively as talent optimization (Schweyer, 2004, p. 38). Accordingly, it is noticeable that, "Talent Management" is apparently similar to a collection of usual HR department functions. practices, activities specialist areas, as later explained by Lewis and Heckman (2006) in their first thought of definition regarding the concept "Talent Management" in 2006. In the same year, Creelman (2004)exposed Management" as a mindset. After around one year Duttagupta (2005) defined the concept "Talent Management", as the strategic management of the flow of talent through an organization. Further, its purpose is to assure that a supply of talent is available to align the right people with the right jobs at the right time based on strategic business objectives (Duttagupta, 2005, p. 2). This explanation is comparable to the third key thought regarding "Talent Management", later given by Iles et al. in 2010. Hence, Duttagupta's elaboration is closer to the thought of talent management as organizationally focused competence development through managing flows of talent to the organization with focusing on talent pipelines rather than talent pools.

Society for Human Resources Management (SHRM) also defined the concept "Talent Management" as the implementation of integrated strategies or systems designed to increase workplace productivity by developing improved processes for attracting, developing, retaining and utilizing people with the required skills and



aptitude to meet current and future business needs (2006, p. 1). Definition of SHRM (2006) carried the views similar to the first thought of Lewis and Heckman (2006) as the concept of "Talent Management" as a collection of usual HR department functions, practices, activities or else specialist areas for instance recruiting, selection, development, career management and succession management. In 2007, Chartered Institute of Personnel and Development (CIPD) also defined the concept "Talent Management" as the organized attraction, development, deployment and retention of high potential employees who are considered as a certain value for the organization (CIPD, 2007). The definition which is given by CIPD (2007) is analogous with the second thought of definition indicated by Iles et al. (2010). Accordingly, talent management is integrated HRM, however it is specifically focused on a certain cluster of employees who are considered as the "talented employees".

In year 2006, Lewis and Heckman indicated that, there is a difficulty of identifying the exact meaning of "Talent Management due to the confusion regarding the definitions and terms and so many assumptions made by the authors who composed about Talent Management. The four terms called, "talent management", "talent strategy", "succession management", and "human resource planning" are frequently used interchangeably (Lewis and Heckman, 2006). However, despite of inauspicious beginning of defining the concept "Talent Management", three distinctive strains of thought regarding "Talent Management" were evolved in prior literature (Lewis and Heckman, 2006). According to Lewis and Heckman (2006, p. 140), the first thought defines the concept "Talent Management", as a collection of usual HR department functions, practices, activities or else

specialist areas for instance recruiting, selection. development, career management and succession management (Byham, 2001; Chowanec and Newstrom, 1991; Heinen and O'Neill, 2004; Hilton, 2000: Mercer. 2005; Olsen, 2000). Afterward, according to Lewis and Heckman (2006, p. 140), the second thought focuses primarily on the "talent pool" concept and defines "Talent Management" as a set of processes intended in ensuring a satisfactory flow of employees into jobs throughout the business organization. Finally, according to Lewis and Heckman (2006, p. 140), the third thought focuses on talent generically, that is without concern for organizational boundaries otherwise precise positions. Further, it includes two general views on the concept called, "talent"; talent as an unqualified good and a resource to be primarily managed according performance levels and talent as an undifferentiated good and emerges from the both the humanistic and demographic perspectives.

In comparable to indicating the key strains thoughts regarding "Talent Management" by Lewis and Heckman in year 2006, after few years, Iles et al. (2010) also presented their views in three broad strands of thoughts regarding the concept "Talent Management", but the analysis seems be somewhat different analysis. According to Iles et al. (2010), the identified three broad strands of thoughts regarding the concept Management" are, talent management as similar to HRM and re-labeling or rebranding exercise of HRM: management as integrated HRM with a selective focus upon "talented" employees; talent management as organizationally focused competence development through managing flows of talent to organization with focusing on talent pipelines rather than talent pools. In time,



Iles et al. (2010) revealed that, "Talent Management" is more than HRM. leadership development initiatives or succession planning. Further, it is the collective approach to recruiting, retaining developing talent within organization for its future benefits and extends beyond the domains of including strategy, organizational culture and change management (Iles et al., 2010, p. 181). After seven years of Iles et al. (2010) in year 2017, Tafti et al. defined the concept "Talent Management" as a complete set of processes which is used to identify, employ and mange employees in implementing business strategies in fruitful mode and these processes are categorized into talent acquisition, talent development and talent retention (p. 19).

In the talent management literature, Collings and Mellahi (2009) suggested a fourth perspective, in which talent management is connected with identifying the key positions in the organization rather than the notion in which individuals are central to an organization's sustainable competitive advantage (Boudreau and Ramstad, 2005; Huselid et al., 2005; Nilsson and Ellstrom, 2011). Hence, in year 2009 Collings and Mellahi defined the concept "Talent Management" as activities and processes that involve the systematic identification of key positions which differentially contribute to the organization's sustainable competitive advantage, the development of a talent pool of high potential and high performing incumbents to fill these roles, and the development of a differentiated human resource architecture to facilitate filling these positions with competent incumbents and to ensure their continued commitment to the organization (p. 305).

By way of an intense review of the prevailing definitions regarding the concept "Talent Management", a particular pool of thoughts has been arisen as talent

management is a collection of usual HR functions, practices and activities. specifically focused upon the areas of recruitment, selection, development, management and career succession management (Schweyer, 2004; SHRM, 2006; Oehley, 2007; Lewis and Heckman, 2006; Tafti et al., 2017). Likewise, another specific pool of thoughts has been arisen concept of "Talent regarding the Management" with precisely concentration upon the "Talent Pool" concept, which concerns only on high potential and high performing employees of the organization (Lewis and Heckman, 2006; CIPD, 2007; Collings and Mellahi, 2009; Iles et al., 2010). Conversely, talent management focuses on talent generically, that is deprived of concern for organizational boundaries otherwise precise positions (Lewis and Heckman, 2006).

2) Working Definition for "Talent Management": The working definition for "Talent Management" was developed based on three significant definitions specified by Lewis and Heckman (2006), SHRM (2006) and Tafti et al. (2017). Accordingly, the developed working definition for the concept "Talent Management" is as follows;

"Talent Management is a collection of functions, practices and activities categorized into talent acquisition, talent development, talent retention, career management and succession management of talent pool and talent generically in implementing the business strategies in fruitful mode".

# D. Talent Management Practices in Different Global Contexts

Through this exploratory review it was recognized that, different global manufacturing and service industries are operating numerous talent management practices in attracting, acquiring, developing and retaining high performing



talents specifically in achieving the organizational goals and objectives in fruitful mode. The service sectors namely, healthcare, hospitality, fast food service, banking, education, telecommunication and IT services have been identified of functioning diverse talent management practices in prior literature. Along with, the manufacturing industries namely, cement manufacturing, steel case manufacturing, coal and mining industry, energy and automotive also have been identified of operating varied industry specific talent management practices in achieving the business goals and objectives in successful manner.

Initially, focusing on to the global healthcare service sector, a "model of talent practices" management best contains six key talent management phases has been explored with enriching the prevailing pool of literature on talent management (Groves, 2011). In view of that, the six talent management phases are establishing the business case for talent management, defining high-potential health care leaders, identifying and high-potential leaders, codifying communicating high-potential designations, developing high-potential leaders as well as evaluating and embedding talent management practices (Groves, 2011). According to the Groves's (2011) elaborations, specifically focusing on acquiring, identifying, developing and retaining of the high-potential leaders is merely inherent to the global health care service sector.

Afterward, the hospitality sector especially SMEs in UK operate four main industry specific talent management practices in winning the war for talent in fruitful manner (Chung and Annunzio-Green, 2018). Consequently, implementation of the inclusive approach, making strategies for growing within the organization itself, cultivating the emotional connection and

managing the alumni networks are considered as the four vital talent management practices functioned in the hospitality service sector, UK. Difference from other industries, due to the industry specific nature of the hospitality industry ad hoc talent management practices are commonly implemented, which extremely influenced by daily business pressures (Chung and Annunzio-Green, 2018). Particularly, in accomplishing the service excellence, the firms of the hospitality industry host talent management practices with concentrating attracting new talents, developing existing talent, retaining talents while improving the organizational performances (Chung and Annunzio-Green, 2018). Sinclair-Maragh et al. (2017) discovered the vital prevailing talent management practices operated in the fast food service of Jamaica. Accordingly, the explored talent management practices are training and skill development, cross training and succession planning which are currently operated in the Jamaica fast food service entities (Sinclair-Maragh et al., 2017).

Once focusing on the educational service sector, investigation about the operated talent management practices concentrated only for very fewer number of research in the pool of talent management literature. In year 2015, Rudhumbu and Maphosa discovered the talent management practices functioned in higher educational sector in Bostwana. The only responsible talent management practice which is functioned in the selected public business schools in Upper Egypt is the unbiased systematic mechanisms in staff recruiting the academic by "appointing the first in rank in the graduating class" (Mousa and Ayoubi, 2019). Accordingly, it is vibrant that, higher educational Egyptian specifically focuses only on the talent recruitment instead of talent development



and talent retaining, which are key steps in the talent management process.

Guerci and Solari (2012) explored the practices executed managerial managing talents through their exploratory case studies, while focusing on banking industry in Italy. Hence, five key talent management practices namely, training development, career planning, performance assessment and management, offering non-monetary benefits for talents as well as measuring the employee satisfaction have been identified related to the banking sector in Italy. Accordingly, the under the talent management practice called training and development, Italian banking sector implements different training and development strategies in different levels of quantity and quality, specifically for the employees who are in the organizational talent pool. Moreover, under the talent management practice called measuring employee the satisfaction, particularly Italian banking sector provides a specific employee satisfaction scheme.

Afterward, once focusing on the global manufacturing industry, different manufacturing industries such as cement manufacturing industry, steel case manufacturing industry, coal and mining energy automotive industry, and manufacturing industry are presently operating various talent management practices in managing their organizational talents. In early time, Piansoongnern et al. (2011)explored diverse talent management practices functioned in the cement manufacturing industry, Thailand. Thus, five main talent management

practices which are identical to the traditional HR processes have been explored namely, talent recruitment, talent screening, talent identification, talent training and development and talent retention. With focusing specially on the Steelcase manufacturing Malaysian industry, Othman and Sumardi (2014) discovered the existing talent management practices operated in the industry. The prevailing talent management practices at Steelcase manufacturing, Malaysia is integrated into the Steelcase's global system (Othman and Sumardi, 2014). Maurya and Agarwal (2018) explored the prevailing talent management practices operated in the coal and mining industry, India through their exploratory study. Based on the results of the multicollinearity test performed in the research, Maurya and Agarwal (2018) concluded that, among the eight dimensions of organizational talent management practices for the current sample of 197 Indian coal and mining industry middle managerial and executive employees' population, the most parsimonious sub variables namely, remuneration and reward fairly, attracting and recruiting talent and managing worklife balance have emerged as the significant factors which play a vital role in determining the perceived employer branding in comparison with other talent management practices.

In conclusion, the prevailing talent management practices explored throughout the time line related to the numerous global manufacturing and service industries are descriptively revealed below (Table 2.6).



Table 2. Different talent management practices explored throughout the literature

	Context		ied Talent Management Practices
Year	301100110		
Oehley	ICT industry,	1)	Displaying a talent management mindset
(2007)	South Africa	2)	Attracting and recruiting talent
(====)		3)	Identifying and differentiating talented employees
		4)	Developing others
			Building and maintaining a relationship
		_	Providing meaningful and challenging work
		7)	Remuneration and reward fairly
		8)	Managing work-life balance
Groves	Global		Establishing the business case for talent management
(2011)	healthcare	2)	Defining high-potential health care leaders
(2011)	industry	3)	Identifying and codifying high-potential leaders
	maasay	4)	Communicating high-potential designations
		_	Developing high-potential leaders
		6)	Evaluating and embedding talent management
			practices
Sumardi	Telekom	Talent	management process with four stages;
and	Berhad,		Talent Spotting (E.g.: performance management
Othman	Malaysia		system)
(2011)	1 Tollory 510	2)	Talent Assessment and Endorsement (E.g.: Leadership
			Potential Inventory (LPI)
		3)	Formulation of Individual Development Plan (E.g.:
		- 7	70:20:10 model)
		4)	Readiness Level Assessment (E.g.: Talent pool)
Piansoong	Cement	1)	Talent recruitment: Campus recruitment
U	manufacturing	2)	Talent screening: Career Camp mechanism
(2011)	industry,	3)	Talent identification: Classified into four key levels;
	Thailand		star, youngster, performer, need improvement
		4)	Talent training and development: in-house training,
			institutional training, Management Development
			Committee (MDC)
		5)	Talent retention: performance based pay, career
			development, give before demand
Chapke	IT industry,	1)	Talent attraction
(2011)	India	2)	Talent retention
		3)	Training and development
		4)	Corporate culture
		5)	Internal and external communication
		6)	Collaboration with the academia and universities
Othman	Steelcase		Measurable annual performance plan
and	manufacturing	2)	Succession management consist of five steps:
Sumardi	industry,		examining key strategic issues, identifying pivotal
(2014)	Malaysia		roles, conducting talent reviews, identifying candidates
			for leadership pipeline and talent development



I ataalalaa	IT I. J	1)	Atturation talanta lauretina of internal and anadusted
Latukha	IT Industry,	1)	Attracting talents: hunting of interns and graduated
and	Russia		from leading IT universities, IT champion winners and
Selivanovs		0.3	hi-tech forums
kikh		2)	Talent selection through special tracks with partner
(2016)			universities" and "IT specific events
		3)	Talent development: own corporate universities,
			institutional partnerships with universities
	IT Industry,	1)	Attracting talents: hunting of interns and graduated
	India		from leading IT universities, IT champion winners and
			hi-tech forums
		2)	Talent development: own corporate universities,
			institutional partnerships with universities
		3)	Talent retention: work place diversity
		4)	Social programmes: job security, health care, maternity
			leave, inclusive programmes for employees' families
		5)	Special compensation package for talents
	IT Industry,	1)	Attracting talents: hunting of interns and graduated
	China		from leading IT universities, IT champion winners and
			hi-tech forums
		2)	Talent development: institutional partnerships with
			universities, sending the best employees to foreign
			universities.
		3)	Talent retention: work place diversity
		4)	-
			leave, inclusive programmes for employees' families
		5)	
Naim and	IT industry,	1)	Recruitment
Lenka	India	2)	Talent Development
(2017)		3)	Knowledge Management
		4)	Performance Management
		5)	Rewards And Recognition
		6)	Social Media
Bolander et	Different	1)	Recruitment
al. (2017)	industries,	2)	Talent identification
	Sweden	3)	Talent development
		4)	Career management and succession planning
		5)	Retention management
Maurya	Coal and	1)	Remuneration and reward fairly
and	mining	2)	Attracting and recruiting talent
Agarwal	industry, India	3)	Managing work-life balance
(2018)	,,,		
(-010)			

Source: Developed by the researcher based on the literature.

# **Discussion snd Conclusion**

This research study anticipates in resolving the conceptual ambiguities of the underlying concepts called, "Talent" and "Talent Management". Further, the research antedates in establishing the working definitions for the key terms named, "Talent" and "Talent Management". Based on the "objective approach" talent



can be defined as the multiplication of three main characteristics of people; competence, commitment and contribution. Based on the 'subjective approach", talent may be exclusive or inclusive or a combination of both. Thus, "Talent" was considered as an elite subset of the organization's population or entire employees of an organization. Talent Management can be defined as a collection of functions, practices and activities categorized into talent acquisition, talent development, talent retention, career management and succession management of talent pool and talent generically in implementing the business strategies in fruitful mode. The global manufacturing industries namely, cement manufacturing, steel case manufacturing, coal and mining industry, energy, automotive and service sectors namely, healthcare, hospitality, fast food service, banking, education, telecommunication and IT services are operating numerous talent management practices attracting, in acquiring, developing and retaining high performing talents. Talent acquisition, talent development, talent retention, career management and succession management are the key identified talent management practices in global contexts.

### Acknowledgment

We immensely thank to all the researchers in the fields of HRM, Organizational Behaviour and Psychology who contributed greatly to enhance the pool of literature, which helped us in order to succeed our creation.

### Referrences

Ashton, C. and Morton, L. (2005). Managing talent for competitive advantage: Taking a systemic approach to talent management. *Strategic HR Review*, 4(5), p. 28-31.

Axelrod, E., Handfield-Jones, H. and Welsh, T. (2001). War for Talent, Part Two. *The McKinsey Quarterly*, 1(spring), p. 9-11.

Bjorkman, I. and Makela, K. (2013). Are you willing to do what it takes to become a senior global leader? Explaining willingness to undertake challenging leadership development activities. European Journal of International Management, 7(5), p. 570-586.

Bolander, P., Werr, A. and Asplund, K. (2017). The practice of talent management: a framework and typology. *Personnel Review*, *46*(8), p. 1523-1551.

Byham, W. (2001). Are leaders born or made?. *Workspan*, 44(12), p. 56–60.

Chambers, E., Foulon, M., Handfield-Jones, H., Hankin, S. and Michaels, E. (1998). The war for talent. *The McKinsey Quarterly: The Online Journal of McKinsey and Company*, 1(3), p. 1-8.

Chartered Institute of Personnel and Development CIPD, (2007). *Talent Management: Strategy, Policy, Practice.* (online) Available at: <a href="https://www.cipd.co.uk/">https://www.cipd.co.uk/</a> (Accessed 20 October. 2018).

Chowanec, G., and Newstrom, C. (1991). The strategic management of international human resources. *Business Quarterly*, 56(2), p. 65-70.

Chuai, X., Preece, D. and Iles, P. (2008). Is talent management just "old wine in new bottles"?: The case of multinational companies in Beijing. *Management Research News*, 31(12), p. 901–911.

Chung, K. and Norma, D. (2018). Talent management practices in small- and medium-sized enterprises in the hospitality sector: An entrepreneurial owner-manager perspective. *Worldwide Hospitality and Tourism Themes*, 10(1), p. 101-116.



Collings, D. and Mellahi, K. (2009). Strategic talent management: a review and research agenda. *Human Resource Management Review*, 19(4), p. 304-313.

Creelman, D. (2004). Return on Investment in Talent Management: Measures You Can Put to Work Right Now. Washington: Human Capital Institute.

Duttagupta, R. (2005). *Identifying and managing your assets: Talent management.*London: Pricewater house Coopers.

Gallardo-Gallardo, E., Dries, N. and González-Cruz, T. (2013). What is the meaning of 'talent' in the world of work?. *Human Resource Management Review*, 23(4), p. 290-300.

Guerci, M. and Solari, L. (2012). Talent management practices in Italy – implications for human resource development. *Human Resource Development International*, 15(1), p. 25-41.

Heinen, J., and O'Neill, C. (2004). Managing talent to maximize performance. *Employment Relations Today*, 31(1), p. 67–82.

Hilton, D. (2000). Hiring and retaining top talent. *Credit Union Executive Journal*, 40(5), p. 12–16.

Iles, P., Chuai, X. and Preece, D. (2010). Talent management and HRM in multinational companies in Beijing: definitions, differences and drivers. *Journal of World Business*, 45(2), p. 179-89.

Khoreva, V. and Vaiman, V. (2015). Intent vs action: talented employees and leadership development. *Personnel Review*, 44(2), p. 200-216.

Khoreva, V., Vaiman, V. and Zalk, M. (2017). Talent management practice effectiveness: investigating employee perspective. *Employee Relations*, 39(1), p. 19-33.

Latukha, M. (2015). Talent management in Russian companies: Domestic challenges and international experience. *International* 

Journal of Human Resource Management, 26(8), p. 1051–1075.

Lewis, R. and Heckman, R. (2006). Talent management: A critical review. *Human Resource Management Review*, 16(2), p. 139–154.

Lunn, T. (1992). The talent factor: key strategies for recruiting, rewarding and retaining top performers. London: Kogan Page. p. 25.

Maurya, K. and Agarwal, M. (2018). Organizational talent management and perceived employer branding. *International Journal of Organizational Analysis*, 26 (2), p. 312-330.

Mercer, S. (2005). Best-in-class leadership. *Leadership Excellence*, 22(3), p. 17.

Michaels, E., Handfield-Jones, H. and Axelrod, B. (2001). *War for Talent*. Boston: Harvard Business School Press.

Morton, L. (2004). *Integrated and integrative talent management: A strategic HR framework, Research Report.* (online) New York: The Conference Board, p.1. Available at: https://www.conferenceboard.org (Accessed 16 Apr. 2020).

Naim, M. and Lenka, U. (2018). Development and retention of Generation Y employees: a conceptual framework. *Employee Relations*, 40(2), p. 433-455.

Nutakki, L., Reddy, M. and Balan, S. (2015). A study of the relationship between talent management and psychological contract", 2<sup>nd</sup> International Conference on Science. Technology and Management, University of Delhi, New Delhi.

Oehley, A. (2007). The development and evaluation of a partial talent management competency model. *Doctoral dissertation,* University of Stellenbosch, Stellenbosch.

Olsen, R. (2000). Harnessing the internet with human capital management. *Workspan*, 43(11), p. 24–27.



Schweyer, A. (2004). Talent Management Systems: Best practices in Technology Solutions for Recruitment. Retention and Workforce Planning. NJ: John Wiley and Sons.

Silzer, R. and Dowell, B. (2010). *Strategy-driven talent management: A leadership imperative*. San Francisco: John Wiley and Sons.

Society for Human Resources Management SHRM, (2006). *Human Resources Glossary*. (online) Available at: http://shrm.org/(Accessed 05 December. 2019).

Stahl, G., Björkman, I., Farndale, E., Morris, S., Paauwe, J., Stiles, P., Trevor, J. and Wright, P. (2012). Six principles of effective global talent management. *MIT Sloan Management Review*, 53(2), p. 24-32.

Sutherland, M., Torricelli, D. and Karg, R. (2002). Employer-of-choice branding for knowledge workers. *South African Journal of Business Management*, 33(4), p. 13-20.

Tafti, M., Mahmoudsalehi, M. and Amiri, M. (2017). Critical success factors, challenges and obstacles in talent management. *Industrial and Commercial Training*, 49 (1), p. 15-21.

Tansley, C. (2011). What do we mean by the term "talent" in talent management?. *Industrial and Commercial Training*, 43(5), p. 266-274.

Tansley, C., Turner, P., Carley, F., Harris, L., Sempik, A. and Stewart, J. (2007). Talent: Strategy, management, measurement. London: Chartered Institute of Personnel and Development (CIPD).

Tarique, I. and Schuler, R. (2010). Global talent management: Literature review, integrative framework, and suggestions for further research. *Journal of World Business*, 45(2), p. 122–33.

Thunnissen, M., Boselie, B. and Fruytier, B. (2013). A review of talent management: 'infancy or adolescence?. *The International* 

Journal of Human Resource Management, 24(9), p. 1744-1761.

Ulrich, D. and Smallwood, N. (2012). What is talent?. *Leader to Leader*, 63 (1), p. 55–61.

Valverde, M., Scullion, H. and Ryan, G. (2013). Talent management in Spanish medium-sized organizations. *The International Journal of Human Resource Management*, 24(9), p. 1832-1852.

Williams, M. (2000). *The war for talent: Getting the best from the best.* London: Chartered Institute of Personnel and Development (CIPD).

Blass, E. (2007) "Talent Management: Maximizing Talent for Future Performance", Chartered Management Institute, London.

Chartered Institute of Personnel and Development (2007) "Learning and development." The Chartered Institute Of Personnel and Development, London.

Gallardo-Gallardo, E., Dries, N. and González-Cruz, T. F. (2013) "What is the meaning of 'talent' in the world of work?", *Human Resource Management Review*, 23(4), 290-300.

Latukha, M. (2015) "Talent management in Russian companies: Domestic challenges and international experience", *International Journal of Human Resource Management*, 26 (8), 1051–1075.

Lewis, R. E. and Heckman, R. J. (2006) "Talent management: A critical review.", *Human Resource Management Review*, 16(2), 139–154.

Maurya, K.K. and Agarwal, M. (2018) "Organizational talent management and perceived employer branding", *International Journal of Organizational Analysis*, 26 (2), 312-330.

McKinsey (2008) "How companies act on global trends: A McKinsey global survey", *The McKinsey Quarterly (April)*.



Michaels, E., Handfield-Jones, H. and Axelrod, B. (2001) War for Talent: Harvard Business School Press.

Nutakki, L.P., Reddy, M.S. and Balan, S. (2015) "A study of the relationship between talent management and psychological contract", 2<sup>nd</sup> International Conference on Science, Technology and Management, University of Delhi, New Delhi.

Oehley, A.M. (2007), "The development and evaluation of a partial talent management competency model", Doctoral dissertation, University of Stellenbosch, Stellenbosch.

Schweyer, A. (2004) "Talent Management Systems: Best practices in Technology Solutions for Recruitment", Retention and Workforce Planning, John Wiley & Sons, NJ.

Tafti, M. M., Mahmoudsalehi, M. and Amiri, M. (2017) "Critical success factors,

challenges and obstacles in talent management", *Industrial and Commercial Training*, 49 (1), 15-21.

Tansley, C. (2011) "What do we mean by the term "talent" in talent management?", *Industrial and Commercial Training*, 43(5), 266-274.

Tarique, I. and Schuler, R.S. (2010) "Global talent management: Literature review, integrative framework, and suggestions for further research", *Journal of World Business*, 45(2), 122–33.

Ulrich, D. and Smallwood, N. (2012) "What is talent?", *Leader to Leader*, 63 (1), 55–61.

Valverde, M., Scullion, H. and Ryan, G. (2013) "Talent management in Spanish medium-sized organizations", *The International Journal of Human Resource Management*, 24 (9), 1832-1852.

Paper ID 606

# Impact of Involvement & Consistency of Organizational Culture on Job Satisfaction in Local Government Organisations in Sri Lanka

SKS Kankanamge<sup>1</sup> and AB Sirisena<sup>2#</sup>

<sup>1</sup>Faculty of Graduate Studies, University of Ruhuna, Sri Lanka <sup>2</sup>Department of Marketing, Faculty of Management and Finance, University of Ruhuna, Sri Lanka

#amila@badm.ruh.ac.lk

**Abstract:** Employee involvement and organizational consistency important factors for obtaining competitive advantage and sustainable performance for an organization. In Sri Lanka, public sector employees pressed bv are rules. regulations and legislations. Research findings have revealed that the inefficiency has been rooted in Sri Lankan government organizations, and employee dissatisfaction is one main reason for the ineffective and inefficient service in the Sri Lankan state sector. Therefore, the focus of this study was to identify the impact of employee involvement and organizational consistency on employee job satisfaction in state sector organizations in Sri Lanka. The conceptual model developed in the present study was based on Denison Organizational Cultural Survey (DOCS) which identifies three organizational cultural traits namely, empowerment, team orientation and capability development as independent variables to measure involvement, and three organizational cultural traits, namely core values, agreement, coordination & integration as independent variables to measure consistency. While the dependent variable, which is employee job satisfaction was based on Minnesota Job Satisfaction Questionnaire. A structured questionnaire was developed and self-administered to a sample of 150 secondary level employees in the local government sector in Sri Lanka. Data was analyzed using descriptive and inferential statistics. The results show that all the traits measuring involvement, namely; empowerment, team orientation & capability development & traits measuring consistency, namely, core values, agreement, coordination & integration were positively related with employee job satisfaction. Moreover, capability development is the most contributing organizational culture trait in involvement in the prediction of employee job satisfaction while agreement is the most contributing organizational culture trait in consistency in the prediction of employee job satisfaction.

**Keywords:** Involvement, Consistency, Job satisfaction, Empowerment, Team orientation

### Introduction

Organizations contain people who are combined to one another purposively to meet the goals of them and the organization (Biswas, 2015). Employee is a leading factor which determines the success of an organization, in the competitive environment (Shah, Memon, & Laghari, 2011). The effectiveness of an organization will be limited if employees are not motivated to do their jobs well. (Delaney & Huselid, 1996).

Involvement and consistency are very important predictors when considering the success of an organization. Job involvement affects for many corporate outcomes in any organization and it is very effective on employees' efforts and their motivation (Mousavi, Hosseini, & Hassanpour, 2015). Consistency is an important factor when predicting the success of an organization



and it provides coordination and integration. Consistency contributes to an organization's capacity to predictable over the time and remain stable (Denison & Mishra, 1995).

When managing the employees, the most complex factor faced by managers is the employee job satisfaction. Dissatisfaction of employees cause absenteeism, less productivity and less loyalty (Aziri, 2011). Involvement and consistency traits are strong predictors when considering the employee job satisfaction (Denison & Mishra, 1995).

When considering the Sri Lankan context, studies have revealed that there is a significant positive relationship between employee involvement and organizational consistency with employee job satisfaction. Especially Government organizations have been criticized due to the inefficiency and, many research findings have revealed that, the inefficiency is rooted in Sri Lankan government organizations (Gunaruwan, 2015). Job satisfaction among Sri Lankan public sector workers has been a major concern, highlighted by the previous research studies because, job satisfaction affects for efficiency and productivity in organizations. Further studies have shown that, Sri Lankan state sector has failed to deliver an efficient and effective service due to the employee dissatisfaction (Sanjeewa & Herath, 2018).

Literature has proved that there is a very strong relationship between employee job satisfaction with involvement trait (Bhatti & Qureshi, 2007). And also according to literature, there is very strong and positive relationship between consistency and employee job satisfaction (Xie et al., 2014).

When considering the local government sector in Sri Lanka, the local authorities are self – governed by the local body which is made of persons elected by the local people. The ability of local governments to

provide and maintain basic services, sound financial management, and well-managed development, has been severely reduced due to the inefficiency and ineffectiveness among the employees (Krishnamohan, 2016). A study conducted regarding the local government employees in Sri Lanka revealed that, the satisfaction level of employees is in a poor level (Selvakumaran et al., 2012). According to the literature, the efficiency, effectiveness and employee job satisfaction is very low in the local government sector in Sri Lanka Bennington, (Samaratunge & 2002: Gunaruwan, 2015). Even though there are many studies have revealed that there is a significant relationship between involvement and consistency trait with employee job satisfaction, there are very limited studies based on the Sri Lankan government sector organizations (Wickramasinghe, 2016; Velnampy, 2007). So, to fill this contextual gap, this study was focused to identify the impact of involvement and consistency traits on employee job satisfaction in local government sector, Sri Lanka...

### **Literature Review**

Perhaps the easiest way to comply with the conference paper formatting requirements is to use this document as a template and simply type your text into it. When using

Involvement and Consistency Aspects of Culture

The highly performed organizations have engaged and empowered employees (involvement), promote behavioral consistency with core values coordinating actions (consistency) (Denison, Nieminen, & Kotrba, 2012). Consistency and involvement traits are mostly focused on the internal integration (Denison & Mishra, 1995). Involvement can be divided into three traits namely empowerment, team orientation and capability development. Consistency can be



divided into three traits namely core values, agreement and coordination & integration. Each trait is consisted with three indexes which show the specific facets of the traits (Denison et al., 2012). Involvement is related to the changing capacity of the organization and consistency is focused on keeping the organizational capacity in a predictable and stable manner over time (Denison & Mishra, 1995).

### Job Satisfaction

Job satisfaction assesses the employees' working conditions and by this, it can be measured the organizational prosperity (Zahid et al., 2017). Job satisfaction is considered as the perceptions of employees on their working environment, employee relations and, promotion opportunities (Belias & Koustelios 2014). Employee satisfaction is an emotive and optimistic feature, which supports to take maximum appraisals, also with large extent of corporate experiences (Zahid et al., 2017).

Factors affecting Employee Job Satisfaction

According to the Minnesota satisfaction questionnaire developed by Martins & Proenca (2012), there are ten factors to measure emplovee iob satisfaction likewise: The chance to work alone on the job; The chance to do different things from time to time; The chance to be "somebody" in the community; The way my boss handles his/her workers; The competence of my supervisor in making decisions; The chance to tell people what to do; The chance to do something that makes use of my abilities; The freedom to use my own judgment; The chance to try my own methods of doing the job; The praise I get for doing a good job (Martins & Proenca, 2012).

Hypothesis Development

Based on the previous literature on the two organizational traits namely involvement and consistency with employee job satisfaction, following hypotheses were developed.

Several studies revealed that empowerment significantly and positively affects for employee job satisfaction (Rana & Singh, 2016; Ulutas, 2018; Elnaga & Imran, 2014). By considering above factors the following hypothesis was formulated.

**H 1**: There will be a positively significant relationship between empowerment and employee job satisfaction.

Some studies revealed that team orientation significantly and positively affects for employee job satisfaction (Shujaat, Manzoor, & Syed, 2014; Komer, Wirtz, Bengel, & Goritz, 2015). By considering above factors the following hypothesis was formulated.

**H 2**: There will be a positively significant relationship between team orientation and employee job satisfaction.

Several studies revealed that capability development significantly and positively affects for employee job satisfaction (Abuhashesh, Dmour, & Masa'deh, 2019; Chaudhry, Jariko, Mushtaque, Mahesar, & Ghani, 2017; Picho, 2014). By considering above factors the following hypothesis was formulated.

**H 3**: There will be a positively significant relationship between capability development and employee job satisfaction.

Some studies revealed that core values significantly and positively affect for employee job satisfaction (Abuhashesh, Diskiene & Gostautas, 2013; Kuchinke, Kang, & Oh, 2008). By considering above factors the following hypothesis was formulated.



**H 4**: There will be a positively significant relationship between core values and employee job satisfaction.

Several studies revealed that agreement significantly and positively affects for employee job satisfaction (Bigliardi et al., 2012; Qazi, Miralam, & Bhalla, 2017). By considering above factors the following hypothesis was formulated.

**H** 5: There will be a positively significant relationship between agreement and employee job satisfaction.

Several studies revealed that coordination & integration significantly and positively affects for employee job satisfaction (Sikowo, Namusonge, Makokha, & Nyagechi, 2016; Wolfeld, 2010). By considering above factors the following hypothesis was formulated.

**H 6**: There will be a positively significant relationship between coordination & integration and employee job satisfaction.

### Methodology

In this study, primary data was collected through questionnaires because, this is a quantitative research based on the survey method (Bradley & Harrell, 2009). The survey questionnaire was developed based on involvement, consistency and employee job satisfaction. Denison organizational cultural survey (DOCS) which developed by Gillespie et al, (2008) was used to measure involvement, consistency and it was consisted with 18 questions. Here the scale involvement measured three sub variables; namely empowerment (three items), team orientation (three items) & capability development (three items). Also, the scale consistency measured three sub variables; namely core values (three items), agreement (three items) and, coordination & integration (three items). Refer figure 01 conceptual framework for the graphical representation. Minnesota satisfaction questionnaire (MSQ) which was developed by Martins & Proenca, (2012) was used to measure employee job satisfaction and it was consisted with 10 questions. Refer table 01 and 02 for the detailed operationalization.

The questionnaire was consisted with two parts. Part one was consisted with the demographic profile of respondents with 09 questions. Part two was consisted with 28 closed ended questions to measure 06 independent variables namely empowerment, team orientation, capability development, core values, agreement and coordination & integration the dependent variable. satisfaction. 5- point Likert scale was used to measure the questions in part two.



Consistency

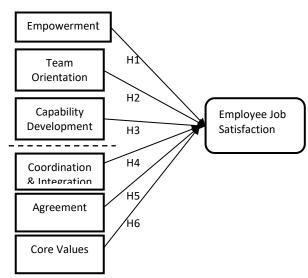


Figure 1: Conceptual framework

Table 1. Operationalization of variables-

Dependent	
Item Description	Source
The chance to work alone on the job	
The chance to do different things	
from time to time	(Martin
The chance to be "somebody" in the	s &
community	Proenca
The way my boss handles his/her workers	, 2012)
Competence of my supervisor in	
making decisions	
The chance to tell people what to do	



The chance to do something using
my abilities
The freedom to use my own
judgment
The chance to try my own methods
to do the job
The praise I get for doing a good job

For this study, the target population was all the government employees in Sri Lanka. Sampling frame was consisted with secondary level employees of the local government organizations in Southern province where a pradeshiya sabha, municipal council and a urban council were selected as the local government organizations for this study. The sample was selected by using simple random sampling method. For the present study, sample was consisted with 150 secondary level employees of the local government A pilot study was conducted for present study, by using ten repondents belonging to the same sample.

Table 2. Operationalization of variables-Independent

Table 2. Operationalization of variables-Independent					
Variable	Sub Variable	Item Description			
		Decisions are usually made at the level where the best			
	F	information is available			
	Empowerment	Most employees are highly involved in their work			
		Everyone believes that he or she can have a positive impact			
Involvement		Working in this organization is like being part of a team			
(Gillespie et	Team	This organization relies on horizontal control and			
al, 2008)	Orientation	coordination to get work done, rather than hierarchy			
ai, 2000)		Teams are the primary building blocks of this organization			
		Authority is delegated so that people can act on their own			
	Capability	This organization continuous invests in the skills of employees			
	Development	Problems often arise because we do not have the skills			
		necessary to do the job			
		The leaders and managers follow the guidelines that they set			
	Core Values	for the rest of the organization			
		There is a clear and consistent set of values in this organization			
		that governs the way we do business			
		This organization has an ethical code that guides our			
		behaviour and tells us right from wrong			
Consistency		There is a clear agreement about the right way and the wrong			
(Gillespie et	Agreement	way to do things			
al, 2008)	Agreement	It is easy to reach consensus, even on difficult issues			
ai, 2000j		We often have trouble reaching agreement on key issues			
		Working with someone from another part of this organization			
		is like working with someone from a different organization			
	Coordination &	It is easy to coordinate projects across different parts in this			
	Integration	organization			
		There is good alignment of goals across levels of this			
		organization			

# **Data Analysis**

In The demographic profiles of the study sample have been described using

descriptive statistics and also different inferential statistics were employed in order to analyze data obtained from the survey. Standard multiple regressions



were used to test hypothesis and achieve the study objective that focuses on whether there is an impact of organizational adaptability on employee job satisfaction. So, the purpose of this chapter is to present the results of data, collected by 150 respondents and which were analyzed by SPSS software.

Table 3. Operationalization of variables-Dependent

Variable	Items	Cronbach's Alpha
Empowerment	03	0.638
Team Orientation	03	0.794
Capability Development	03	0.375
Core Values	03	0.668
Agreement	03	0.613
Coordination & Integra	03	0.471
Job Satisfaction	10	0.887

Source: survey data, 2020

Table 4 Corelations and VIF values

Table 4. Corelations and vir values						
	Emp	Team	Сар	Core	Agree	VIF
Empo						
we						2.411
Team	.534**					1.562
Capa	.542**	.357**				1.651
Core	.508**	.526**	.428**			2.145
Agree	.598**	.454**	.420**	.553**		2.276
Coordi	.604**	.509**	.530**	.622**	.571**	2.406

Source: survey data, 2020

Table 3 provides details on the reliability of the questionnaire. By examining conbach alpha values we can conclude that the satisfay instrument minimum requirements of reliability since all the items have values above 0.6. Further the researchers carried out tests to establish

weather the model suffers from threats of multicolenearity. As per table 06 highest correlation recorded in 0.604 which is well below the threashhold lvel of 0.8. Further when examining VIF values the hishet recorded value is 2.411. this is well below even the conservative estimate of 5 and the liberal estimate of 10 (Hair, et, al, 2016). Therfore the researchers can conclude that the model is free from multicolinearity.

Table 5. Model Summary							
R Square	Adjusted	Std.	Error	0			

R	R Square	Adjusted	Std.	Error	of	the
		R Square	Estir	nate		
.707a	.500	.479	.439	00		

Source: survey data, 2020

Table 6 Anova results

	Table 0. Allova results							
Model	Sum of	df	Mean	F	Sig.			
	Squares		Square					
Regressio	27.554	6	4.592	23.829	.000b			
n								
Residual	27.559	143	.193					
Total	55.114	149						

a. Dependent Variable: SatisMean Source: survey data, 2020

b. Predictors: (Constant), ConCooMean, InvTeaMean, InvCapMean, ConAgrMean, ConCorMean, InvEmpMean

Table 7. Regression coefficients					
Model	Unstandardi		Standa	t	Sig.
	zed		rdized		
	Coeffic	ients	Coeffic		
			ient		
	В	Std.	Beta		
		Error			
(Constant)	.522	.252		2.071	.040
Empowerm ent	.082	.087	.087	.942	.348
Team Orientation	.055	.057	.071	.967	.335
Capability	.331	.076	.329	4.333	.000



Core Values	.172	.080	.185	2.140	.034
Agreement	.143	.081	.157	1.760	.081
Coordina	.061	.099	.057	.618	.537

Source: survey data, 2020

When the tables 5,6 and 7 are examined it is evident that the current research developed a valid mode. The model is statistically significant and the five independent variables included in the model can explain around 50% variation in the dependent variable.

Howver after more carefull consideration on table 07, it is evident that only two variableas are statistically significant at 95% confidence level while a fourth hypothesis which explain the impact of agreement on job satisfaction can be accepted at 90% confidence level.

Accordingly the research accepts the two hypothesis which stated that there is a positively significant relationship between Capability Development and Employee Job Satisfaction and there is a positively significant relationship between Core Values and Employee Job Satisfaction at 95% confidence level. Research may accept the third hypothesis that states that there is a positively significant relationship between Agreement and Employee Job Satisfaction can be accepted at 90% confidence level.

### **Data Analysis**

In general, according to the findings of the study, it can be concluded that involvement and consistency are important in improving the level of employee job satisfaction which is asserted by the positive contribution on employee job satisfaction.

When discussing the potential limitations of the study, single point/ cross sectional data collection using quantitative research design has been used to gather data from

respondents but this is limited to one point in time. Due to that reason, future researchers could use longitudinal design to clarify the effect of each organizational culture traits. Secondly, the research was done by focusing a narrow context which makes it indicative but not fully conclusive. So, future studies in this area could be conducted in a wider & broader scope to include other organizations and increase conclusiveness of the findings.

### References

Aziri, B. (2011). Job Satisfaction: A Literature Review. Management Research and Practice, 77-86.

Bhatti, K. K., & Qureshi, T. M. (2007). Impact of Employee Participation on Job Satisfaction, Employee Commitment and Employee Productivity. International Review on Business Research Papers, 54-68.

Belias, D., & Koustelios, A. (2014). Organizational Culture and Job Satisfaction: A Review. International Review of Management and Marketing, 132-149.

Biswas, W. (2015). Impact of Organization Culture on Job Satisfaction and Corporate Performance. Journal of Research in Humanities and Social Science, 14-16.

Bonsu, N. O. (2014). The impact of change management on job satisfaction of employees in Ghana's banking sector. Problems of management in the 21st century, 140-149.

Bradley, M. A., & Harrell, M. C. (2009). Data Collection Methods. Santa Monica: National Defence Research Institute.

Bulgarella, C. C. (2005). Employee Satisfaction & Customer Satisfaction: Is There a Relationship? Guidestar research white paper, 1-6.

Chen, S.-y. A., Hou, Y. H., & Fan, K. T. (2009). The effect of organizational change on team



creativity, job satisfaction, organizational commitment, and work performance. Proceedings of ASBBS, 1-6.

Coetzee, M., & Stoltz, E. (2015). Employees' Satisfaction with Retention Factors: Exploring the Role of Career Adaptability. Journal of Vocational Behaviour, 83-91.

Cullen, K. L., Edwards, B. D., Casper, W. C., & Gue, K. R. (2014). Employees' Adaptability and Perceptions of Change-Related Uncertainty: Implications for Perceived Organizational Support, Job Satisfaction, and Performance. Journal of Business and Psychology, 266-280.

Dekoulou, P., & Trivellas, P. (2015). Measuring the Impact of Learning Organization on Job Satisfaction and Individual Performance in Greek Advertising Sector. Procedia - Social and Behavioral Sciences, 367-375.

Delaney, J. T., & Huselid, M. A. (1996). The Impact of Human Resource Management Practices on Perceptions of Organizational Performance. Academy of Management Iournal, 949-969.

Denison, D. R., & Mishra, A. K. (1993). Toward a Theory of Organizational Culture and Effectiveness. Research Support, 1-43.

Denison, D. R., & Mishra, A. K. (1995). Toward a Theory of Organizational Culture and Effectiveness. Institute for Operations Research and the Management Sciences, 204-223.

Denison, D. R., Haaland, S., & Goelzer, P. (2004). Corporate Culture and Organizational Effectiveness: Is Asia Different from the Rest of the World? Organizational Dynamics, 98-109.

Gillespie, M. A., Denison, D. R., Haaland, S., Smerek, R., & Neale, W. S. (2008). Linking organizational culture and customer satisfaction: Results from two companies in different industries. European Journal of Work and Organizational Psychology, 1-21.

Goedegebuure, R., & Xu, Y. (2005). Employee Satisfaction and Customer Satisfaction: Testing the Service-Profit Chain in a Chinese Securities firm. Innovative Marketing, 49-59.

Gunaruwan, T. L. (2015). Unsatisfactory Performance of Sri Lanka's State-Owned Enterprises: Causality Diagnostics in Management Autonomy and Accountability. Financial Sector Development, 67-72.

Krishnamohan, T. (2016). Challenges towards Local Self-Governance: Situation in Sri Lanka. Scientific Journal Impact Factor, 1-16.

Martins, H., & Proenca, T. (2012). Minnesota satisfaction questionnaire - Psychometric properties and validation in a population of portuguese hospital workers. Research work in progress, 1-20.

Mousavi, S. A., Hosseini, S. Y., & Hassanpour, N. (2015). On the Effects of Organizational Culture on Organizational Performance: An Iranian Experience in State Bank Branches. Iranian Journal of Management Studies, 97-116.

Parlalis, S. K. (2011). Organizational changes and job satisfaction among support staff. Journal of social service research, 1-37.

Rahman, M. M., & Karim, Z. (2018). The Impact of Learning Ofganization on the Performance of Organizations and Job Satisfaction of Employees: An Empirical Study on Some Public and Private Universities in Bangladesh. European Journal of Business and Management, 142-151.

Rose, R. C., Kumar, N., & Pak, O. G. (2009). The Effect of Organizational Learning On Organizational Commitment, Job Satisfaction and Work Performance. The Journal of Applied Business Research, 55-66.



Samaratunge, R., & Bennington, L. (2002). New Public Management: Challenge for Sri Lanka. Asian Journl of Public Administration, 87-109.

Sanjeewa, G. C., & Herath, D. (2018). Employee Satisfaction and Related Factors among Public Healthcare Workers in Sri Lanka. Epidemiology International Journal, 1-8.

Selvakumaran, K., Wickremesinghe, E. S., & Upananda, W. A. (2012). Employees' Job Satisfaction on Accomplishing Routine Tasks: A Study on Programme Assistants in the Northern Provincial Council, Sri Lanka. Proceedings of Jaffna University International Research Conference, 61-69.

Shah, S. M., Memon, M. S., & Laghari, M. K. (2011). The Impact of Organizational Culture on the Employees' Job Satisfaction. Interdisciplinary Journal of Contemporary Research in Business, 847-859.

Sony, M., & Mekoth, N. (2016). The Relationship Between Emotional

Intelligence, Fronline Employee Adaptability, Job Satisfaction and Job Performance. Journal of Retailing and Consumer Services, 19-31.

Velnampy, T. (2007). Job Attitude and Employees Performance of Public Sector Organizations in Jaffna District,Sri Lanka . ResearchGate, 1-11.

Wickramasinghe, T. (2016). Democratic Accountability of Elected Representatives: Appraisal of the decision making process in local electoral systems. Vistas, 24-50.

Yaacob, Z. (2014). The direct and indirect effects of customer focus on performance in public firms. International Journal for Quality Research, 265-276.

Zahid, M., Shaikh, T., & Zehra, S. Z. (2017). Impact of Organizational Culture on the Pakistani Hotels Workforce's Job Satisfaction: Qualitative Report. Munich Personal RePEc Archive, 1-10.–571.

Paper ID 607

# Impact of Website Attractiveness and Trustworthiness on Repeat Purchase Intention

KW Opanayake<sup>1</sup> and AB Sirisena<sup>2#</sup>

<sup>1</sup>Faculty of Management and Finance, University of Ruhuna <sup>2</sup>Department of Marketing, Faculty of Management and Finance, University of Ruhuna

#amila@badm.ruh.ac.lk

**Abstract:** In the modern era, there are many new business models that have developed because of the large inversion in the field of technology with overhead features. Especially the advancement of the internet has created many social and consumption trends. Recently with the global pandemic Covid-19, customer involvements with online activities have become a daily routine for many. They use every online business solution that makes their life easy in this critical situation. Web shopping is the most preferred online business model among Asian consumers. It is more substantial to clarify the factors that make a significant impact on the consumer's purchase intention in this online purchasing context. Therefore, the main objective of this study was to evaluate the impact of website attractiveness and trustworthiness on online customer purchase intention. A total of 150 individuals who have purchased goods through web shopping participated as the respondents in the sample. The study measures the impact of five independent variables: three under website attractiveness and two under web site trustworthiness, on the dependent variable repeat purchase intention. The results of the regression analysis revealed that fulfilment and integrity of the website positively relate to the customer online purchase intention, while the study could not find a statistically significant impact from the remaining three variables of the study. Researchers highlight importance of conducting more contextual

studies in this growing yet relatively understudied area.

**Keywords:** Repeat purchase intention, Website attractiveness, Website trustworthiness

### Introduction

The world has become more and more technology oriented and one of the main driving forces is the advancement of internet which has revolutionized every aspect of human life including new form of businesses like online retailing or web shopping. The recent movement from traditional business platforms to online contexts has become a global phenomenon. In the e-commerce, web shopping is growing market segment with even larger potential for growth (Wenny, 2016). Through this novel business solution, both consumers and business parties have tried to accomplish their own goals. Usually consumers hunt their requirements at low cost while businesses are trying to reach highest profitability (Yang & Jun, 2002). In the online business world, consumer's behavior largely distinct from longstanding bricks and mortar environment. With the revolution of consumption, intelligent consumers already armed with relevant yet updated information that has allowed them to evaluate each option comprehensively. Consumers who engage with the virtual businesses, even though there isn't any physical access to the business place have been able to enjoy the freedom of choice at



an unprecedented scale which would have been impossible in the absence of advanced information communications technology. (Thamizhvanan & Xavier, 2012).

The e-market consisted with many influential strategies that convert the traditional consumers into active buyers who accept more price premiums and make purchases frequently (Tan & Guo, 2005). The success of web retailing relies not only on its sales achievement, but also on its ability to widely deploy without geographical boundaries, lowering costs, maintaining close customer relationships as well as the potential for innovation (Ranganathan, 2002).

Further according to Ozili and Arun (2020), the unpredictable situations, social distance and other restrictions implementation due to Covid-19 pandemic around the world, has positively effected the tendency for online transactions among people.

As far as Sri Lankan context is concerned, according to digital statistical data in Sri Lanka (2019), there were more than ten 10 million internet users and 31. 8 million mobile connections. There is conspicuous growth in internet penetration in Sri Lanka that stood at 47% in 2020. (Digital; Sri Lanka,2020). At the first sight, there has an elaboration of internet usage among Sri Lankans along the past decade. Along with the expansion of social commitment, online shopping experience is really popular among every generation people without any doubt (Ayoobkhan, 2016).

When considering the estate of online shopping portion in Sri Lanka, it is evident that few large players have acquired majority of the online market. As far as customers are concerned there are geeting more amd more aware about the web shopping and its related features, thus presenting a market with significant growth potential (Ayoobkhan, 2016).

However it has been noted that some businesses who are already engaging in online business and struggling to manage quality web shopping experience for their consumers (Poddar, Donthu, & Wei, 2009), thus presenting a major challenge for this budding market.

Most of customers seek innovative business solutions that provided unexpected, attractive and trustworthy experience because services untouchable and unseen (Pavlou, 2003). Their quality depends on the innovative and trustworthiness of the service. Unfortunately this is hard truth that some businesses couldn't understand, thus jeopardizing the entire industry. These lees than accepted processes has created some trivial matters like frequent customer switching, complaints from dissatisfied customers, etc for the interne retailers (Ruth, Richard, Charles, & Wynnes, 2016). It has been identified that switching of existing customers to other web sites and inability and difficulty in attracting new customer due to bad word of mouth has been identifying at the most crucial (Tamuliene & Gabryte, 2014).

The main reason for online customer frustration and dissatisfaction is nullity of proper guidance for web design and poor awareness about customer preferences. The distinctive consumer relationship is based on in-depth affinity between both parties (Tamuliene & Gabryte, 2014). Even though there is several research articles which studied about this area, their results are differ from one to another. Further there are not many studies that pay attention for both observable and tangible factors that affect for online shopping decisions. Also only few have applied this to Sri Lankan context. Since the customers thinking patters in particular and behavior general differ through cultural differences, applying knowledge gained from west directly to local context would be



problematic and the validity of knowledge can be questioned. Hence there is a theoretical and contextual gap in this research area, which current study tries to fulfill.

### Literature Review

With the advancements of the internet, it become a space that allow individuals to engage with different parties for fulfil own desires through the available convenience features of the internet (Canzer, 2009). Along with timely updated, internet based business or e-commerce have spread around the world and many giant business transfer to e-commerce sector due its unique and lucrative competencies (Melão, 2008).

As the heart of the today's business, ecommerce offers exclusive ways of interactions that make the live styles of the people easier. Through the e-commerce, customers could engage with any kind of businesses in a website or in a social media while open a path to businesses to create novel bond with customers, employees, suppliers and other business parties (Song & Zahedi, 2005). According to the Poddar et al. (2009), web shopping as a major unit of e-commerce used by both B2B and B2C context. Through the interactive communication that facilitate the web shopping, could be an enormous contingency for attain about customer preferences, their after thoughts about product or service considerable factors when they make purchase decision (Salunke, Weerawardena, & McColl-Kennedy, 2013).

According to Chung and Young (2003), purchase intention can connote as the probability that an individual's desire of fulfil their any need and want through consumption of tangible or intangible object. The revolution of purchase intention into online context has added some collateral facts due to shown up the

internet. The sufficiency of consumer's intention to accomplish specific comportment through internet can be cognizance as online purchase intention (Kwek, Lau, & Tan, 2010).

Purchase intention is one of the aspect of cognitive behavior, it is more effective as a volitional measure to understand customer's real motive (Bello, Radulovich, Javalgi, Scherer, & Taylor, 2015). Where customer willing to involve in online transaction, it can be count as the online purchase intention and variables as defection and cogitation can be used to identify the degree of purchase intention (Eastlick, Lotz, & Warrington, 2006).

The B2C market is the main that usually come over in online space.so it is critical to maintain gladsome web interface that delight customers and commute the customers into loyal latters (Flavián & Kozar, 2006,2012,2006). Attractive objective is the diversion point of constitution the long-term congruity. Satisfactorily web design may arouse people underneath motives and encourage to more visits to the web page.at the same time those motives could be affect to the revisit or retention (Wenny, 2016).

In (2003), Wolfinbarger and Gilly have disclosed the ETAILQ model which consist with measures that can be used to measure online retail quality. Every prestigious online business have unique web designs that attract people who need to recapture self-worth by using the well founded company or website. If the web store is well known in the social and widely recommend among social communities, people tend to visit to that to create identification for themselves through that website goodwill (Ruth et al., 2016).

Attractive website should be consists with the characteristics like fulfillment, security and friendly customer service. Fulfillment as a quality object, facilitate the transaction



facilities to the customers even it is diverse situation that balk the usual business process (Osama & Fawaz, 2010). Fulfilling the customer's requirement is the cardinal responsibility because it is positively effect to perceived service quality and customer satisfaction in the online context. Web stores must provide omission free, secure, and comfortable and user friendly service (Gwo & Hsiu, 2005).

When a customer have an issue related to the service that they have got, company need to provide sufficient platform to address those complaints. Those services need to be helpful, reliable, intensive and responsive (Yang & Jun, 2002). In 2009, Chao, Chen, Hsiang, and Yu have reveald, if a company handle their customer graveness quickly and effectively, that situation enough to measure their service quality.

Because of the deceitful businesses, many people stumble to choose online business rather than traditional business. Due to higher intangible nature, privacy has become crucial proof that consumers really attend (Hao, Kok, & Jer 2014). Customer's personal information, transaction payment source information should be protect by using advanced security features. There are not any excuses if there is a violation of customer privacy and it may be a punishable crime presence of law (Collier & Bienstock, 2006). As an imperative characteristic, security associated act that consist other qualities like integrity, benevolence, authenticity, vulnerability privacy. Customer's immutable confidence toward particular wen store is the best disclosure of the security level of that company (Jalilvand, 2017).

The web shopping context, the design of the web or overall quality of the web store directly affect the customers purchase intention. If it is really poor compare to another substitutes, customers become

dissatisfied to abandon the futile option and switching to another option in flash (Hao et al., 2014). As the physical store internal and external atmosphere, virtual store should be attractive through novel graphics, humor features and eye catching interface. Also it should be consist with customer oriented service and security features that protect the user privacy. These factors appealing as catalytic which induce consumer's mind for make a purchase decision (Hsin & Su, 2008).

Today people's consumption varies time to time due to social impact that generate by influential group through their reviews full critics. suggestions, and recommendation in online brand communities or social media groups (Hao et al., 2014). So every consumers search more information when they are flaunting in virtual business context. Influential online environment motivate the revisit to the web store and spread positive word of mouth and it's promote wealthy consumer behavior (Hoque & Lohse, 1999).

Trust is the genesis of the relationship than happen howsoever. Nowadays peoples are extremely egoistic toward their desires due to unpredictable motions in the business world (Ayoobkhan, 2016). Honesty is a rare character in this anomalous world. Though if there a company gain more trust from their customers, it can consider as a competitive capability. Hence the trustworthiness customers encourage themselves to engage with online business (Ruth et al., 2016). According to Chung and Young (2003), where the higher degree of trust there is higher purchase intention. But some studies have found there is not significant impact of trust on purchase intention.

Trust act as an inscription agent between the individual's psychological behavior and business's intentional behavior. Further it is reflect the whether there is opportunistic



and selfish morals of the business (Xiao & Benbasat, 2002). For maintain customer retention, main key is the trust between seller and buyer.as a set of inseparable concepts like integrity and benevolence are roots of the trustworthiness (Daisy & Deqing, 2014).

As Malaika and Farhod (2012) explained that the benevolence is seller's genuine acts without self-revival. Buyer believes that seller concern about their perceptions also and always tire for customer's welfare and benefaction. For boost the benevolence of the service, web retailers usually design the website with a sufficient knowledge about customer preferences and requirements. User friendly interface and interactive communication methods are another indicators of the amiableness (Venetis & Ghauri, 2016). A set of morals, principals, ethical practices are lead to honest service and that fairness service start at the pre purchase stage and end in the post purchase stage. The integrity should consist aspects like reliable, credible, honest, fair and ethical practices (Elissar, Nizar, & Riadh, 2013). Usually every consumers navigate to the web store have an unrevealed motive about benevolence and admire the one with impartial and reliable obligations (Hao 2014). Inexperienced consumers afraid to deal with online vendors due intangibility and lack of trust. Their attitudes are also different from window shopping behavior (Gefen, 2002). In order to accelerate the acceptance of e-business, trust is a mediator that arouses the purchase intention of the customers (Kwek et al., 2010).

Customers buzz about particular web page is positive and they have recommended it to others without hesitation, it is a sign of trustworthy web store. That identity attract more customers and retain existing ones while affect for individual's purchasing behavior (Malaika & Farhod

2012). Not as the brick and mortal store, online store consumption have considerable risk, so the trust act as a significant role in the intentional behavior of customer when they make purchase (Tamuliene & Gabryte, 2014).

### Methodology

The study was conducted through focusing on a single company in the industry because the researcher wanted to get a deep understanding of the practical scenario about selected marketing Using convenience phenomena. the sampling method through a survey process primary data have been collected and nearly 170 individuals who have purchased goods from selected company has been taken as respondents. Out of 170 surveys 20 surveys are unusable due incompleteness. In order to fit with the study type as well as objectives the data was collected through the online sources. Questionnaire was developed based on through literature survey where the respondent's perception was tested using five independent variables and one dependent variable. Refer figure 01, the conceptual framework.

Figure 1. Conceptual framework

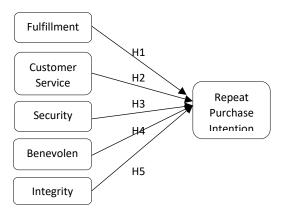




Table 1. Operationalization of variables

Variable	Scale items	Source		
	1. Receiving the right order.			
	2. on time order receiving.			
Fulfillment	3. Being the same as shown.			
	4. Well packaged.			
	5.straightforward returning	*** 10° 1		
Customer	6. Any time customer response.	Wolfinbarger and		
service	7. Sincere inquiry solving.	Gilly (2003)		
	8. Adequate security feature			
C	9. Protect privacy			
Security	10.Well-established			
	11. Safe transactions			
	12. Close to customers			
	13. Capture and understand need and preferences.			
Benevolence	14. ready to assist and support			
	15. Benevolent. Intention.	Wang and Benbasat		
	16. Prioritize the customer interest.	(2007)		
	17.Impartial recommendations			
Integrity	18. Honest service.			
	19. Reliable promises.			
	20. Continuous use in future.			
Repeat	21. Recommendation to others.	Jiyoung and Sharron		
Purchase	22. Give prioritize to this website.	(2013)		
	23. Frequent visit and use.			

The questionnaier as a measuring instrument consisit of seven point likert scale ranging from strongly agree to strongly diagree.

As per the above table 2, there was an internal consistency due to all values consist with the Cronbach Alfa value that are higher than 0.7 (Cavana 2001; Lance, Butts, & Michels, 2006).the Content validity was established by carrying out a through literature review. For achieving construct validity, survey has developed through using relevant measures and indicators in the published literatures. For face validity, the survey has to deliver to the academic expertise. Through their supervision there were several adjustments in the questions. There are three parametric tests that used to test normality, independence and mulitiulticolineraity. These tests have own assumptions that need to fulfill for further statistical analysis.

Table 2. Reliability statistics

Table 2. Renability statistics			
Variable	Cronbach's	Number	
	Alfa Value	of items	
Re-Purchase	0.942	4	
Intention			
Fulfillment	0.923	5	
Customer	0.909	2	
Service			
Security	0.940	4	
Benevolence	0.921	5	
Integrity	0.897	3	

Source: survey data, 2020

According to Miles and Shevlin (2001) if the Skewness values are closer to zero and Kurtosis values are in between the range of +2 to -2, it can be considered as that data set follows a normal distribution. As the statistical findings of skewness and



kurtosis test, all statistics of skewness were nearly 0 and Kurtosis have been spread between range of (- 2) and (+2). So, researcher can be concluded that data is distributed. normally To test interrelation among variables, usually use the mulitiulticolineraity assumptions and According to standard value assumptions of Hosmer and Lemeshow (1999), when there are VIF value that less than 10 along with the tolerance value garter than 0.2, mulitiulticolineraity effect does not exist. As findings indicated, tolerance of each independent variable are greater than 0.2 and VIF below the 10. Therefore this study is free from the Mulitiulticolineraity effects. However highest recorded correlation for this study is 0.871 well above the 0.8 threshold. Refer table 03 for more information.

# **Analysis**

In order to test the 5 hypothese developed by the study a regression analysis was conducted. Table 04 explains that the model along with the independent variables can predict upto 83% of variation in the dependent variable. More over according to table 5 a p value equal to 0.000 gurantees that the model is statistically significanlt.

Table 3. Corelations and VIF vlaues

	Custo	Secu	Bene	Inte	Colline	arity
	mer			gr	Statist	ics
	servic				Tolera	VIF
	e				nce	
serv					.320	3.127
Secu	.760				.219	4.576
Bene	.770	.817			.159	6.302
Integ	.750	.763	.878		.211	4.750
Fulfil	.799	.871	.861	.815	.158	6.336

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

Source: survey data, 2020

Table 4. Model Summary

R	R	Adjusted	Std. Error of the
	Square	R Square	Estimate
.913a	.833	.827	.63353

Predictors: (Constant), integrity, Customer service, security, benevolence, fulfilment Source: survey data, 2020

Table 5. Anova

Tuble bi imeva				
Model	F	Sig.		
Regression	143.738	.000 <sup>b</sup>		

Source: survey data, 2020

Table 6. Regression coefficents

	1010 01	Ct d d:		
Model		Standardize	τ	Sig.
		d		
		Coefficients		
		Beta		
(Const)	198		981	.328
Fulfill	.566	.529	6.167	.000
Cus Ser	.070	.068	1.122	.264
Security	.118	.109	1.490	.138
Benevol e	.058	.053	.622	.535
Integrity	.244	.211	2.850	.005

Source: survey data, 2020

When examine the table 6, it show up that only two independent variables are significant (fulfilment P value= 0.000 and integrity p value 0.005) and other independent variables namely, customer service, security and benevolnece are statistically not significant. |Therfore the study has sufficient evidence to accept first hypothesis which stated that, there is an impact of fulfillment of the website on repurchase intention and final hypotheis which stated that there is an impact of integrity of the website on repurchase intention. While the study do not have enough statistical evidence to accept the remaining hypothesis which stated that, there is an impact of customer service of



the website on repurchase intention, there is an impact of security of the website on repurchase intention and there is an impact of benevolence of the website on repurchase intention.

### Conculusions

The rapid improvements in the technology and vitual space outbreak everywhere as varity kind of online bunisess formats. People use internet for different activities such as for their job purpose, find new things. online shopping, building relationship with people etc. so today, online business could acieve forfront place in people's generical life style. Further the changes of customer attitudes, behaviors, perception in online context also make huge impact on the business survival. As other scholars identified, customers are the major agent that directly decide the business success or failure. So every business in the online context try to maintain good relationship while fulfilling every customer's requirement at least in a considerable extent. It may be decrease their customer switching and make loyal and satisfied customers. Main objective of this research was test the impact of web site attractiveness and trustworthiness on customer purchase intention.

According to the findings of this study there was a significant impact of fulfilment of the web site on online purchase intention. Findings of this study mostly similar to the existing literatures that have shown up about the impact fulfilling web page on customer purchase intention in the online space which disclose by Ayoobkhan (2016). According to Bandar (2018), fulfilling the customer's requirement is the cardinal responsibility because it is positively effect to perceived service quality and customer satisfaction in the online context. Web stores must provide omission free, secure, and comfortable and user friendly service. Bello et al. (2015) illuminated, if a company handle their customer graveness quickly and effectively, that situation enough to measure their service quality. Therefore, organizations or companies who doing web shopping must target their service to meet the customer's needs, desires, and goals. If this is considered, it will influential to the customer purchasing behavior positively.

The study identified a positive significant impact of integrity of the web page on customer purchase intention as Elissar et al. (2013) disclosed. A set of morals, principals, ethical practices are lead to honest service and that fairness service start at the pre purchase stage and end in the post purchase stage. The integrated service should consist aspects like reliable, credible, honest, fair and ethical practices (Jalilvand, 2017). So every businesses who are struggling with customer management issues, try to implement honest service that impressed the customers.

Moreover the study has identified that there is not any significant impact of customer service, security benevolence. But this findings are could not find the same relationship which has disclosed through past academic studies. According to Ruth et al. (2016) when a customer have an issue related to the service that they have got, company need to provide sufficient platform to address those complaints. Those services need to be helpful, reliable, intensive and responsive and as a reverse effect those customer oriented service positively impact for their purchase intention. Consider about the security features, Hao et al. (2014) when a service consists characteristic like benevolence, authenticity, integrity, vulnerability and privacy, Customer's immutable confidence toward that web store is the best disclosure of the security level of that company. The past studies that revealed about the relationship between



the benevolence and customer purchase intention have disclosed for boost the benevolence of the service, web retailers usually design the website with a sufficient knowledge about customer preferences and requirements which directly impact on customer purchase intention. While the current study couldn't find the same relationship we would like to encourage more research in this area to further strengthen the findings.

This study offers following suggestions with the practical perspective for the professionals in this field. For establishment of the attractive and trustworthy web store, the company can introduce some strategies that establish strong trust in consumer's mind toward their web store and manage customer perception of risk in the pre purchase stage, and explicate the sources that impact service experience in service encounter stage. Further try to not to satisfy the customer but to delight; that going beyond the satisfaction through impartial and reliable promises. The relationship management is all about mutual knowledge between two parties. When a business offer more value to customers, they become loyal latters. When they become loyal, it also decrease the customer switching to another substitute.

Considering the attractive web page which can identify as service innovativeness, company can provide more services that connected to the customer's requirements. Further Marketing managers can combine personal variables with knowledge about lifestyle preference, they gain customer insight allowing for a more powerful focus on each respective consumer segment.as well as referring to the findings of this study for marketing managers, at least try to fulfil each customer's requirement of .Receiving the right order, on time order receiving, products the same as shown in the web store, Well packaged and

straightforward returning while maintaining impartial recommendations, honest service with reliable promises.

### References

Ayoobkhan, A. L. M. (2016). Intention towards Online Shopping Via Social Media Networks: Perspective of Young Generations in the Eastern Parts of Sri Lanka. Journal of Information Systems & Information Technology (JISIT), Vol. 1 No. 2, 18-25.

Bandar, K. A. (2018). Linking Interactive and Supportive Service Innovation with Customer Satisfaction Through Customer Value Creation. International Journal of Marketing Studies, Vol. 10, No. 4, 1918-7203.

Bello, D. C., Radulovich, L. P., Javalgi, R. G., Scherer, R. F., & Taylor, J. (2015). Performance of professional service firms from emerging markets: Role of innovative services and firm capabilities. Journal of World Business, 2016-April.

Canzer, B. (2009). Efficiency and effectiveness dimensions from the impact of e-business on corporate performance with special reference to banking sector.

Cavana , R. Y. (2001). Applied Business Research: Qualitative and Quantitative Methods. John Wiley & Sons , Australia, 334-359.

Chao, M. C., Chen, C. C., Hsiang, L. C., & Yu, H. F. (2009). Determinants of customer repurchase intention in online shopping. Online Information Review, 33(4), 761-784.

Chung, H. P., & Young, G. K. (2003). Identifying key factors affecting consumer purchase behavior in an online shopping context. International Journal of Retail & Distribution Management, 16-29.

Collier, J. E., & Bienstock, C. C. (2006). Measuring service quality in e-retailing. journal of service reserach, 8(3), 260-275.



Daisy, & Deqing. (2014). The Effect of Service Innovation on Customer Satisfaction.

Digital 2020:Sri Lanka - Dtareportal- Global Digital Insights (2020 ). Retrieved from http://www.trc.gov.lk

Eastlick, M. A., Lotz, S. L., & Warrington, P. (2006). Understanding online B-to-C relationships: An integrated model of privacy concerns, trust, and commitment. Journal of Business Research, 59, 877–886.

El-Erian, M. (2020). The Coming Coronavirus Recession and the Uncharted Territory Beyond.

Foreign Affairs, Media Report.

Elissar , T., Nizar, S., & Riadh, L. (2013). Consumer trust toward retail websites:Comparison between pure click and click-and-brick retailers. Journal of Retailing and Consumer sServices.

Flavián, G. A. L., & Kozar, P. M. A. (2006,2012,2006). Analysis of website design and user interaction.

Gefen, D. (2002). Reflections on the dimensions trust and trustworthiness among online consumers.

Gwo, G. L., & Hsiu, F. L. (2005). Customer perceptions of e-service

quality in online shopping. International Journal of Retail & Distribution Management, 33(2), 161-176.

Hao, S. S. L., Kok, W. K., & Jer, L. H. (2014). Influence of online shopping enjoyment and trust towards purchase intention in social commerce sites. Australian Journal of Basic and Applied Sciences, 8(8), 62-67.

Hoque, A. Y., & Lohse, G. L. (1999). An information search cost perspective for designing interfaces for electronic commerce. Journal of Marketing Research, 36 (3), 387-394.

Hosmer, D. W., & Lemeshow, S. (1999). Applied Logistic Regression. New York: Wiley.

Hsin, H. C., & Su, W. C. (2008). The impact of online store environment cues on purchase intention. Online Information Review-Emerald, Vol. 32 No. 6, 818-841s.

Jalilvand, M. R. (2017). The effect of innovativeness and customer-oriented systems on performance in the hotel industry of Iran. 8, 111-144.

Jiyoung, K., & Sharron, J. L. (2013). effects of reputation and website quality on online consumers' emotion, perceived risk and purchase intention based on the stimulus-organism-response model. Journal of Research in Interactive Marketing, 7(1), 33-56.

Kwek, C. L., Lau, T. C., & Tan, H. P. (2010). The effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. International Business Research, 3(3).

Lance, C. E., Butts, M. M., & Michels, L. C. (2006). The Sources of Four Commonly Reported Cutoff Criteria. What Did They Really Say? Organizational Research Methods, 9(2), 202-220.

Malaika, B., & Farhod, P. K. (2012). The effect of web communities on consumers' initial trust in B2C e-commerce websites. Management Research Review, 35(9), 791-817.

Mcknight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An intergrative typology. Information systems reserach, 13(3), 334-359.

Melão, N. (2008). E-business processes and e-business process modelling a state-of-the-art overview



Miles, J., & Shevlin, M. (2001). Applying Regression and Correlation. London: Sage Publications.

Osama, M. A. R., & Fawaz, A. M. (2010). Key factors for developing a successful ecommerce website. IBIMA Publishing.

Ozili, P., & Arun, T. (2020). Spillover of COVID-19: Impact on the Global Economy.

Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. International Journal of Electronic Commerce, 7(3), 101-134.

Poddar, A., Donthu, N., & Wei, Y. (2009). Web site customer orientation, web site quality, and purchase intentions: The role of web site personality. Journal of Business Research, 62, 441-450.

Ranganathan, C., & S, G. (2002). Key dimensions of business-to-consumer Web sites.

Ruth, C. K., Richard, A. M. S., Charles, C., & Wynnes, W. C. (2016). Do customers identify with our website? The effects of website identification on repeat purchase intention. International Journal of Electronic Commerce.

Salunke, S., Weerawardena, J., & McColl-Kennedy, J. R. (2013). Competing through service innovation: The role of bricolage and entrepreneurship in project-oriented firms. Journal of Business Research, 66(8), 1085-1097.

Song, J., & Zahedi, F. M. (2005). A theoretical approach to web design in e-commerce: A belief reinforcement model. Management science, 51(8), 1219-1235.

Suh, B., & Han, I. (2003). The impact of customer trust and perception of security control on the acceptance of electronic commerce,. International Journal of Electronic Commerce, 7(3), 135-161.

Tamuliene, V., & Gabryte, I. (2014). Factors influencing customer retention: case study

of Lithuanian mobile operators. Procedia - Social and Behavioral Sciences, 156, 47–451.

Tan, H., & Guo, J. (2005). Some methods to depress the risks of the online transactions. ICEC, 15-17.

Thamizhvanan, A., & Xavier, M. J. (2012). Determinants of customers' online purchase intention: an empirical study in India. Journal of Indian Business Research, 5(1), 17-32.

Tony, A., Seewon, R., & Ingoo, H. (2004). The impact of the online and offline features on the user acceptance of Internet shopping malls. Electronic Commerce Research and Applications, 3, 405–420.

Venetis, K. A., & Ghauri, P. N. (2016). Service quality and customer retention: building long-term relationships. European Journal of Marketing, 38 No. 11/12,, 1577-1598.

Wang, W., & Benbasat, I. (2007). Impact of explanations on trust in and adoption of online recommedation agents. Journal of managment information systems, 23(4), 219-249.

Wenny, P. (2016). Web attractiveness, hedonic shopping value and online buying decision. International Journal of Economics and Management, 123-134.

Wolfinbarger, M., & Gilly, M. C. (2003). Etailq: Dimensionalizing, measuring and predicting etail quality. journal of retailing, 79, 183-198.

Xiao, S., & Benbasat, I. (2002). The impact of internalization and familiarity on trust and adoption of recommendation agents. unpublished Working Paper 02-MIS-006.

Yang, Z., & Jun, M. (2002). Consumer perception of e-service quality: From internet purchaser and non-purchaser perspectives. Journal of Business Strategies, 13(1), 19-41. -temperature poly-Si TFT, *IEEE Electron Device Lett.*, 20, 569–571.

Paper ID 614

# Impact of Retail Store Atmospheric Factors on Repurchase Intention

PD Jayaweera<sup>1</sup> and AB Sirisena<sup>2#</sup>

<sup>1</sup> Faculty of Management and Finance, University of Ruhuna <sup>2</sup> Department of Marketing, Faculty of Management and Finance, University of Ruhuna

#amila@badm.ruh.ac.lk

**Abstract:** Shopping in supermarkets has steadily gone up over the years, especially across the non-industrialized countries due to the benefits it provides to the customer including high quality hygiene & affordable pricing. Literature has emphasized the importance of store atmosphere providing a quality shopping experience for the customer. When referring the related research papers and articles, the researchers noticed that those concentrating on the impact of atmospheric effect on buying behaviour, customer satisfaction, customer relationship, customer perception and customer loyalty are rather lacking when considering the local/Sri Lankan context. However, as a country where modern trade is picking up with a significant speed, there is a real need for contextual studies. Therefore, through this research, the researcher attempts to study both exterior and interior factors which have an effect on customer purchasing intention. The questionnaires were based on atmospheric variables namely, exterior atmospheric, interior atmospheric, store layout and visual merchandising while the re-purchase intention was used as the dependent variable. Data was collected from 150 respondents. Study found that there is a significant impact of exterior atmospheric on customers' purchase intention. The study also found that there is impact significant of Interior Atmospheric on customer's purchase intention. Finally, the study accepted that

there is a significant impact of visual merchandising on customer's purchase intention. These findings are in consistence with retail marketing literature.

**Keywords:** Interior atmospherics, Exterior atmospherics, Store layout, Visual merchandizing, Repurchase intention

### Introduction

Shopping in supermarkets has steadily gone up over the years, especially across the none industrialized countries due to the benefits it provides to the customer including, high quality hygiene & affordable pricing. Literature has emphasized the importance of store atmosphere in providing a quality shopping experience for the customer. According to Levy and Weitz (2009), store atmosphere is referred as the attributes that aims to intensify the store environment with the combination of different cues such as lighting, colour, music, and scent. Further Milliman (1986) categorized atmosphere as a term that is used to explain our feeling towards the shopping experience which cannot always be seen. Moreover, Turley and Milliman (2000) believed that store atmosphere in fact might decide the ultimate survival of the firm. Impact of atmospherics in the conventional stores in recent years have attract a lot of interest from academics who in turn have examined the impact of these atmospheric cues on shaping consumer behavior (Turley and Milliman, 2000).



The buying decision making with respect to in-store environment is triggered when customer identifies that they have an unsatisfied need which is triggered by something in the retail environment. Especially when shoppers engaged in unplanned shopping behavior what they purchased or not can be greatly influenced by the shopping environment as well as consumer's emotions felt during the same period. Because of that it is important for retailers to design and plan their shops to attract more customers, locate merchandise easily, motivate unplanned purchase and give a satisfying shopping experience (Levy and Weitz 2009). A research found that 87% of Hungarian retailers consider the style, color, and size of the shop in important section of practical marketing. (Jozsa, Bator and Sassne Grosz 1990). Therefore, store atmospheric effects are more important for shopper behavior.

When referring the related research papers and articles, the researchers noticed that those are talking about the impact of atmospheric effect on buying behavior, customer satisfaction, customer relationship, customer perception and customer loyalty are rather lacking when considering the local/Sri Lankan context. However as country where modern trade is picking up with a significant speed, there is a real need for contextual studies. Therefore, through this research the researcher attempts to study both exterior and interior factors which effect on customer purchasing intention.

### **Literature Review**

### A. Store atmospheric factors

Store atmospheric factors or stimulis are very broad concept area for learning. Researchers have defined the store atmospherics as "buying environments that can produce specific emotional effects in the buyer that enhance his purchase probability" (Kotler, 1973, p.50). This is

quite important since, increasing sales may be one of the primary objectives of any store design layout.

The previous literature classifies atmospheric stimuli into four categories, namely, exterior of the store, the general interior, the layout & design variable, point of purchase and finally decoration aspect (Berman and Evans 1995.). The current study is also based on this model where the conceptual model was based on the above conceptualization.

### B. Exterior Atmospheric factors

When you consider a shopping experience the first thing customer notices is the exterior of the store. In fact consumers do not even need to enter to the store to judge the exterior design of the store. However upon the evaluation may decide to not to visit the store. Exterior design is really important because the outside of the store is what gets the attention of customers and entice them to enter. If the people in entity can't make the exterior atmosphere look nicer, then there won't be a much of customer attraction to the entity. Architectural properties of the building, Store front, entrance, display windows and parking facilities are normally considered under the category of external variables. There are limited researches available focusing on this area of store atmosphere. Ward, Bitner, and Barnes (1992) identified the importance of exterior window displays in attracting customers. Pinto and leonidas (1994) found out about the impact of parking facilities as the importance of location in determining the customer perception of quality.

# C. Interior Atmospheric factors

Interior design plays a very important role in creating the appeal for any retail store. It has the ability to draw a person in as well as to keep him there, till he makes a purchase decision. Interior design is an area which needs constant updating and up



keeping. The objective of making the interior atmosphere nicer is to attract customers and make them spend more money than they have initially planned before entering into the store. Interior Atmospheric variables include color usage, flooring, temperature, lighting, sounds, cleanliness, aisles and wall textures (Yalch & Spangenberg, 2000). It was found that shop owners can be get more attention to the retail displays by varying different color patterns (Bellizzi, Crowley & Hasty 1983). Further it was revealed that customers are more aroused, have a distinct image of retail store and merchandise, spent more time in the retail store and finally prefer to purchase more when they like the interior (Bellizzi & Hite 1992). Furthermore many researchers have identified that "color schemes applied in the interior design of environment have been shown to have an effect on shopping behavior" (Ellis & Ficek 2001, Babin, Haedesty & Suter 2003, and Chebat & Morrin 2007). Another study explains the extent of the effect of music type on consumer behavior. For an Example it was found that foreground music had a different effect than background music (Yalch & Spangenberg 1988, Yalch & Spangenberg 2000), while the volume and the tempo of music (Milliman 1986, Milliman 1982, Oakes & North 2008), along with the age of the patron influence his or her responses towards it (Yalch & Spangenberg 1990).

# D. Store Layout

Store layout can be simply described as the floor area design and how the entity has kept their items in that store. Retailers use layout to influence customers' behavior by designing the store's flow, merchandise placement and ambiance (Turley & Milliman, 2000). Layouts also help retailers understand how much revenue per square foot they are making. Store layout helps to influence a customer's behavior, which

mean when done right, it's a key strategy to a store's prosperity. Owners of the store can decide where to keep different items and what are the best places to keep them to get more attraction. Created floor space factors customers to hang on longer and spend more time in a store, also join with other customers and sales associates (Michon et al., 2008). Shopping tours are simple, comforttable and more fun for consumers if there is relieve of access outside the retail store and there are very clear navigations to view within the retail store. It has been investigated that retail store layout has got a considerable impact on the final performance of the retailer or marketer through an impact on the information processing among their customers that in turn incites purchase intentions and attitude to the retail store demonstrate (Griffith, 2005). A retail store environment can lead customer's infer from the merchandise, enjoyment and service quality at a retail store and floor space allocation can considerable influence customer's decision to revisit a retail store (Turley & Milliman, 2000).

Many studies deal with the based-on store layout as a mean of provide customers space to shopping is more comfortable (related to the crowding) or to control traffic on the ground (Levy & Weitz 2009, Hasty & Reardon 1996).

### E. Visual Merchandising

Visual merchandising is the act of making more retail spaces attractive encourage impulse buying. Visual merchandising is all about the look, feel, and culture of your store and brand (Doyle and Gidengil, 1977). If it's done perfectly, it will help increase the customer brand loyalty too. It is the main crucial retail strategy that maximizes the aesthetics of a product with the intent to increase and maximize sales. If this process can be implemented effectively it will be helpful to



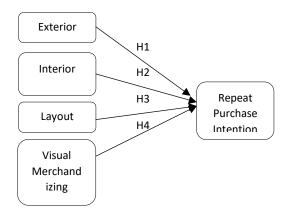
create awareness and also it will help to increase brand loyalty. The most important thing is to get more attraction from the customer and this will help to achieve that objective. According to this category, visual merchandising sub factors are product displays (facing), Rack and shelves, posters, decorations wall and According to previous studies, shelf space allocated has a positive relationship to unit sales. (Doyle and Gidengil, 1977). Gagnon and Osterhaus (1985) examined that point of purchase displays increased sales of an ointment more than 300% in supermarkets and more than 100% in pharmacies. Simonson and Winer (1992) investigated that the way a product display is arranged also can have an influence on consumer preference. Further it has been identified that product displays play a significant role in any retail strategy (Berman & Evans 1995, Levy & Weitz 2009).

### Methodology

In order to achieve the main purpose of this study, the researchers had to collect data from a comparatively large sample; so a questionnaire has been used as the main data collection instrument. To select 150 respondents from the defined population of total super market visitng consumers in Sri Lanka, the researchers used a nonprobability sampling approach considering the easiness and limited timeframe available. Questionnaire consists with two sections. First section concerned with demographic variables while the 2nd section comprises with 24 attitudinal statements which were anchored using five points from strongly agree to strongly disagree. The 24 items measured five independent variables and one dependent variable. Refer Figure 01 for the conceptual framework. Detailed operationalizations of the variables are found on table 01. To validate the questionnaire; the researcher conducted a pilot study with 10% of the

selected sample and based on the results minor changes were made to the wording of the questionnaire.

Figure 1. Conceptual Framework



Based on the conceptual framework the researchers proposed five hypothesis, namely there is an impact of exterior atmospheric of retail store on customer's repurchase intention, there is an impact of interior atmospheric of retail store on customer's purchase intention, there is an impact of store layout of retail store on customer's purchase intention and the last states that there is an impact of visual merchandising of retail store on customer's purchase intention.

Table 1. Operationalization of variables

Variable	Factors		
Exterior	Store front		
Atmospheric	Entrance		
	Display windows		
	Building architecture		
	Parking		
Interior	Flooring		
Atmospheric	Sounds		
	Scents		
	Temperature		
	Cleanliness		
	Cash register placement		
Store Layout	Floor space Allocation		
	Product Grouping		
	Traffic flow		
	Department location		
Visual	Product displays		
Merchandising	Racks and shelves		
	Posters		
	Wall decorations		
	Signs		

Source: Mathur and Goswami (2014)



Heale & Twycross (2015) explained the reliability as the consistency of the result. It gives the ability to generate the same result at different times and at the same time in a study. There are different methods to reliability named measure internal consistency, equivalence, and stability. Most of the reliable methods used to measure the ability of question items to generate stable results at different times, but internal consistency explains the ability of question items to generate the same result using multiple question items (Heale & Twycross, 2015). Table 02 provides reliability measurements for the study and the lowest recorded value is 0.711, which is above the threshold level of 0.7 (Conbrach, 1957), which signals strong reliability of the study.

Table 2. Cronbach's alpha values

Independent	Items	alpha
variable		r
Exterior	5	.732
atmospherics		
Interior	6	.716
atmospherics		
Store layout	4	.791
Visual	5	.711
merchandising		

Source: survey data, 2020

Table 3. Corelations and VIF values

	Exteri	Interi	Layou	Tolera	VIF
	or	or	t	nce	
Exterior				.473	2.113
Interior	.683**			.372	2.690
Layout	.643**	.732**		.380	2.634
Visual Merchad izing	.588**	.636**	.666**	.492	2.033

Source: survey data,2020

Moreover table 03 provides the details on the correlation & VIF values. As far as correlations among independent variables are concerned, highest recorded value is 0.732 which is well below the conservative estimate of 0.8 cutoff levels for threats of multicolinerity. Further the researchers decided to conduct a VIF test. As far as VIF values are concerned highest recorded is 2.690, which is well below even the conservative cutoff of 5 (Hair, et.al, 2012), thus ensuring that model does not have threats of multicolenearity.

### **Analysis**

The conceptual framework of this study is consisted with four independent variables and a single dependent variable. Therefore to test the hypotheses, standard multiple regression analysis was employed. Asuero, et al. (2006) explained regression as a form of relationship between the variables. Multiple regression analysis can be used to predict a variable using two or more known variables. According to the data presented in table 04, around 63% of the variation in customer repurchase intention is explained by the four independent variables used by the model. Further table 05 ANOVA test depicts that the model is significant (significant value of F statistics shows the value .000 and it is less than 0.05) meaning that the researchers can interpret the regression model.

Table 4. Model Summary

R	R	Adjusted	Std. Error of the
	Square	R Square	Estimate
.792a	.628	.617	.31215

Source: survey data, 2020

Table 5. Anova results

	Table 5. Allova results				
Model	Sum of	df	Mean	F	Sig.
	Squares		Square		
Regressi on	27.554	4	5.954	61.103	.000b
Residual	27.559	145	.097		
Total	55.114	149			



a. Dependent Variable: Repurchase Int

b. Predictors: (Constant), exterior atmospheric, interior atmospheric, store layout, visual merchandise

Source: survey data, 2020

Table 06 explains the coefficients of the regression model. Accordingly visual merchandizing is the most contributing independent variable, meaning that when you increase the level of visual merchandizing by one unit, repurchase intention increase by 0.373 (p= 0.000). Exterior atmospheric factors and Interior atmospheric factors also positively contributes purchase intention to respectively (0.273 & 0.230). Both those variables are significant (p <0.01). Accordingly research accepts the 1st , 2<sup>nd</sup> and the 4<sup>th</sup> hypotheses which respectively stated that, there is an impact of exterior atmospheric of retail store on customer's repurchase intention, there is an impact of interior atmospheric of retail store on customer's purchase intention, and there is an impact of visual merchandising of retail store on customer's purchase intention. The 3<sup>rd</sup> hypothesis which stated that there is an impact of store layout of retail store on customer's purchase intention is not accepted (p = 0.649).

m 11 c	D .	cc· · ·
Table 6.	Regression	coefficients

Model	Unstandardi zed Coefficients		Standard ized Coefficie nt	t	Sig.
	В	Std. Error	Beta		
t)	.216	.248		.872	.385
Empower ment	.276	.074	.273	3.703	.000
Team Orientati on	.254	.092	.230	2.771	.006

Capabilit y	.034	.074	.038	.456	.649
Core Values	.385	.074	.373	5.170	.000

Source: survey data, 2020

### Conclusions

First the research accepted that there was a significant impact of exterior atmospheric on customer's purchase intention. The finding was consistant with results of the study of Mower, kim and Childs (2012) indicating the samr type of reklationship. Furthermore, Edwards and Shacley (1992) also found that store external atmospheric has a directly effect on customer behavior thus it is important to retailers to focus on exterior atmospherics. The study also accepted that there is a significant impact of Interior Atmospheric on customer's purchase intention. The finding was again consistant with Bone and Ellen (1999, Crowley & Henderson (1996) and Mattila & Wirtz (2001) who also found a significant relationship between interior atmospherics and repurchase behaviour. Finally the study accepted that there is a significant impact of visual merchandising on customer's purchase intention. This finding too is consistenet with retail marketing literature (Dovle Gidengil, 1977; Simonson and Winer 1992)

As far as retail store layout is concerned our results were non significant. Howver this is contrary to the exssting literature which has documented clraer positive relationshsip (Aghion, Bloom, Bundell, Griffith and Howitt, 2005). Beucase of this incositancy coupled with the limitation of the study researcher would like to recommend more research in this impoertant area, specially using a random sampling.



### References

Asuero, A. G., Sayago, A. & Gonz'alez, A. G., 2006. The Correlation Coefficient: An Overview. Critical Reviews in Analytical Chemistry, 36(41).

Ajzen, I. (1991). Organizational behavior and human decision processes Elsevier. Journal of Business Research. Elsevier, 50(2), 179-211.

Ajzen, I., Fishbein, M. (1977). The theory of planned behavior: reactions and reflection. Behavior Relations Marketing. Doi. org. 84(5), 888-918.

Babin, B. J., Hardesty, D. M. & Suter, T. A. (2003). Color and shopping intentions: the intervening effect of price fairness and perceived affect. Jaurnal of Business Research. Elsevier, 95(2), 259-282.

Baker, J., Levy, M., and Grewal, D. (1992). An experimental approach to making retail store environmental decisions, Jaurnal of Retailing, 68(4), 445

Bellizzi, J. A., Crowley, A. E., Hasty, R. w. (1983). The effects of color in store desing. Journal of Retailins, psycnet.apa.org.

Berman, Berry. Joel, R. (1995). Instructor's edition retail management: a strategic approach. Retiling Management. (6th Ed.). New Jersey: prentice. Hill.

Broeckemier, G., Marquardt, R. & Gentry, J. (2008). An exploration of happy/ sa an liked/ disliked music effects on shopping intentions women's colothing store service setting. Journal of Service Marketing, 22 (1) 59-67.

Chan, Y.H. (2004). Biostatistics 201: Linear regression analysis, Age (years) 80.140.

Chebat, J. C., Morrin, M. (2007). Colors and cultures: exploring the effects of mail décor on consumer percepitions. Jaurnal of Business Research, 60(3), 189-196

Doyle, P. and Gidengil, B. Z. (1977). Review of in store experiments. Journal of Retaling, 53(2), 47-62.

Edwards, S., Shackley, M. (1992). Measuring the effectiveness of retail window display as an element of the marketing mix. International Journal of Advertising, 11(2) 193-202.

Ellis, L., Ficek, J. (2001). Color preferences according to gender and sexual orientation. Personality and Individual Differences, 31(8), 1375-1379

Gagnan, P. J., Osterhaus, J.T., (1985), Journal of Retaling. New yoke :Pare Ave. South. 61(1), 104-116

Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications. Long range planning, 45(5-6), 320-340.

Jennifer, M., Minjeong, K., Michelle, L.(2012). Fashion Marketing and Management, International Journal.

kotler, p. (1973 ) Atmospheric as a Marketing tool. Journal of Retailing, vol.49, No 4, pp.48-64.

Levy, M. & Weitz, A., (2009), Supply chain management and retailer performance: emerging trends, issues, and implications for research and practice. Retaling Management. 85(1), 84-94

Mathur, M., Goswami, S. (2014). Store atmospheric Journal of Management Research, Edu 6(2), 111-117,

Meryl, p. George. J.(1986). Towarda Methodology for Assessing Effects of instore Atmospherics NA- Adrances in cosumer Reseach volume (13th ed). Richard . J. Lutz, prove, UT: Assocloting for customer Research, pp.27-31.

Milliman, R.F.(1986). The Influence of Background music on the behavior of



restorent prtrons. Journal of Business Research, 17,193-211.

Milliman, R. E. (1982). Using background music of affect the behavior of supermarket shoppers. Jaurnal of Marketing. 46(3), 86-91

Milliman, R. E. (1986). The influence of background music on the behavior of restaurant patrons. Journal of consumer Research, 13(2), 286-289

Morin, S., Dube, L., & Chabet, J.C. (2007). The role of pleasant music in services capes: A test of the dual model of environmental perception. Jaurnal of Retaling, 83(1), 115-130.

Rearden, J., Hasty, H., & Cas, B. (1996). The effect of information technology on productivity in retailing, Journal of Retaling. 72(4), 445-461

Simonson, I., Winner, R.S. (1992). The role of explanations and need for uniqueness in consumer decision making: unconventional choices based on reasons. Journal of consumer Research. 19(1), 133-138.

Summers, H. S., Koester, D. J., & Guthrie, G, M. (2001). Vibration isolation mount. US Patents, 6,302,385.

Turley, L. W., Milliman, R. E., & Guthrie. (2000). Atmospheric effect on shopping behavior a review of the experimental. Journal of Business Research, 6,302,385.

Word, J.c., Bitner. M.J. (1992). A typology of retail failures and recoveries. Journal of retailing, 69(4), 429

Pinto, M., Leonidas, L. (1995). The impact of office characteristics on satisfaction with medical care: a before and after analysis. Health marketing quarterly, 12(2), 43-54

Santord, I., Robert, A., & William, W., Robert, D. (1975). The effects of information and company requtation on intentions to buy a business service.

Journal of business research, 3(4), 281-294,

Bitta, C., Martin, N., & Carinne, F. (2010). Re-examining online customer experience to include purchase frequency and perceived risk. Journal of retailing and consumer service, 17(2), 143-151

Joseph, A., Robert, E. (1992). Environmental color, consumer feelings, and purchase likelihood. Psychology and marketing, 9(5), 547-363

Richard, F., Eric, R. (2000). The effects of music in a retail setting on real and perceived shopping times. Journal of business research, 49(2), 134-147

Ronal, M. (1982). The impact on firm value of capital structure change some estimates. Journal marketing, 46(3), 86-91

Steve, O., Adrani, C. (2008). North International Journal of service industry management

Richard, Y., Eric, S. (1990). Effects of store music on shopping behavior. Journal of consumer marketing, 7(2), 55-63

Arch, G., Elizabeth, W. (2003). Case study research methods for theory building. Journal of business and industrial marketing.

Ronald, C. (1978). Journal of marking, 37(3), 54-60

Stephen, J., Xavier, D., & Mary, E. (1994). Edlp, hi-lo an margin arithmetic. Journal of marketing, 58(4), 16-27,

Michael, Q. (1982). Sager publications ink

Janes, A., Russell, A., & Bert, M. (1974). Distinguishing anger and anxiety in terms of emotional response factors. Journal of consulting an clinical psychology, 42(1), 79

Jalic, B., Michael, L., & Dhrur, G. (1992). Congruency of scent and music as a driver of in- store evaluations and behavior. Journal of retailing, 68(4), 445,



Laurette, D., Sylvie, M. (2001). Background music pleasure and store evaluation: intensity effects and psychological mechanisms. Journal of business research, 32(2), 107-113

Eric, R., Ayn, C., & Pamela, W. (1996). Improving the store environment: do olfactory cues affect evaluations and behaviors? Journal of marketing, 60 (20 67-80,

Anna, S., Jochen, W. (2001). Congruency of scent and music as a driver of in-store evaluations and behavior. Journal of retelling, 77(2) 273-289

Paula, F., Pam, E.( 1999). Scents in the marketplace: explaining a fraction of olfaction. Journal of retailing, 75(2) 243-262

Philippa, W., Barry, J., & Davies, D. (2007). Olfaction and the retail environment: examining the influence of ambient scent. Service business, (4) 295-316

Kevin, B., Debra, M. (2009). The use of scents to influence consumers: the sense of using scents to make cents. Journal of business ethics, 90(2), 141-153,

Eric, R. (2006). Gender- congruent ambient scent influences on approach and avoidance bahaviors in a retail store. Journal of business research, 59(12) 1281-1287

Richard, M. (2008). The influence of mall environment on female fashion shopper's. Journal of fashion marketing and management, 12(4),456-468

Philippe, A., Nick, B., & Richard, B., Rachel, A. (2008). Peter Hewitt the quarterly. Journal of economics, 120(2) 101-728

Jean, P., Jane, T.(1985). Effectiveness of floor displays on the sales of retail products. Journal of retailing, 61(1) 104-116,..

Paper ID 628

# An Evaluation on the Rehabilitation Programmes Conducted for Juvenile Delinquents in Remand Homes and Certified Schools in Sri Lanka: A Case Study Based on Southern Province

DWUC Wickramasinghe\*, PY Jayasuriya, IADT Medhavini, WAL Avindhya, HMKKA Herath, KMND Konarathne and LS Liyanage

Department of Social Sciences, Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defence University

#umawicks@gmail.com

**Abstract:** Juvenile Delinquency is identified as a significant issue in society. The government and some governmental organizations have taken many steps and procedures to facilitate those children with care and correctional programmes. The main objective of these programmes is to correct their deviant behaviours. In this research, we noticed many issues in the prevailing system, which make it difficult to achieve the expected objectives. Therefore, this research mainly focused on identifying those issues and solutions/ deriving alternatives overcome them. For this purpose, the legal procedures followed in institutionalizing children and the background environmental system were observed and understood in detail. Since it is prohibited to meet and discuss with the juvenile delinguents in these institutions, semistructured interviews and informal discussions were conducted with officials of these organizations. The study findings reveal that proper counselling and individual treatment plans are not included in the rehabilitation programmes, which are essential for the psychological development of these children. Researchers also noticed that education is only provided for a selected group of children. Further, it was identified that lack of space and equipment and unfavourable physical environment lead to poor efficiency of these programmes. It is suggested to address these issues in order to improve the quality of the rehabilitation conducted programmes iuvenile delinquents.

**Keywords:** Juvenile delinquency, Rehabilitation programmes, Social theories, Juvenile justice

### Introduction

# A. Background of the study.

Juvenile Delinquents or children in contact with law refers to any child below the age eighteen years who has come in contact with the juvenile justice system as a result of committing a crime or being suspected on committing a crime. Generally, the term "juvenile delinquents" or "children in conflict with law" refers to a large variety of disapprove or anti- social behaviour of children and adolescence, which does not approve of, and for which the punishment or corrective measures are justified in the public interest (Niriella, 1996). The term of delinquency also includes actions engaging in activities such as vagrancy, truancy, obscenity, begging, gambling, loitering, stealing and drinking.

Many causes of juvenile delinquency can be identified through prevailing literature. As the main reason leading to juvenile delinquency, disintegration of family and laxity in parental control over children can be identified. Further, it has proven that over 50% delinquents have the bitter experience of separation or divorce of parents. On the other hand, unfavourable exemplary behaviour at home like abusive behaviour of parents, impact of alcohol and drug addiction, smoking and gambling may



derive the chid to try the same activities where they end up with anti-social activities.

To facilitate and rehabilitate them with care, protection and other needs, the government and NGOs have established many institutions with procedures of institutionalizing. Main objective of these programmes is correcting the deviant behavior of juvenile delinquents. Children and Young Persons Ordinance (CYPO) No. 48 of 1939 continues to function as the basic law dealing with the administration of juvenile justice. Implementation of the 13th amendment to the constitution of 1887 has resulted for a structural change which made the probation and child care services devolved to the provincial councils. Youthful Offenders ordinance No. 28 of 1939, Probation of Offenders Ordinance No.42 of 1944 contain some special provisions applicable to juvenile offenders including the process institutionalizing. In the current Sri Lankan context, it has recorded that over 14 000 children have institutionalized in 414 institutions across the country including the voluntary homes (Research, 2017).

## B. Problem statement

Though the procedures and institutions under separate law for juvenile delinquents exist to deal with such children and to correct their deviant behavior, the number of child (Madara Dias, 2018) delinquents was identified with an increasing trend. This has now come to a level that the authorities should pay their fullest attention more and take the necessary steps and actions in assessing and improving their programmes in order to cater the diverse nature of these children.

#### C. Main objective

This study examine the Rehabilitation Programs conducted for such children in Remand Homes and Certified Schools with the main objective to identify the prevailing

issues in the rehabilitation programs. In doing this, the research looked into related laws and procedures of institutionalization, the differences between International Law and National Law related to juvenile justice, legal procedures, institutionalizing process and the institutional backgroundss. In summary, this research aimed at getting an in-depth understanding rehabilitation programs conducted Remand Homes and Certified Schools, identifying and bringing recommendations or alternative changes to address the prevailing issues in the Rehabilitation Programs by reaching their root causes.

#### **Literature Review**

According to the United Nation's Children's Fund (UNICEF), significant number of children around the world are convicted to various crimes because they are deprived of their basic needs and rights kept in detention without sufficient care. No child is ever born as a criminal, but their inproper surroundings, socialization, absence of parental care and peer group influence may lead to delinquent behaviors among the children. Juvenile delinquency is described through various segments according to different views. The term 'Juvenile delinquency' refers to a variety of disapproved behaviors of children and adolescents which the society disapproves and some corrective measures punishments are taken. This has remained a controversial subject for many years among psychologists, criminologists and sociologists. Many theorists have come up with exclusive explanations seeking to explore the tendencies in juvenile crimes.

Various theories were presented by different scholars such as Social Disorganization Theory, Power Control Theory, Subcultural Sheory, Anomie Theory. Economics, Sociology, Psychology, and Criminology are some academic



disciplines which holds different assumptions about human behavior and finally causes of juvenile delinquency. There are a number of theories related to juvenile delinquency, but the fields of psychology, sociology, economics are most visible disciplines to understand why adolescents commits crimes. The previous research findings related to this research area were referred.

Most of the researches related to juvenile delinquents were foreign and there were only few researches related to the Sri Lankan context. "A study on the factors related to the recidivism of juvenile delinquency in Sri Lanka" by is a study done to identify the factors influencing the juvenile recidivism in Sri Lanka. They adopted descriptive survey research design and target sampling method. Data collection was done through delinquent's records and semi structured interviews were conducted to obtain information where matrons were specially interviewed. It revealed that most reported fields of juvenile delinquency in Sri Lanka, theft, trafficking, disobedient to parents, suicide attempts, selling and use of alcohol, also further it reveals that lack of education, poverty and fruitless relationships effects Juvenile delinquency. According to Madara Dias and K.G.W.U. Ranaweera, most of the delinquents have association with peers which has lead them in recidivating even in certified schools. To reduce juvenile recidivism, changing attitudes of the children, soft skills training programs and the regular and continuous monitoring and assessing are suggested. This research recommends establish separate rehabilitation institutions. training matrons for counseling, skills training programs for school dropouts awareness programs to control the issues.

"Rehabilitation and re-integration of juvenile offenders in Sri Lanka" by Jeewa Niriella (Niriella, n.d.) GIVE THE YEARdescribes and evaluates, the reasons for juvenile delinquency in Sri Lanka, The problems that juvenile offenders face when they are kept in correctional institutions such as certificate schools, detention centers, the failure of the existing system and needs of juvenile delinquents are explained. Protecting, caring for and rehabilitating the juvenile delinquents are of utmost importance in the juvenile justice system as upbringing children into good social position is a prime responsibility of the society. This research highlights the importance bringing remedial measures to the existing system as the current system is not a favorable one and make number of recommendations for the development of the juvenile justice system in Sri Lanka. Finally, this research suggests the need of an institutionalized proper after-care service for the juvenile delinquents to achieve the main goals of the juvenile correction: rehabilitation and reintegration of the juvenile delinquents into the society.

"A review of the intervention strategies and approaches used with young offenders: Southhill outreach" (Tuohy, 2014) is a study which reviewed the intervention strategies and approaches used with young offenders by gaining the ideas interventions with Southill Outreach staff members, members of the Board of Management and young people. An intervention is a series of actions or structured service for the young offenders. Local and international literature findings, three interviews findings, focus group discussion findings were used to present the findings. A thematic analysis identified relevant themes that arose during the focus group and interview group regarding effective intervention strategies used when working with young offenders. Interventions and approaches like motivational interviewing, family relationship building. interventions. importance of recognition and working to



address individual needs in order to engage young people who offend are suggested from the findings to have an effective relationship with the young offenders. The major suggestions presented through this study are effective system for measuring outcomes, encouraging the use of self-care strategies utilizing supervision as the part of the process.

"A study on factors affecting on juvenile delinquency" (Mazinani Nourollani, 2015) is a cross-sectional study with a sample of 250 participants which included 200 male juvenile delinquents and 50 female juvenile delinquents aged between 9-18 years in Tehran. Interviews and studying of records the participants helped in the process of data collection. SPSS Software, frequency distribution tables and chi-square were used in data analysis process. The crimes committed were theft, evil-doing drugs, mischief and mayhem. Gender, educational level, occupation, separation from family and educational levels of their mothers affected delinquency. This research suggest to improve the personality and the social living environment of the juveniles, ensuring health and safety facilities, implementing informal and formal educations in all areas of juveniles development will help to eradicate juvenile delinquency among the youngsters.

## Methodology

Qualitative research methodology which is more relevant and consisting a set of practices to understand the social and human problems from multiple perspectives was followed in order to get an in-depth understanding about the nature of the rehabilitation programs conducted for juvenile offenders. This approach made it easier to grab out the essential information that are needed in the study.

#### A. Population and sample

All the rehabilitation institutes including Remand Homes and the Certified Schools located island wide were considered as the population and out of that two Southern province probation care centers located in Kithuampitiya and Hikkaduwa were selected as the sample to obtain information for the study.

#### B. Data collection methods.

Both primary and secondary sources were used in data collection. Primary data were gathered by interviewing the professionals in the field, following informal and semistructured interviews. Secondary data sources were the previous researches related to the selected topic, published/unpublished documents including CYPO (Children and Young Persons Ordinance), Verite Research document- Legal and institutional assessment of Sri Lanka's justice system and CRC (Child Rights Convention).

Since the study was based on qualitative analysis, the main method of collecting data was interviewing the selected people in juvenile justice field. Semi- structured and informal discussions were held with the Assistant Commissioner of the Department of Probation and Child Care Services, Probation Officer at Southern Province Department of Probation and Child Care Services, UNICEF and a child Psychologist to gather the information . An interview lasted for about one and half hours

#### C. Ethical consideration

As this was a study which was dealing with children in conflict with law, the legal background and the procedures were strictly legally bounded. Therefore, researchers had to adhere to a high ethical procedure. It was not allowed to meet, interview or observe the juvenile delinquents. Therefore, some professionals and some institutional officers were interviewed in order to get the information we needed. Even as the information



officials provided by these and sometimes highly professonals were confidential, researchers had to get their permission before hand to record the conversations. All the interviewees were initially given with an Information Sheet and a Consent Form to ensure the ethical aspect of the research and it was support for the participants to undersatand for which purpose they are providing the information maintaining the transparency between two parties.

## **Data Analysis**

### A. Coding

The research followed the Manual coding method by analyzing the data generated in the transcript papers which included reading the qualitative data and manually assigning a code. The first stage was open coding, which entailed reading and rereading the data in order to have an idea of how patterns could be coded. A code book was made by getting same ideas that have provided by each participants and those ideas were numbered one by one in code book. Highlighters were used to highlight the important participant responses obtained in the transcript papers.The transcripts papers were written manually using the information collected in semi structured interviews and informal discussions.

## B. Cateogarizing

After coding stage the most important stage was categorizing the codes. Names were given to each category that seems most logically related to the data. This was a process of classifying or looking for categories which should be internally consistent, but distinct from one another. We highlighted five categories according to each participant's ideas as:

- 1) Issues related to institute and programs.
- 2) Officers and their duties.

- 3) Social acceptance for rehabilitated child.
- 4) Prevailing intervention programs.
- 5) Measurement about improvement or weakness from prevailing rehabilitation programs.

## C. Deriving themes

After cateogarizing the data, it was derived into five themes to do a complete analysis of the data we gathered. The five themes are:

1)Nature of existing intervention programs for rehabilitation.

2Impact of issues in probationary care centers and programs.

- 3) Involvement and duties of probationary care officers in the process of institutionalizing and rehabilitation programs.
- 4) Impact due to lack of social acceptance for the rehabilitated child.
- 5) Assessment of the overall development of the juvenile offender after the rehabilitation process.

Theme 1: Nature of existing programmes for rehabilitation . All participants of the interviews explained about the prevailing intervention programs for rehabilitation. Mental and skill development programs, educational programs are conducted to enhance the personality development of the juvenile offender. Probationary care officers mentioned that, they have treatment plans like action plan, individual care plan and these institutionalized children also take part in the competitions and other events organized by the department as an approach of socializing and reintegration.

Theme 2: Impact of issues in probationary care centers and programs.

Some issues in the probationary care centers and the rehabilitation programs during the interviews and informal discussions were identified. All



participants mentioned about lack of individual counselling and individual treatment plan according to their offence. They discussed about the lack of space and equipment specially for the vocational training programs. As they mentioned, there is a need for identifying the problems faced by each offender.

Theme 3: Involvement and duties of probationary care officers in the process of institutionalizing and rehabilitation programs.

All the participants mentioned about the officers who are responsible for the juvenile offender's rehabilitation programs and their duties. Probationary care officers play a major role in this field. They have to do a case study and make a probation report (social report) about the child offender. Based on the social report, the court decides whether to institutionalize the child or not. If the child is not institutionalized, he or she is settled back with the participants mentioned about the officers who are responsible for the juvenile offender's rehabilitation programs and their duties. Probationary care officers play a major role in this field. They have to do a case study and make a probation report (social report) about the child offender. Based on the social report, the court decides whether to institutionalize the child or not. If the child is not institutionalized, he or she is settled back with the family or will be settled with a suitable guardian. Institutionalizing a child is the final option in the absence of a safe family environment or a guardian. This step is taken to ensure the highest security and for the betterment of the child. This whole process happens when the child offender is housed in a remand home for a period of maximum one month. A personal profile for each juvenile delinquent should be maintained by the task assigned probation officer in order to report the court about the improvements or any other behavioral change of the child. The probation officer has the responsibility about the reintegration process of the child offender. The Child Rights Promotion Officers (CRPO) have the same amount of responsibility as the probation officer in the reintegration process. This process continues during the period of child's stay in the institution assigned by the court.

Theme 4: Impact due to lack of social acceptance for the rehabilitated child.

Every participant mentioned that there is no positive social acceptance from the society for the reintegrated children. This condition directly affects the mentality of children. All the participants highlighted the point that the society should also be educated on how to deal with a rehabilitated child as the social support and the acceptance is poor for these children in the present society. Before reintegrating the child, probation officer has the responsibility to examine the situation of the family background and the environment where the child is being reintegrated.

Theme 5: Assessment of the overall development of the juvenile offender after the rehabilitation process.

Before socializing the child, there should be a suitable process to identify whether the child has achieved an improvement from the rehabilitation program or whether there is a requirement to keep that child in correctional process. When we were conducting the interview with the Assistant Commissioner, she clearly mentioned that there are special methods to measure the correctional process such as discussion sessions and questionnaires.

#### **Findings**

We generated some findings after analysing the data according the method as discussed above.



Theme 1: Prevailing intervention programs for rehabilitation.

The most important aspect which was examined during the interviews and informal discussions was the prevailing intervention programs for rehabilitation. The existing rehabilitation programs include mental and skills development programs which was said during the informal discussion with the probation officer. Since the education is provided for a selected group of children in the school located nearby the institution, vocational training is facilitated for all the juvenile offenders as a support and guidance for their future career. Different kinds of programs, events and competitions like children's day celebrations, Independence Day ceremonies are organized department of probation and child care where the opportunity is given for the children to participate in them.

Theme 2: Impact of issues in probationary care centers and programs.

This theme elaborates the prevailing issues in the probationary care centers and the rehabilitation programs which have a negative effect on the effectiveness of the rehabilitation programs. Lack of space and equipments, unfavorable physical environment which disturbs for setting up a peaceful and calm mind can be identified as one of the major issues existing in the institutions. There is an absence in individual counselling treatment programs due to issues like lack of mentors and psychologists in these institutions.

Theme 3: Involvement and duties of probationary care officers in the process of institutionalizing and rehabilitation programs.

Probation officer plays a major role not only prior the institutionalizing process but also even after institutionalizing the juvenile offender. A Case study is conducted which examines all the

information about the nature of the offense, background of the offense and social background of the offender. It follows these investigation, steps: observation. and recommendation conclusion compiling the case study report. The court gives the decision based on the case study report submitted by the probation officer, so the probation officer has all the responsibilities on deciding the future of the juvenile offender. The personal profile document which is maintained for each of the juvenile offender includes all the information such as the behavioral skills, improvements, achievements, career skills development during his or her stay in the institution. Child Rights Protection Officers (CRPO) have assigned with the duties to facilitate the children with a school which is located near by the institution during the rehabilitation period and after the children are reintegrated, CRPO should find a proper school and guide the rehabilitated child in order to achieve the educational goals.

Theme 4: Impact due to lack of social acceptance for the rehabilitated child.

Reintegration is an important aspect for the delinquents to overcome various social and psychological problems as there is a higher tendency to drag them back to the same situation prior the rehabilitation. When a child is reintegrated, the major problem which they have to encounter is, being illtreated by the majority of the society who holds a negative perspective which will adversely affect the rehabilitated child. Lack of social awareness regarding the juvenile delinquency issue implies a higher threat of pushing the rehabilitated child back to the same position, so it is much necessary to aware the family and other closed ones on how to deal with these rehabilitated children. Living in controlled environment for a particular time in an institution and once the children are reintegrated, the necessary support



and guidance should be given by the society. In the current society, lack of social support has affected for repetitive unacceptable behaviors and activities for these children.

Theme 5: Assessment of the overall development of the juvenile offender after the rehabilitation process.

As the methods of evaluating rehabilitation programs, different steps and methods are followed at the institutional level. Basically, discussion sessions with the children questionnaires filled by them are used as the methods to evaluate the efficiency and the success of rehabilitation program. The personal profile documentation which is continued throughout the institutionalized period is used as another method to evaluate the rehabilitation programs as it includes all the improvements or failures of iuvenile delinguent during rehabilitation

## Conclusion

Primary research was carried out to collect data related to the rehabilitation programs and five themes emerged out of the information. This study revealed that there are certain loopholes in the existing rehabilitation programs and the juvenile justice law should be revised in order to develop the system.

#### A. Limitations

This research is related to strictly bounded legal background and procedures and researchers had to encounter with some limitations which were really difficult to deal with. The main challenge which had a direct influence on the findings of the study was the legal restrictions to meet and discuss with the juvenile delinquents housed in the certified schools and remand homes. The information related to the administration of juvenile delinquents was addressed through the interview

conducted, but not any information related to the personal experiences of juvenile delinquents.

## B. Recommendations and Suggestions

In the steps which are followed after identifying a child who is in conflict with law or in contact with law, the court and the police procedures should be child friendly where they do not disturb the child mentality. Under the rehabilitation programs conducted in the Probation care centers, educational facilities are provided for a selected group of juvenile delinquents and they are sent to the nearest school for the institutions. In any case, where it is unable to send the child to an outside school, there should be a proper educational system operating inside the institutions in order to continue the academic studies. Professional and well experienced counsellors and psychologists should be employed to get an in depth understanding of individual juvenile offenders. Matrons and other residential staff who spend more time with juvenile delinquents can be trained under the professional counsellors and psychologists. "Family care unit" can be established for each probation care center to increase awareness and creating a favorable family background and the social environment where the child is reintegrated after the Rehabilitation period. The "family care units" should maintain continuous monitoring programs, assessment and awareness programs with the society. "Care service programs" for the ex-juvenile offenders as an after care system should be established. Opportunities for physical activities, games, and sports can be given as an effective method to control arrogant and aggressive behavior. Rules related to these games and sports can be used to educate the children about how to adhere the law, rules and regulations, on the other hand such types of activities can be used as a platform to develop personal qualities like



coordination, unity, co-operation and leadership. Various products which are manufactured from the practical and academic knowledge which they have gained, can be solved at the market to a reasonable price or they can be given employment opportunities under well monitored background to earn an extra income. Police stations should be made more child friendly and staffed with at least one female plain clothed officer who is adequately trained in child protection. The provincial department of probation and child care services in collaboration with the health department, should establish a screening center in every province to assess psychological, social and educational needs of the child. The current legal system regarding juvenile justice should be revised as the law relating juvenile delinquency and justice are outdated comparing to the present social context. Token economy system is a behavior modification technique based on operant conditioning which can be employed in the rehabilitation process where tokens are exchanged. A punishment can be removed as a token of appreciation too.

## Acknowledgment

First we would like to acknowledge the academic staff of the Department of Social Sciences of KDU for all the knowledge and encouragement in doing a dissertation. Secondly, the nonacademic staff of the Faculty of Management, Social Science and Humanities of KDU for their assistance. We also wish to thank all the officers in the Department of Probation and Child Care Services in Sethsiripaya and Southern Province for the endless support. We highly appreciate your willingness to guide and nourish us with the information needed for

the study. We would take this opportunity to express our heartfelt gratitude to all our family members for their inspirations and constant encouragement. We are proud and blessed to have you with us.

#### References

Madara Dias, K. R., 2018. A Study on the Factors Related to Recidivism of the Juvenile. *IRCHSS 2018*.

Mazinani Nourollani, M. F. J. F., 2015. A study on factors affecting juvenile delinquency. *Biomedical & Pharmacology Journal*, Volume Vol. 8.

Niriella, J., n.d. Rehabilitation and Reintegration of Juvenile offenders in Sri Lanka.. [Online] Available at: http://www.iccwtnispcanarc.org/alchohol.php?folders\_name=Juvenile%20Justice%20System%20&%20country\_name=Sri%20Lanka

Research, V., 2017. A legal and Institutional assessment of Sri Lanka's Justice System for children. In: s.l.:s.n.

Tuohy, M., 2014. *A review of the intervention strategies and,* s.l.: School of Applied Social Studies, Community-Academic Research Links/University College Cork.

## **Author Biographies**

The group: DWUC Wickramasinghe, PY IADT Jayasuriya, Medhavini, WAL **HMKKA** Herath. **KMND** Avindhya, Konarathna are undergraduates of BSc in Social Sciences Degree programme, Faculty of Management, Social Sciences and Humanities at General Sir John Kotelawala Defence University. We completed this research as partial fulfilment of the BSc in Social Sciences Degree. This group was supervised by Dr LS Liyanage, senior lecturer from the same department.

# **POSTER PRESENTATIONS**







Paper ID: 12

## **Developing Strategies to Improve the Performance of the Resilient** Supply Chain (RSC) to Rise Back from Post Covid-19

Dishanthi N Kahaduwa# and Dushanthi D Lokuge

General Sir John Kotelawala Defence University, Sri Lanka

# dishanthi.kahaduwa@gmail.com

**Abstract** - The outbreak of the Covid-19 has revealed the vulnerability of the current supply chains; therefore, many researchers have indicated that supply chains have higher risks than their supply chain managers realize. The outbreak is having a significant influence on industries and institutions that are integral to modern life-style. To be successful in this pandemic scenario, the supply chain of firms should be resilient. Most of the firms realize that with a specific end goal to develop a resilient supply chain, there is a need for assessment of performance. The purpose of this paper is to discuss the Resilient Supply Chain (RSC), to identify indicators that would help to increase the performance, and develop strategies to rise back from this outbreak. Articles published regarding RSC and the effect of Covid-19 towards the chain were collected categorized to filter some meaningful and valid information. Twelve performance indicators for supply chain resilience were identified after the classification and analysis of the literature collected. Supply chain resilience strategies were developed using these indicators under three categories (anticipation, resistance, and recover and response) to support supply chain managers examine and deal with the disruption. This study may influence future researchers to deeply study how a particular industry or a nation can improve supply chain resilience after Covid-19 or any other future disruption, to become more competitive with other industries or countries in upcoming years.

**Keywords:** Resilient supply chain, Covid-19, Risk management, Resilient framework

## Introduction

Many researchers have indicated that modern supply chains have higher risks than supply chain managers realize. There are worst-case situations for them; such as terrorism, natural disasters, credit crunch, cyber-attacks and so now the coronavirus. Disruption of cross-border trade and Just-In-Time (JIT) production is unprecedented in modern days. Most of the countries only focus on getting medical supplies right now, and more than 50 nations have imposed restrictions, making a mockery of resilience in supply chains. Corona virus has not only affected human beings, but has introduced spread of disease through world markets. The supply chain vulnerability has now become a significant problem for many companies. Adequate research on the resilient supply chain is still required in today's uncertain and turbulent markets. The term "resilience" can be described as a substance's capacity to convert its initial structure or situation after deformation, resilient supply chain appears as a major strategy field to be (Christopher, 2004). explored unfortunately, a lot of organizations are also unaware that a Resilient Supply Chain (RSC) will be taken into consideration in the deployment of their risk control and sustainability management as part of their strategy. The paper thus addresses effective approaches to build supply chain more resilient in order to enable businesses



to recover from failures which may effect on the high and lower supply chain sources; specially during this pandemic.

The research methodologies are mainly qualitative, taking advantage of various scientific journals, related literature, publications, as well as the experience of the publishers in management, simulation and modeling. Otherwise, the extent of loss of productivity due to incidents involving supply chain was also exploited by secondary and quantitative resources. The objective of this research paper is to recognize the essentiality of RSC and develop RSC strategies based on RSC indicators to "rule" the supply chain upper and lower stream including supplies, with the aim of helping companies to recover quickly after the supply chain has deformed (Mensah, 2013). It is necessary to have a better knowledge of the Supply Chain Management (SCM) and Risks of the Supply Chain itself before considering "Supply Chain Resilience".

# A. Supply Chain Management and Supply Chain Risks

First, the term supply chain can be described as a network that links the manufacturer to the end consumer through distribution and output to insure that the flow of products, material, information and money is maintained. This is beneficial in seeking

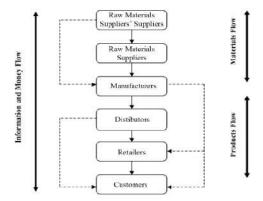


Figure 3 The Covid-19 heat map (Source: Moody's, Covid-19 Impact Heat-map)

Solutions to satisfy to meet the needs of the company. The network of supply chain can be shown in figure 1. By reference to Figure 1, manufacturers purchase their raw materials at the upper level of the supply chain from either supplier of raw materials or suppliers of raw material supplier is then the value will be added to the materials which are transformed into goods for usage in the lower supply chain stage. The companies that sell such goods through related distributors are able to pass these value-added goods to retailers and can quickly meet the target customers. On the other hand, certain manufacturers reach their target consumers though their websites bypassing dealers and retailers. Therefore, not every step in Figure 1 is required. To examine and manage supply chain networks; The necessity of Supply Chain Management (SCM) arise.

According to the Council of Supply Chain Management Professionals "supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, customers" (CSCMP, 2013). As the business globalized and following approaches such as lean, efficient customer feedback, quick response programs, the market fluctuations and competitiveness; increased improvements in the supply chain day by day. Such developments improve the complexity and uncertainty of the supply chain Management. (Rao, 2013)

Different researchers and professionals have described possible reasons for distractions in the supply chain as follows;

- Various interruptions of supply
- Risk of Planning and integration of demand and supply





- Price of purchasing
- Obsolescence and inventory
- Compliance and regulatory
- Privacy and confidentiality of information
- Satisfaction with customer service
- Compliance of arrangements and legislation
- Inefficiency of the process
- Fraud against workers and others
- Introduction and cycle time of the product
- Skills and qualifications in human resources
- Management of the project
- Controlling of business behavior and transition
- Integrity and availability of information

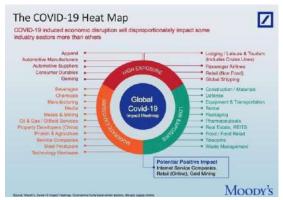


Figure 4 The Supply Chain Network [Source: (Mensah, 2013)]

In the current scenario, the supply chain has become highly unpredictable and unstable due to the Covid-19 pandemic. The outbreak influences industries and institutions which are integral to modern life. Just-in-time supply chain businesses and nations which depend on imported goods are the systems most affected by Covid-19. These established trading lines control not only what customers buy, it also controls what manufacturers of all sizes and types can produce in the first place. Across the world, difficulties posed by Covid-19 are affecting the supply chains that people depend on for food, hygiene

supplies and medicine (Lichtenwalter, 2020).

# B. How the Covid-19 pandemic has disrupted to the global supply chains

During the last four decades, a great deal of worldwide development has taken place in global supply chains. (Raw materials and intermediary goods are transported many miles around the world and assembled elsewhere. The final product is re-exported to end users in both advanced and developing markets (UNIDO, 2020). But now, the outbreak of the Covid-19 has revealed the vulnerability of the current supply chains. It induced economic disruption will disproportionately impact some industry sectors more than others; the impact can be shown in figure 2.

Latest statistics indicate that China, the US and Europe have impacted by the crisis week-on-week exchange. Diverse sourcing and computerization are key for the stronger development, sustainable recovery and smarter supply chains. The Covid-19 pandemic entered exponential global commerce and expenditure. Supply disruption and disruption in demand is threatening multinational companies as more and more countries told civilians to stay at home. Governments, businesses, and actual customers immediately struggled against the fragility of the global supply chain and sought to procure essential goods and resources. One of the key lessons of this crisis was the pressing need for smarter, faster and more diversified supply chains (Lanng, 2020).

The scale of the effect on trade and demand is shown by new research from Tradeshift, (a digital supply chain network). It indicates that over the next months, the effects of the initial shock will continue. The week-by-week decline in domestic and foreign trade was 56% in China starting in



mid-February. It was followed by the United States, Britain and Europe with a combined decrease of 26% at the beginning of April and a steady decline of 17% at the end of April. In fact, the trade in any lockdown area is small. Overall weekly Trade shift sales since 9th of March have dropped by an average of 9.8% relative to pre-lockdown estimates, with invoices and orders falling considerably after the end of March.

There have been two negative impacts of global trade contractions. One thing is that payment on an invoice takes longer and a faster payment trend is reversed. Based on the data from Tradeshift, the total invoice processing period in 2019 was 36.7 days, relative to 36.8 in 2018. Average duration of payments increased 1.7% to 37.4 days in the first quarter of 2020. Secondly, the absence of orders in the supply chain leads to another issue, bringing down new orders and with the invoices dropping. Since 9 March, average weekly command volume has dropped 15.9% on the Tradeshift site. Over the same time, invoices dropped by 16.7%. Based on orders issued before the lockout, businesses still receive capital, but they are drying up. For suppliers worldwide, the coming months would be really tough (Tradeshift, 2020).

#### C. Supply Chain Resilience

It is important for companies that their supply chain be more resilient in order to sustain this changing market scenario. Accurate information, materials, products and money will move through the Supply Chain in order to ensure visibility, integrity and transparency, as discussed in previous segments. These are all a step in the development of a resilient supply chain strategy which will be discussed in this section.

The resilience of the supply chain can be defined as; "Supply chain adaptability to

prepare for unforeseen events, react to and recover from disruptions through continuity of operations at the desired level of connectivity and control over structure and function." (Serhiy Y. Ponomarov, 2009). Or "The ability to predict the risk, minimize the impact and quickly return to the appearance of turbulence adjustments by survival, development, adaptability and growth." (Day, 2014).

These explanations say to a move in organizations far from risk management systems, that do not adhere to the common vulnerabilities, unpredictable disruptions complex supply chains. When considering the current state of the Resilient Supply Chain studies. building such operating capacities along with their supply chain partners have become required in order to cope with expected or unexpected fluctuations (Pankaj Raj Sinha L. E., 2004). Although several ongoing research work has been undertaken on different perspectives and regions, the performance measurement of the supply chain has not been much considered. An organization's supply chain will not succeed; if the supply chain performance measures have not been able to improve (Uta Jüttner, 2011). Such performance measures and measurements examine and identify appropriate techniques without which an recognizable instantly impact development and acknowledgment of objectives would be really difficult (Ferdoush, 2018). Recently, due to the Covid-19 Pandemic; researchers and industry experts have given more attention to the idea of Resilient Supply Chain. This concept seems to provide a means of preventing the restrictions of traditional risk and protective strategies addressing the difficulties of global supply chains (Croxton, 2011). It has been suggested resilience reduces that



traditional risks in many businesses and it is significant (Fiksel, 2015).

In this paper, the literature and framework defines indicators for RSC and provides a roadmap for improving supply chain resilience together with findings and recommendations for further analysis. This study has three objectives:

- 1) Identify the essentiality and indicators of Resilient supply chain.
- 2) Develop resilient supply chain strategies that can contribute to increasing supply chain performance to rise back from post Covid-19.
- 3) Identify current work gaps to be discussed in future studies.

A systemic literature review has carried out and 17 performance indicators were collected from the literature to achieve these objectives. These indicators were used to build the supply chain resilience framework that would help to improve the supply chain's performance. This study would enable supply chain managers in any organization to analyze and develop their supply chain efficiency and make it resilient to disruptions of any nature. Specially, During this Covid-19 pandemic.

This paper has been structured in the following way:

- Section I: Include the introduction of this study, explained the essentiality of Resilient Supply Chain and effect of Covid-19 towards the global supply chain.
- Section II: The methodology for collecting and evaluating articles.
- Section III: The Resilient Supply Chain indicators were listed and described.
- Section IV: Proposed Resilient Supply Chain Strategies/framework and discussion.

Section V: The conclusions and future directions for research.

## **Research Design**

**Articles** from different scientific publication and databases were collected to identify the essentiality of RSC, RSC indicators, Relevant to Covid-19, Its impact toward the supply chain and to be updated about latest supply chain statistics. The systemic review used as the research approach (Badhotiya, 2019). A systematic review is identified as a fair approach to minimize biases and random errors which provides a greater transparency of the literature search. The way of gathering relevant literature by using collection of keywords; Supply Chain, Resilience, Risk Management, Covid-19, Global Supply chain in different databases such as; Google Scholar, Research gate, Science direct, Springer, Emerald insight and etc. Initial searching 70 papers were gathered to analyzed for further explore importance of the topic. A total of 45 articles have been chosen for further study after deletion of insignificant papers. The span of time for the collected articles was the time in between 2000 to 2020. Data refinement is made on the basis of the RSC indicators described by different authors after data collection. Depending on these measures, the data analysis is carried out and, subsequently, RSC approaches are prepared.

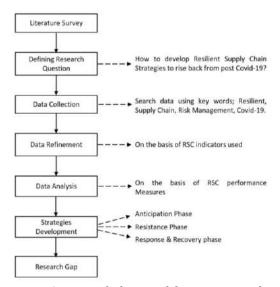


Figure 3 Research design of the current study (Developed by the Researcher)

## Indicators for Resilient Supply Chain

The purpose of the RSC is to handle disruptive supply chain events and recover quickly. It is clearly defined as the capacity to schedule and develop the network of the supply chain to foresee unexpected disruptions or adverse incidents and to react disturbances while retaining leverage over the network and supply chain structure. Following RSC strategies will guide an organization, to raise its role or further strengthen and be more competitive as before the interruption (Ponis, 2012). As mentioned in previous sections; these days every organization has to upgrade their resilient plan, since Covid-19 has affected global value chain. If any organization have comprised following indicators to their supply chain, they certainly imply stability of the supply chain as well as the value chain. One of the objective of this study is to identify RSC indicators which are discussed as follows;

**Agility:** Agility of the supply chain can be described as ability to respond fast to a rough shift in demand and supply (Christopher, 2004). And it has improved frequency to respond easily to unforeseeable demand or supply shifts

(Croxton, 2011) and speeding up the response period (Hong F. B., 2020). Seems the flexibility needs agility to react rapidly and to maintain an alternate advantage for random occasions in unregulated and fuzzy conditions. Supply chains may reduce stock vulnerability by handling a large reactive supplier (Sodh, 2004).

Collaboration: Collaboration in the supply chain generally means that two or more autonomous companies are jointly planning and executing supply chain operations for mutual benefits (Sridharan, 2008). Collaborative partnerships help prevent and manage risk disruption efficiently (Pankaj Raj Sinha L. E., 2004). In a critical situation, collaboration can keep companies in the supply chain together (Barratt, 2004).

Redundancy: Redundancy means the essential and serious use of additional stocks which can be avoided in an emergency in order to adapt to demand surges or supply deficiencies (Aghaei, 2016). Furthermore, redundancy involves a duplication of the limit with a certain end goal to carry out operations in deception and can also be viewed as a course to flexibility (Inger, 2015). Redundancy often reflects a buffer stock; it may also be expensive ways of creating resilience as it accounts for holding costs (Esmaeili, 2018). Founded that redundancy creates flexibility that promotes response by means of a diverse asset of organization (Ali, 2017).

Flexibility: A supply chain should be flexible in order to be resilient, so it is defined by the willingness of a supply chain to respond to the demands of its stakeholders and the environmental situation within a limited time span (Stevenson, 2007). The literature shows various types of RSC flexibility hones such



as flexible travel, flexible market game strategies, postponement, flexible supply base, and flexibility in ordering satisfaction (Croxton, 2011).

**Visibility:** The supply chain visibility is defined as the supply chain manager's ability to see the disruptive event from one end to the other (Christopher, 2004). Visibility is a tool for intercession which enables managers to respond quickly with accurate continuous evaluations to interruptions or disturbing influences (Uta Jüttner, 2011).

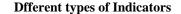
**Robustness:** Robustness is the capability of supply chain's to counteract change, and implies proactive progress expectations before it occur (Wallenburg, 2013). Robustness requires a strategic planning to develop a supply chain network (Inger, 2015).

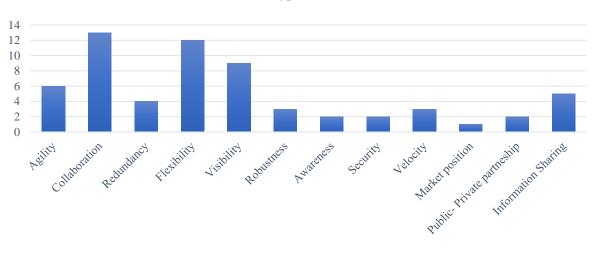
**Awareness:** Awareness can be of characterized as anticipation actual demand. Awareness includes understanding the vulnerabilities and arranging for such opportunities, and requires an ability to detect and transform opportunities through early cautioning arrangement to recognize a possible disturbance (Jain, 2017).

**Security:** Security is a basic aspect of RSC that should be written early rather than looked for during a sequence (JAMES, 2003).

**Velocity:** Velocity of the supply chain is the level of the supply chain response to announce improvements. The ability to adapt to adjustments greatly relies on the reliability of the data sharing between entities in the supply chain (Uta Jüttner, 2011).







■ Indicators and its Frequency of Occurence

Figure 4 Different types of Indicators (Developed by the researcher)

Market Position: A good market position is related to improved market share, thereby encouraging improvement in RSC, which definitely helps retain consumer relationships during the unexpected incident (Fiksel, 2015). With a strong market position, a company is able to recover from interruptions in the supply chain due to monetary related quality (Uta Jüttner, 2011).

Public-Private Partnerships: Having social capital between supply chain members and other organizations, for instance community shareholders, enhances the power of the company and encourages each other to learn. Post-disruption in the supply chain can be assisted by public-private partnership attributable to human relations and social capacity (Xun Li, 2017).

**Information Sharing:** Throughout the current complex and undefined supply chain environment, it is important that a group of active participants and that appropriate details should be provided to all partners in that particular category, to

minimize the risk in the supply chain (Mostafa Setak, 2017).

## A. Supply Chain Network Design

Sometimes, when a supply chain becomes complex and dynamic, it is more vulnerable to disruption (Christopher, 2004). It is important to have a clear understanding about supply chain network design to make the supply chain resilient (Hong T. Y., 2002).

## B. Supply Chain Performance Measures

Covid-19 revealed global weaknesses (Seewald, 2020). Many businesses were unable to make their supply chains resilient, as the measures required to enhance their performances have still not been established (Uta Jüttner, 2011). Incomplete performance measures existing across industries or assessment of the entire supply chain and recommend concentrating on manufacturing lead time inventory holding costs (Betts, 2009). Measures for all supply chain participants should be clear and supply chain members should provide the least chance for interfere (Pillania, 2008).



Many analysts investigate the supply chain indicators to improve the efficiency and resilience of the supply chain; (Azevedo, 2014) pointed out redundancy and efficiency of transport as measures of the Portuguese automobile supply chain. (H.Elleuch, 2016) stated that the agro-food industry is tested for collaboration, flexibility and redundancy as indicators. Visibility in maritime supply chain as a resilient supply chain indicator (LamXiwenBai, 2016).

Figure 4 illustrates the frequency of and occurrence of various indicators in various supply chains and shows the most frequent indicator is *collaboration*. Some studies have found that, to make company's supply chain more resilient it should collaborate with others for the mutual profit. The most affected indicator after collaboration is flexibility, to meet the visibility, agility, RSC community and beyond.

Resilience is an organization's dynamic ability to react according to interruption and depends on persons, groups and subsystems (Xun Li, 2017). There are not just a few countries with respect to the idea of resilience. It is a matter of concern to companies worldwide.

Figure 5 shows that Major percentage of the overall supply chain comes from the USA and India, and the supply chain from the different areas of the world analyzed in this report. The remaining 53% falls from the United Kingdom, China, France, Portugal, Ireland, Australia, Hungary, Singapore, the Netherlands, the United Arab Emirates and Germany (Reuters, 2020).

Somehow, the heart of the global supply chain center locations, like China, Europe, and the US, has been impacted by COVID-19. Combined in January and February, factory output in China dropped by 13.5% relative to the previous year. The pandemic has serious implications for foreign

development networks and will leave a mark for future years. In December 2019, Hubei Province in China began with an unknown infections named corona-virus. In response to this outbreak, Chinese authorities imposed severe restrictions on people's movements and effectively imposed curfews and quarantines in the country from the end of January. Then this virus spread to the Europe, UK, USA and India as well. Many manufacturing sites were closed to limit future interactions between people and this inevitably influenced those countries economy too (UNIDO, 2020). China's exports to all regions worldwide have declined. In the exception in North America, this downturn has been extreme across the world. Trade between the all over the world has now declined.

An analysis of statistics on input-output relations from the German statistical office indicate that inputs imported represent about a quarter of industrial production in German manufacturing. 10% was from China with all manufactured materials. (Reuters, 2020).

When considering The latest monthly US data, figure 06 shows the overall imports indicates a substantial decline in manufactured goods from US-Chinese worldwide supply chains relative to February 2019, including computer and telecommunications hardware, motor vehicles bodies and truck equipment and other items.

It is obvious that the emergence of COVID-19 has a destructive impact on development and world supply chains, which has implications for businesses, customers and the world's economy. Many organizations struggle to answer critical question about how their employees can be protected, supply security ensured, the financial impact reduced, reputational risks addressed, and market uncertainty which is driven by demand (Hong F. B., 2020).



Hence, developing a resilient supply Chain (RSC) within the organization and nation is highly essential to overcome any kind of a supply chain related risk including this pandemic.

The resilience of the supply chain includes three parts. Those are Anticipation, Resistance and Recovery and response (Parast, 2016). Can be described as follows;

- a) *Anticipation* for a supply chain manager, it's the impact of the disruption must be anticipated and the supply chains can be prepared for predicted or unexpected changes in the environment. The disruption and its impact should be understood in order to minimize the probability of an occurrence. The forecast phase of the supply chain is a pre-disruption. The key indicators supply chain of resilience during this anticipating phases are awareness, visibility and security.
- b) Resistance In a few situations, if any expected or unforeseen disturbance may arise, a supply chain will have the capacity to tolerate it and disable the negative impact before it comes (Alkaff, 2018), For the stability of the supply chain, that will play a vital role. The impact can be withstood by a well-organized supply chain. It is known as a period of disruption. The key indicators in this step of supply chain stability are flexibility, redundancy, collaboration and robustness.
- c) Recovery and response Frequently disruption has ability to affect the supply chain. The immediate and appropriate solution based on resources is important to reduce its disruptive impact on the supply chain (Bittencourt, 2018). In addition to being able to regain the position prior to the interruption, a well-planned

supply chain will help to restore market positions to a higher level, which will lead to the competitive advantage. Strong market position, information sharing, velocity, agility and public-private Partnership play a significant role in keeping the supply chain resilient.

## Proposed Resilient Supply Chain Strategies / Framework and Discussion

The concept of RSC was analyzed and a conceptual clarity framework proposed by (Ali, 2017). Their framework revealed three main structures for the definition of RSC: resilience strategies, resilience phase and capacity. structure outlines the definition and explains the components required to improve the RSC's capabilities as well as details the practices needed to utilize them. (Mandal, 2014) has carried out a systematic analysis of RSC and recommended the framework that defines resiliency and problems the supply in chain performance. (Christopher, 2004) did an RSC development investigation and tried to detect the current state of work. They suggested a structure which defines RSC 's values and indicators.

The frameworks suggested for RSC in the literature unable to provide a detailed understanding of RSC's metrics that can help improve the supply chain 's efficiency. A conceptual framework as strategies has proposed in this study to overcome the gaps and drawbacks in literature. The framework also shows various Supply Chain performance measures and provides knowledge about indicators that contribute to increasing the effectiveness of the supply chain. Strategies proposed allows management to understand the connections between indicators number of performance indicators. As an example, if a Supply Chain Manager needs to anticipate the right demand during this



pandemic, for example, awareness and collaboration are the two metrics. If two companies collaborate, it will help to minimize costs for holding inventories and, by shipping in on-time improve consumer responsiveness.

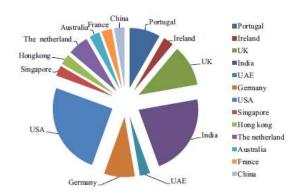
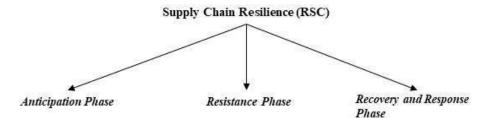


Figure 5 Overall Supply Chain Performance [Source: (Reuters, 2020)]





#### Visibility

- Crate systems in place to provide visibility across the extended supply network.
- Create transparency on multitier supply chains.

#### Security

- Multi-sourcing key commodities or strategic components to reduce reliance on any supplier.
- Should immediately develop a treasury plan for cash management.
- Prepare for potential channel shifts.

#### Awareness

- Developing and implementing supply chain risk management and business continuity strategies.
- Educate employees on prior the disruption. [symptoms and prevention.]
- Distribution networks to quickly reconfigure and maintain supply to global demand

#### Flexibility

- Diversifying supply chains from a geographic perspective to reduce the supply-side risks from any one country or region.
- Enforce precautionary measures.
- Understand and activate alternate sources of supply.
- Adjusting the operating model to allow for a decentralized manufacturing organization with a consistent risk management system in place.
- Adoption of new ways of working and governing to increase manufacturing resilience

#### ▶ Redundancy

- Enhance allocated available inventory to promise capability.
- Understand the demand impact and confirm short term demand-supply synchronization strategy.

#### ➤ Collaboration

- Build strong relationships with key suppliers and stakeholders.
- Focus on Key suppliers and identify their ability to meet supply requirements and potential risks.
- Enhance allocated available inventory to promise capability.
- Collaborate with all parties in supply chain to leverage freight capacity jointly.

#### → Robustness

- Investing in supply chain planning and control tower solutions to better sense and respond.
- Optimize production and distribution capacity to ensure employee safety

#### → Market Position

- Capturing new opportunities from cross-industry collaboration models.
- Reviewing and challenging the product portfolio to reduce complexity and refocus on key strategic directions

## ► Information Sharing

- Increase remote work policies and flexible workforce arrangements.
- Enhance inbound materials visibility.
- Doubling down on investments in advanced manufacturing technologies that were attributed to an essential role in ensuring a quick reaction to the crisis.
- Implement supply system setups enabled by advanced technology.

#### ▶ Public-Private Participation

 Adopting the overall supply chain set-up by carefully managing interdependent levers such as dual sourcing, complexity reduction and localizing.

#### Agility

- Considering inventory strategy to buffer against supply chain disruption
- Rapid tailoring of manufacturing and supply systems to changing consumer behavior
- Focus on production scheduling.

#### → Velocity

- Enhance focus on workforce/labor planning.
- Illuminate the extended supply network.
- Evaluate alternative outbound logistics options and secure capacity.
- Run supply-chain stress tests vs major suppliers' balance sheets

Figure 6 RSC Strategies based on RSC Indicators (Developed by researcher)

The proposed strategies (in figure 6) have tremendous potential for managing a company's or country's strengths, its weaknesses and its priorities. Managers / Supply chain expertise should provide clear knowledge about their capabilities by recognizing top graded measures. These strategies will also expose existing vulnerabilities their supply chain. New technologies are evolving in the supply chains that will significantly improve the visibility across the end-to-end supply chain, which encourage even more agility and resilience in the supply chain without "overhead". Hence, to implement suggested strategies of this study; the traditional supply chain network (Mensah, 2013) would be insufficient (as mentioned in the figure 01).

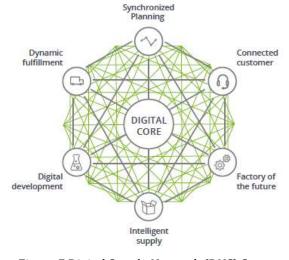


Figure 7 Digital Supply Network (DNS) Source: (Deloitte, 2020)

(Deloitte, 2020) stated that the traditional solutions to the linear supply chain and to optimize for the company itself are transforming into Digital Supply Networks (DSNs). Figure 7 shows how digitalized supply network should work with a digital core. In this manner, organizational silos are separated into an organization linked to a global supply network that offers end-to-end visibility, collaboration, awareness and optimization. Such DNS are progressively being developed and configured to avoid

interruptions, respond to mitigate bad impacts of any disruption and make supply chain more resilient.

At last, proposed strategies provides administrative guidance and setting needs to make a methodology for improve RSC. Implementing these strategies within business may show the path to rise back from this Covid-19 pandemic as well.

#### Conclusion

The pandemic of Covid-19 is not simply a short-term epidemic. It has long-term impacts on the working of people and supply chains. Companies need to develop their supply chains more resilient to overcome future challenges in the long term. The definition of resilience is a broader concept than integrated control of supply chains, congruity planning, risk control or combination. RSC can be categorized into three aspects from the study of literature, including anticipation, resistance and response and recovery which help supply chain managers to analyze the supply chain and in resisting disturbance.

This research aims to suggest strategies to create an essential managerial tool for increasing performance of supply chain and make it more resilient specially after the Covid-19 pandemic. The outcome this paper is not limited to rise back from this pandemic. Suggested RSC strategies can be used to face any disruption may arise in near future.

This research has some limitations. The RSC indicators were divided into three stages, but apart from those stages, there were other indicators. The investigation of these unexplored indicators should be aimed at further research. Since this study was done during the quarantine period of Covid-19 pandemic; There was no access to collect data from outside. Hence, collection



of previously published literature are the main indicators which are taken into consideration in this study. The review is only limited to 31 research papers in its quantitative material analysis. Thus, the results cannot be generalized on the basis of this study. This study focus only on theoretical side of RSC; practical side should reveal and evaluate how far these theoretical strategies can be implemented to the real world scenario.

However, in future research, should focus on empirical research of supply chain resilience indicators and explore new indicators. Also, this study can be considered as an initial research for anyone who would like to increase and evaluate the performance of RSC indicators either local or global level.

#### References

Aghaei, A. Z. (2016). Redundancy allocation problem for k-out-of-n systems with a choice of redundancy strategies. *Journal of Industrial Engineering International*, 13, 81-92.

Ali. (2017). Analysing supply chain resilience: integrating the constructs in a concept mapping framework via a systematic literature review. *Supply Chain Management*, 22(1).

Alkaff. (2018). Supply chain management on the production process and distribution flows of the superior teak seedlings production. *International Journal of Supply Chain Management*, 07(03), 16-23.

Azevedo. (2014). Supply chain management resilience: a theory building approach. *Supply Chain and Operations Resilienc*, 1(1).

Badhotiya. (2019). Performance indicators for supply chain resilience: review and conceptual framework. *Journal of Industrial Engineering International*, 15, 105-117.

Barratt, M. (2004). Understanding the meaning of collaboration in the supply chain. *Supply Chain Management*, 09(01).

Betts, T. S. (2009). Supply chain agility, collaboration, and performance: how do they relate. In: Proceedings of annual conference of the production and operations management society.

Bittencourt, J. P. (2018). Analysing the circular economy opportunities in the French construction sector related to the sustainable supply chain: a waste input-output analysis. *International Journal of Supply Chain and Operations Resilience*, 03(02).

Christopher, H. P. (2004). BUILDING THE RESILIENT SUPPLY CHAIN. *International Journal of Logistics Management*, 15.

Croxton, T. J. (2011). ENSURING SUPPLY CHAIN RESILIENCE: DEVELOPMENT OF A CONCEPTUAL FRAMEWORK. *Journal of Business Logistics*, *31*(1), 1-21.

CSCMP. (2013). SUPPLY CHAIN MANAGEMENT TERMS and GLOSSARY. Council of Supply Chain Management Professionals.

Day, J. M. (2014). Fostering emergent resilience: the complex adaptive supply network of disaster relief. *International Journal of Production Research*, 52(07).

Deloitte. (2020). *Deloitte.* Retrieved 06 02, 2020, from

https://www2.deloitte.com/kz/en/pages/about-deloitte/articles/covid-19--the-recovery-of-organizations-and-supply-chains.html

Esmaeili, M. S. (2018). Optimal (R, Q) policy and pricing for two-echelon supply chain with lead time and retailer's service-level incomplete information. *Journal of Industrial Engineering International*, 14, 43-53.



Ferdoush, M. M. (2018). Supply Chain Performance Measurement Model: A Literature Review. Supply Chain Management, 07(3).

Fiksel, J. (2015). From Risk to Resilience. In *Resilient by Design* (pp. 19-34). Island Press, Washington, DC.

H.Elleuch, E. A. (2016). A Quality Function Deployment approach for Production Resilience improvement in Supply Chain: Case of Agrifood Industry. *IFAC-PapersOnLine*, 49(31), 125-130.

Hong, F. B. (2020). *World Economic Forum*. Retrieved 05 26, 2020, from https://www.weforum.org/agenda/2020/02/how-coronavirus-disrupts-global-value-chains

Hong, T. Y. (2002). Unveiling the structure of supply networks: case studies in Honda, Acura, and DaimlerChryslerUnveiling the structure of supply networks: case studies in Honda, Acura, and DaimlerChrysler. *Journal of Operations Management, 20*(05), 469-493.

Inger, H. T.-N. (2015). Toward a framework for supply chain resilience. *International Journal of Supply Chain and Operations Resilience*, *1*(4), 339.

Innovation, P. F. (2013). Global Supply Chain Risk Management Survey.

Jain, V. (2017). Supply chain resilience: model development and empirical analysis. *International Journal of Production Research*, 55(22).

JAMES, C. F. (2003). BUILDING A SECURE AND RESILIENT SUPPLY NETWORK. SUPPLY CHAIN MANAGEMENT REVIEW, 07(05), 22-30.

Jüttner, S. M. (2011). Supply chain resilience in the global financial crisis: an empirical study. *Supply Chain Management, 16*(4).

LamXiwenBai, J. S. (2016). A quality function deployment approach to improve maritime supply chain resilience. *Transportation Research Part E: Logistics and Transportation Review*, 92, 16-27.

Lanng, J. L. (2020). *World Economic Forum*. Retrieved 05 30, 2020, from https://www.weforum.org/agenda/2020/05/this-is-what-global-supply-chains-will-look-like-after-covid-19/

Li, Q. W. (2017). An empirical examination of firm financial performance along dimensions of supply chain resilience. *Management reseach review*, 40(03).

Lichtenwalter, J. (2020). *ASUG News*. Retrieved 05 26, 2020, from https://www.asug.com/insights/how-covid-19-is-affecting-every-aspect-of-supply-chains

Mandal, S. (2014). Supply chain resilience: a state-of-the-art review and research directions. *International Journal of Disaster Resilience in the Built Environment, 05*(04).

Mensah, Y. M. (2013). Developing a resilient supply chain. *Procedia - Social and Behavioral Sciences, 110 ( 2014 ) 309 - 319* (Contemporary Issues in Business, Management and Education), 309-319.

Pankaj Raj Sinha, L. E. (2004). Methodology to mitigate supplier risk in an aerospace supply chain. *Supply Chain Management,* 09(02).

Pankaj Raj Sinha, L. E. (2004). Methodology to mitigate supplier risk in an aerospace supply chain. *Supply Chain Management,* 09(02).

Parast, M. K. (2016). A review of the literature on the principles of enterprise and supply chain resilience: Major findings and directions for future research. *International Journal of Production Economics*, 171(1), 116-133.



Pillania, A. K. (2008). Strategic sourcing for supply chain agility and firms' performance: A study of Indian manufacturing sector. *Management Desicion*, 46(10).

Ponis, S. a. (2012). Supply Chain Resilience? Definition of concept and its formative elements. *The Journal of Applied Business Research*, 28(05).

Rao, K. V. (2013). Design of supply chain in fuzzy environment. *Journal of Industrial Engineering International*.

Reuters, G. T. (2020). *General Administrations of Customs Peoples' Republic of China*. Retrieved 05 26, 2020, from

http://english.customs.gov.cn/newsroom/news

Seewald, T. K. (2020). *Efficio : Setting up a post-COVID-19 supply chain*. Retrieved 05 28, 2020, from https://www.efficioconsulting.com/engb/resources/insight/setting-up-a-post-covid-19-supply-chain/

Serhiy Y. Ponomarov, M. C. (2009). Understanding the concept of supply chain resilience. *International Journal of Logistics Managemen*, 20(1).

Setak, H. K. (2017). Incentive mechanism based on cooperative advertising for cost information sharing in a supply chain with competing retailers. *Journal of Industrial Engineering International*, 14(01), 265-280.

Sodh, S. C. (2004). Managing Risk To Avoid; Supply-Chain Breakdown. In *MIT SLOAN MANAGEMENT REVIEW* (pp. 53-62).

Sridharan, T. M. (2008). Design for supply chain collaboration. *Business Process Management Journal*, 14(03).

Stevenson, M. S. (2007). Flexibility from a supply chain perspective: definition and review. *International Journal of Operations & Production Management*, *27*(7), 685-713.

Tradeshift. (2020). *Tradeshift*. Retrieved 05 30, 2020, from https://hub.tradeshift.com/future-of-supply-

chain?\_ga=2.27807804.169123784.15908 44790-1329975328.1590844790

UNIDO. (2020). *World Economic Forum*. Retrieved 05 26, 2020, from https://www.weforum.org/agenda/2020/04/covid-19-pandemic-disrupts-global-value-chains

Wallenburg, A. W. (2013). The influence of relational competencies on supply chain resilience: a relational view. *International Journal of Physical Distribution & Logistics Management*, 43(4).

## **Abbreviations and Specific Symbols**

RSC - Resilient Supply Chain
SCM - Supply Chain Management
DSN - Digital Supply Network

## Acknowledgement

I would like to forward special thanks to the lecturer Mr. M.M.L.C. Gunathilake for giving all the necessary knowledge and guidance about the research. Also I would like to thank the authority of General Sir John Kotelawala Defence University for organizing International Research Conference in 2020. Finally, I'm accepting this opportunity to offer true thanks to lecturers, friends and everybody who helped me to write this paper.

#### **Author Biographies**



Dishanthi Kahaduwa is a final year BSc. Logistics Management undergraduate at General Sir John Kotelawala Defence University –Ratmalana.

She has followed Advanced Certificate in



Human Recourse Management at NIBM, Cambridge First certificate in English and Diploma in Spoken English at Royal Institute. And she is a member of Editorial Committee in *Chartered Institute of Logistics and Transport (CILT)* "Link" magazine.



Dushanthi Lokuge is a Senior Lecturer at General Sir John Kotelawala Defence University. She has a M.Sc. in Management, 2014, University of Sri

Jayewardanepura and B.Sc. in Eco Business

Management (Special), 2008, Sabaragamuwa University of Sri Lanka. She has performed as a plenary/ technical session Coordinator of the Management, Social Sciences and Humanities session at the 8th International Research Conference Inculcating Professionalism for National Development of General Sir Iohn Kotelawala Defence University held on 27th- 28th August 2015.





Dilkie Salgado#, Nethmi Bandara, Thisuri Peiris and Lahiru Gunathilaka

Department of Management and Finance, Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defense University, Sri Lanka

#sdilkie@gmail.com

Abstract: Bankers in Sri Lanka recently introduced new self-banking technologies including automated teller machines, cash/cheque deposit machines and bill payment machines where customers can directly engage with banking services without employing service people. As per the exploratory study, the researchers found that the usage rate of Self-Banking Services (SBS) in Sri Lanka is invariably low. Therefore, the research was carried out to identify the factors affecting consumer intention towards SBS in Sri Lanka and to identify the most important factor to promote SBS in Sri Lanka. The conceptual model was developed using the existing theories such as the Technology Acceptance Model, Diffusion of Innovations Theory, and Theory of Planned Behaviour. Accordingly, perceived security (PS), perceived ease of use (PEU), perceived trust (PT), perceived usefulness (PU) and perceived risk (PR) were identified as independent variables, whereas attitudes towards SBS and intention to use SBS were identified as mediating and dependent variables. respectively. An online questionnaire survey and a printed questionnaire survey were conducted to collect data and 252 full responses were obtained in return. As per the multiple regression analysis and sobel test, attitude mediates the impact of all independent variables, while PU was identified as the most important factor to promote SBS. Finally, by understanding the consumers' perspective towards SBS, this study will

assist bankers to plan and implement appropriate strategies to promote SBS in Sri Lanka.

**Keywords:** Self-banking services, Consumer attitudes, Consumer intention

#### Introduction

Background of the study

Due to rising employment costs and improvements in service offerings, service are encouraged to consider firms substituting technology-based self-service options for labor to serve consumption (Dabholkar, 1996). Retail banking is one of the sectors that has quickly embraced this reengineering phase and is committed to offer innovations. Changes in financial conditions such as globalization and privatization have caused a high level of competition in the banking sector. Combativeness in rising banking market rivalry is the key issue for these banks to find various options and possibilities to enhance their services. Introducing selfservice banking technologies (SSBT) to consumers is one of the excessive solutions implemented by the banking sector. SSBT are technologies that enables customers to use a service at their own, irrespective of direct involvement of employees. (Meuter, et al., 2003).

SSBT provide automated teller machines (ATM), cash/cheque deposit machines (CDM), bill payment machines (Kiosk machines), internet banking and mobile banking facilities to both banks and



customers (Gerrard & Cunningham, 2003; Laukkanen, et al., 2008; Walker & Johnson, 2006). The advantages of using ATM, CDM and Kiosks have motivated the dimensions of service quality, and banks are offering new choices to consumers. Opportunities for growth, cost reduction, customer satisfaction and efficiency are recognized as reasons for building and adding new technologies to the existing banking networks.

Even though, there are several banks that provide self-banking services currently in Sri Lanka, these services were first introduced to Sri Lanka by the Peoples' Bank. To become the most digitalized bank by the year 2020, Peoples' Bank commenced establishing self-banking units around the country equipped with the most modern ATM, CDM and Kiosk machines. The automated machines are accessible 24 hours, 365 days in the year further enhancing convenience for customers empowering them as to where, when and how they would like to conduct their banking needs in order to create a comprehensive revolution in the Sri Lankan banking industry. In this context, most of the Sri Lankan banking customers have not adapted to the new facilities as expected, regardless of the various advantages they provide.

## Research problem

While various banks in Sri Lanka have rapidly spread new self-banking units across the country expecting their customers to use the facilities provided by them, not all customers have adopted the self-banking facilities as they tend to avoid or fail to follow them. Most of the customers are in a dilemma and they hesitate to move towards the adoption of new technology. They remain stuck with traditional methods of performing banking and financial operations than using the new despite technology, the numerous

advantages it offers including convenience to the general public and significant long-term savings for the banks' operating costs as prominent advantages. Unless consumers encompass and use self-banking facilities to the expected level, it is difficult to realize savings and benefits. It is essential to make almost all consumers self-banking facility users. Therefore, studying the factors affecting consumer intention towards SBS in Sri Lanka are predominant to make a contribution to the body of knowledge in this area.

Innovation data is the first step in the adoption process to raise awareness and interest that leads to the decision which is to adopt or not to adopt the innovation (Rogers, 1962). Data on self-banking facilities is a major factor affecting the purpose of embracing facilities or not. Such factors are very relevant to practitioners who are preparing and promoting new models in the current competitive market as well as traditional forms of banking. Therefore, against this background, the researchers are prompted to investigate and find out the factors affecting consumer intention towards SBS in Sri Lanka.

## Research objectives

Objectives of this study are two fold; to identify the factors affecting consumer intention towards SBS in Sri Lanka and to identify the most important factor to promote SBS in Sri Lanka.

#### **Literature Review**

The extensive use of ICT in the Sri Lankan banking sector first began in late 1980s (Jayamaha, 2008). Self-banking internet banking are the current distribution methods developed banking services in Sri Lanka. In contrast, they are the newest, most creative and most competitive services that banks offer (Sathye, 1999). Previously, customers interact directly with service organizations



and service meetings between front-line service workers (Bitner, 1990). This conventional relational emphasis of company meetings have been largely replaced recently by innovations including new self-service facilities for customers (Bitner, et al., 2000).

Attitudes are one of the most important factors affecting the purchasing behavior of consumers and can therefore attract significant attention from researchers investigating banking customers' actions and their relationship with banks. In recent years, the emergence of technology-based self-service platforms have changed the way consumers access many services, including banking services (Bobbit & Dabholkar, 2001). In addition, Berta & Mann (2000) stated that 'privacy and security' is one of the most important factors to be considered when storing data in ATM, CDM and Kiosks which are the applications of self-banking units.

The research model for this study was developed using an extensive review of literature on Theory of Technology Acceptance Model (TAM), Diffusion of Innovations Theory (DIT) and Theory of Planned Behavior (TPB) which are the mostly used theoretical frameworks to explain the consumer intention towards SSBT.

## Theory of Technology Acceptance Model

TAM was originally developed by Fred Davis and extended by Richard Bagozzi (1989).The model forecasts acceptability of a system and identifies the advances that need to be made to the system in order to make it acceptable by users. Further, the model suggests that there are two major factors affecting an system's information acceptability: perceived ease of use (PEU) and perceived usefulness (PU).

The main objective of TAM is to provide a explanation conditions thorough of typically affecting the acceptance of technological applications, and it also helps practitioners to define why a precise organism is unacceptable and rejected. In addition, Marina, (2009) suggested that the usage of any kind of information system should be in a straight line defined by the conduct purpose of its use, which is influenced by consumer attitudes towards the usage of the system and perceived usefulness of the system which are, in effect, persuaded by perceived ease of use.

## Diffusion of Innovations Theory

'Diffusion' extends beyond the concept of two-step flows, focusing on factors which increase or decrease the likelihood of embracing an invention, a new idea, a product or an action by the members of a given culture. DIT was first developed by Rogers (1962) to describe how an innovative idea or service is promptly driven through a specific population or social system and diffuses over time.

The model categorises 'the adopters of innovation' as: innovators (a group's first 2.5% to embrace a new concept), early adopters (next 13.5% to embrace an invention), early majority (next 34% of the group to adopt the invention after early adopters), late majority (next 34% of the group, who tries an innovation only after the others) and laggards (the last 16%, who are conservative and stuck with past generations' choices when adopting an innovation.

## Theory of Planned Behavior

Theory of Planned behavior which was originated as Theory of Reasoned Actions (TRA) was proposed by Ajzen & Fishbein (1977). The model, extends the TRA model where Perceived Behavioral Control (PBC) is introduced as a new parameter. In essence, PBC is determined by the



availability of resources, opportunities and skills and the perceived value of those resources, opportunities and capacity to achieve results. Although the behavioral intention of both TPB and TRA are believed to influence the conduct of a person, TPB uses PBC to act for the individual that is not under volitional command. When incorporating PBC, there are not only practical limits, but also an element of selfefficacy. Three main factors have been considered in TPB model to determine the factors affecting behavioral intention for this study - interpreted by Taherdoost & Masrom, (2009): behavioral attitudes, subjective norms, and perceived behavioral control.

## Methodology

Eleven hypotheses were developed with a mediating effect of attitudes towards SBS by reviewing existing theories. Scope of the study is restricted to SBS provided by commercial bank units in Colombo Metropolitan Area. The rationale for selecting Colombo metropolitan area is the existence of a well-organized and a larger inter network of banks operated equally in rural & urban areas, increasing usage of modern technology and surge in e-literacy among the people. Deductive approach method was used for this study with the positivism research philosophy. Research technique used for this study was the survey questionnaire, which is used widely in business and management related researches. According to Saunders, et al., (2009), this type of technique is generally related to the deductive method which enables the collection and interpretation of quantitative data using concise and inferential statistics. Further, the study adopted quantitative approach since it allows the researcher to examine the underlying connection among variables described in the model providing evidence to support the hypotheses (Carter &

Bélanger, 2005). A cross-sectional survey design was used in the research as it collects data on a wider range of variables at a given time using structured questionnaires.

The population of this study equally included experienced and inexperienced banking consumers relative to SBS. 350 respondents were selected for the sample size based on convenience sampling method which is the most applicable sampling technique to collect complete information which will concentrate comprehensively on the selected sample. A questionnaire was used to collect primary data. The researchers initially carried out a pilot test with 25 respondents to ensure the items used in the questionnaire were reliable, clear, and appropriate. Results acquired from the pilot test were used in addition to improve the final questionnaire. Finally, 252 appropriate questionnaires were considered to test the proposed hypotheses. 'IBM SPSS (Statistical Package for the Social Sciences) Version 22' software was used to analyze data. Secondary data linked with SBS, including types of services provided by banks, number of users from sources, pattern of users & etc. were mainly gathered through discussions held with top-level personnel engaged in the Ratmalana branch of Peoples ' bank, Sri Lanka and from the bank's official website.

## Conceptual Framework

According to the conceptual framework illustrated by Figure 1, PU, PEU, PT (percieved trust), PS (perceived security) and PR (perceived risk) have been considered as the independent variables (IV), consumer intention has been considered as the dependent variable (DV) and the attitudes towards SBS has been considered as the mediate variable (MV). Corresponding to the conceptual



framework, research was examined under the following hypotheses.

 $H_{1a}$  – Attitudes towards SBS mediate the impact of PU towards consumer intention to use SBS.

 $H_{1b}$  – Attitudes towards SBS mediate the impact of PEU towards consumer intention to use SBS.

 $H_{1c}$  – Attitudes towards SBS mediate the impact of PT towards consumer intention to use SBS.

 $H_{1d}$  – Attitudes towards SBS mediate the impact of PS towards consumer intention to use SBS.

 $H_{1e}$  – Attitudes towards SBS mediate the impact of PR towards consumer intention to use SBS.

 $H_{1f}$  – Attitudes towards SBS impact the consumer intention to use SBS.

 $H_{1g}$  – PU impacts consumer intention to use SRS

 $H_{1h}$  – PEU impacts consumer intention to use SBS.

 $H_{1i}$  – PT impacts consumer intention to use SBS.

 $H_{1j}$  – PS impacts consumer intention to use SBS.

 $H_{1k}$  – PR impacts consumer intention to use SBS.

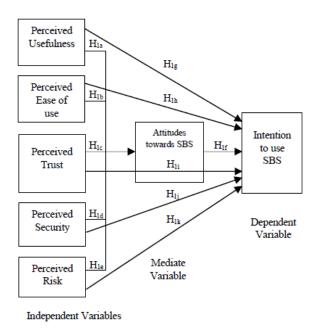


Figure 1. Conceptual Framework Source: Author(s) 2019

## **Results**

Along with the intention of evaluating the indicators of the respective variables, some demographic characteristics and general characteristics were analyzed through the questionnaire in addition, as an attempt to display the answers of the right population and right respondents. Regarding their ages, majority of them were between 18 to 25 years, which was 194 respondents in total. Next, the research examined the level of their education. Among the 252 respondents, majority (107) had obtained a Bachelors' degree as their highest level of education. Regarding occupations, it was discovered that majority of respondents were undergraduates with a (33.3%).quantity of 84 General characteristics of the respondents were examined next in descriptive analysis. Out of the 252 respondents, most of them (86%) were aware of SBS. Even though, researchers identified that only 82% of them were using SBS. Out of the above 82%, majority were using only the ATM in self-banking units and 18% do not intend to



use SBS in any way as they distrust technology and innovations when managing monetary whereas 13 respondents face the same problem due to the difficulties involved in the process. The most significant finding is that, out of the 252 respondents, 40% had a general opinion, which was, human contact is more important than technology when handling finances through banks.

The research aimed at determining the internal consistency of the scales used to calculate the variables. Cronbach's Alpha is used to determine the reliability of a study and according to Nunnally (1967), if the value is greater than or equal to 0.6, the collected data can be considered as reliable and acceptable.

Table 1. Reliability test				
Variabl	Cronbach	No.		
e	,	of		
	Alpha	item		
	F	S		
PU	0.928	2		
PEU	0.823	2		
PT	0.792	3		
PS	0.897	4		
PR	0.801	3		
MV	0.898	2		
DV	0.960	4		

Source: Survey data 2019

According to Table 1, the variables of the current study are highly reliable. Therefore, the data can be used further for the purpose of acquiring the impact of the factors affecting consumer intention towards SBS.

Descriptive research methods were used to investigate the hypotheses which is difficult experimentally. Alternative hypotheses were built to show both direct effect and indirect effect of the observations.

Table 2. Correlation analysis - Direct relationship

Hypotheses	Pearson	Significance	Decision
	Correlation	value	
$H_{1g}$	0.203	0.054	Rejected
H <sub>1h</sub>	0.134	0.322	Rejected
$H_{1i}$	0.094	0.579	Rejected
$H_{1j}$	0.134	0.322	Rejected
H <sub>1k</sub>	0.127	0.378	Rejected

Source: Survey data 2019

As per the results of correlation analysis illustrated by Table 2, PU, PEU, PT, PS and PR (independent variables) are not significantly correlated with the consumer intention to use SBS (dependent variable) since the above hypotheses indicates a significance level above 5% individually and therefore, they can be rejected.

Table 3. Correlation analysis - Indirect ralationchin

relationship					
Hypotheses	Pearson	Significance	Decision		
	Correlation	value			
H <sub>1a</sub>	0.253	0.015	Accepted		
H <sub>1b</sub>	0.372	0.006	Accepted		
H <sub>1c</sub>	0.417	0.001	Accepted		
$H_{1d}$	0.389	0.003	Accepted		
H <sub>1e</sub>	0.389	0.003	Accepted		
$H_{1f}$	0.377	0.005	Accepted		

Source: Survey data 2019

Hypothese built for the correlation analysis which was carried out to demonstrate the indirect relationship among variables as illustrated by Table 3, indicates a significance level below 5% (0.05).

Hence it can be concluded that attitudes towards SBS mediate the impact of PU, PEU, PT, PS and PR individually and



therefore supports the expectations of the researcher regarding the nature of the interrelation among independent variables, attitudes towards SBS (MV) and consumer intention to use SBS (DV).

When concerning the correlation – coefficient, perceived ease of use, perceived security, perceived risk, perceived trust and attitudes towards SBS have recorded a moderate level of positive correlation with consumer intention to use SBS whereas perceived usefulness has recorded a weak positive relationship with consumer intention to use SBS.

Multiple regression was performed since there were more than one independent variable. The linear relationship between intention to use SBS and attitudes towards SBS were analyzed initially by identifying PU, PR, PEU, PT and PS as the independent variables. To analyze the linear regression, Table 4. was generated using SPSS.

Table 4. Model summary

Model	R	$R^2$		Std. Error of the Estimate
1	.937ª	.878	.875	.481

Predictors: (Constant), Perceived security,
Perceived Usefulness, Perceived Risk,
Perceived Trust, Perceived ease of use
Dependent Variable: Consumer intention
Source: Multiple Regression Output – IBM SPSS
Statistics Viewer 2019

According to the Model Summary (Table 4.), Regression value was calculated as 0.937 showing a positive linear relationship with the dependent variable. R<sup>2</sup> value should be straight forward and it should always stand between 0 and 1.0. Higher the R<sup>2</sup> value is, the association between variables is better proved. The adjusted R<sup>2</sup> which is 0.875, is statistically significant as it suggests that the variance of the independent variables determines a value of 87.5% for the variance of

consumer intention to use SBS. Standard error in the model summary reveals how much the mean of the sample deviates from the mean of the population.

Table 5. ANOVAa

	Sum of		Mean			
Model	Squares	df	Square	F	Sig.	
Regression	2041.725	5	408.345	35.324	0.000 <sup>b</sup>	
Residual	277.44	24	11.56			
Total	2319.165	29				

Dependent Variable: Consumer intention
Predictors: (Constant), Perceived security,
Perceived Usefulness, Perceived Risk,
Perceived Trust, Perceived ease of use
Source: Multiple Regression Output – IBM SPSS
Statistics Viewer 2019

ANOVA (Analysis of Variance) table which is also an output of regresson analysis, confirms the significance of the linear relationship by carrying an F value of 35.324 as demonstrated by Table 5. Significance of the relationship is also proven by the ANOVA table where p<0.05 at a confidence level of 95%.

Table 6. Coefficients

rable 6. Coefficients					
Model	el Unstandardiz ed Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	.093	.086		1.078	.282
Perceived Usefulness	.377	.053	.395	7.099	.000
Perceived Risk	.102	.063	090	1.628	.016
Perceived ease of use	.107	.064	.108	1.669	.096
Perceived Trust	.067	.063	.064	1.057	.052
Perceived security	.332	.066	.322	5.065	.000

Dependent Variable: Consumer intention Source: Multiple Regression Output – IBM SPSS Statistics Viewer 2019



Table 6. interprets the standardized beta coefficients which is the next output of regression analysis that is used by researchers to determine the relative importance of independent variables on the dependent variable and therefore the following equation can be obtained as per the beta values of the above table.

Consumer intention to use SBS = 0.395(PU) + -0.90(PR) + 0.108(PEU) + 0.064(PT) + 0.322(PS)

The above equation depicts; increase in one unit of PU while holding all the other variables constant, will increase 0.395 units in consumer intention to use SBS in average. Likewise, increase in one unit of PR while holding all the other variables constant, will decrease 0.90 units in consumer intention to use SBS in average, increase in one unit of PEU while holding all the other variables constant, will increase 0.108 units in consumer intention to use SBS in average, increase in one unit of PT while holding all the other variables constant, will increase 0.064 units in consumer intention to use SBS in average and increase in one unit of PS while holding all the other variables constant, will increase 0.322 units in consumer intention to use SBS in average.

"Sobel test" which is also known as the mediating analysis, was also carried out by the researchers to confirm the mediating effect, further ensuring the conditions proposed by Baron & Kenny, (1986). To test the significance level of the mediating effect, Sobel z-statistics (developed by Sobel in 1982) were used. According to Sobel z-statistics shown in Table 7, mediating effect of the five models used in the study are significant at p < 0.05. Therefore, it can be concluded that there is a mediating effect of attitudes towards SBS on consumer intention to use SBS.

Table 7. Mediating effect of attitudes towards SBS

Models		Sobel's	P
		test	Values
		Statistics	
PU → towards SBS		2.833	0.006
PR →	Attitudes	3.413	0.0006
towards SBS			
PEU→	Attitudes	1.994	0.046
towards SBS			
PS -	Attitudes	2.078	0.037
towards SBS			
PT <b>→</b>	Attitudes	2.212	0.026
towards SBS			

Source: Survey data 2019

#### **Discussion**

The main objective of this research is to understand the key factors that could affect the intention of banking customers to use SBS in the context of Sri Lanka. In order to achieve this, a model was proposed including variables namely PU and PEU from TAM with three other extended variables (PS, PR and PT). Statistical findings confirmed the predictive power of the proposed model to justify enough variation for the intention to use as the overall value of R2 was measured at 0.878 (87.8%), which is beyond the proposed minimum acceptable value of 30%. In addition, result of this study has been similarly mentioned to some extent by several self-banking studies conducted in other developing countries.

Conveniently selected samples were used in this analysis, which is the most appropriate sampling technique that can be used to reach customers who use SBS since the researchers were limited when obtaining accurate details of banking customers in Sri Lanka as banks were



unable to provide the expected details in order to protect the confidentiality of their the customers, agreeing conditions proposed by Sekaran & Bougie, (2016). though, convenience sampling approach includes issues related to justifications and sampling partiality, this study addressed these problems to some extent by providing a moderately large sample size and data was collected covering the entire Colombo metropolitan area including respondents with different levels of education, occupations & etc.

Second objective of this research is to identify the most important factor to promote SBS in Sri Lanka. Since statistical findings have highly demonstrated that PU, with its regression weight of 0.395, is the significant factor predicting the intention to use SBS, it implies that Sri Lankan banking customers are more likely to use selfbanking units if they are felt it as an advantageous technology and consuming SBS carry a greater efficiency and productivity. Therefore, PU is the most important factor to promote SBS in Sri Lanka. With its regression weight of 0.108, PEU determines that these customers are more likely to adopt SBS if the systems are not problematic and requires no extra exertion and energy. Nonetheless, a particular level of skills and knowledge is required to use such software properly, based on the available self-banking framework. With a regression weight of 0.322, the study has found PS has a positive impact towards the intention of customers to use SBS in Sri Lanka, suggesting that, greater the security provided by banks, greater the intention to use SBS. PR, with a regression weight of 0.090, determines that these customers are more likely to adopt SBS if they're ensured the systems secure the confidentiality of their personal information and security features are highly incorporated in self-banking units.

As the regression weight of PT determined a value of 0.064, it is considered to be the model's lowest influencing factor. It further implies that customers in Sri Lanka would be more motivated if they are ensured SBS are trustworthy and their operations can be carried out as planned.

These results will assist banks to implement appropriate strategies by understanding the main concerns of consumers towards SBS and as a result, suggestions for more effective and efficient SBS to retain more consumers can be provided.

## Conclusion

According to the Diffusion of Innovations theory, it is important to understand the concept of SBS in the early phases of adoption. Active presentations using all forms of media promotions will be beneficial when introducing the services to broader audience and educating prospective consumers on benefits of SBS which are linked to time saving, comfort at any time, low cost and information availability. Several other important implications have also been identified while conducting the research which can be recommended for banks in order to provide better strategic perspective to design and implement SBS in Sri Lanka. Security issues related to SBS must be addressed to ensure SBS' performance in Sri Lanka. More precisely, problems related to perceived risk including error-free transactions, reliability of SBS and relative security features must be addressed as well. Further, banks must communicate to their customers regarding how they will be guided to solve the difficulties that occur while engaged with SBS. Finally, according to the findings of this study, it can be concluded that banks must play a prominent role in shaping insight, and thus the attitude and purpose towards SBS on users of technology-based potential



banking facilities. In addition, these suggestions can be implied practically for banks and their guidelines.

#### References

Ajzen, I. & Fishbein, M., 1977. Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. *Psychological Bulletin*, 84(5), p. 888.

Baron, R. M. & Kenny, D. A., 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), pp. 1173-1182.

Berta, I. Z. & Mann, Z. A., 2000. Smart Cards - Present and Future. *Hiradastechnika, Journal on C5*.

Bitner, M. J., 1990. Evalating service encounters: The effects of physical surroundings and employee responses. *The journal of marketing*, pp. 69-82.

Bitner, M. J., Brown, S. W. & Meuter, M. L., 2000. Technology infusion in service encounters. *Journal of the Academyof Marketing Science*, 28(1), pp. 138-149.

Bobbit, L. & Dabholkar, P., 2001. "Intergrating attitudinal theories to understand and predict use to technology-based self-service. The internet as an illustration". *International Journal of Service Industry Management*, 12(5), pp. 423-50.

Carter, L. & Bélanger, F., 2005. The utilization of e-government services: citizen trust, innovation and acceptance factors. *Information systems journal*, 15(1), pp. 5-25.

Dabholkar, P. A., 1996. Consumer evaluations of new technology-based self-service options: An investigation of alternative models of service quality. *International Journal of Research in Marketing*, Volume 13, pp. 29-51.

Davis, F. D., Bagozzi, R. P. & Warshaw, P. R., 1989. User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), pp. 982-1003.

Gerrard, P. & Cunningham, J. B., 2003. The diffusion of internet banking among Singapore consumers. *International Journal of Bank Marketing*, 21(1), pp. 16-18.

Jayamaha, R., 2008. *Impact of IT in the banking sector*. colombo, Speech at Cinnamon Lakeside.

Laukkanen, P., Sinkkonen, S. & Laukkanen, T., 2008. Consumer resistance to internet banking: postponers, opponents, rejectors. *The International Journal of Bank Marketing*, 26(6), pp. 440-445.

Marina, L. G., 2009. Utilizing Information Technology Systems across Disciplines. *Advancements in the Application of Computer Science*, pp. 301-314.

Meuter, M. L., Ostrom, A. L., Bitner, M. J. & Roundtree, R., 2003. The influence of technology anxiety on consumer use and experiences with self-service technologies. *Journal of Business Research*, Volume 56, pp. 899-906.

Nunnally, J. C., 1967. *Psychometric Theory,* New York: McGraw-Hil.

Rogers, E. M., 1962. *Diffusion of Innovations.*. 3rd ed. New York: The Free Press..

Sathye, M., 1999. Adoption of internet banking by Australian consumers: an empirical investigation. *The internatinal journal*, 17(7), pp. 324-334.

Saunders, M., Lewis, P. & Thornhill, A., 2009. *Research methods for business*. 5th ed. Harlow: Pearson Education.

Sekaran, U. & Bougie, R., 2016. *Research methods for business: A skill building approach.* 7th ed. West Sussex: John Wiley & Sons.





Sobel, M. E., 1982. Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology,* Volume 13, pp. 290-312.

Taherdoost, H. & Masrom, M., 2009. *An Examination of Smart Card Technology Acceptance using Adoption Model.* Cavtat, Croatia, 31st Int. Conf. on Information Technology Interfaces.

Walker, R. H. & Johnson, L. W., 2006. Why consumers use and do not use technology-enabled services. *Journal of Services Marketing*, 20(2), pp. 125-135.

# Acknowledgement

We would like to express our deepest appreciation to our supervisor Mr. M.M.L.C. Gunathilaka, senior lecturer, Faculty of Management, for his valuable time, advices, support, motivation and constant encouragement throughout the research study. His continuous constructive feedback and collaborative recommendations are the most influential reality behind this research study's ultimate success and timely completion. We would also like to sincerely express our gratitude to all the Faculty of Management academics who have enriched our knowledge on the subject developed our personalities over the years.In addition, we want to offer our appreciation to all the respondents who valuable time have invested their completing the research questionnaire correctly, which supported the timely completion of the research report. Also, an ocean of appreciation goes to our parents, our friends, and all the others who have helped us making this process a reality in different ways. We are grateful for their persistence, devotion of love, motivation

and compassion, if not this research study would not have been possible.

### **Author Biographies**



Dilkie Salgado,
Undergraduate,
Department of
Management and
Finance
Finance, Faculty of
Management, Social
Sciences and

Humanities, General Sir John Kotelawala Defence University.



Nethmi Bandara, Undergraduate, Department of Management and Finance, Faculty of Management, Social Sciences and Humanities, General

Sir John Kotelawala Defence University.



Thisuri Peiris,
Undergraduate,
Department of
Management and
Finance, Faculty of
Management, Social
Sciences and
Humanities, General Sir

John Kotelawala Defence University.



Lahiru Gunathilaka, Senior Lecturer – Grade II

Department of
Management and
Finance, Faculty of
Management, Social
Sciences and

Humanities, General Sir John Kotelawala Defence University

Paper ID: 89

# Celebrity Endorsement and its Effect on Purchase Intention with Reference to Skincare Products in Sri Lanka

Chathumini Munasinghe, Charuka Gunaratne, Hasini Chandrasiri#, and Lahiru Gunatilake

Department of Management and Finance, Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defence University, Sri Lanka.

#wgchkavindya@gmail.com

**Abstract:** In the current media landscape, advertisers use different celebrity personnel as brand ambassadors. As per secondary evidences the such advertisements with celebrities. are judged by favourably the viewers. Therefore, the primary objective of this study is to identify the influence of celebrity endorsement on customer purchase intention of skincare products. likability, credibility, Accordingly, personality, attractiveness of the celebrity is taken as independent variables, whereas consumer purchase intention is taken as the dependent variable. Primary data were collected through a survey using an online questionnaire. A sample of consumers were identified from Ratmalana area using the convenience sampling method. The study employs pure quantitative analysis using the SPSS 23 version software. As per the findings, credibility, personality attractiveness were identified as the characteristics of a celebrity that have an effect on the purchasing intention while likability of a celebrity showed no effect. As implications, marketers need to hire more attractive celebrities, and they must make sure that the celebrities will not harm or disgrace the product that they are endorsing.

**Keywords:** Celebrity endorsement, Consumer purchase intention, Likability

### Introduction

This study focuses on investigating the impact of endorsement of celebrities on purchasing intention of consumers. Celebrity endorsement or celebrity branding is a form of brand advertising campaign that engages a famous individual using their frame to assist or promote products or services. Manufacturers of beauty culture related products, perfumes and clothing are few of the mutual business users of typical techniques of celebrity endorsement, such as television advertisements and annual launching event appearances, in marketing their products (Business Dictionary, 2019). Skincare is the range of applies that care to skin integrity, improve its presence and dismiss skin circumstances. When it comes to skincare products, people are more concerned about purchasing, because it matters to everyone in maintaining their physical appearance. Α renowned quotation by Aristotle "Beauty is a greater recommendation than any letter of introduction". So people try to be good in physical attractiveness in front of the people they meet. Skin caring is a daily routine technique in many sceneries, such as skin that is also too dry or too moist and anticipation of skin damages. Skincare is at the edge of cosmetics and dermatology. Nowadays skincare has become a need instead of a want. This study is based on celebrity appearance on TV commercials behalf of skin care products and how it





affects to the buying behavior of consumers.

Credibility is an important role to attract large number of target audience. When the impact on the aimed audience becomes greater, recognition of the brand and emotional unity with the aimed group becomes faster (Datta, 2010). The celebrity endorsement concept can help to improve the image of the brand and thereby the sales of a product too, as a consequencet of the value connected by the celebrities are transmitted to the brand.

# Objectives of the Study

Primary Objective: To identify factors of celebrity endorsement which affect to the purchase intention of consumers.

Secondary Objective: To identify most influencive factor of celebrity endorsement towards consumer purchase intention.

## **Research Questions**

What are the factors of celebrity endorsement which affect to the purchase intention of consumers?

What is the most influencing factor of celebrity endorsement towards consumer purchase intention?

# Literature Review

#### **Celebrity Endorsement**

Celebrity endorsement promote products and not all products pledge to the conception, it's grounded in quite easy logic. Well-known people which are called as celebrities are seen in commercials endorsing a fresh product and audience are provoked to purchase them. "celebrity endorsement is the forming of a relationship between a brand and an influential individual who fits with the brand and whose personality resonate with the target consumer" (WARC, 2019) The celebrity endorser can be described as " an

individual who enjoys favorable public recognition and who uses the recognition on behalf of a consumer good by appearing with it in an advertisement. (McCracken, 1989) The extent of recognition is very high and it can be depleted to promote the product as highly recognized individual celebrity. If the celebrity is the best match for the product or service, advertisements can meet the objectives.

#### Likability

Likability is "affection for the source as a result of the physical appearance and behaviour of the source" (McGuire, 1985). McGuire also said that when people love a celebrity, they like the brand that celebrity accompanies. So celebrities are involved in advertisements (McCracken, 1989). It is believed that celebrities can even change the view of the consumer has about the company. Likability of an advertisement increases if people find something interesting in it. Sanders (2018) have expressed that friendliness, relevance; empathy and realness are the elements that can improve likeability and success. Likability of an advertisement increases if people find something interesting in it.

#### Credibility

Simple idea of credibility is "the quality of being trusted and believed in". Expertise and trustworthiness are two major elements of traditional modern credibility (Freebase, 2019). Marketing advertising will not succeed without credibility. According to Fogg, as cited by Papantoniou (2011), 4 kinds of credibility can be identified; presumed credibility, earned credibility, surface credibility, reputed credibility. Under credibility we can further discuss credibility dimensions; credentials, experience, reliability, quality, performance, fidelity, precision, evidence, confidence accuracy, process, conviction, culture, diligence, norms,





empathy, charisma, visual appeal etc. (Spacey, 2018). "Source Credibility Theory" can be used for measuring credibility. It declared the audience or receivers are more willing to be influenced when the source present it self as credible. Because of popular celebrities (model, singers, actors, actresses, sport stars) have important place in consumer's hearts, companies spend a lot of money on signing contracts with celebrity endorsers. Credibility can be referred to a person's consciousness of the truth information (Hovland, 1951).

McCracken (1989) presented the purpose of celebrities with credibility by launching an endorser as an effective promoter for creating value to the brand, as it is pondered that celebrity endorser create their own, symbolic value to the brand. A celebrity who has higher credibility can make effect on customers' reaction about brand which are advertised. Employing a popular celebrity as an endorser helps to enhance the rating of the advertisement (Singh, 2018).

#### Personality

Popular personalities can turn into best salesmen and because of that companies use celebrities to increase consumer purchase intention. The basic reason for the consumers starting to accept celebrity endorsed cosmetics is that those products make them look like stylish and enchanting (Kelman, 1961). In the attempt of understanding the buyer traditions and his main concerns, it is necessary to be aware of and be familiar with the personality of the consumer. Personality signifies inner psychological characteristics that reflect how a person reacts to his environment. According to individual traits, likes, dislikes, personality can be categorized. Celebrity must have confidence and strong determination. When products celebrities with weak personality, the

consumer will lose their interest towards the certain product and the company. It is important to consider more about personality of a celebrity endorser before taking them into an advertisement and having loses.

#### Attractiveness

Attractiveness is physically the amount to which physical features of a person are considered visually beautiful. In this era, most of the companies market their product using internet, social media and television which are the ideal ways to promote their products or services (Said & Napi, 2015). Celebrities have gone to the minds of people by their attractiveness. And also it is believed that the popularity exposed by those particular celebrity endorsement can be featured to the capability to take hold of the attention from the consumers (Zipporah, 2014). Many celebrities use their social media accounts to promote beauty products. Physical attractiveness is the first thing which captures the minds of the consumers when they are watching an advertisement. So it is very important for the companies to use physically attractive celebrities to promote Physically their products. attractiveness for the endorsed celebrity can be categorized as their height of the figure, amount of weight and the attractiveness of the face which is frequently judge by public that speaks celebrity endorser's physical about physical attractiveness attractiveness (Bardia, et al., 2011). Attractiveness doesn't only consider the attractiveness physically showed out. It also consists of way of living, intellectual skills, properties of personality, day to day routines and performances of athletic activities (Edrogan, 1999). It is believed by the sellers that beauty helps to sell anything. Customers need to see the existing sample, so that they can imagine how they will look like after using that



particular product in the advertisement. The attractiveness of the endorser can also affect the brand perception image. It is easy to catch the attention of the consumers by showing them that there is something common between the endorser and the consumer. By advertising using attractive endorsers, the product will spread widely among the society.

Consumer Purchase Intention and Purchase Probability

The consumer's willingness and desire to buy a product is known as consumer buying intention. Consumer's buying intention is an important fact to consider when improving the buying behaviour. Celebrities do not always impact on the purchase probability, but somehow they are capable to do a considerable change in the minds of the society. One of the fastest and safest ways of developing a brand is, converting famous characters to brilliant businessmen because people always tend to follow familiar and famous characters. Skincare products play a major role in cosmetics industry. So it has a huge marketing opportunity to increase consumer purchase intention and purchase probability. Perceived value is important to achieve this. Perceived value of a skincare product influences buying intention of a consumer. There are different factors of perceived value and when the manufacturers identify factors, they can adjust their product according to those factors. According to the belief of manufacturers, celebrity and brand mascot endorsement are effective for consumer purchase intention and purchase probability. They have faith in celebrity endorsement and brand mascot would deliver high chance a appeal, responsiveness and recalling customer compared with not using this techniques. Celebrity endorsement has a huge power to grab the attention toward the brand. And

also it can damage the brand because of the misbehavior of celebrities. Manufacturers must be prepared for these incidents properly from the beginning.

### Methodology

In this chapter, the methodology has described which is used to develop the model of the study. Throughout this chapter mostly focused on the multiple linear regression analysis technique. Also conceptual framework, hypotheses, data collection method, sample size and analysis techniques are covered by this chapter.

Conceptual Framework and Hypotheses

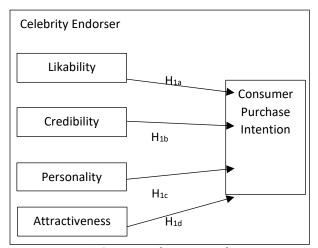


Figure 1 Conceptual Framework Source: Developed by authors, 2019

According to the conceptual framework, four main hypotheses were identified in this study. Likability (L), credibility (C), personality (P) and attractiveness (A) are independent variables of the study. The dependent variable is consumer purchase intention (CPI). The conceptual framework ascertains a straight relationship between the independent variables and the dependant variable.

 $H_{1a}$  – Likability impacts towards consumer purchase intention

 $H_{\mbox{\scriptsize 1b}}$  - Credibility impacts towards consumer purchase intention





 $H_{1c}$  - Personality impacts towards consumer purchase intention

 $H_{1d}$  – Attractiveness impacts towards consumer purchase intention

### **Experimental Design**

Research Sample and Sampling Technique

Sample is a set of individuals, objects or elements that are occupied from a bigger population for the evaluation. The sample must be symbolic of the population to make sure that we can simplify the results from the sample of the research to the population as an aggregate. Target population of this study was Ratmalana area which is located in the district with the highest population of the country. This area was chosen because most residences of well-known celebrities are located around Ratmalana. A questionnaire was sent to 200 contacts as the sample of the study. The sample was included respondents with a wide range of age, different income levels, different residential areas and both males and females from different job sectors. Generally, sampling can be divided in to two categories as probability sampling and non-probability sampling. Non-probability sampling is often associated with case study research design and qualitative research (Taherdoost, 2016). technique is used when the likelihood of selecting a person for a sample is unknown. But in this quantitative study, nonprobability sampling method was used instead of probability sampling method. Convenience sampling technique was used under non-probabilistic sampling in order to gather data as this study has no significant sampling frame. Convenient sampling is an easy and more convenient way to recruit the primary data sources for the research (Saunders, et al., 2012).

# **Data Collection and Analysis**

According to business dictionary (2019), data is information in raw or unorganized form that refers to, or represent, conditions, ideas or objects. Data can be collected by two methods; qualitative and quantitative which identified as data analysis methods. Quantitative data is the value of data in the form of count or numbers where each data set has a unique numerical value associated with it. Data which can observe and record are qualitative data. This type of data is in nonnumerical nature. Qualitative data is usually gathered through observation techniques, one-to-one interviews, focused groups and similar approaches (QuestionPro, 2019).

As the study is based on the impact of celebrity endorsement on consumer purchase intention with reference to skin care products in Sri Lanka, quantitative approach is used for the data collection. Quantitative research is used to populate statistics from a high volume sample size to gain statistically valid results in customer insight (Peppercreative, 2015). For the analysing purpose, it required to collect more reliable statistical data. In this methodology, a questionnaire was used as the survey study including 27 questions covering both research variables and demographic data. A link was sent to the contacts of the sample through social networking websites individually and 194 responses were received. 188 responses were used for the final data analysis after removing outliers.

#### Results

This chapter describes and indicates the evaluation and circulation of the data in combining with the research area clarification determined. Prepared and accumulated data is introduced into





analysis kits and it allocates discovering data, locate arrangements in it for the purpose of attaining the impact of celebrity endorsement on consumer purchase intention (Sridhar, 2018).

According to the collected data, celebrity endorsed skincare products were not used by most of the respondents. Celebrity endorsed skincare products were used by 46.28% respondents. The respondents were allowed to choose one of the products among few popular skincare brands in Sri Lanka. The brands for choices were Facia, Lia Products, Fair and Lovely, Off Marks, 4rever, Nature's Secrets, Himalayas, Ponds, Janet and other products. Most of the respondents answer was other products while Lia products were the least favoured skincare product. It was believed by 61 of the respondents that sales get increased because of the celebrity endorsement. And the statement was not approved by 25 respondents and neutralized by 102 respondents. It was stated that the quality and the quantity of the skincare products were the most important thing consumers consider when buying the products. Least vote was given to the other influencing factors than factors such as cost/price, celebrity advertisements and past experiences.

Reliability in scientific research usually means a measure's reliability and repeatability, or the ability of an experiment to yield the same results under the same conditions (Statisticssolutions, 2019). According to standard conditions, the percentage of reliability must be a value above 0.6. A co-efficient of 0 means no reliability and 1 means perfect reliability. The Cronbach's alpha values of the variables of this study are given below.

Table 1. Reliability Analysis

Variables	Cronbach's	No.	of
	Alpha	items	
Likability	0.760	4	
Credibility	0.793	3	
Personality	0.843	4	
Attractiveness	0.822	3	
Consumer	0.639	2	
Purchase			
Intention			

Source: Developed by authors using survey data

As all of the above variables have Cronbach's alpha values above 0.6, they can be considered as reliable.

Table 5.2. shows the tolerance levels and Variation Inflation Factor (VIF) of each variables.

Table 2. Multicollinearity Test

Table 2. Multiconfineality Test				
Model	Tolerance	VIF		
Likability	0.545	1.835		
Credibility	0.925	1.081		
Personality	0.544	1.840		
Attractiveness	0.577	1.734		

Source: Developed by authors using survey data

According to the standard levels, tolerance value should be greater than 0.1 and if the tolerance level is "0" it indicates a perfect multicollinearity while the tolerance is "1" it indicates there's no multicollinearity. According to Field (2005), The value of VIF should be lower than 10. When cosidering the above table, all the tolerance levels are greater than 0.1 and all the VIF values are less than 10 which denotes that there is no multicollinearity.

Correlation is capable of acquiring any value within the range of -1 and +1. The mark of the correlation coefficient specifies





the direction of the relationship, while the extent of the correlation specifies the intensity of the relationship. If the correlation is -1/0 or +1 it shows that there is a negative linear relationship/ no relationship or a perfectly positive linear relationship respectively.

Table 3. Correlation test

Hypothe	Pearson'	Significa	Decisi
sis	S	nce	on
	Correlat ion		
H <sub>1a</sub>	0.103	0.160	Reject
			ed
H <sub>1b</sub>	0.476	0.000	Accept
			ed
H <sub>1c</sub>	0.181	0.013	Accept
			ed
H <sub>1d</sub>	0.210	0.004	Accept
			ed

Source: Developed by authors using survey data

Pearson's correlation coefficient is greater than 0.1 in all of the above hypotheses. Therefore, it can be considered that  $H_{1a}$ ,  $H_{1b}$ ,  $H_{1c}$  and  $H_{1d}$  have positive linear relationships.  $H_{1b}$  has a Pearson's correlation value of 0.476, which means there is a moderate correlation. Other three have their Pearson's hypotheses correlation values between 0.1 and 0.3. therefore it can be considered as those three hypotheses have a weak correlation. When it comes to significance values except  $H_{1a}$ , all other significance values are less than 0.05 and those are highly accepted. H<sub>1a</sub> is rejected because its significance value is greater than 0.05.

Multiple regression is executed by finalizing linear regression reflecting the collection of linear links at assumed time. In this study, likability, credibility, personality and attractiveness were identified as independent variables. According to the below table, it can be suggested as there's a positive moderate linear relationship because the R value is 0.506. Having 0.240 value for the R<sup>2</sup> can be considered as 24% of variance of consumer purchase intention can be verified by the changes of likability, credibility, personality and attractiveness.

Table 4. Model Summary

Model	R	e	Adjusted R Square	of	ror the
1	0.506 a	0.256	0.240	0.770	

a. Predictors: (Constant), Attractiveness, Credibility, Likability, Personality

Source: Developed by authors using survey data

Anova table makes sure the importance of linear relationship between the independent variables and the dependent variable by bearing an F value of 15.752.

Table 5. ANOVAa

	Sum of Squares		Mean Square	F	Sig.
Regression	37.382	4	9.345	15.75 2	0.000 b
Residual	108.569	183	0.593		
Total	145.951	187			

a. Dependent Variable: Purchase Intention

b. Predictors: (Constant), Attractiveness, Credibility, Likability, Personality

Source: Developed by authors using survey data

When considering the results of the multiple linear regression, two variables (likability and personality) show negative B values which indicates the greater likability (B= -0.027) and greater personality (B= -0.074), are related to lower the consumer purchase intention. And also both likability and credibility are not significant as the values are greater





than 0.05. The correlation test also shows that the above mentioned variables have than credibility values attractiveness; which means that those two hypotheses ( $H_{1a}$  and  $H_{1c}$ ) have weak correlation. Other two variables (credibility and attractiveness) show positive B values which means when the credibility and attractiveness increase: their effect on consumer purchase intention also increases. In the correlation test, it was revealed that the credibility has the highest Pearson's correlation and in this test, it has the largest positive B value (B= 0.462). When it comes attractiveness, it has shown a weak correlation in its hypothesis in the correlation test but has achieved a moderate positive B value (B= 0.220) in the multiple linear regression model. Following equation can be obtained according to the results of beta values of the below table. It says a change of one unit in likability results a change of -0.024 units in consumer purchase intention.

Consumer Purchase Intention = -0.024 (Likability) + 0.473 (Credibility) + -0.071 (Personality) + 0.221 (Attractiveness)

Table 6. Multiple Linear Regression Model for Original Data Set

		8a. 2 a			
			Standardi		
	Unstai	ndardiz	zed		
	ed		Coefficient		
	Coeffi	cients	S		
		Std.			
Model	В	Error	Beta	t	Sig.
(Constan	1.297	276		4.69	.00
t)	1.277	.270		2	0
Likability	027	.100	024	273	.78 5
Credibilit y	.462	.065	.473	7.10 1	.00 0

Personali ty	074	.096	071	771	.44 2
Attractiv eness	.220	.090	.221	2.44 1	.01 6

Source: Developed by authors using survey data

To check the significance among variables, collinearity test was conducted to identify whether the independent variables are showing multicollinearity or not. In the collinearity test it indicates the Variance Inflation Factor (VIF). The VIF values of the variables are less than 10. So it can be considered as no multicollinearity among those independent variables of this study.

According to the results of the normality test, all the skewness values were within the range of -1 and +1 and all the kurtosis values were within the range of -3 and +3. Therefore all the variables involved in this study are normally distributed.

#### Discussion

#### Achievements of the Study

First objective of this study was to identify factors of celebrity endorsement which affect to the purchase intention of consumers. According to the results, credibility, personality and attractiveness were identified as which affect on the purchasing intention of consumers. Results did not show that there's any relationship between likability and consumer purchase intention. As per the literature review, it was found that all the variables affect on the purchase intention. McGuire (1985) and McCracken (1989) have stated that when people love a celebrity, they like the brand that celebrity accompanies and therefore celebrities are involved in advertisements. But according to this study, likability does not make any effect on consumer purchase intention.



Second objective was to identify the most influencing factor of celebrity endorsement towards purchasing intention. As per the results, credibility was found as the most influencing factor among the accepted variables. The result of the survey of 194 respondents near Ratmalana area, supported the three expected hypotheses out of four. It was found that majority of the respondents do not use celebrity endorsed skincare products. And the survey found that most of the respondents like to purchase skincare products which are endorsed by a common man as brand ambassador. According to the results, most consumers prefer using Nature's Secrets skincare products than other well-known skincare products. So it can be considered as most Sri Lankan's appreciate skincare products made in Sri Lanka, even though marketers of foreign skincare products use most popular celebrities.

#### **Conclusion and Recommendations**

The uttermost conclusion of this research was that celebrity endorsement doesn't have that much of impacts on consumer purchase intention of skincare products. The best recommendation is to supply better tactical perspective to make attached consumers in Sri Lanka. Marketers can hire more attractive celebrities to promote their products, and they must make sure that the celebrities will not harm or disgrace the product they are endorsing. And also the marketers can assure that the celebrities are also using the product they are endorsing. So they can grab the trust and attract the consumers more. Hiring Sri Lankan celebrities is better than hiring foreign celebrities to gain the trust of consumers. Because the results of imported skincare products will not give the same positive results; as Sri Lanka's a country which was located near the equator and have different weather

conditions than other countries. So the products can react differently to different skin types. Manufacturers can include natural ingredients instead of chemicals artificial ingredients, when manufacturing skincare products. As Sri Lanka has a great history of Ayurvedic skincare treatments, if the manufacturers can go towards with the products which are riched with herbal ingredients, it will convince more consumers to purchase such products than other skincare products. As the ancient Ayurvedic practices are fading away from new generations, it will also support consumers to achieve wealth through health.

#### Refernces

Bardia, Y. H., Abed, A. & Majid, N. Z., 2011. Investigate the Impact of Celebrity Endorsement on Brand Image. European Journal of Scientific Research, pp. 116-132.

Business Dictionary, 2019. Business Dictionary. [Online] Available at: http://www.businessdictionary.com [Accessed 2019].

Datta, S., 2010. Celebrity Endorsement in India- Emerging Trends and Challenges. Journal of marketing and Communication, April.

Edrogan, B. Z., 1999. Celebrity endorsement: A literature review. Journal of Marketing Management, pp. 291-314.

Freebase, 2019. definition.net. [Online] [Accessed 2019].

Glen, S., 2015. Statistics How To. [Online] Available at: https://www.statisticshowto.datasciencec entral.com

Hair, J. F., Black, W. C., Babin, B. J. & Anderson, R. E., 2009. Multivariate Data Analysis. Issue 7th Edition.





Hovland, C. J. L. K. H., 1951. The Influence of Source Credibility on communication Effectiveness. Public Opinion Quartley, pp. 635-650.

Hutcheson, G. D. & Sofroniou, N., 1999. An Introduction to Generalized Linear Models. The Multivariate Social Scientist.

Kelman, H. C., 1961. Process of Opinion Change. Public Opinion Quartely, p. 63.

Kim, J. O. & Mueller, C. W., 1978. Factor Analysis: Statistical Methods and Practical Issues. s.l.:SAGE University.

McCracken, G., 1989. Journal of Consumer Research, pp. 310-321.

McCracken, G., 1989. journal of consumer research. [Online] [Accessed 2019].

McGuire, W., 1985. Handbook of Social Psychology. In: s.l.:s.n., pp. 233-346.

Mishra, P., Pandey, C. M. & Keshri, A., 2019. Descriptive Statistics and Normality Tests for Statistical Data. Annals of Cardiac Anaesthesia, pp. 67-72.

Papantoniou, L., 2011. CX Insights. [Online] [Accessed 2019].

Peppercreative, 2015. Performance in People. [Online].

QuestionPro, 2019. QuestionPro. [Online].

Said, N. P. & Napi, W. N. W., 2015. Celebrity and Non-celebrity Endorsement Effectiveness on Consumers' Attitude Towards Advertisement. International Academic Research Journal of Business and Technology, pp. 51-57.

Sanders, T., 2018. timsanders.com. [Online] Available at: http://timsanders.com [Accessed 2019].

Saunders, M., Lewis, P. & Thornhill, A., 2012. Research Methods for Business Students.

S. Shree, V., Pugazhenthi, R. & Chandrasekaran, Statistical M., 2017. Investigation the of Performance Evaluation in Manufacturing Environment. International Journal of Pure and Applied Mathematics, Volume 114, pp. 225-235.

Singh, R. P., 2018. Exploring the influence of celebrity on brand attitude, advertisement attitude. Global business review, pp. 494-509.

Spacey, J., 2018. Simplicable.com. [Online] [Accessed 2019].

Sridhar, J., 2018. Makeuseof.com. [Online].

Statistics Solutions, 2019. Statistics Solutions. [Online].

Taherdoost, H., 2016. Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. International Journal of Academic Research in Management, Volume 5, pp. 18-27.

WARC, 2019. WARC best practice. [Online]. XLSTAT, 2019. Addinsoft. [Online].

Zipporah, M. M., 2014. The Effects of Celebrity Endorsement in Advertisements. International Journal of Academic Research in Economics and Management Science, pp. 178-188.

### Acknowledgement

We would like to express our sincere gratitude to our supervisor, Mr. MMLC Gunatilake, for always finding the time to provide guidance and advice during the research study period. The constructive criticisms and corporative suggestions provided by him continuously is the most prominent fact behind the ultimate success and timely completion of this research study. The ten month of supervising gave us the immense knowledge of the subject. Further we would express a sincere thank you to all the academic and non-academic staff of the department of management and





finance who have enriched our subject knowledge and personality throughout these months. A very special thanks go to those who helped us in data analysis and all the respondents those who spent their precious time in data collection.

# **Author Biographies**



Lahiru Gunathilake,
Senior Lecturer-Grade
II, Department of
Management and
Finance, Faculty of
Management, Social
Sciences and

Humanities, General Sir John Kotelawala Defence University.



Chathumini Munasinghe,
Undergraduate,
Department of
Management and Finance,
Faculty of Management,

Social Sciences and Humanities, General Sir John Kotelawala Defence University.



Charuka Gunaratne,
Undergraduate,
Department of
Management and Finance,
Faculty of Management,
Social Sciences and
Humanities, General Sir

John Kotelawala Defence University.



Hasini Chandrasiri,
Undergraduate,
Department of
Management and
Finance, Faculty of
Management, Social

Sciences and Humanities, General Sir John Kotelawala Defence University.

Paper ID: 102

# A Study on Women's Empowerment in Aviation Industry in Sri Lanka

Sahana Vithanagama<sup>1#</sup> and RMNT Sirisoma<sup>2</sup>

<sup>1</sup>ExpoLanka Headquarters <sup>2</sup>Department of Management and Finance, Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defence University

#sahanavithanagama@gmail.com

Abstract: If a person can hoist his/her spiritual, political, social or economic forte, that is where you find empowerment. Per UN Women, empowering women is what you contribute fully to economic life across all sectors and it is essential to build stronger economies. achieve internationally agreed goals for development and sustainability. To achieve your career goals, your gender should not matter. This paper focuses on women's empowerment in aviation sector. It discusses the factors influencing gender inequality, job quality, leadership, and glass ceiling. Global measures of gender equality show that in Sri Lanka the gender-based inequality is increasing despite the nation's dramatically improving economy and poverty levels and meeting Sustainable Development Goals. To explain this situation in aviation, a sample of 40 was taken to explore how they experienced gender and empowerment and to explore synergies, or lack thereof, with measures of women empowerment. What the data revealed complementary was a relationship between leadership and job quality where it direct to break the glass ceiling. The Glass ceiling referred to the phenomenon where men dominate the upper limit of management. The research clearly shows that in nations like Sri Lanka, women experience 'modernization' and globalization in complex ways that are influenced strongly at workplace especially in transportation sector. The candidates

who participated in the research are personnel in aviation field and their experiences indicated that inequality and empowerment require far deeper analysis. As findings it is exposed that experiences could not be captured by global measures of gender equality and empowerment and suggest women empowering activities such as gender equality, leadership, job quality, job satisfaction, promotions, standards, personal growth, glass ceiling competence have a positive relationship over women in aviation sector. As the efficiency of these functions are increased in relation the aviation sector women's empowerment will also be increased.

**Keywords:** Women, Empowerment, Aviation

#### Introduction

If a person can hoist their spiritual, political, social, or economic forte that is where you find empowerment. It evolves around self-development and sureness. Per UN Women, empowering women is what you contribute fully in economic life across all sectors is essential to build stronger economies, achieve internationally agreed goals for development and sustainability, and improve the quality of life for women, men, families, and communities. The conversation of women's empowerment came to the table in an era where there was "no place for women". (Turnbull,2013) But





today the tables have turned, and we talk about gender equality as a sustainable development goal around the world. For a sustainable development role of the woman is important as a man to every sector.

Transportation is a major sector in a country's economy where we see a lesser number of women reputations, as for the records LABORSTAT data indicate that while women constitute only 1-in-7 transport workers they experienced threequarters of the job losses in transport between 2008 and 2011. When it comes to the Sri Lankan context there is a fifty-seven percent women representation out of twenty-one million populations and out of economically active eight point five million, thirty-three-point four percent are women. Where seventy percent of the labor force constitutes of economically sedentary women. (Affairs, 2015) This gap reflects in the transportation industry as well as per the 2013 Sri Lanka labor force survey.

The fewer women involvement in the economy indicates the need for women empowerment to a sustainable future, where is gender inequality in the field. Legal, social and cultural situation in which sex and/or gender determine different rights and dignity for women and men, which are reflected in their unequal access to or enjoyment of rights, as well as the assumption of stereotyped social and cultural roles is known as gender inequality. (Commission, 2004) Especially in the transportation industry, where mainly we can recognize aviation, port, and land transport. Out of these three sectors, roughly aviation leads to the high participation of women in comparison to other sectors, as pilots, air hostesses, ground staff, and administration. But this is comparatively low to men. To fill the gap there is a need of finding a cause to the low involvement of women in the aviation industry and facilitate women's empowerment to overcome the subjects.

This research covers the aviation industry's women's employability in Sri Lanka. This seeks the ratios of male and female representation in the Aviation industry in administrative, managerial, and executive levels specifically. The importance of identifying the gender representation in the industry will encourage to fill the unseen imbalance and break the glass ceiling. Here the researcher identifies the components where underlay to the above scenario. The research will be mainly based on the aviation industry which is one of the main sectors that contribute to transport internationally and the economy of Sri Lanka.

# Methodology

This study uses an emergent, exploratory, inductive qualitative approach. Because the basis of such an approach is that one does not predetermine or delimit the directions the investigation might take, it is especially important to detail the specific stages that this research will follow in addressing the research question by identifying the influence of women in the aviation sector and the necessity of women's empowerment. To achieve the core objective of the current study conceptual framework is based on the relationship between gender inequality, job quality which is defined as the degree of satisfaction, or the pleasantness associated with the process of working (Coulibaly, 2006), glass ceiling effect, and leadership as independent variables and women's empowerment as the dependent variable. Gender representation in a specific area of work in the workplace as indicated by the gender inequality index and the researcher based its findings from direct answering questionnaire. Laeken indicator analyzed the direct answer questions for the degree





of satisfaction associated with the process of work of female employees. The phenomenon where men dominate the upper limit of management of the aviation sector was indicated by the glass ceiling index through the Likert scale data collection method. The challenging model and confirming model of the alpha female inventory indicators were used to analyze direct answer questions and Likert scale data to identify the matter of equality and the right to have the same opportunity as men in the industry of aviation. Because of the complexities involved in this type of research, the proposal is divided into several broad stages with funding and time estimates provided for each. The research will be secondarily based on secondary data which will be collected through Sri Lankan Aviators. This sample was selected as it is convenient to conduct surveys and gather more specific data with the support and contribution of the selected executives. managers, and employees, which were given a survey form to collect primary data. This method of data collection is inconsistent with the researcher Gary Gereffi (2010) who also collected data using questionnaires. The data will be collected per the Primary method by conducting a survey using questionnaires and interviews as this method helps to get more accurate and up to date data which was also adopted by the researcher Gary Gereffi to conduct his research.

The relevant data and variables will be evaluated through multiple regression analysis, percentage analysis, and coefficient of correlation and factors analysis with the use of SPPS software. Which will be an advantage to minimize data analytical errors. All the data collected by the researcher is analyzed per application or model. In SPSS the data are analyzed using the sum of each profile in the questionnaire except for profile 'A' and

the rest of the profiles consist of three univariate and two bivariate statements in which the response is taken six-point Likert scale. The reliability test is measured using Cronbach's Alpha. Analysis of data relevant to the study begins as soon as the data collection is finalized. The relationship between the independent variable and the dependent variable will be identified and calculated in this process per the significance of the study. This process will be conducted using an analytical tool such as MS Excel, which was also used by Gereffi et al in 2010. Data interpretation and presentation will be done in the means of a textual method, graphical method, and tabular method for a clear and precise declaration.

Data is analyzed descriptive, quantitative, and qualitative methods. Data is univarial, multivariable. bivarial, and The significance is measured using 90% confidence interest. Grounded theory is a qualitative research approach that was originally developed by Glaser and Strauss in the 1960s. The self-defined purpose of grounded theory is to develop a theory about phenomena of interest. For this study, several key analytic strategies were used based on ground theory. The strategic process of Memoing was used for recording the thoughts and ideas of the researcher as they evolve throughout the study. Early in the process, these memos tend to be very open while later they tend to increasingly focus on the core concept. Finally, Integrative diagrams and sessions are used to pull all the detail together, to help make sense of the data concerning the emerging theory of women's empowerment.

#### **Discussion**

The participant-approved close-ended interview transcriptions were analyzed using a modified grounded theory method (Strauss & Corbin, 1998).





When the data is analyzed by the research questions to identify the job quality which is defined as the degree of satisfaction or the pleasantness associated with the process of working of the participants, 41.46% highly satisfied with their job designation while 56.10% satisfied and 2.44%, not in the least satisfied.

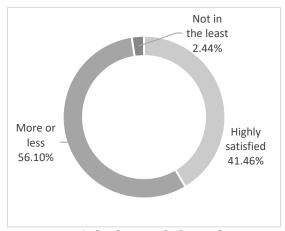


Figure 5 The degree of job satisfaction Source: Research questionnaire

Measuring the relationship with the supervisor shows that 42.5% candidates have a strictly business relationship with their supervisors where 55% has a very good relationship and 2.5%, not a good relationship. 67.5% of the interviewees agree on sometimes they have praised for their work output while 32.5% tells that they are praised for their work. Thus, 38.5% is very confident about the personal progress in the company,35.9% somewhat confident, and 25.6% unsure about their progress. Among the participants, 19.35% very agreeable on the case where women and men are equally treated at the 59.14% Agreeable, 19.35% workplace. somewhat agreeable, 1.08% disagree and, 1.08% very disagreeable on that statement.

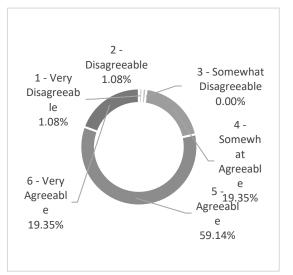


Figure 6 Workplace equality Source: Research questionnaire

67.5% of the candidates think that people should be rewarded based on their performance, regardless of whether they are men or women. 22.5% agree on it but 5% disagree on that statement too. 35% believe that women and men can perform the same work equally well while 2.5% very disagree on that.35% agree and 30% somewhat agree on that. A person who devotes extra time to the job can be a better employee than who does not as per 40% where they somewhat agree on.5% highly disagrees while 20% agrees and 2.5% highly agrees. Per 2.5% an employee who has geographically relocated for the job has a chance to get promoted. But 12.5% highly disagree and 20% agree on that statement.

A woman must perform better than a man to be promoted according to 2.5% but 40% very disagreeable on that statement. 40% think that standards are not higher women than men in the workplace. 50% agree on the viewpoint of a woman is often heard at a meeting. Per 44.7% women are not placed in positions beyond their level of competence. 41% disagreed that women face the barrier of the glass ceiling at the workplace, but 12.9% say she does. Out of 20 characteristics, 8% think making decisions make you a leader,14.4% thinks a





good leader is a good communicator, 8.5% see a person who pulls people together is a good leader and 8% agree that a good leader sets a good example.

93.9% of candidates highly agree that a leader can be taught and learned while 6.1% see that a true leader is born. 51.5% of the candidates consider themself as a leader in the organization despite their job title. Contenders were more likely to seek out leadership opportunities in the workplace. 60.6% of them pursue learning and professional growth opportunities and 54.5% think strategically about their career. The data illustrate that a quality job complements the leadership ability of women. Have a balance personal and professional life leads to break the glass ceiling effect in the workplace. Per department in the organization, they have working schedules flexible accommodate female employees. In the aviation sector management, does have a moderate perception of female's career progression.

### Results

The focus of the conduct of this study is to identify the women's empowerment need in the aviation sector which is not given much focus. The mastering of the above four independent variables will ensure women's empowerment. The positive effect on gender equality, job quality, and leadership will lead to breaking the glass ceiling. These may influence regardless of the department, the number of years worked in the organization, the gender, the designation, and marital status. Therefore, if the foundation of something is laid properly the outcome of it would also be impressive. In this study, the foundation is empowerment women's determines the gender balance in the aviation sector Sri Lanka. As stated in this study if the country wants to regain its lost position in the International markets the organizations must do something extraordinary by seeing into different aspects of the workplace.

Describing what they valued about their careers, most participants said that their work provided a sense of goal fulfillment as well as interpersonal support comraderies. Half to most of the women cited other benefits of their careers, including interpersonal rewards resulting from helping others, career self-confidence, the enjoyment of challenging work, and money/financial independence. Finally, twenty-seven of the participants emphasized their preferences for careers that provided personal fulfillment in contrast to external rewards based on performance. Most of the women in the sample (seventeen participants) spoke about a feeling of accomplishment arising from the fulfillment of long-term or shortterm career goals. The gender imbalance of the sector is showing where a high number of male representations in the industry. The job quality is identified through job satisfaction and confidence in the According workplace. sixteen to participants, the glass ceiling is a barrier to female employees. Leadership can be taught and learned where communication is a basic skill to pursue it.

#### Conclusion

The outcomes of the present study highlight the need for research in several less reputable areas. The theory of life meaning, until now represented by partial constructs in the disparate research literature, deserves attention as a variable in its own right, one that adds an important dimension to the study of career development, and women's career development. Most expressively, the life meaning construct may help in explaining the often-non-linear path of women's life





and work decisions. As seen in this study. Our models of career expansion for women and men must mirror the multiple and interdependent roles/sources of meaning that shape individuals' lives and the nonlinear career paths that result from those multiple obligations. Another variable that may be of significance to the study of women's career choices but that has not been explored much in the literature is autonomy.

Finally, it is critical that career development models explicitly acknowledge the significant contributions of structural and cultural (broadly defined) factors to individuals' particularly women's career decision-making (Fitzgerald & Betz, 1994). These include economic and sociopolitical climate, workplace barriers, and supports e.g., glass ceilings, job quality, and leadership. These recommendations include individual career counseling interventions that explore clients' career questions and decisions in the context of sources of life meaning, that expand individuals' horizons about what careers and life roles might be possible, and that assist clients in emerging strategies for assimilating family and career along their life/career paths.

The outcome of this specific research would have been more accurate and specific if the researcher were able to gain more knowledge through a bigger sample survey. Also, the meeting of all department employees is recommended. It is also recommended to survey every aspect of the aviation sector rather than the managerial side. Further research can be carried out to see the impact on other transport sector's needs of women's empowerment. Also, research on what are the current practices done in the transportation sector to encourage women to enter the industry. Studies can be done to identify other factors that influence women's empowerment broadly. Likewise, many other types of research can be conducted in relevant to women's empowerment.

#### References

Rachel Polster Kelsey Roets, 2013. Indicators of Women's Empowerment in Developing Nations.

Afande, F. O., 2015. Factors Affecting Career Development of Women Employees in the Banking Industry in Kenya.

Affairs, M. o. N. P. &. E., 2015. *Sri Lanka Labour Force Survey*, s.l.: Department of Census and Statistics.

Anju Malhotra, Sidney Ruth Schuler, Carol Boender, 2002. Measuring Women's Empowerment as a Variable in International Development.

Anon., 2010. Strategy for equality between women and men 2010-2015, s.l.: s.n.

Anon., 2010. Women in infrastructure works: Boosting gender equality and rural development!.

Anon., 2012. The current situation of gender equality in Germany – Country Profile , s.l.: s.n.

Biomedicine, I. o. r. i., 2009. BREAKING THE GLASS CEILING, s.l.: s.n.

Bodin, R.-P., 2002. *Quality of women's work and employment Tools for change*, s.l.: s.n.

Bombuwela P. M., De Alwis A. Chamaru, 2013. Effects of Glass Ceiling on Women Career Development in Private Sector Organizations – Case of Sri Lanka.

Bombuwela P. M., D. A. A. C., 2013. Effects of Glass Ceiling on Women Career Development in Private Sector Organizations – Case of Sri Lanka.

Christine Erhel and Mathilde Guergoat-Larivière , 2010. *Job quality and labour market performance* , s.l.: s.n.





Commission, E., 2004. Toolkit on Mainstreaming Gender Equality in EC Development Cooperation, s.l.: s.n.

Coulibaly, B., 2006. Changes in Job Quality and Trends in Labor Hours.

Coulibaly, B., 2006. Changes in Job Quality and Trends in Labor Hours.

Council, S. A. F., 2015. *Gender & Equalityin transport and logistics*, s.l.: s.n.

D. S. W Gunawardane, 2014. *Gender Inequality in Sri Lanka*, s.l.: s.n.

David A Cotter, Joan M hermsen, Seth Ovadia, 2001. Glass ceiling effect.

David Coats with Rohit Lehki, 2014. 'Good Work': Job Quality in a Changing Economy, s.l.: s.n.

David I. Levine Michael W. Toffel, 2010. Quality Management and Job Quality: How the ISO 9001 Standard for Quality Management Systems Affects Employees and Employers, s.l.: s.n.

Desai, R., 2015. Women's Work Counts Feminist Arguments for Human Rights at Work.

Effectiveness, O. o. D., 2014. *Women's leadership: evidence review*, s.l.: s.n.

Engineering, A.-A. W. i., 2005. *Career Development Theory for Women in Engineering*, s.l.: s.n.

Eurofound, 2014. Working Conditions and Job Quality: Comparing Sectors in Europe.

Eurofound, 2014. Working Conditions and Job Quality: Comparing Sectors in Europe, s.l.: s.n.

Geoffrey Tate and Liu Yang, 2009. Female Leadership and Gender Equity: Evidence from Plant Closure, s.l.: s.n.

Hae Young Shin, Seung Cheon Bang, 2013. What are the Top Factors That Prohibit Women From Advancing Into Leadership Positions at the Same Rate as Men?.

Hauff & Kirchner, 2014. Cross-national differences and trends in job quality.

Hensler-McGinnis, N. F., 2004. A QUALITATIVE STUDY OF CHANGES IN CAREER.

Herath, M., 2015. Place of Women in Sri Lankan Society: Measures for Their Empowerment for Development and Good Governance.

International Labour Organization, I. a. I. G., 2014. Female labor force participation in developing countries.

Jamal Abdul Nasir1 , Munir Akhtar2 and Ramsha Salim3 , 2007. Measuring and Modeling the Domestic Empowerment of Rural Women in Pakistan.

Jayawardane, JMSSK , 20115. Impact of Glass Ceiling on the Career Upward Mobility of Women in a Selected Large Scale Telecommunication Company in Sri Lanka.

Keenawinna, KAST and Sajeevanie, TL, 2015. Impact of Glass Ceiling on Career Development of Women: A Study of Women Branch Managers in State Owned Commercial Banks in Sri Lanka.

Kirai MN\*, Margaret Kobia, 2012. Effects of Social Cultural Beliefs on Women Career Progression in Kenya's Civil Service, s.l.: s.n.

Knörr, H., 2005. Factors that Contribute to Women's Career Development in Organizations: A Review of the Literature.

Lahti, E., 2013. WOMEN AND LEADERSHIP. Female leaders' reflections on their career development and leadership.

Lahti, E., 2013. WOMEN AND LEADERSHIP: FACTORS THAT INFLUENCE WOMEN'S CAREER SUCCESS. s.l.:s.n.

MN, K., 2012. Effects of Social Cultural Beliefs on Women Career Progression in Kenya's Civil Service.





Mohammaden, A. H., 2013. Factors affecting women career choice: comparison between civil engineering and other engineering disciplines, s.l.: s.n.

Myrtle P. Bell, Mary E. McLaughlin, Jennifer M. Sequeira, 2002. Discrimination, Harassment, and the Glass Ceiling: Women Executives as Change Agents.

Nations, D. f. t. A. o. W. D. o. E. a. S. A. U., 2007. WOMEN IN LEADERSHIP ROLES, s.l.: s.n.

Nations, U., 2015. *The World's Women 2015*, s.l.: s.n.

NJIRU, F., 2013. FACTORS AFFECTING CAREER PROGRESSION OF WOMEN IN THE.

NJIRU, F., 2013. FACTORS AFFECTING CAREER PROGRESSION OF WOMEN IN THE.

Paul A. Grout, In–Uck Park and Silvia Sonderegger , 2007. THE CENTRE FOR MARKET AND PUBLIC ORGANISATIO.

Posholi, M. R., 2013. An examination of factors affecting career advancement of women into senior positions in selected parastatals in Lesotho.

program, l. d., 2008. Leadership Can Be Learned, But How Is It Measured?.

Project, F. G. N., 2011. An Overview of Job Quality and Discretionary Economic Development Subsidies in New York City, s.l.: s.n.

Rakhee Goyal Alexandra Pittman Anna Workman, 2010. Monitoring and Evaluating Leadership Programs.

Ranjula Bali Swain and Fan Yang Wallentin, 2008. *Economic or Non-Economic Factors – What Empowers Women?*, s.l.: s.n.

Rose Mary Cordova-Wentling , Steven P. Thomas, 2006. *The Career Development of Women in Executive Level Positions in Information Technology*, s.l.: s.n.

Schwerpunktes, D. d., 2014. Cross-national differences and trends in job quality.

Singh, P., 2012. Scope and Limits of Women's Empowerment in Sri Lanka, s.l.: s.n.

Statistics, D. o. C. a., 2015. *Sri Lanka labour force survey annual report 2015*, s.l.: Ministry of National Policies & Economic Affairs.

Svenn-Åge Dahl ,Torstein Nesheim and Karen M. Olsen , 2009. Quality of work – concept and measurement.

Svenn-Åge Dahl , 2009. *Quality of work – concept and measurement* , s.l.: s.n.

Thomas, S. P., 2006. The Career Development of Women in Executive Level Positions in Information Technology.

Turnbull, P. P., 2013. Promoting the employment women in the transport sector – obstacles and policy options.

Turnbul, P., 2013. Promoting the employment of women in the transport sector - Obstacles and policy options, s.l.: s.n.

Ward, R., 2010. *Defining the Alpha female.* s.l.:s.n.

Williams, J., 2005. Measuring Gender and Women's Empowerment Using Confirmatory Factor Analysis.

Williams, J., 2005. Measuring Gender and Women's Empowerment Using Confirmatory Factor Analysis.

World, W. o., 2014. *Companion to the World Development Report on Jobs*, s.l.: s.n.

# Acknowledgement

First and foremost, I would like to dedicate my acknowledgment of gratitude towards the significant advisor Dr. Namali Sirisoma. Also, to my University General Sir John Kotelawala Defence University, Faculty of Management, Social Sciences, and Humanities, Department of Management and finance. This research paper is made





possible through the help and support of everyone, including parents, teachers,

family, friends, and in essence, all sentient beings.

Paper ID: 104

# State Legitimacy and the Criteria for Statehood

LCdr G Duminda Dayananda#

Sri Lanka Navy

#dumindu.finest@gmail.com

Defining a 'State' and the **Abstract:** criterion for 'Statehood' was found to be ambiguous due to legitimacy issues. State as a subject of international law is enabled with certain rights and duties obliged to perform. While the political relevance of the recognition of states is beyond doubt, the rules of law which apply to this aspect remain uncertain. The establishment of the modern state system in the world roots back to the Westphalian treaties. Montevideo Convention of 1933, initially identified qualifications for a state and subsequently accepted by many states, regional and international institutes with codification. Declaratory and Constitutive theories on the criterion for statehood debated on relevance of 'international recognition' over the other factual qualifications of population, territory, government and the capacity to enter into relations with other States. Admission as a member to the UNO recognizes a new state as a part of the globally organized community by way of co-optation. The globalization and related changes along with humanitarian considerations have created various types of status for states. International recognition for a state expressed through diplomatic relations and the influence of UNSC is found to be prominent aspects over the other domestic settings for statehood except the 'effective control' over its territory. This paper is meant to clarify ambiguities on the legitimacy of a state and the criteria for statehood with reference to sources of international law cases and secondary data analysis methods.

Keywords: State, Statehood, Recognition

# Introduction

"There are only very few branches of international law which are of greater, or more persistent, interest and significance for the law of nations than the question of Recognition of States... Yet there is probably no other subject in the field of international relations in which law and politics appear to be more closely interwoven."

### Hersch Lauterpacht

When looking at the map of the world, it appears as if almost the whole world is neatly divided into separate parts, with each part representing a defined territorial entity, known as a State. Three different waves that took a role in the establishment of more than 200 new states. The first wave was the First World War which brought the collapse of the Ottoman Empire; the second was the Second World War which put an end to the Europe's overseas sovereignty; and the third wave was the expiration of the Cold War era which ended up with the collapse of USSR and the Eastern Bloc countries. As a result, of these 3 waves, many of the new states existed today have emerged with independence breaking away from ancient system of monarchs and empires (Orman, 2016). But a closer examination of the present status of states reveals that the concept of statehood is shrouded in many ambiguities. Is that the Palestine, Taiwan, Hong Kong and Tibet are states? If not, what are those? What is a Nation and the Nation State? What is the criteria of statehood? What are the rights





and duties of a State? What is the status of Libya, Yemen and Syria at present? These questions will not be precisely answered by the majority due to the level of understanding and the complexity of those terms.

Primarily, it is important to define, differentiate and understand the general meanings of different terms related to a state and the statehood.

- 1) A state: State is a territory with its own institutions and populations (Rosenberg, 2020).
- 2) A sovereign state: Sovereign state is a state with its own institutions and a permanent population, territory and government. It must also have the right and capacity to enter in to treaties and agreements with other states (Rosenberg, 2020).
- 3) A nation: A Nation is a large group of people who inhabit a specific territory and are connected by history, culture, or another commonality. Nations that hold territory but are not sovereign states include: The Indian Nations of the United States, Bosnia, Catalonia (in northern Spain), Quebec, Corsica, Sicily and Tibet. In addition, some nations govern no territory at all. Sindhi, Kurds, Yoruba, Rohingya, and Igbo people share histories, cultures, and languages but have no separate territory (Rosenberg, 2020).
- 5) A Country: A country can be used to mean the same thing as the state, sovereign state, or nation-state but not officially used due to vagueness. A country also use to refer a region or cultural area that has no governmental status. Examples include 'Wine Country' which is used to mention the grape-growing area of northern California (Rosenberg, 2020).

#### **CONCEPT OF STATE**

# A. Westphalian System and the Nation State

Significant identification for a state was established days back to the Peace Treaty of Westphalia, signed in 1648, which ended the 30 years of religious wars in Europe; with the concept of 'nation-state'. This concept was and is associated with the rise of the modern Westphalian system of states in the world. This system is based on the principle of international law that each state has sovereignty over its territory and domestic affairs, to the exclusion of all external powers, on the principle of noninterference in another country's domestic affairs, and that each state no matter how large or small is equal in international law (UKEssays, 2018).

*A nation-state:* Nation state is a cultural group (a nation) and that is also a state. It may be a sovereign state too.

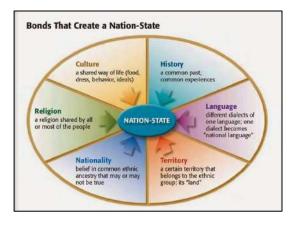


Figure 1. Creation of a Nation- state (Source: slideplayer.com)

The narrow definition of nation state presumes the existence of the "one nation, one state" model. Consequently, less than 10% of states in the world meet this criteria today, due to the presence of minorities. According to a wider working definition, a nation-state is a type of state that conjoins the political entity of a state to the cultural entity of a nation, from which it aims to derive its political legitimacy to rule and





potentially its status as a sovereign state. The concept of a nation-state can be compared and contrasted with that of the multinational state, city-state, empire, confederation, and any other state formations; key distinction being the identification of people with a polity in the nation-state (Watts, 2020). The European colonization of Asia and Africa in the 19th century and two global wars in the 20th century dramatically undermined the principles established in Westphalia pertinent to nation state.

Max Weber defined the state as the monopoly of the legitimate use of force under three characteristics. Accordingly, there is only one government in a state (there is a monopoly in the provision of public governance), the state governs unconditionally, which means that it coerces its citizens into behaving in certain ways and the third characteristic is, the use of coercive force has to be legitimate, which means that it has to be either legal or accepted in some way by the citizens (Orman, 2016).

In the modern day context the term 'Failed State' came into discussion with the evolvement of some states who have failed to preform duties and responsibilities of a state in various ways. Key aspects of failed state when summarizing the definitions developed by scholars are; failed states are tense, deeply conflicted, dangerous, and bitterly contested by warring factions, cannot or will not safeguard minimal civil conditions, can be defined in terms of their demise of the practical operation of for governmental functions an internationally recognized state, could be expanded if one were to include states facing serious internal problems that threaten their continued coherence or significant internal challenges to their political order, failure can be also based on cultural indicators such as the restrictions

on the free flow of information, the subjugation of women, the inability to accept responsibility for individual or collective failure, the extended family or clan as the basic unit of social organization, the domination by a restrictive religion, the low valuation of education, and the low prestige assigned to work (Orman, 2016). There are various of failed states have identified in the world today with examples as follows.

Failed States	Failed States Representations	
Rogue States	North Korea, Cuba, Iraq, Iran and Libya	
Weak States	Scnegal, Honduras, Burma, Zimbabwe, Mozambique, Haiti, Sudan, East Timor	
Non-States	All failed states at risk	
Phantom Mirage States	Zaire, Democratic	Political legal approach
raunom surage situes	Republic of Congo, DRC	
Anemic Sates	Haiti	
Captured States	Rwanda	
Aborted States	Angola, Mozambique	
Fragile States	Somelia, Sudan, Afghanistan	
Failing States	Ethiopia, Georgia and Zaire	II a d Alboria
Collapsed States	Angola, Burundi, Somalia	Historical Developmenta approach
Quasi-states	Pakistan, Yemen. Kenya, the Philippines, Guinea, Indonesia.	
Monopole States	Congo, Bosma and Herzegoviru	Sociological Approach
Anarchic States	Somalia, Liberia	Sociological Approach

Figure 2. Various versions of failed sates (Orman, 2016)

#### B. Fundamental Rights of a State

The formulation of a list of the so-called fundamental or basic rights and duties of a State has been a persistent preoccupation of international conferences and bodies. The Montevideo Convention of 1933 on the Rights and Duties of States was initially attempted for such and subsequently followed by the adoption of Resolution 2625 of 1970 in the General Assembly of the United Nations (UNGA) entitled the 'Declaration on Principles of International Law Concerning Friendly Relations and Cooperation Among States'. Accordingly, States are entitled to enjoy certain fundamental rights and bound by certain duties under International Law (General Assembly, 1970).





- 1) The Right of Independence: Independence as defined by under the Rights and Duties of States is the capacity of a State to provide for its own well-being and development, free from the domination of other states. The right of independence in International Law includes a number of rights, such as, the right of territorial integrity, and the right to have an exclusive control over own domestic affairs.
- *2) The Right of Sovereignty:* Sovereignty twofold meaning. Primarily, sovereignty means that a State has the supreme undivided authority over its territory which is known as territorial sovereignty. Secondly, sovereignty means the capacity of a State to enter into relations with other States which is connected with the concept 'International personality'. These rights includes; sending and receiving diplomats, engaging in treaty making, and the enjoyment of certain immunities and privileges from the jurisdiction of other States. Today, state sovereignty is not seems absolute and there are limits due to the emergence of powerful national States. A State has subjected its sovereign powers to several limitations by virtue of treaties or decisions of international organizations of which it is a member, or by virtue of its consent.
- 3) The Right of Territorial Jurisdiction: The Right of Territorial Jurisdiction is derived from the right of sovereignty. This right entitles a State to have the absolute and exclusive authority over all persons, property and events within the limits of its national territory. This authority implies jurisdiction of the State to enact the law, to enforce the law and to adjudicate persons and events within its territorial land, its internal and territorial water, and national air space.

- 4) The Right of Sovereign Equality:
   Sovereign equality means that all states have equal rights and duties, have the same juridical capacities and functions, and are equal members of the international community, notwithstanding differences of an economic, social, political or other nature. Sovereign equality is mentioned in the Charter of the United Nations as the principle on which this Organization is based.
- *5) The Right of Self-Defence:* The right of self-defense to which a state is entitled is recognized by Customary International Law as well as Article 51 of the Charter of the United Nations. However, this right cannot be exercised by a State unless an armed attack occurs against it and or until the UN Security Council has taken the measures necessary to maintain international peace and security. invoking this right, the state must comply with the requirements of Customary International Law, which are the use of peaceful procedures if they are available. Due consideration for the 'Necessity' and 'Proportionality' when taking actions is also a must (General Assembly, 1970).

# C. Fundamental Duties of a State

In correlation to the rights of the states mentioned in above UNGA's resolution 2625 of 1970, there are duties binding the states. Non-compliance of a state with its duties constitutes a violation of International Law (General Assembly, 1970).

1) The Duty to Refrain from the Threat or Use of Force: A State is under a duty to refrain in its international relations from the threat or use of force against the territorial integrity or political independence of any State. This duty includes within its scope certain recognized duties, such as, the duty to refrain from propaganda for wars and





aggression, the duty to refrain from organizing or encouraging the organization of irregular forces or armed bands for incursion into the territory of another state, the duty to refrain from organizing, assisting or participating in acts of civil strife or terrorist act in another State and the duty to refrain from forcible action which derives peoples from their rights to self-determination, freedom independence. However, the use of force is accepted and considered lawful under International Law only if it is exercised in case of self-defense and in accordance with the provisions of the Charter of the United Nations.

- 2) The Duty to Settle International Disputes by Peaceful Means: A State is under a duty to settle its international disputes with other States by peaceful means in such a manner that international peace, security, and justice are not endangered. Charter of the United Nations, in Chapter 6, provided the machinery for the fulfillment of this duty by the States. Accordingly, States must seek a just settlement of its international dispute by any of the peaceful means stated in the Charter or by any peaceful means agreed upon by them. In case of their failure to reach a peaceful settlement by themselves, they are under a duty to comply with the actions taken by the United Nations.
- 3) The Duty not to Intervene in the Affairs of Other States: A State is under a duty not to intervene, directly or indirectly, for whatever reason, in the internal or external affairs of any other State. It constitutes a violation of International Law when in any use, encourage the use or threat to use of military, economic, political or any other form of intervention against a state or against its political, economic and cultural elements.

- 4) The Duty to Co-Operate with One Another: A State is under a duty to co-operate with other States, irrespective of the differences in their political, economic and social systems, in various spheres of international relations, in accordance with the Charter of the United Nations.
- 5) The Duty of a State to Fulfill Its Obligations in Good Faith: A State is under a duty to fulfill in good faith the obligations assumed by it under the Charter of the United Nations and the International Law, including international treaties. The concept of good faith implies that a State should perform its assumed obligations honestly, without malice and defraud. and without seeking unconscionable (General advantage Assembly, 1970).

# D. Qualities of a Sovereign State

A sovereign state, sometimes called an independent state has following qualities:

- 1. Space or territory that has internationally recognized boundaries.
- 2. People who live there on an ongoing basis.
- 3. Regulations governing foreign and domestic trade.
- 4. The ability to issue legal tender that is recognized across boundaries.
- 5. An internationally recognized government that provides public services, security and police power and has the right to make treaties, wage war, and take other actions on behalf of its people.
- 6. Sovereignty; no other state should have power over the country's territory (Rosenberg, 2020).

#### *E.* Non-Sovereign States and Entities

Many entities have geographical and cultural significance and many of the qualities of a sovereign state, but are not independent sovereign states. These include territories, non-sovereign states,



and nations. Many entities have most of the qualities of sovereign states but are officially considered to be non-sovereign. Many have their own histories, and some even have their own languages. Examples include: Hong Kong, Bermuda, Greenland, Puerto Rico and non-sovereign parts of the United Kingdom (Northern Ireland, Wales, Scotland, and England). The word state is also used to refer to geographic sections of sovereign states that have their own governments but are subject to a larger federal government. The 50 United States non-sovereign states in USA (Rosenberg, 2020).

#### *F.* State Sovereignty and the Diplomacy

The Vienna Convention on Diplomatic Relations, which was agreed in 1961 and went into force in 1964, sets out how sovereign states can establish, maintain and, if need be, terminate diplomatic relations. It defines who is a diplomat and thus entitled to special privileges and immunities. These include immunity from civil and criminal prosecution in the host state and exemption from all dues and taxes (Ottawa, 2019). One best latest example for this diplomatic sovereignty is the interrogating of Michael Kovrig, who was on leave from the Canadian foreign ministry and working for an international organization when China detained him in December 2018. In questioning Mr Kovrig, the Canadian Prime Minister says that, China did not respect "the principles of diplomatic immunity" referring to the Vienna Convention. Mr Kovrig's immunity under the convention, which includes exemption from arrest or detention, said to be ended when he took a leave of absence from the government to work for the International Crisis Group. Yet it partially remains as it covers activities performed while he is still a diplomat. This is what led to Canadian accusation. China points to a different part of the convention, which stipulates that diplomats should not interfere in the internal affairs of the host country. This Diplomatic spat can be brought to the International Court of Justice, which the US did in 1979 when Iran held more than 50 Americans hostage for more than a year (Ottawa, 2019).

#### **STATEHOOD**

The Statehood plays an important role in the International Law when empowering states with 'Legal Personality' which has the authority to file cases at the International Criminal Court (ICC) and International Court of Justice (ICJ) and to be accepted for entering into International agreements. The modern state being a political form that has been singularly successful featured with mechanisms of;

- 1) Monopoly: control of the means of violence,
- 2) Territoriality,
- 3) Sovereignty
- 4) Constitutionality: the quality of being in accordance with a political constitution
- 5) Impersonal power: Not influenced by or involving personal feelings,
- 6) Public bureaucracy
- 7) Authority/legitimacy
- 8) Citizenship
- 9) Taxation (Pierson, 2004)

# A. Legal Status of a State - Montevideo Convention

In general, a subject of law is an entity to whom the law provides rights and assigns obligations. The requirements to be met for an entity to be considered a subject of International Law are the ability to have rights and obligations under International Law, the capacity to enter into relations with other subjects and to stand before international courts. States are, in this sense, clearly subjects of International Law



since they fulfill all of these requirements. A State is the primary legal subject or person in International Law.

There is no exact definition of the term "State" in International Law. However, the essential criteria for statehood are well settled. Article 1 of the Montevideo Convention on the Rights and Duties of States of 1933, indicates that, the state as a person of international law should possess the following qualifications:

- 1. A permanent population,
- 2. A defined territory,
- 3. Effective Government
- 4. The capacity to entire into relations with other States.

The Convention, and the law at that time, viewed States as a kind of legal entity operating and existing under its own authority and power. Article 3 of this "The political convention provides, existence of the state is independent of recognition by the other states. Even before recognition, the state has the right to defend its integrity and independence, to provide for its conservation and prosperity, and consequently to organize itself as it sees fit, to legislate upon its interests, administer its services, and to define the jurisdiction and competence of its courts". Article 6 of the same convention states that, "The recognition of a state merely signifies that the state which recognizes it accepts the personality of the other with all the rights and duties determined international law. Recognition is unconditional and irrevocable" (Davids, 2012).

There is a debate taking place in the international legal world over whether or not satisfying the Montevideo criteria alone is enough to be a State or if recognition is also necessary. The two main doctrinal views in the present day world for this case are known as the declaratory and

constitutive theories of Statehood (Davids, 2012).

# 1) The Declarative theory:

The Declarative theory of statehood, defines a state as a person in international law if it meets the criteria mentioned in the Montevideo convention. It however fails to adequately describe the creation of "States" in international practice, as there are entities in the world that 'de facto' satisfy the criteria of the Montevideo convention but do not benefit from the rights that come with such a status due to lack of recognition. One example is the nominally Moldovan territory of 'Transnistria'. The new practice of recognition of the recently established states of Eastern Europe and the former Soviet Union since 1991 is said have overridden the traditional principles of public International law recognition. regarding Indeed, predominant declarative theory cannot explain this new practice convincingly (Hillgruber, 1998).

2) Constitutive theory: Constitutive theory of statehood, defines a state as a person in international law, only if, it is recognized as sovereign by other states. This theory also have lapses as it fails to explain why certain entities that have received numerous recognitions yet, are not considered as States and also raises the question of how many recognitions are necessary in order for an entity to become a State. One clear example of this problem is the 'State of Palestine'. As of July 2011, the Palestinian Liberation Organization (PLO) received up to 122 recognitions of its 'Statehood'. That means around 63%, of the United Nations recognizes Palestine as a State. However, it could not obtain the full membership. The regulatory function of states in the world is to administer a portion of the planet where people live. If they cannot serve that function due to lack



of authority over a territory or people, they will lose the statehood. In the Palestine; neither PLO nor Hamas in the Gaza strip have the effective control over the territory they claim. So, it seems that "Statehood" is the product of a balance between the Montevideo criteria and the recognition. (Davids, 2012). In case of Taiwan, an island 180km off the coast of China; Its democratically elected leaders say they run a country called the Republic of China. Yet, to the Communist government in Beijing the island is the 'Taiwan Province of China'. International organizations, desperate not to offend either side, struggle to name it at all. Many opt for the deliberately ambiguous "Chinese Taipei", after its capital city. Taiwan is not a member of the WHO. Between 2009 and 2016, when a China-friendly government held power in Taiwan, it attended assembly meetings as an observer. But when the other party is in power, it has been prevented from participating, at China's behest. Though, America and most of the allies have backed its bid to attend WHO assembly, invitation could be extended only if a majority of the WHO's 194 members vote in favour; which is unlikely due most countries will fall in line with China's demand as China is trying to step up pressure on other countries to freeze out Taiwan. Hence, they do not challenge the view of the government in Beijing that it alone represents China, and that China includes Taiwan. In 1971 the UN voted to recognize that government as China's sole representative (H, 2020).

Hence, it is understood that, requirements mentioned in the Montevideo Convention are not exhaustive; other actual requirements including sovereignty, Independence, self-determination and recognition; are considered in correlation.



Figure 3. Statehood of Taiwan (source: The Economist)

# B. Understanding the Requirements for Statehood

It is noteworthy to understand actual meanings of the said requirement for the statehood.

1) A Permanent Population: The existence of a permanent population is naturally required as an initial evidence of the existence of a State. This requirement suggests a stable community. The size of the population, is not relevant since International Law does not specify the minimum number of inhabitants as a requirement of statehood. Nevertheless, an acceptable minimum number of inhabitants is required with regard to self-determination criterion.

2) A Defined Territory: The requirement of a permanent population is intended to be used in association with that of territory. What is required by a defined territory is that there must be a certain portion of land inhabited by a stable community. A defined territory does not suggests that the territory must be fixed and the boundaries be settled since these are not essential to the existence of a State, although in fact all modern States are contained within territorial limits or boundaries. The past practice shows that, what matters is the existence of an effective political authority having control over a particular portion of land. Israel was admitted to the United Nations as a State in spite of disputes over its existence and territorial delineation. The existence of a particular territory over which a political authority operates is



essential for the existence of a State. For this reason, the "State of Palestine" declared in November 1988 at the conference of Algiers was not legally regarded as a valid State since the Palestine Liberation Organization had have no control over any part of the territory it was claiming. The size of the territory of a State and alterations to its extent, whether by increase or decrease, do not of themselves change the identity of that State. A State continues to exist as long as a portion of land is retained (Zadeh, 2012).

3) *A Government:* For stable community to function reasonably effectively, it needs some sort of political organization. It is required that an effective government be created, and this political authority must be strong enough to assert itself throughout the territory of the State without a foreign assistance. The existence of an effective government, with some sort of centralized administrative and legislative organs, assures the internal stability of the State, and of its ability to fulfill its international obligations. However, in modern practice, requirement of an effective government was not regarded as precondition for recognition as an independent State. The State of Croatia and the State of Bosnia and Herzegovina were recognized independent States by the member States of the European Community, and admitted to membership of the United Nations at a time when substantial areas of the territories were outside the control of each government. On the other hand, in the cases of Burundi and Rwanda, the requirement of an organized government was unnecessary or insufficient to support statehood. These States had arisen before government was very well organized, yet, were admitted as States to the membership of the United Nations in 1961. Moreover, a State does not cease to exist when it is

temporarily deprived of an effective government because of civil war or similar upheavals. The long period of de facto partition of Lebanon did not hamper its continuance as a State. The lack of a government in Somalia did not abolish the international personality of the country. Even when all the territory of a State is occupied by the enemy in wartime, it continues to exist as in the cases of the occupation of European States by Germany in the Second World War and the occupation of Germany and Japan by the Allied powers after that war. Nevertheless, the requirement of effective government remains strictly applied in case when part of the population of a State tries to break away to form a new State (Zadeh, 2012).

4) A Capacity to Enter into Relations with Other States: A State must have recognized capacity to maintain external relations with other States and is essential for a sovereign State. Lack of such capacity will avert the entity from being an independent State. Capacity distinguishes States from lesser entities such as members of federation or protectorates, which do not manage their own foreign affairs, and are not recognized by other States as full-members of the international community.

# C. Supplementary Requirements of Statehood

Independence, sovereignty, self-determination and recognition are other requirements of statehood identified in recent times, used either as separate criteria or in association with the above major requirements.

1) The concept of independence: means that the State is subject to no other State. Many jurists stress on independence as the decisive criterion of statehood. Some consider independence as the essence of a capacity to enter into relations with other States, in association with the requirement



of effective government with own executive and other organs, and conducts its foreign relations through its own organs.

2) The concept of sovereignty: This denotes, internally, the supreme undivided authority possessed by a State to enact and enforce its law with respect to all persons, property and events within its borders, and externally, the capacity of a State to enter into relations with other States, such as sending and receiving diplomats and engaging in treaty making, and the enjoyment of certain immunities and privileges from the jurisdiction of other States. Sovereignty, in this regard, is the indication of the international personality of an entity seeking a status of a State in the community of nations. Lack of sovereignty suggests that an entity is not independent and has no international legal personality.

3) Principle of self-determination: the practice of States, the principle of selfdetermination has been used as a criterion modifying the requirement of effective government. The evolution of the right of self-determination has affected the level of effectiveness a concerned government required to exercise in order to fulfill such requirement of statehood. Moreover, the principle of self-determination has been used as an additional criterion of statehood in certain circumstances, such as, in the case of Rhodesia when it unilaterally declared independence on November 11, 1965, and in the cases of the successor States of the former Yugoslavia. This additional criterion may be required in the future in cases of certain national minorities seeking independence and the creation of their States (Hillgruber, 1998).

#### D. UN Recognition of States

Recognition of a new state is an act that confers the legal status of a entity under International law. In this sense, a (new) state is not born, but chosen as a subject of international law. When the new state has been recognized by certain amount of states, it become a subject of international law, only with respect to the existing states recognizing it. On admission as a member of the United Nations, the new state then becomes part of the globally organized community of states by way of co-optation. After the decision has been taken to admit a state to the United Nations, its statehood cannot be called into question with the effect of contesting the validity of mutual rights and obligations arising from comembership (Hillgruber, 1998).

United Nations Organization is the world's largest International Governmental Organization (IGO) which was established aftermath of WWII. As of 2020, 193 out of 195 sovereign states in the world are members of the United Nations (UN) whilst the Palestine and the Holy See has only the Observer status (Non-Voting membership). Taiwan and Kosovo, are recognized by most but not all members of the UN and specifically by China Russia respectively (Rosenberg, 2020).

The criteria for admission of new members to the UN are set out in Chapter II, Article 4 of the UN Charter. Membership in the UN is open to all peace-loving states which accept the obligations contained in the present Charter whilst accepting its judgements. Any such admission will be effected by a decision of the General Assembly upon the recommendation of the Security Council. The Security Council's recommendation requires affirmative votes from at least 9 of the 15 members, with none of the 5 permanent members using their 'Veto' power. This recommendation must then be approved in the General Assembly by a two-thirds majority vote. The 'Veto' power rested with the five permanent members is one of the main barrier for new states to be recognized and to practice its sovereign



rights at present. (Hillgruber, 1998). The issue with the status of Taiwan and the Hong Kong is due to the negative influence of China and the status of Palestine is affected by the USA's support to Israel being permanent members of the Security Council.

#### Conclusion

The definition of the State and the Statehood itself considered complex and changed with the time since its first appearance through the peace treaty of Westphalia in 1648. Yet, there are accepted criteria for consideration through Montevideo convention, UN Charter and the Declaration on **Principles** International Law Concerning Friendly Relations and Cooperation Among States agreed on 1970.

A permanent population, A defined territory, Effective Government and the capacity to entire into relations with other States are identifies as major requirements for statehood. Independence, sovereignty, self-determination and recognition are the other requirements used either as separate criteria or in association with major requirements. Criteria for addition of new members to UN being the largest International Governmental Organization and the recent examples are well suited to understand the present practice State recognition in the world.

#### References

Davids, J. W., 2012. What Makes a State?. [Online] Available at: <a href="https://thenewinternationallaw.wordpress.com/2012/05/02/what-makes-a-state/">https://thenewinternationallaw.wordpress.com/2012/05/02/what-makes-a-state/</a> [Accessed May 2020].

Rosenberg, M., 2020. *Differences Between a Country, State, and Nation.* [Online] Available at: <a href="https://www.thoughtco.com/country-">https://www.thoughtco.com/country-</a>

# state-and-nation-1433559

[Accessed May 2020].

D'Amato, D. S., 2018. *Understanding the Modern State*. [Online]
Available at: https://www.libertarianism.org/columns/understanding-modern-state
[Accessed May 2020].

Pierson, C., 2004. *The Modern State.* New York(NY): Routledge.

Hillgruber, C., 1998. The Admission of New States to the International Community. *European Journal of International Law,* Volume 9, pp. 491-509.

Ottawa, M. D., 2019. What is the Vienna Convention?. [Online]
Available at: https://www.economist.com/the-economist-explains/2019/01/23/what-is-the-vienna-convention
[Accessed June 2020].

H, A., 2020. Why Taiwan is not recognised on the international stage. [Online] Available at: <a href="https://www.economist.com/the-economist-explains/2020/05/17/why-taiwan-is-not-recognised-on-the-international-stage">https://www.economist.com/the-economist-explains/2020/05/17/why-taiwan-is-not-recognised-on-the-international-stage</a> [Accessed Jnue 2020].

General Assembly, U. N., 1970. Declaration on Priciples of International Law Concerining Friendly Relations and Cooperation Among States in Accordance with the Charter of the United Nations. New York, United Nations Organization.

Hillgruber, C., 1998. The Admission of New States to the International Community. *European Journal of International Law*, 01 August, 9(3), pp. 491-509.

Zadeh, A. Z., 2012. International Law and the Criteria for Statehood: The Sustainability of the Declaratory and Constitutive Theories as the Method for



Assessing the Creation and Continued Existence of States. Tilburg: Tilburg University Faculty of Law Department of International and European Law.

UKEssays, 2018. Principles Of The Westphalian State System Politics Essay. [Online]

Available at: <a href="https://www.ukessays.com/essays/politics/principles-of-the-westphalian-state-system-politics-essay.php?vref=1">https://www.ukessays.com/essays/politics/principles-of-the-westphalian-state-system-politics-essay.php?vref=1</a>

Watts, A., 2020. *State/Nation-State.* s.l.:Princeton University.

Orman, T. F., 2016. An Analysis of the Notion of a Failed State. *International Journal of Social Science Studies*, January, 4(1), pp. 77-85.

## Acknowledgement

[Accessed June 2020].

Apart from the efforts of own, the success of any research depends largely on the encouragement and guidelines of many others. I take this opportunity to express my gratitude to Sri Lanka Navy and especially the Rapid Action Boats Squadron for moulding me this status. Further, I cannot forget my loving wife and daughter for their level of patience.

# **Author Biography**



The author had followed Diploma in International Relations from Bandaranayake Centre for International

Studies (BCIS) in year 2014 and presently following (last phase) a Master of International Relations programme from the University of Colombo. Further, the author was awarded with the Trophy for the Best Commandant's Service Paper during the Junior Naval Staff course in the Naval and Maritime Academy, 2016 and also won the first place of the Admiral Clancy Fernando memorial Essay competition 2018.

Paper ID: 158

# Sustainable Competitive Advantage through Disintermediation with Special Reference to Supermarket Chains in Sri Lanka

T A A Gamage, I P R Vidanapathirana and S G S D Karunathilaka

General Sir John Kotelawala Defence University, Rathmalana, Sri Lanka

#avishkagamag@gmail.com

**Abstract:** There has been a significant improvement in the Sri Lankan retail industry over the last ten years. Supermarkets have become increasingly popular, along with other modern retail outlets offering a wide variety of products under one roof. Therefore, the market is becoming highly competitive day by day and it is a common aim of each and every supermarket entity operating in Sri Lanka to increase their profitability mainly by reducing costs and to improve their market share. Disintermediation in supply chain eliminates the position of middlemen between producers and customers, which avoids conventional distribution channels and the business goes direct to the consumers, making the supply chain processes more transparent straightforward while generating many benefits for both the Supermarket chains and to the customers. This study was conducted to explore how the disintermediation is related to obtaining sustainable competitive advantage by supermarket chains in Sri Lanka. Both quantitative and qualitative studies have been done to achieve the research objectives. A questionnaire comprising of relevant questions has been developed and distributed among 103 respondents and also 5 supermarket managers were interviewed in-depth for greater precision. The results of the multivariate analysis found that social impact has the highest influence towards disintermediation on competitive sustainable advantage. Further, disintermediation can be

recommended for supermarkets as an efficient and effective practice to adapt with the modern market conditions, and it has many benefits towards stakeholders in achieving sustainable competitive advantage in the industry.

**Keywords:** Disintermediation, Sustainable Competitive Advantage (SCA), Cost reduction, Value creation, Social impact

#### Introduction

The of supply chain consists manufacturers, wholesalers, distributors customers. Disintermediation and eliminates the position of middlemen between producers and avoids conventional distribution channels with intermediates such as distributors, dealers, brokers or agents. In the case of disintermediation, one step is eliminated, e.g. the manufacturer goes directly to the customer, thereby removing the need for the wholesaler. Simplified, business goes in direct to the consumers, although the elimination of any single point within the supply chain can make the process more transparent and straightforward (Moore, 2001). Companies and also manufacturers can deal directly with consumers or endusers, which is a significant factor in reducing the cost of service to customers. Disintermediation leads to a high market visibility which allows customers to pay less as they deal directly with the supplier, bypassing the entire distributor and the retailer. Additionally in another way consumers can also purchase directly from wholesalers. Supermarket industries



around the globe therefore regarding direct sourcing as one of the best tactics to achieve sustainable competitive advantage (Ritchie & Brindley, 2000). The primary objective of this study is to explore how the disintermediation related to sustainable competitive advantage. The Secondary objectives of this study is to identify which factor influence is most disintermediation, to identify the benefits of disintermediation for the supplier and buyer and to recognize the issues with the disintermediation of supplier in supermarket chain. **Attributes** of disintermediation are as follows,

#### A. Cost Reduction

Cost reduction can be defined as a reduction in the unit cost of goods and services provided by the company, most importantly without sacrificing performance or suitability for the projected use, with the aid of new and improved approaches. Many firms use it in a systematic and preventive manner to reduce the inessential costs of goods produced solely in order to increase the overall profits. There are several intermediaries engaging in supermarket industry all across the supply chain. They create different kinds of costs for their added value. Such costs may be removed or further minimized disintermediation (Stevenson & Spring, 2007).

#### B. Value Creation

Value creation can be defined as an upgrade in overall performance by analyzing each connection or node of the entire food supply chain systematically to see how the overall speed, cost effectiveness and reliability and can best be enhanced. Now a days, supermarkets are introducing goods and services under their own labels as a strategy in value creation. The phrase 'own-label ' brands often referred to as '

personal brands', ' store brands', ' retailer brands ' or ' home brands ' is described as consumer products manufactured by or on behest of distributors and selling under the distributor's own name or trademark via the distributor's own outlet. Removing intermediary parties and direct sourcing practices has an impact on this value Most supermarkets creation. committed to offer its valuable customers quality product at affordable prices through this. Supermarkets can design their goods to have a standard design, plain, clear packaging while ensuring that all cost savings from disintermediation are passed on to the Customer. In the selling of ownlabel brands, supermarket entities has number of advantages such as increase the customer attraction towards their companies while promoting healthy eating and lifestyles which will generate many sales toward their companies (Riera, 2002).

#### C. Social Impact

Nowadays customers and consumers are increasingly concerned about the social and environmental effects of production and consumption. This has led businesses to renew their interest in matters related to reverse logistics, greener supply chains, environmental conservation sustainable supply chains. Greener supply chains and sustainable supply chains are frameworks embraced by many supermarket chains today that reflect the overall environmental footprint of the supply chain on resources and ecological footprints are Greening the supply chain can lead to many benefits, such as saving money by minimizing or reducing waste, while at the same time improving efficiency and competitive advantage (Porter & Linde, 1995). Also Corporate Social Responsibility (CSR) is a well-known concept implemented by supermarket chains which reflects the attitudes and beliefs about the



nature of the relationship between business and society vary from day to day with the relevant issues arising due to the disintermediary practices conducted within the supply chain. Practices like empowering farmers and their families to engage in more cultivation, providing latest technological equipment with proper technological knowledge to improve their cultivation, providing loans at low interest rates for cultivation purposes facilitated by supermarket chains can be identified as current actively engaged CSR practices. In addition to CSR, other values supermarkets can develop includes business ethics, sustainable development, corporate citizenship, responsible entrepreneurship and the triple bottom line etc (Marrewijk, 2003).

#### D. Sustainable Competitive Advantage

A sustainable supply chain approach incorporates the connection between upstream and downstream. Focusing on buyers and sellers, you can see how each will have an impact on the processes and practices of the supply chain. In reducing middlemen, reduced costs are typically the result, supply chain management must concentrate on leveraging the skills, resources and strengths of the companies that make up this strategic network. Supermarket managers have recognized the importance of getting closer to their main customers. So, they can understand the needs and desires of the consumers and what they are actually looking for. The relevant upgrades can then be made to meet the needs of the customer. (Rossetti & Choi, 2008). This reasoning has also been applied downstream, and it is also important to forge close ties with one of the main suppliers. Therefore a supply chain be built approach must after disintermediation by recognizing the elements of the sourcing process, internally and externally generated knowledge flows, new product Management, parallel procurement, partnering arrangements, commodity / component approaches, long-term demand planning, business cooperation and staff creation in order to obtain sustainable competitive advantage (Pepe, Abratt & Dion, 2012).

# Methodology

### E. Research Design

The purpose of this study is to know the impact of disintermediation in supermarket chains. An inductive research approach with a qualitative method has been used to examine the relationship of variables. Researcher has followed mix method. The research was conducted in a longitudinal manner. Research theory and hypothesis are developed and tested according to positivism approach. In this research the target population comprises of the super markets in Colombo metropolitan area. The researchers focus identifying on the impact of disintermediation towards sustainable competitive advantage in the supermarket chain; the target population is identified as super markets managers. Considering the topic of the research, it has been narrowed down to Rathmalana, Kiribathgoda and Maharagama areas. Hence, the sample size consists of 100 Supermarkets. Snowball sampling technique is being used to create a sample which is a non-probability sample. This sampling method is convenience to create strata or layers that are highly representative in the population. Both primary data and secondary data collection tools used in the study. When collecting the primary data, a questionnaire which included only close ended questions is used and in-depth interviews with managers has been conducted. The questionnaire was distributed among the selected sample supermarket area's outlets. When collecting the secondary data related to this



study, previous literature from journal articles, web sites and books has been thoroughly studied and referred.

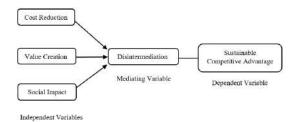


Figure 1 Conceptual Framework Source: Developed by Authors (2020)

## F. Hypotheses of study

H1: Disintermediation mediates the impact of cost reduction towards sustainable competitive advantage.

H2: Disintermediation mediates the impact of value creation towards sustainable competitive advantage.

H3: Disintermediation mediates the impact of social impact towards sustainable competitive advantage.

H4: Disintermediation mediates the impact of cost reduction, value creation and social impact towards sustainable competitive advantage.

## G. Data Analysis Method

The analysis of data is done through multivariate analysis through the SPSS software. Findings of the researchers will be evaluated and analyzed using quantitative and qualitative methods. In this task of analyzing data, correlation and multiple regression measures are calculated by using the collected data. To use the correlation Statistical, represent liner relationship between two variables that is expressed numerical value and relationship of variables. And also, the studies that wish to use Multivariate analysis are focused on the dimensionality of the problem. Such problems are often resolved by the use of alternative models, which are highly accurate approximations of the physics-based approach. Therefore, Multivariate analysis (MVA) was selected to analysis the data.

#### **Results**

Based on the study, the result for social impact is identified as the highest impact to the mediating and the dependent variable. The findings that was interpreted in the fourth chapter shows a linear relationship with a significant value of (p<0.05) and a confidence level of 95%. Therefore, we can conclude that social impact has the highest impact on disintermediation towards sustainable competitive advantage. As per the linearity analysis the R square value which is 0.828 (82%)affects disintermediation and sustainable competitive advantage. Furthermore, the result of the coefficient of the independent variable, mediating variable and the dependent variable has an influence of 0.910, which means it has a strong positive relationship among the variables. Furthermore, when looking at the sobel test, all independent variables were accepted by the mediate variable. As a result, cost reduction has 2.0916, value creation has 1.9643 and social impact has 2.1813 respectively at 95% confidence level. Among them it can be concluded that social impact has a higher influence on disintermediation towards sustainable competitive advantage. Finally, with the use of the data analysis it was proven that the social impact has the highest influence on the disintermediation.

Table 1 Sobel test

Table 1 Sober test							
Variable	P value	Sobel test					
Cost reduction	0.00075	2.09161351					
Value creation	0.00024	1.96436597					
Social impact	0.00086	2.18136396					

Source: Developed by Authors (2020)





When looking at the B values of the coefficient analysis, we can conclude that if the cost reduction variable increases by one unit while all other factors are held then the effect constant, of disintermediation will increase by 0.13 resulting a positive relationship. Likewise, when value creation increases by one unit while the other factors are constant, the effect of disintermediation will decrease by -0.010 resulting a negative relationship. This is due to value generated throughout the supply chain will reduce when there are more intermediary parties involved. Next, the effect of social impact (b=0.918, p=.000) is significant and its coefficient is strongly positive out of other variables, indicating that, greater the social impact, the higher the disintermediation. Thus social impact variable is highly related to disintermediation and functions more as a sustainable proxy for competitive advantage.

Table 2 Coefficient Analysis

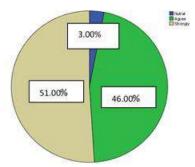
I d	Die Z C	nt Anaiy	313		
			Standa		
	Unsta	ndard	rdized		
	ized		Coeffic		
	Coeffi	cients	ients	Т	Sig.
		Std.			
Model	В	Error	Beta		
(Constant)	1.795	1.040		1.72 6	.088
cost reduction	.013	.062	.012	.205	.838
Value creation	010	.062	009	155	.877
Social impact	.918	.059	.908	15.5 93	.000

Source: Developed by Authors (2020)

Effect of disintermediation= a + 0.013(cost reduction)-0.01(value creation)+0.918(social impact)+ e

Additionally when concerning the in-depth interviews of the research sample, the majority of 51% strongly agreed that supermarket is the best way to satisfy customers as a retailer market, while 46% agreed and 3% remained neutral.

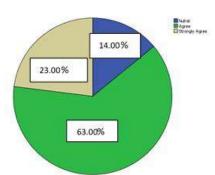
Figure 2: Supermarkets as a mode of customer satisfaction



Source: Developed by Authors (2020)

According to the survey, 63% agree on that the entity is currently reducing suppliers in it's supply chain. Nearly 23% strongly agree and only 14% remain neutral.

Figure 3: Reduction of suppliers in the supply chain

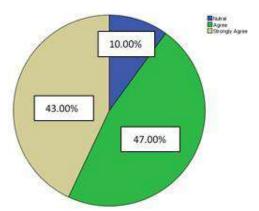


Source: Developed by Authors (2020)

Majority of the respondents (47%) agreed that the company is focused more on producing goods under their own brand name. A considerable proportion of (43%) strongly agreed while a minority of 10% remained neutral.

INTERNATIONAL RESEARCH CONFERENCE 2020

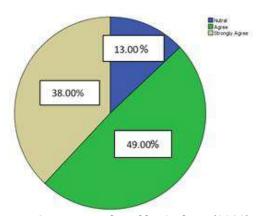
Figure 4: Company produces under its own brand name



Source: Developed by Authors (2020)

According to the survey results, almost half of the respondents (49%) agree on the fact that their company aims to increase quality of goods while reducing suppliers. However, 38% agree on this while only 13% are neutral.

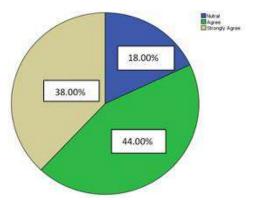
Figure 5: Increase the quality by reducing the suppliers



Source: Developed by Authors (2020)

The majority of respondents (44%) agreed that there is high customer attraction towards the products which is producing under the company's own brand name. 38% of them strongly agreed while the minority of 18% remained neutral.

Figure 6: Customer attraction towards the products under own brand name



Source: Developed by Authors (2020)

#### **Discussion**

Sri Lanka is a developing country which is now highly concerned about social welfare and environmental friendliness. When discussing the hypotheses of this study, it was identified that there is a positive influence of the social impact on disintermediation towards sustainable competitive advantage with regard to supermarket chains in Sri Lanka. Therefore that hypothesis is clearly accepted. The cost reduction and value creation variables are rejected since one party has to bear the cost while the other party enjoys the benefit. Therefore, due to the lack of benefits supermarkets are moving towards the social impact as it is a win-win situation for both the parties which is recommended by this study. Considering the study, it is possible to recommend the supermarket entities to be more focused on social and environmental effects of production and consumption. In order to enhance the Social impacts, activities such as corporate social responsibility (CSR) can be put into practice which will benefit both the society and the entity in many ways. Supermarket chains can embrace frameworks like Greener supply chain and Sustainable supply chain that reflects the overall environmental footprint of the supply chain resources ecological on and





footprints. Greening the supply chain can lead to many benefits, such as saving money by minimizing or reducing waste, while at the same time improving efficiency and achieving competitive advantage (Marrewijk, 2003).

## H. Benefits of Disintermediation

- 1) Speed/ability to deliver in a timely disintermediation, Through manner: supermarket chains may boost their speed and ability to produce in a timely manner through decreasing the intermediary parties involved in the business process and therefore it takes less time for the product or service to reach the final customer or consumer. This can lead to higher sales, earnings, customer loyalty and gain high market share (Yusuf, et al., 2004). Such steps indicate reliability, but quick delivery is not so important unless the organization is highly associated with the reliability of the delivery. Furthermore, supermarket chains that focus on speed can deliver products in a reliable manner as they are promised that they might gain a competitive advantage over others (Hult, et al., 2006).
- 2) Flexibility: Disintermediation helps consumers to meet their needs by ability improving the to deliver personalized goods within a short period of time. Most supermarket chains are offering products / services under their own brand name. Flexibility can be defined as a metric to determine the quality of the supply chain after elimination of intermediaries. There are two cost outcomes within the consistency measures, namely flexibility in orders for extra volumes and flexibility in supplying extra sales points Supermarkets should therefore be flexible enough to meet customer needs and requirements that are always changing with the synchronization of its flexibility and reliability elements which creates value (Aramyan, et al., 2007).

3) Product quality: The main objective of the chain of supermarkets should be to offer high-quality products in a reliable manner. Material quality can be addressed with elements such as quality of the raw material, quality of the product manufactured by the company, period of preservation of the product, continuity in the use of the traceability process, processing and performance of the packaging and distribution conditions for the products of the company etc (Ketchen & Hult, 2007). Not as in other industries when it comes to food, customers are seeking increased food safety, improved quality, trustworthiness and convenience compared to other similar demands from rivals (Chow, et al., 2008). Supermarket chains use a traceability program including any step in the food supply chain to maximize food product safety and it is found very beneficial for controlling quality. Usage of good packaging practices, processing and distribution methods can lead to the safe transport of goods from suppliers to the final consumer without compromising the quality of the products (Wognum, et al., 2011).

#### I. Issues with Disintermediation

It is a complex process to disintermediate a node within the supply chain. The removal of the middle man also means that companies must reproduce functionality of the intermediary's core expertise and replicate the flow of information, the flow of products and the flow of knowledge, as well as the cash flows of that particular node. The most common example of older versions of intermediation and disintermediation is Outsourcing. It is having the expertise, abilities and technologies of an outside company that makes a certain activity cheaper than working on its own (Pinto, 2000a). A more reasonable view on the influence of disintermediation



distribution channels is that it will alter, but not eliminate the distribution channels. The producers need to create that value addition which was satsified by the middleman prior to the disinteremdiation. Consumers are very demanding in added value to most of items before they can purchase and use them. But producers cannot provide this added value as it does not have the resources needed and may not have all the skills needed. This value must be given by the distribution channel, which is here to remain, but not in its current state. There are many problems that can arise directly from the customer itself, such as minimal order size, refunds, inquiries, delivery and all the issues that make up customer service etc (Pinto, 2000b). In order to cope with these new conditions, the business must have careful access and understanding of the causes and effects and be subject to change. It must find new ways to add value to the businesses of its customers through its engineering and design and financial capabilities in a way that its competitors cannot (Nordin, Brozovic & Holmlund, 2013).

# Conclusion

Nowadays, customers and consumers are increasingly concerned about the social and environmental effects of production and consumption. Based on this study, it is a possible to recommend the supermarket companies to practice disintermediation within their supply chains to enhance their Social impact towards the stakeholders. This will give them Sustainable Competitive Advantage within operating market. Supermarket chains can renew their interest in matters related to greener supply chains, reverse logistics, environmental conservation management. Furthermore the companies can think of practices such as corporate social responsibility (CSR), supply chain sustainability, triple bottom line, business ethics, corporate citizenship and sustainable entrepreneurship in supply chains which are currently receiving an amplifying attention in corporate business world.

#### References

Aramyan, L.H., Oude Lansink, A.G.J.M., Van der Vorst, J.G.A.J. and Van Kooten, O., 2007. "Performance measurement in agri-food supply chains: a case study". Supply Chain Management: An International Journal, 12(4), pp. 304-15.

Chow, W.S., Madu, C.N., Kuei, Ch., Lu, M.H., Lin, Ch. and Tseng, H., 2008. "Supply chain management in the US and Taiwan: an empirical study",. Omega, 36(5), pp. 665-79.

Christian L. Rossetti & Thomas Y. Choi, 2008. Supply Management Under High Goal Incongruence: An Empirical Examination of Disintermediation in the Aerospace Supply Chain. A Journal of the Decision Sciences Institute, 39(3), pp. 507-540.

Hult, G.T.M., Ketchen, D.J., Cavusgil, T. and Calantone, R., 2006. "Knowledge as a strategic resource in supply chains". Journal of Operations Management, 24(5), pp. 458-75.

Ketchen, D.J. and Hult, T.M.G., 2007. "Bridging organization theory and supply chain management: the case of best value supply chains",. Journal of Operations Management,, 25(2), pp. 573-80.

Marrewijk, M., 2003. "Concepts and definitions of CSR and corporate sustainability: between agency and communication". Journal of Business Ethics, Volume 44, pp. 95-105.

Pepe Michael S, Russell Abratt & Paul Dion, 2012. Competitive advantage, private-label brands, and category profitability. Journal



of Marketing Management, 28(2), pp. 154-172.

Moore, G., 2001. Corporate Social and Financial Performance: An Investigation in the U.K. Supermarket Industry. Journal of Business Ethics, 34(1), p. 299–315.

Nordin,Brozovic & Holmlund, 2013. Disintermediation in Business-to-Business Service Channels: Mechanisms and Challenges. Journal of Business-to-Business Marketing, 20(4), pp. 179-192.

Pinto, J., 2000. "Disintermediation-II; the customer perspective", San Diego,USA: Controls Intelligence & Plant Systems Report.

Pinto, J., 2000. Disintermediation stirs up industrial automation. Controls intelligence & plants system report.

Porter & Linde, 1995. "Green and competitive: ending the stalemate". Harvard Business Review, 73(5), pp. 120-35.

Riera, J., 2002. "Supermarkets battle it out for own-brand supremacy". Retail Week, p. 10.

Ritchie, B. and Brindley, C. (2000), "Disintermediation, disintegration and risk in the SME global supply chain", Management Decision, Vol. 38 No. 8, pp. 575-5.

Stevenson, M. and Spring, M., 2007. "Flexibility from a supply chain perspective: definition and review". International Journal of Operations & Production Management, 27(7), pp. 685-713.

Wognum, P.M., Bremmers, H., Trienekens, J.H., van der Vorst, J.G.A.J. and Bloemhof, J.M., 2011. "Systems for sustainability and transparency of food supply chains – current status and challenges". Advanced Engineering Informatics, 25(1), pp. 65-76.

Yusuf, Y.Y., Gunasekaran, A., Adeleye, E.O. and Sivayoganathan, K.,2004. "Agile supply chain capabilities: determinants of competitive objectives". European Journal of Operational Research, 159 (2), pp. 379-92.

#### **Abbreviations**

Corporate Social Responsibility (CSR)
Multivariate analysis (MVA)

# Acknowledgment

We wish to express our gratitude to our supervisor Mrs. DD Lokuge, Senior Lecturer of Department of Management and Finance for the guidance and encouragement provided throughout the research. Further we would like to sincerely express our gratitude to all the academic and nonacademic staff of FMSH in supporting us and providing encouragement throughout these academic years. Our special thanks go to all the supermarket managers and respondents who spent their valuable time filling out our questionnaires and helping us make this research a success.

# **Author Biographies**



T A A Gamage is an undergraduate of Faculty of Management & Finance of the General Sir John Kotelawala Defence University, Rathmalana, Sri Lanka.



I P R Vidanapathirana is an undergraduate of Faculty of Management & Finance of the General Sir John Kotelawala Defence University, Rathmalana, Sri Lanka.



S G S D Karunathilaka is an undergraduate of Faculty of Management & Finance of the General Sir John Kotelawala Defence University, Rathmalana, Sri Lanka.



Paper ID: 188

# Factors Affecting the Growth of SME Lending Portfolio of Banking Industry with Reference to Consumer Perspective of XY Bank PLC

Nishan Mallikarachchi<sup>1#</sup> and Lahiru Gunathilake<sup>2</sup>

<sup>1</sup>Faculty of Graduate Studies, General Sir John Kotelawala Defence University
<sup>2</sup>Department of Management and Finance, Faculty of Management, Social Sciences and Humanities,
General Sir John Kotelawala Defence University

#nm9771@Gmail.com

**Abstract**: The Government of Sri Lanka has identified SME as an important strategic sector for balanced regional development in Sri Lanka. As such, with the purview of the Central Bank, Sri Lanka, several banks have launched numerous facilities to gear up the SME sector in Sri Lanka. However, during the last three years, it is evident that those banks have not achieved the targets of their SME lending portfolio. Accordingly, this study focuses on the analysis of factors affecting the growth of SME lending portfolio in banking industry with special reference to consumer perspective of XY bank PLC. A sample of lending portfolio was selected from the lowest pull through rate indicated districts of SME lending of XY bank, such as Anuradhapura, Ampara, Kegalle and Kurunegala. Along with the findings of the exploratory study and past research studies, the researchers tested four types of factors affecting the SME lending portfolio growth in the banking industry, namely bank staff related factors, bank credit policy related factors, bank SME customer related factors and country economic related factors. The survey was conducted using questionnaires and the data were analysed using quantitative data analysis techniques. As per the findings of the parametric tests, three predictor variables of staff, policy and customer related factors were positively correlated and economic related factors were negatively correlated. However, in the multiple regression analysis, only three

predictor variables of staff, policy and customer related factors indicated significant influence on XY bank's SME lending portfolio growth while staff related factors were identified as the most significant ones. Therefore, the study recommends XY bank to improve staff related factors, policy related factors and customer related factors to achieve SME lending targets in future.

**Keywords:** SME, Banking, Staff, Policy, Customer

#### Introduction

The Government of Sri Lanka has been acknowledged that the SME industries as a significant strategic segment and as the backbone of the economy in the country. It identified as a key area of change for comprehensive economic development, provincial growth, creation of employment & poverty eradication. SMEs accounts over seventy-five percent of the total number of enterprises, offers forty-five percent of the occupations and contributes to fifty-two percent of the GDP.

XY Bank is a premier commercial bank which contributes major part for SME sector in Sri Lanka and currently operates through a largest branch network across the Island. The bank has over 2.5 million customer base across the country and the bank is delivering an entire range of financial services for them. from the inception of the bank has been deeply



engaging with SME financing. During this period bank has partnered with so many of SME's and success stories created.

This study has been more focused on factors which have been directly affecting to growth of SME lending portfolio success in banking industry with special reference to consumer perspective of XY Bank & how the aforementioned further strengthen to sustain the highly viable business environment today. SME lending activity is one of the most profitable arms of XY Bank. The bank SME clientele contribute twenty percent of operating income, twenty-five percent of whole assets and eighteen percent of overall liabilities when compere with entire bank PNL. A high level of asset quality has also been maintained with the SME. In addition, one third of the lending portfolio contains of SME which reflects substantial effect to the overall profitability and the balance sheet growth of the organization. (XY, 2020). Considering economic value of SME industry in Sri Lanka and SME segment contribution for bank performance authors have selected SME industry and SME customers in XY bank for research.

However, considering last three years' statement of the financial position of the XY Bank, the researcher has recognised that they have not been achieved set targets for SME lending and identified particular performance gap. Since previous studies in Sri Lanka related to subject area & in view of the review of literature in this study, the researchers have not been identified direct related, similar studies. Hence, it can state that very limited studies done previously. In this connection, this study is significant when compare to other SMEs related studies in Sri Lanka.

The research is based on the Sri Lankan Banking sector and there are about 26 licensed commercial banks and 7

specialized banks such as savings and development banks currently operating in Sri Lanka. When the growth of SME sector is considered, customer perspective can be identified as one of the key perspectives. Other factors such social factors, economic factors, political factors, etc, can have direct and/or indirect impact towards the customer perspective. Therefore, it is that the highly possible financial requirements of consumers are fluctuated depending on these areas. However, SME customers in the market not aware about entire information within the banks and in the bank perspective bankers also don't know about all information about customer side. Hence, adverse selection occurs among both parties. Other mean, adverse selection happens when bank or client (one party) in a negotiation has related information from bank or client (other party) lacks. The asymmetry of information repeatedly occurs to creating adverse selection in both side or one party. Furthermore, bank and customers are involving doing business with less-profit and riskiest market. Identification of the all aspects are more important to finalized good business with win-win situation among both bank and client.

To avoid the adverse selection occurs, both parties must know about each and every one splendidly prior to a deal. This research is more focused on understanding and knowing, getting of the factors that affect in both side of client and bank. As such there is a strong need of understanding financial providers and its' customers to expansion and development prospects of the Island. The purpose of this study is avoid the adverse selection between both parties and recognize the factors affecting to the SME lending growth/success of financial providers.



## **Research objectives**

Main objective of study - The main objective of the study is to identify the 1 factors 1 that 1 affect 1 on the 1 growth 1 of the SME lending portfolio of XY Bank.

Specific objectives of study - To identify main factor that affect the growth1of SME1lending1portfolio1of1banking industry with special reference to consumer perspective1of XY Bank PLC.

## Research questions

What are the factors affecting the success of SME lending1portfolio of banking sector with special reference to consumer perspective of XY Bank?

What is the main factor affecting the growth/success of SME lending1portfolio of banking sector with special reference to consumer perspective of XY Bank?

#### Literature Review

The literature reviews mainly focused on background of SME, review the factors affecting to the banking industry SME lending growth or success and critically analyzed the key factors which affected to SME portfolio growth/success of banking industry in customer perspective.

## Defining of SMEs and its background

There is no broadly accepted definition of SMEs. The most widely used working definitions are based on either the size of employment or the value of fixed assets or both. In addition, there is no accepted size of a firm to classify it either as small, medium or large (European Commission, 2020). A common mistake observed in SME studies, particularly at the international level, is cross country comparison without considering the factors influencing their performance. In some countries, firms employing 50 employees may be regarded as Large Scale Enterprises (LSEs) where as

it may be a small or even cottage scale industry in another country. Thus country specificity is key aspect of any SME definition (European Commission, 2020).

Considering world largest multinational organizations such as World Bank Group, IMF, IADB, African Development bank, ADB, and UNDP, they are also using deferent definitions for introduced SME segment can be identified that deficit of common policy for SMEs in world level, these organizations inserted their own thinking for context of the official definition (DC-MSME, 2020). In addition to that, considering individual country they have also used their own official definition for introduced SME. Hence geologically & economically different set of nationals used own definition for SMEs.

# Sri Lankan's definition for SME

In 2017, Government of Sri Lanka has been introduced worldwide accepted SME policy framework for SMEs. That is give definitions of SMEs in Sri Lanka. Before introduced Sri Lankan National Policy there was no usually Framework. recognized definition for SME in Sri Lanka. As per policy framework using define SMEs based on, I. Number of employees II. Annual turnover. Below mention table 1, specified that how government create business categorized as a micro, small and medium as per the National Policy Framework for SME Development (Central Bank of Sri Lanka, 2017).

Table 1: Definition of SME in Sri Lanka

Size Sector	Criteria*	Medium	Small
Manufacturing Sector	Annual Turnover	Rs. 250 -750 Mn	Rs. 61 - 250 Mn
	No of Employees	51- 300	11 - 50
Service Sector	Annual Turnover	Rs. 301 - 750 Mn	Rs. 61300 Mn
	No of Employees	51 - 200	11 -50

Source: National1Policy1Framework1for SME



Key challenges faced by SMEs & banks in SME lending.

When compare to other sectors, financial services providers are facing plenty of challengers in SME sector lending in comparison to other lending such as personal, financing, corporate midmarket industries financing. Bank point of view, as per Fernando (2020) banks are lending to high risk and high sensitive market. Most of the SMEs have lack of collateral, poor management, one man show management, poor sustainable plan, lack of R&D, poor technology with poor innovation, lack of financial management, shortage of labor & poor skill labor, lack of infrastructure and utilities, rigid and unfavorable regulations, influence by public sectors, lack of information, problems of row materials supply, inadequate market demand & adverse economic policies.

The researchers have been identified listed common constrictions among SAARC regions counties SMEs lack of productivity, poor ability to accessing proper financial service, lack of skill man power, poor regulatory support (labor lows, trade policy, fiscal & tax policy, etc.), lack of technology sub-stranded products, poor inferior product quality, poor management, lack of risk management, poor access to resources (land, row materials, employees, infrastructure facilities), communication and lack of information and analysis (market, demand. supply, productivity, cost, etc) (Buddhadasa, 2018).

Key factors affecting to SME lending portfolio banking industry

The researchers have identified key factors that affecting to the banking industry SME lending portfolio growth by discovering previous literature. The key variables included I. Bank staff related factors, II.

Bank internal policy related factors, III. Economic related factors, IV. SME customer related factors. The staff related factors mainly focused on XY bank staff qualities throughout questionnaire, researchers collected data on personalized customer service, friendly staff with positive attitudes, appropriate knowledge & Skills of staff, professionalism and excellent relationship management of staff. These variables measure staff qualities toward SME customers and it directly impacts on SME growth of the bank. As well as, bank internal credit policies are also having an impact on SME growth and throughout the questionnaires, researchers collected data for identify policy related factors of the XY bank by using variables of bank loan granted and approval duration (speed), worth of credit approval standards & terms, viability loan securities. The customer friendly credit policies are directly impact on SME growth of XY bank. Furthermore, stable economy also increases credit of banking sector and concessionary interest rates, favorable tax policy on SME sector, exchange rate fluctuations and government economic policy variables also tested in economic related factors in the research. In addition to that, SME customer's internal capacity also impacts on SME growth and throughout questionnaire, the researchers collected data for analysis of customer related factors by using variables of client's strategic plan to grow business, skills, knowledge and innovation of the client. Finally, SME growth of the bank identified by using variables of loyalty of SME customer, positive perception towards the bank, satisfied level of overall service extended by the bank and outside recommendation of the SME customer, non-performing loans, YOY growth of SME portfolio.



Critical reviews on Staff related factors.

Banks and other financial services providers are operating their business in highly competitive and risky market environment offer best quality and high oriented services in relating to customer need and expectations. The KPI indicators in banking industry such as service level quality, satisfaction of internal staff, satisfaction of external consumers and customers, product portfolio range, effectiveness and efficiency, productivity, cost and risk management, operational management, business growth is being directly link with skilful employees of the organization.

Most of the business entities have not been giving staff growing activities considerable and they main focus accomplishing revenues and profitability. Any organizations if more focus on employee developing actions which will be enhancing, capacity of the employees such as knowledge and skills (Chay et al., 2003). When they improved skills, this is naturally developing business growth of the organization and it would be career path of employees. Maintain strong relationships with the clients is a key factor of a high customer service providing organization (Panda, 2003). Further, this will be directly affecting to customer fulfilment and faithfulness (Dissanayake, 2019). Satisfied customer is always bringing new business opportunities to the bank and will not be a cost burden to the entity in view of profitability terms. Mainly through this research analyses credit skills, knowledge & staff attitudes, customer service and relationship management of the banking employees in consumer perspective.

Critical reviews on Policy related factors

Credit policies are another important factor. In order to assure superiority of the transactions & proper monitoring aspects, the bank, is adhering to the, local and international policies and guidelines. These policies will mitigate the risk and help to control NPLs of the bank. A strong credit risk policy supports to grow the bank's business plan and maintain the financial strength. The bank credit policy related factors included documented credit policy of the bank, credit approval procedures, credit standards and terms.

Scheufler, (2002) has pointed out that a credit policies of the bank generates a collective set of goals for the business and recognizes the credit functions as an important contributor to the organization. If the credit policy is correctly formulated, carried out and well understood at all levels of the financial institution, it allows management to maintain proper principles applied in bank loans to avoid unnecessary consider risks and correctly opportunities for business development to a greater extent. Lengthy and drawn-out credit policies have been primary challenged for the SME's to enter financial services (Harvie, 2005) also it influences on operation of the sector. Further, Financial limits on SMEs create obstacles for growing businesses in the industry.

The benefits and values of using proper credit approval procedure are presently existence by using all around the world's banks. They have been implementing duly created approaches of deal with risks advances. related Many financial institutions are using the 5Cs model other than PESTE model, SWOT model, 3Cs model, etc. assess a customer's credit worthiness to grant facilities (Abedi, 2000). In addition to that banks also comply credit scoring models for client evaluations to grant advances.



Critical reviews on Economic related factors

Economic related factors are always affecting the business environment in which the firm operates. Hence, financial institutions need to carefully analyze the pricing methods and interest rates are offering to the clients separately in view of monetary changes in the country. According to Nichter (2009) economic factors are always influencing changes in prices of production, charges of the products, salary rates. Interest and inflation and would finally affect the profitability of the organization. Gul (2011) highlighted that relationship between macro-economic facts on the bank productivity by way of considering data of premier fifteen commercial banks in the period 2005 to 2009. He has investigated the influence of assets, inflation, economic growth, loans, deposits, equity and market capitalization productivity on measuring of main aspects of ROE and ROA. The results have indicated that equally internal & external economic connected influences have a strongly effected to success of the business.

Tax, interest and exchange rates fluctuation are another key portions which affects sustainable SME growth (Robertson et al, 2003). Over interest rates & levy rates decrease the revenue margins in any business organization (Belliveau Sandberg, 2009). The same number of SMEs don't have the volume for manage tax payments and therefore essential to refer specialists for a payment in order to encounter these legitimate requirements (Luiz, 2011). This discouraged business operations. However, the bank needs to educate them on external economic changes and effectiveness of the same to the business activities conducted by the bank, in order to meet the challenges in proper way.

Critical reviews on Consumer related factors

Identification of SME success is more vital area of studies and nonetheless study become further complex when try to understand to regulate influences that lead to success. However, success of the SME business mainly depends on key person's characteristics such as knowledge & skill and strategic planning, innovation, management capability of the client.

Every SME business have right of entry to a wide group of skill & knowledge. This can be in SME's empathetic of buyer wants & industry background with skills & capability of workers. Technique a SME encounters, stakes and deftness mentioned knowledge will be fundamental for its capability to grow effectively. Considering entrepreneurial knowledge, the existing (within business) knowledge in the business are more important and that can be identified as i. The experience of workfares in the entity ii. The policies and procedures of products & services iii. Internal sources which are knowledge (documented or digitally held information) iv. Strategic tactics v. impression of new product development. challenge is connecting understanding in an intelligible and creative methods (Babu, 2012).

Introducing somewhat new to market says innovation in SME. This can be, improving or replacing business processes to increase effectiveness and output beautify spread the range or excellent of current merchandise. Developing completely new and progressed products and offerings. Adding fee to present products, contributions or industry to separate the trade from its competition and boom the to clienteles superficial price marketplaces. Novelty can suggest a sole foremost advance consisting of small, incremental changes (Dissanayake, 2019).



Management capacity of SME client define ability to manage resources such as human resources, capital resources (machineries are accustomed production), financial resources (the cash endowed by the higher management in shopping for product and services for the corporation) and raw materials (the materials accustomed turn out the product). This resources manager effectively to realize a plus competitors mean managed capability of business key person. Moreover, structure capabilities ought to be distinctive to the organization to forestall imitation by alternative competitors. Increasing and growing capabilities be able to support tiny business managers gain a profit during a competitive atmosphere (Kelchner, 2020).

#### The Research Model

Considering the limited studies on this area, research model of this study has been developed by analyzing a wide review of literature which are behind in the research. literature review on study described that there was limited direct studies on this area. However, conferring to the analyzing the factors affecting to the SME growth/success of banking industry ware mainly focus on development of research model in this research.

## **Conceptual Framework**

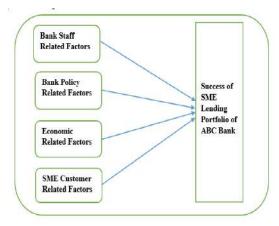


Figure 1: Conceptual Framework Source: (Author Developed, 2020)

## Hypotheses

 $\mathbf{H}\mathbf{1}_{a}$  - Staff related factors affected on SME business growth

 $H1_b$  - Policy related factors affected on SME business growth

 $\mathbf{H1}_{c}$  - Economic related factors affected on SME business growth

 $\mathbf{H}\mathbf{1}_{d}$  - Consumer related factors affected on SME business growth Conceptual Frame work

# Research Methodology

Research is associate degree organized analysis that uses appropriate scientific methodology to answer issues generate contemporary incontrovertible fact that is applicable normally. Scientific approaches comprise of method observation, sampling, grouping clarification of information. During this analysis qualitative strategies accustomed collect information. The entire research has planned and designed in a proper way (Saunders, Lewis and Thornhill 2012).

The research philosophy of this study is realism, since the researchers want to identify the existing nature of customer related factors on SME loan portfolio. As per the review of literature, researchers hardly found any similar study in local and global context. Hence, create new findings of this area researchers selected inductive approach for study. Survey strategy is more economical research strategy and it was used this study to find out huge information to given solution to why, who, what, where, when and how of the research. In addition to that through this strategy researchers collected rich and reliable data. As per the main purpose of this study, researchers basically collected primary data by using questionnaire. Hence only quantitative method used for collecting data. Hence, author has considered mono method as a





choice for this study. This study mainly focusses on analysis of factors affecting to the SME growth of banking industry in present moment. As well as, cross-sectional studies have been using to1describe what is1 happening at1the present moment. Hence, the time frame for this study used cross-sectional.

A satisfied sampling method has been used to collected data as a random sampling from the SME clients where this sample was representing the entire bank in line with the Likert scale questionnaire. Further the questioner was circulated among the SME clients of the bank on following basis and the sample size consists of 200 SME owners as it is more accessible and convenient for this study. 1

In addition to that, measure the growth of SME lending portfolio of XY bank, sample considered using pull through rate. Hence, the lowest ratio percentage indicated district of Kegalla, Kurunegala, Ampara and Anuradhapura SME consumers have carefully chosen for select sample to this study. Further, Sample size calculator, the confidence interval has entered as 10% and confidence level has inputted as 95%. The calculator results predicted the least possible needed sample of SME client size as 96. Nevertheless, so as to realize higher outcomes, the researchers selected as 200 SME customers for study. However, solely 173 questionnaires collected throughout the gathering of questionnaires. During the groundwork primary of data. the researchers abolished have seven incomplete respondents from 173 respondents. Further, rest 166 respondents, after that the researchers follow through box plots analysis and researchers carried out box plots and another 14 respondents removed as outliers. Therefore, remaining respondents selected for the final analysis.

## **Data Presentation and Analysis**

Demographic factors have been identified through questionnaire for identify scope, background of the correspondent. Consequently, among 152 respondents, 132 were male borrowers and solely 19 of them are male. And majority of seventyseven (51%) SME customers completed their studies up to A/Ls. The second highest was indicated from studies up to O/L (18%). The bulk of the SME customers are within the age vary of 30 years to 40 years. Survey data also indicates that 64 SME borrowers who have 5 to 10 years' experience in industry and 53 respondents have over 10 years' experience. As well as, 50 SME borrowers in XY bank (33%) who has been engaging their business in manufacturing industry and second highest 26% trading business. As questionnaire results, it shows that bulk of 131 times participant have obtained term loans facilities and 115 times permanent overdraft facilities from bank. And majority of the SME clients are registered their business as a sole-proprietorship that represent 48% and other majority of 33% business are managing under partnership registration.

## Correlation Analysis

Based on the correlation summery, R value for three independent variables are having positive values. They are staff factors, bank internal policy factors & customer factors. These R values represent .458, .320 and .208 respectively. Based on this results, the researcher has identified that there are having positive correlation with dependent variable of SME growth. However, highest correlation of significant strong level positive correlation identified from staff related factors & second highest correlation of significant moderate level positive correlation identified from policy related factors. Customer related factors



have significant week level of positive correlation and considering economic related factors, it has R valve negative -.185. Therefore, it indicated significant week level negative correlation with variable of SME growth. However, all variables have significant values with depended variable.

Table 2: Summery Correlation analysis

rable 2. Julilliery Correlation allarysis							
Hypothes	Pearson	Significan	Results				
is	Correlati	ce Value					
	on ®	(P)					
Staff	.458	0.000	Significa				
related			nt Strong				
Credit	.320	0.000	Significa				
Policy			nt				
Economi	185	0.023	Significa				
c related			nt week				
Consume	0.208	0.010	Significa				
r related			nt week				

Source: (Author Developed, 2020)

## Multiple Regression Analysis

The research worker verified the relationship between employees connected factors, policy connected factors, client connected factors and economic related factors exhausting multiple correlation model.

Table 3: Model Summary

Mod	R	R	Adjust	Std.	Durbi				
el		Squa	ed R	Error	n-				
		re	Square	of the					
			Square	Estima	n				
				te					
1	0.51	.264	.244	2.0359	1.925				
a. Pı	a. Predictors: (Constant), Independent								

a. Predictors: (Constant), Independent Variables- Staff related factors, Bank internal credit Policy factors, Economic

Source: (Author Developed, 2020)

Model summary of multiple regression method analysis show above table and as per the generated values of the table, R Square is 26.4% and comparatively indicate less value, however, the model is useable since "ANOVA" result has been

significant (Sig. 0.000) and addition to that, 'Durbin & Watson' test indicator is 1.925, which is between 1.5 and 2.5. Finally, the researchers identified that the regression model has been valid.

Table 4: 'ANOVA'a Table for Regression Model

Model	Sum of	df	Mean	F	Sig.
	Cauaros		Square		
Regression		4	54.676	13.191	0.000 <sup>b</sup>
Residual	609.296	147	4.145		
Total	828.000	151			

Dependent Variable: SME growth

Predictors1: (Constant), Independent Variables-Staff factors, Bank internal credit Policy factors, Economic factors, Consumer factors

Source: (Author Developed, 2020)

As per the outcomes from the ANOVA regression model investigation shows that sig. value is 0.000 & that is indicate highly significant position. Consequently, considering both analysis the regression model is jointly significant and can be stated that the model is suitable to take decisions. Hence, model indicate staff, policy, customer and economic related factors influence on SME growth. In addition to that. the researchers supplementary tested, individual effects of supposed variables creating coefficient table.

Table 5: Coefficients Table for Multiple

Regression							
Model	Unsta	ndardiz	ed	t	Sig.		
Ind.	Coeffi	cients		value	value		
Variabl	В	Std.	Beta				
es		Error					
Staff	0.67	0.139	0.371	4.831	0.000		
Related	2						
Factors							
Policy	0.22	0.105	0.154	2.003	0.037		
Related	1						
Factors							



Custom	0.15	0.087	0.125	1.729	0.046
er	1				
Related					
Factors					
Econo	_	0.064	_	_	0.145
mic	0.094	0.001	0.105	1.464	0.1.10
Related					
Factors					

Source: (Author Developed, 2020)

As per the above table, four independent variables tested in multiple were regression. Accordingly, the first independent variable was staff related factor, it was having Sig. Value of .001 and B value of .369. Based on that staff related factors had significance positive impact (highly significant positive influence) on SME growth. As well as, second variable of policy related factors also had significance positive impact (Significant positive influence, Sig. Value of .0.047 and B value of .211) on SME growth. Furthermore, third variable of customer related factors also has significance positive impact (Sig. Value of .0.046 and B value of .151) on SME When considering economic growth. related factors, it was having insignificant value of .145 and negative B value of -0.094. Based on that economic related factors had insignificant influence on SME growth.

The research consists of four hypotheses. As per the data derived out of the statistical analysis, the following results were generated.

Hypothesis  $H1_a$  is accepted (B Value = 0.672, P Value = 0.000)

Hypothesis  $H1_b$  is accepted (B Value = 0.221, P Value = 0.037)

Hypothesis  $H1_c$  is rejected (B Value = -.094, P Value = 0.145)

Hypothesis  $H1_d$  is accepted (B Value = 0.151, P Value = 0.046)

Summery findings of correlation and Multiple1 Regression analysis.

Table 6: Correlation and Multiple Regression summery

		Correlation		Multiple regression analysis			
I	Analysis	Per. Con (R)	Sig. value (P)	Relationship	B value	Sig. value (P)	Relationship
1	Staff related factors	.458	.000	Significant strong level positive correlation	.672	.000	Highly significant positive influence
2	Policy related factors	.320	.000	Significant moderate level positive correlation	.211	.037	Significant positive influence
3	Custo mer related factors	.208	.010	Significant week level of positive correlation	.151	.046	Significant positive influence
4	Econo mic related factors	-,185	.023	Significant week level negative correlation	094	.145	Negative not significant influence

Source: (Author Developed, 2020)

## **Discussion and Conclusion**

Achievement of research objectives

Table 7: Rank wise Research objective achievement.

Variable	Correlation		Multiple regression analysis		Relationship	Rank as per the	
	Per. Corr - R	Sig. value (P)	B value	Sig. value (P)		relationship strength	
Staff related factors	0.458	0.000	0.672	0.000	Highly significant positive correlation and significance influence	1	
Policy related factors	0.320	0.000	0.211	0.037	Moderate level correlation with Significant positive influence	2	
Customer related factors	0.208	0.010	0.151	0.046	Week level correlation with Significant positive influence	3	
Economic related factors	0.185	0.023	-0.094	0.145	No significant influence	No significant impact	

Source: (Author Developed, 2020)

The broad data analysis has been completed by the research worker on top of are provided awareness concerning the impact to the main objective and also the specific objectives of the study. The main objective of this study is to distinctive the factors affecting the SME lending growth of XY bank. This was tested with the participants through the association between credit staff, credit policies,



customer and economic factors. As per the above table and to fulfil the main objective of the study, the researchers identified that staff related factors, policy related factors and customer related factors have impact on XY bank SME loan portfolio growth. Throughout the above factors, staff related factor has highest impact on XY bank SME loan portfolio growth. In addition to achieve specific objective of the study, the researchers also identified that staff related factors has highest impact on XY bank SME loan portfolio growth. Economic related factors haven't impact on SME growth of the bank.

Main objective achievement - Staff related factors, policy related factors and customer related factors have impact on the1growth1of the SME lending portfolio of XY Bank.

**Specific objectives achievement** - XY bank staff related factors has highest influence on growth1of SME1lending1 portfolio as per consumer perspective of the bank.

Based on the findings of this research it is recommended that Improve staff, policy and customer related factors to grow one of profitable arm of SME lending portfolio of the bank XY bank (Staff- Credit skills, knowledge & Staff attitudes, Customer service and Relationship Management / Policy- Credit Policy of the Bank, Credit approval procedure, Credit standards and terms / Customer- Knowledge & Skill, Strategic Planning, Innovation Management capability) In addition to that government policy takers can take this research as an example for SME policy development.

#### References

Abedi, S. (2000) Highway to Success. Journal of Credit Management, 21 (4), pp. 83-92.

Buddhadasa, S., 2018. Attitudes and Behaviour Orientations of Sri Lankan Entrepreneurs. 1st ed. Colombo: Samudra Books Publications, pp.1-62.

Belliveau P and Sandberg, S. (2009). Internationalization patterns of Chinese private owned SMEs: Initial stages of internationalization and cluster as take-off node, in Jorma

Babu, K., 2012. Importance of Knowledge Management in Recent Business. SSRN Electronic Journal, 1.

Central Bank (2017) Annual Report. Sri Lanka: Central bank.

Chay Hoon Lee and Norman T. Bruvold, (2003), Creating value for employees: investment in employee development. Int. J. of Human Resource Management, Vol.14 No. 6 p 981–1000.

Central Bank of Sri Lanka, 2017. Implementation of budget proposals 2017 in respect of banking services. Colombo: CBSL Circular No.01 of 2017, pp.1-2.

Dcmsme.gov.in. 2020. DC-MSME. [online] Available at: <a href="http://www.dcmsme.gov.in/ssiindia/def">http://www.dcmsme.gov.in/ssiindia/def</a> ination\_msme.htm> [Accessed 17 February 2020].

Fernando, J., 2020. Factors Affecting the Growth of SME Lending portfolio of Banking Industry, Interviewed by Nishan Mallikarachchi, 15 March 2020

Dissnayake, M., 2019. SME Lending in North Central Region, Interviewed by Nishan Mallikarachchi, 15 July 2019.

Gul, S., Irshad, F and Zaman, K. (2011). Factors affecting bank profitability in



Parkistan. The Romanian Economic Journal, 39, pp.61-87.

Harvie, C. and Lee, B.C. (2005). Sustaining Growth and Performance in East Asia. The Role of Small and Medium Sized enterprises, Volume III, Edward Elgar, Cheltenham, UK, pp.372.

Hnb.net. 2020. Annual Report 2019. [online] Available at: <a href="https://www.hnb.net/images/annual\_re">https://www.hnb.net/images/annual\_re</a> ports/2019/integrated-report-2019.pdf> [Accessed 9 September 2019].

Internal Market, Industry, Entrepreneurship and SMEs - European Commission. 2020. European Commission. [online] Available at: <a href="https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition\_en">https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition\_en</a> [Accessed 17 February 2020].

Kelchner, L., 2020. The Importance of Organizational Capability. e-Coach: Corporate Capabilities, 2(IV), pp.15-21.

Luiz, M. (2011). Factors Affecting SME' Growth. Prepared for the International Labour Organization (ILO), Geneva, November 2011.

Nichter, S., Goldmark, L.(2009). Small Firm Growth in Developing Countries. World Development, 37(9), pp. 1453- 1464.

Panda, T. K. (2003). Creating customer lifetime value through effective CRM in financial services industry. Journal of Services Research, 2(2), pp. 157-171

Robertson, M., Collins, A., Medeira, N. & Slatter, J.(2003). Barriers to start-up and their effect on aspirant entrepreneurs. Education/Training.5 (6) pp.308-316.

Saunders, M., Lewis, P. & Thornhill, A. (2012) "Research Methods for Business Students"  $6^{th}$  edition, Pearson Education Limited

Scheufler, B. (2002). Five Risks You Can Target with Best Practices from http://www.dnb.com. [Accessed on 21 Dec 2018].

## **Author Biographies**



Nishan Mallikarachchi Relationship Officer – SME Hatton National Bank PLC North Central Region. (Associate Member of the Institute of Bankers of Sri Lanka

(AIB Sri Lanka), DIMF (Frankfurt School/IBSL), DICM (IBSL), DSMEF (IBSL), Reading for MSc in Management at Sir John Kothalawala Defence University and final stage for Postgraduate Diploma in Professional Marketing (CIM-UK)



Lahiru Gunathilake.
Senior Lecturer-Grade II
Department of
Management and
Finance. Faculty of
Management, Social

Sciences and Humanities. General Sir John Kotelawala Defence University.



Paper ID: 210

# Strategic Impromptu Speaking to Combat Anxiety and Develop a Public Speaking Personality

WSA Fernando

Department of English Language Teaching, Wayamba University of Sri Lanka

#sajeewani@wyb.ac.lk

**Abstract:** Developing a public speaking personality of impromptu style is a battle that a second language learner is confronted with, where fear and anxiety act as enemies. This research is devoted to investigate how some preparation strategies could amour the learner to fight it. One hundred second-year undergraduates of the Faculty of Technology, Wayamba University of Sri Lanka received instruction on brainstorming ideas, preparing brief outlines, filling the outlines with examples, and speaking based on them. Ten sessions were created consecutively in which the learners practiced strategic impromptu speaking. The topics were drawn from university life, and the initial five minutes of each session were used for whole class discussions to assist the learners with ideas and vocabulary through a map on board allowing them to identify a unique focus for the individual speech. An initial questionnaire was administered after the second session to measure how the participants felt about the experience, and a post-questionnaire after the tenth session to measure whether, in their view, the speaking personality had grown. Six questions out of each were analysed, and the findings were encouraging. Further, Wilcoxon Signed Rank Test was applied on a question which required participants to rate their ability to speak in English, knowledge over speaking strategies, level of confidence and enjoyment of the exercise prior to and after the intervention. The p value of 0.00 (P < 0.05)revealed that there is a statistically significant improvement in public speaking personality. Feedback from the reflective journals was

coded, and it proved the approach to be productive.

**Keywords:** Strategic impromptu speaking, Brainstorming, Speech outline, Public speaking skills

#### Introduction

Sound public speaking skills determine the success at presentations, speech tests, and multiple other forums at university and afterwards at job setting and everyday life. Yet, most undergraduates who start English medium courses only at tertiary level not only lack such skills, but they are also not motivated enough even to try. Unlike the traditional definition that limits impromptu speaking only to 'delivering a speech without preparing in advance' (Beebe & Beebe, 2009), Puteh's (2006) definition of it as 'a mini speech delivered with little or no immediate preparation time' provides the creative language teacher with some insights as to how to exploit the situation to build up the speaking confidence of the uncertain second speaking community. language importantly, Nawi, Yasin & Champion (2015) state that impromptu speaking can involve planning, preparation and practice if the teachers want the leaners 'to be ready at all times to speak impromptu'.

The little preparation time allowed within impromptu speech can fruitfully be used to activate the learner schemata over the speech topic since lack of ideas and vocabulary often hinder the flow of the speech. The leaners can also be trained to have a narrow focus over





the broad topic making each speech unique and attractive. Thirdly, each speaker can prepare a brief outline, and if time permits can fill the outline with interesting examples mostly in short hand style. Even international exams like TOEFL and IELTS provide quick preparation time and encourage using notes prior to speech. So, strategic impromptu speaking is realistic and meaningful and holds the power to remove the unnecessary fear or inhibitions of the novice speaker facilitating the speech.

A major reason why impromptu speeches are not accommodated in ELT courses is because teachers perceive it to be a misfit with the majority of learners. Interviews reveal that most learners have not delivered many public speeches even in mother tongue let alone in the second language of English. So, it looks reasonable by teachers to resort to prepared speech. Yet, the vital fact that they have overlooked is that even impromptu speeches can mean preparation and practice in certain ways, and moreover; teachers too have a role in making grounds for its success. Further, the prepared speeches alone cannot make the undergraduates ready for the demands of the wider world outside the university in which spontaneous speech is required as a major skill. Therefore, the need arises to find out some appropriate strategies through which impromptu speeches could work out in Sri Lankan ELT context. Further, the very challenging nature of it may arouse the interest of the adult learner to fully engage into it.

The strategic impromptu speaking sessions which were designed for this study initially attempted to equip the learners with effective impromptu speaking strategies. Then, they also focused on creating opportunities for learners to practice speech while applying the planning strategies. A further intention of the sessions was to obtain data on anxiety associated with public speaking to see whether it declines over time with

consecutive exposure into the experience. Moreover, it targeted at obtaining the learner views over the intervention to measure whether strategic impromptu speaking had positively transformed the public speaking personalities of the undergraduates. Since public speaking in English was an alien experience to majority of the learners, a few skills such as spontaneity, flow of speech, content, structure, clarity of presentation and quality of speech were specifically focused during the intervention while giving feedback at the end of speech sessions.

#### **Research Problem**

Poor speaking skills negatively affect the confidence of the undergraduates and developing those is vital at tertiary level. Though method of impromptu speaking has an un-surpassing capacity to develop the spontaneous speech, the very challenging nature of the activity casts doubt on whether either teachers or learners would welcome it as a right tool to uplift their public speaking skills.

## Research Objective

To identify the perceptions of the learners over the effectiveness of strategic impromptu speaking in removing the speech related anxiety and developing public speaking skills

#### **Review of Literature**

Second language anxiety can have a debilitating effect on performance (Woodrow, 2006). Fear of speaking in a second language termed as 'social anxiety', as per Leary (1982), is made up of several constructs: speech anxiety, shyness, stage fright, embarrassment, social evaluation anxiety (feeling that you are being judged by the audience) and communication apprehension (fear associated with interacting with others). Public speaking is an event a speaker has to combat all these psychological factors in an effort to perform successfully. Tobias (1985)





introduces two models to explain the causes of anxiety during public speaking: retrieval interference and skills deficit. Retrieval interference occurs when anxiety inhibits recall of previously learnt material at the output stage while skills deficit occurs when poor language proficiency and poor study habits impair performance at input. processing as well as output stage. Hurwitz, 1986, who studied in-class speech anxiety, identified three negative emotions confronting public speaking: fear, worry and emotionality, and produced anxiety scales which is currently practised widely at research contexts as reliable tools to measure speech related anxiety. Ajeng (2006) who used the same scale in English as a foreign language context in Indonesia discomfort, worry, fear and shyness to be the four major causes of anxiety.

Speaking confidence second over language(L2) emerges out of the two affective and cognitive constructs of 'language use anxiety' which occur at the speech context and the 'perceived L2 confidence' which is a selfevaluation over one's L2 proficiency (Clemant, 1986). So, it is vital for a learner to believe in his language skills to speak confidently. As per Bandura (1986) a person's innate cognitive capacity, which directly affected on public speaking personality, is enhanced through environmental factors, and this is where the language teachers can positively intervene.

# **Methodology and Experimental Design**

This research was based on two structural designs: survey questionnaire and quasi experimental design. Hundred second year undergraduates of the Faculty of Technology, Wayamba University of Sri Lanka participated in this. The introductory session was conducted with a view to expose the learners into planning strategies that could facilitate impromptu speaking. Individuals received feedback on preparing brief outlines to be

used as the structure of the speech. The themes for the sessions were related to university life such as leisure time activities, part time jobs, sports, job skills and community service. Ten impromptu sessions were arranged within two months, and the first five minutes of each session produced a whole class discussion on the theme during which the teacher mapped the vocabulary and ideas on the board out of which the individuals selected their focus or narrower topics for the speech. Then, the class was divided into three groups and the speeches were delivered in 3-4 minutes, and the sessions were concluded with a common feedback. When the participants have finished two speech sessions under the targeted procedure, a questionnaire adapted from Horwitz (1986) was administered to identify whether they felt confident or nervous at the initial speaking contexts. Next, a second questionnaire was administered to identify whether the learners experienced development in their public speaking personalities. Finally, the learners also recorded their spontaneous thoughts over the experience in reflective diaries.

The rationale for using this methodology was that the attitudinal questionnaires and open feedback by adult learners were perceived as appropriate tools to measure the success of a novel approach into a speaking course. Further, any comments if were positive, would provide as evidence to see whether the learners had perceived a transformation in their public speaking personalities and those of their peers. In addition to that, administering the first questionnaire after two speech sessions instead of administering it prior to the sessions was so planned because for most learners impromptu speaking in English was a novel experience, and it was thought that without such exposure, they would not be able to accurately comment on it.





Table 01: Learner perceptions on the issues faced while delivering the initial impromptu speeches

Statement	strongly	disagree	Neither	Agree	Strongl
	disagree		agree nor		y agree
			disagree		
1. I never feel quite sure of myself when I am making impromptu speeches.	2%	8%	51%	30%	19%
2. I worry about making mistakes while speaking.	3%	8%	41%	34%	14%
3. I fear about failing in my speaking sessions.	6%	8%	42%	32%	12%
4. Even if I have prepared a brief outline, I feel anxious about speaking.	3%	15%	41%	29%	12%
5. I can't speak long as I forget the things I know due to nervousness.	1%	8%	34%	38%	19%
6. I keep thinking that other students are better at English than I am.	4%	7%	35%	33%	21%

Table 02: Learners perceptions on how strategic impromptu speaking helped develop the public speaking personalities

Statement	Strongly	Disagree	Neither	Agree	Stron
	disagree		agree nor		gly
			disagree		agree
1. Speaking sessions gave me confidence to speak in public.	-	-	4%	44%	52%
2. I learnt to speak without worrying about mistakes.	-	-	7%	61%	32%
3. I enjoyed making impromptu speeches.	-	3%	10%	55%	32%
4. Speaking sessions helped me to talk well on a given topic with a brief preparation.	-	-	7%	60%	33%
5. Speaking sessions helped me to speak continuously on a given topic.	-	-	6%	53%	41%
6. I enjoyed listening to other speeches and learnt from them.	-	1%	6%	49%	44%

# Results

Six questions from both questionnaires (Table 1 & 2) were analysed both qualitatively and quantitatively to see whether the intervention

had achieved its expected outcomes. Initial questionnaire (Table 1) focused on identifying whether anxiety had an impact on speaking whereas the post questionnaire (Table 2) focused on identifying whether the





impromptu speech sessions were effective. The selected questions in each table were arranged in such a way that for a specific issue related to anxiety focused by a question in table 1 could be compared with the response given to the corresponding counterpart in table 2 to gain some general insights over the process. For instance, the first question on tables addressed **'lack** confidence/confidence' and the data received on table 2 could be used to generally observe whether the intervention had helped the students to remedy the situation by gaining confidence over it.

Moreover, four statements from the post questionnaire which asked the participants to denote values from 1-4 (1 means very little, 2 means little, 3 means much and 4 means very much) considering the situations prior to and after the intervention such as 'the ability to speak in English, knowledge about speaking, confidence about speaking and enjoyment in speaking in English' were analysed by using Wilcoxon Signed Rank test (Table 3).

 $H_0$ : Public speaking skills of the students has not been improved

 $H_1$ : Public Speaking skills of the students has been improved

Table 3: Results of the Wilcoxon Signed Rank Test: Difference

Test. Difference				
N for	Wilcoxon	P value		
test	statistics			
101	5151.0	0.000		
	N for test	N for Wilcoxon test statistics		

As per the statistics, the p value recorded is less than 0.05, the null hypothesis is rejected, and in the perception of the learners their public speaking skills have been uplifted at 5% significance level.

The feedback received from reflective diaries too was quite encouraging and could be coded under nine themes: built confidence, provided practice, developed speaking skills, learnt speech techniques, improved vocabulary, enjoyed public speaking, used speech outlines, achieved fluency and helped other academic activities.

Table 04: Sample thoughts over strategic impromptu speaking extracted from reflective diaries

	ipie thoughts over strategic impromptu speaking extracted from reflective diaries
Code	Thoughts
A: Built	A1: "Impromptu speeches make our confidence specially to talk to an audience"
confidence	A2: "It make me strong and now I don't have any fear for speaking"
	A3: " now I can speak without shiver"
B: Provided	B1: "Impromptu speaking is a challenging task, but is interesting when practicing it
practice	continuously."
	B2: "It was fun to speak because of repetitive sessions"
	B3: "Giving ten impromptu sessions was very useful."
C:Developed	C1: "This lesson helped to improve my speaking skills"
speaking	C2: "One of the most valuable sessions. My friends who did not speak even a word at
skills	the first day spoke more than the best students the last day"
	the met day spend men than the sessional the last day
	C3: "It improves speaking skill as we prepare and deliver the speech in a short time"



D: Learnt	D1: "I didn't know about techniques before this session""
	D1: I didn't know about techniques before this session
speech techniques	D2: "I identified different techniques while doing speeches"
teeninques	D3: "Listened to other speeches and learnt techniques"
E: Improved	E1: "I learnt to speak using good vocabulary"
vocabulary	E2: "I developed my vocabulary"
	E3: "Discussion sessions helped a lot to learn vocabulary"
F: Enjoyed	F1: "I enjoyed speaking sessions"
public speaking	F2: "I tried to do best because this is a challenge for me"
Speaking	F3: "I enjoyed others speeches"
G: Used	G1: "We learnt to build speech according to a plan."
speech outline	G2: "When speaking according to a structure, it increased quality as well as enjoyment of the speech."
H: Achieved	H1: "I learnt to speak very fluently."
fluency	H2: "although I had English knowledge I was unable to speak long, Now I have the ability."
I: Helped	I1: "We did subject presentations nicely. All said it's because of English sessions"
other academic	I2: "It is important for the future works."
activities	

#### **Discussion**

The first questionnaire (Table 1) focused on obtaining learner views over the issues they confronted while delivering impromptu speeches in a second language, and it was administered after two strategic impromptu speaking sessions in order to obtain the genuine feelings of the fresh experience. The data revealed that even after receiving help through speech strategies like brainstorming ideas and outlining the speech, there was still anxiety (social anxiety) towards public speaking (Leary, 1982). 49% were not sure of themselves while speaking either due to language deficit (Tobias, 1985) or due to other psychological phenomena connected to social anxiety (Ajeng, 2016), and 48% worried over the mistakes they would make. A reality with regard to public speaking in a second

language is that the speakers forget the content due to language barrier or retrieval interference (Tobias, 1985). Accordingly, 57% either agreed or strongly agreed that they forgot due to nervousness. Further, there was evidence to show that performing before an audience affected the self-conscious adult second language learners. 44% feared the idea of failing in performance while 54% were conscious of the level of performance compared to the more competent peers (social evaluation anxiety: Leary, 1982).

Another interesting finding was that though the questionnaire was administered at a very early stage of the intervention, many participants were neutral in their position rather than being negative; thereby, indicating a growing confidence towards impromptu speaking. For instance, according to the data received for statement 3, only 15%





disagreed that they felt anxious about speaking after being prepared with an outline while 41% neither agreed nor disagreed. This can be attributed to the help provided through effective speaking strategies.

The analysis of the second questionnaire (Table 2) which was administered at the end of the ten impromptu speech sessions revealed that there was clear evidence that the learners had developed their public speaking skills. 96% either agreed or strongly agreed that the sessions built up their confidence while another 94% believed that it improved their fluency. While observing one's progress over the sessions, reflecting over it & recording in the diaries, the learners had been able to reduce their 'language use anxiety' and confidently deliver the speeches towards the end with the existing language skills (Clemant, 1986). Further, 87% enjoyed the sessions rather than dreading them and 93% also enjoyed others' speeches and learnt from each other. The environmental factors such as conducive classroom atmosphere and the attitudinal changes created though right feedback had helped learners to enjoy the activity, enjoy the performance of peers and to benefit through it (Bandura, 1986). Moreover, 93% felt that the practice helped them to talk with a brief preparation and further to talk without worrying about mistakes, thereby; rewarding the strategies employed during the intervention.

The six questions from each questionnaire were purposely organized so that the situation during early stages of intervention and after it could clearly be observed. The findings proved that all issues such as lack of confidence, fear of making errors, anxiety, poor self-esteem and nervousness which were identified initially had disappeared significantly towards the end. Interestingly, the statistics depicting negative attitudes as well as un-deciding responses which had been marked as '3' in the Likert five-point scale as responses to questionnaire 1 had turned into

positive and deciding figures in questionnaire 2. Quite importantly, this change could be observed with regard to all six statements.

analysis conducted on the statements (table 3) explaining their speaking personalities prior to and after intervention further confirmed that the learners benefitted from the strategic impromptu speaking sessions. The participants claimed that they developed various aspects of a public speaking personality such as ability to speak in English, knowledge about public speaking including the strategies, confidence to speak and the ability to be relaxed and enjoy the speech.

The learners recorded their feelings and thoughts over speaking sessions regularly and also included a final overall comment considering the whole experience. The sample comments on table 4 were selected from the final comments. Compared to the responses presented in table 1, which showed that lack of confidence, worry, fear, nervousness and speech anxiety impaired the performance, the final open feedback was quite positive. Many participants believed that the sessions built up their confidence (A1, A2, A3) and the ability to speak spontaneously, (C2) fluently (H1, H2) and effectively (C1, C3, G2). The introductory session had exposed the learners into strategic impromptu speaking styles (D1, D2, D3, G1, G2) while brainstorming sessions had enriched their vocabulary power (E1, E2, E3) creating a path impromptu making speeches pleasurable experience (F1, F2, F3, B1, B2). The principal of continuous practise too accounted for the success of the programme (B1, B2, B3) enabling the participants to apply the public speaking skills earned into other academic contexts (I1, I2). Overall, the intervention has been effective and the learners have found it to be a quite positive experience.





#### Conclusion

The data received for post questionnaire (Table 1) and the statistical analysis conducted on statements (Table 3) revealed that in the learners' perception their public speaking skills had developed proving the methodology applied and the theories underpinning it to be effective. Further, the data from questionnaires 1 provided evidence that anxiety impacted on the performance considerably at the beginning, however; those of table 2 proved that the anxiety which affected the performance of the speaker initially had gradually disappeared through correct strategies and continuous practice. In other words, strategic impromptu speaking which in-cooperated planning, preparation and practice paved way to eliminate the inhibitions that would otherwise be present during impromptu speaking context. Finally, though challenging a task it initially seemed to be by both the parties of teacher and the students, it has proven to be favourable approach to develop the public speaking skills of the learner majority.

## References

Ajeng GD. (2016) The possible causes of Indonesian EFL students' anxiety in speaking impromptu speech. The 4<sup>th</sup> International Conference on Education & Language, II-216-II-221.

Bandura, A. (1986) Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice- Hall.

Beebe, SA & Beebe, SJ. (2009) Public Speaking: An Audience Centred Approach (seventh edition) Pearson Education

Clément, R. (1986). Second language proficiency and acculturation: An investigation of the effects of language status and individual characteristics. Journal of Language and Social Psychology, 5, 271-90.

Horwitz, E.K., Horwitz, M.B., & Cope, J. (1986). Foreign language classroom anxiety. The Modern Language Journal, 70(2), 125-132.

Leary, Mark R. (1982) Social anxiety. Review of personality and Social Psychology. Ed. L. Wheeler Beverly Hills: Sage, : 97-120.

Nawi, Yasin & Champion. Great Impromptu Speaking is Never Just Impromptu- Studies in English Language and Education. Volume 2, Number 2, September 2015

Puteh, F. (2006). Effective Oral Communication UHB 3052. University of Technology Malaysia.

Thobias, S. (1985) Test anxiety: Interference Defective Skills and Contextual Influences. Hong Kong and Melbourne: CERC and ACER.

Woodrow,L (2006) Anxiety and speaking English as a second language. RELC Journal 37; 308.

Paper ID: 328

# **Determinants of Boundaryless Career for Employee Satisfaction**

RHPM Ranasinghe, WAH Wanniarachchi#, DMDVB Dissanayake and DD Lokuge

Department of Management and Finance, General Sir John Kotelawala Defence University

# hariniwanniarachchi@gmail.com

Abstract: This research paper will focus on investigating the determinants boundaryless career for employee satisfaction. The results of the study will help employees to identify how to acquire satisfaction employee through boundaryless career and to highlight the most significant factors of boundaryless career. This study will guide society to follow a new career path which leads to creating multi-skilled employees. In order to examine the data, this study will use the quantitative method. Western province, managerial level employees were the target population. The research was conducted in a cross-sectional time horizon. A mono method study was done to reach the final conclusion. Initially the researchers carried out a pilot testing with 35 managerial level employees to investigate whether the questions are relevant, exhaustive and accurate. Finally, 184 responses were gathered to test the planned hypotheses. Finally, with the results of the analyzed data, it was determined that a boundaryless career will influence on employee satisfaction. The findings suggest that mainly there is no unique identity for boundaryless career concept in the local setting.

**Keywords:** Employee satisfaction, Boundaryless career, Labour market

#### Introduction

Boundaryless career is a new career concept that suggest numerous potential boundaries which is beyond the limits of the modern career, hence the career actor

becomes aware of multiple number of opportunities. Boundaryless Careers are the careers which stretch across a set of different organizations, sectors, domains and not a single organization. The people who are following such careers have no specific scope of operation and their jobs range across several parameters.

Modern labor market is saturated with skilled university Consequently, unemployment rates according to the report of Department of Census and Statistics in 2018 was 3.8 %. In local context the most prominent career setting is based on resources as a result it creates a deficiency in skilled based career setting which compel to brain drain. Currently, employees are practicing hierarchical highly organized and rigid organizational structure. The promotions are given by considering their experience and seniority instead of Knowledge, Skills and Abilities (KSA). The job market is saturated with the increment in literacy rate therefore there is a high competition in job market.

As the initial step in the evolution of career concept there was a resource-based view. This model emerged in 1980s and 1990s to achieve competitive advantage, after the major works published by Wernerfelt (1984), Hamel, Barney (1991) and others. The presenters of this model argued that organizations should mainly focused, inside the company to find the sources of competitive advantage instead of focusing at competitive environment for it. With the industrial revolution competency-based





view emerged. In this concept scholars mainly focus on knowledge, skills and abilities (KSA). Further each section of an organization's competency suggests a matching section of career competency which is introduce as Know-Why, Know-How and Know-whom respectively.

#### **Problem Statement**

In the business world there is a significant number of employees who do not follow their career paths according to their Knowledge, Skills and Abilities. Therefore, employees are in a confusion state when finding a suitable job and lack of job satisfaction encourage them to leave their jobs.

In local context employees are stressed enormous amount of work, consequently turnover rates are drastically increasing currently scholars developing retention strategies to reduce the turnover rates. Since 1990s British American society have discussed how to reduce the stress within the work place and how to develop the skilled employees. Due to the observation in the prevailing generation gap skills in elderly generation are obsolete because of the high capacity and potential of younger generation. Therefore, organizations should give up their traditional organizational strategies and need to follow new career concepts like boundaryless career which will direct the employees to acquire satisfaction through career performance. In the current scenario scholars have examined only about the turnover and retention intensity not the underpinning but Therefore, researchers mainly focus to reveal the influence of boundaryless career to employee satisfaction.

## **Research Objective**

The primary objective of this paper is to identify the determinants of boundaryless

career on employee satisfaction in context of Sri Lanka.

#### Literature Review

This section of the study is displayed with the intention of addressing the research objectives in conducting the study "Determinants of Boundaryless career for employee satisfaction" based on previous studies.

A. organizations cultural differences and boundaryless career

Cultures can be differentiate according to a bipolar variable known as individualism and collectivism (Hofstede. 1984). Individualistic culture reflects personal and equity-based rewards, goals promotions and social networking. Job security, group goals and rewards are emphasized in collectivistic cultures. Employees in collectivistic culture have a greater possibility to remain within their work groups or organizations and it reveals contrast psychological mobility in employees in individualistic culture have a greater possibility to change work place or organization and it reveals physical mobility. Individualistic organization should define work that supports the exchange between social individualism, human rights and equality (Diener, 1995). Individualists base their description on their own (Hofstede, 2001), therefore they tend to feel that their own company conducts tasks (Bandura, 2001). This viewpoint was shown by studies showing that individualism is associated with greater respect for human rights (Basabe & self-management Ros. 2005) and preferences which encourage the society to follow boundaryless career. The purpose of this research paper is therefore to determine whether individualism and collectivism have an impact on





boundaryless career to achieve employee satisfaction.

B. changes in socio-cultural conditions and boundaryless career

With the enactment of knowledge and service-based organization new employee practices were developed and it paved the way to boundaryless career. With reference to social cognitive theory (Bandura, 1986), once values, attitudes, behavior and motivation are influence by social norms and expectations. Significantly, important changes in socio-cultural norms and expectations played a major role in the emergence of boundaryless career concept. The first concerns the decline in full-time jobs and growth of contingent employment practices in societies. A transformation from long-term employment practices to more flexible and short-term practices is observed in the public sector. As a result, findings have revealed that employee expect low employer engagement and employees are less committed to single organization. The growth in contingent practices and work styles encourage employees to follow up boundaryless and self-reliant approach in their career development, and it leads to inter organizational mobility. The second concern is related to a substantial increase in the global supply of highly skilled workers due to educational expansion and a rising middle class in developing countries.

According to a research carried out by Bergeman (2010) the lack of worker participation was the primary reasoning provided by the 74 percent of respondents who select to accept a conditional work style. The above results indicated that workers perceived less stable bonds in jobs and grow into less loyal to any individual organization. The adjustment described above echos the desire for workers to

follow in their career development a more boundless and self-reliant approach, leading to inter-organizational flexibility. Such attitudinal changes in conditional job practices are similar to improving the kind of job attitudes and behaviors associated with individuals pursuing boundaryless professions.

C. Changes in organizational strategy and boundaryless career

Literature suggests that addition to the above-mentioned transformations in social norms and principles of employment bonds, developments in business environment and corporate approaches in present decades have also directed the route towards the growth of boundaryless career.

In the latter part of the industrial era strategies for business organization were expanded rather than downsized and to independence stimulate rather collaboration (Pfeffer, 1978) with the technology development in highly unpredictable and unstable competitive environment was created. Consequently, business organization tend become more flexible and fluid. Organizations tend to partition for self-governing units and encourage the departments to challenge with external suppliers (Bridges, 1994). Presently inter-firm networks, employee mobility, new-firm formation and flexible specialization are primary keys for advancement of organization's success (Sexenian, 1994).

D. networking and learning and boundaryless career

'Cultivating networks' (Hirsh, 1987) is a principle free agent of career conduct, presenting get entry to other human being knowledge and resources. As an end result, network relations concurrently serve the profession pursuits of an individual actors



and the strategic pursuits of organization firms. Networks additionally serve as learning structures (Powell and Brantley, 1992), once more with outcomes for both individuals and using firms. Gaining knowledge of over the route of the profession prospectively provides to someone's employment cost, or human capital (Becker, 1964). In the meantime, getting to know via 'groups of exercise' (Brown and Duguid, 1991) could have a two-manner impact, as human beings draw gaining knowledge of from and infuse getting to know into the work businesses they be a part of.

#### E. employee satisfaction

Job satisfaction at its most fashionable conceptualization, is simply how content material a man or woman is along with his job. The following job satisfaction theory which is traceable to employee overall performance inside the company are hereby indexed and examined:

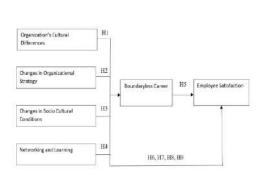
Implementation of Herzberg's two-factor theory

Two-Factors Theory's groundwork is focused on the reasons for the job satisfactions of employees. Job satisfaction is characterized like "the degree to which people desired (satisfaction) or do not desired (dissatisfaction) their work roles," according to Spector (1997). It has been recognized as having a positive influence on the quality of the organization and on the actions of employees (Levy, 2003)

Figure 1. Conceptual Frame Work

Mediator

Independent variable



Source: Author

According to the conceptual framework researcher has come up with nine hypothesis.

H1- Boundaryless career mediates the impact of organization's cultural differences towards employee satisfaction. H2- Boundaryless career mediates the impact of changes in organizational strategy towards employee satisfaction.

H3- Boundaryless career mediates the impact of changes in socio cultural conditions towards employee satisfaction.

H4- Boundaryless career mediates the impact of networking and learning towards employee satisfaction.

H5- Boundaryless career impact on employee satisfaction.

H6- Organization's cultural differences impact on employee satisfaction.

H7- Changes in organizational strategy impact on employee satisfaction.

H8- Changes in socio cultural conditions impact on employee satisfaction.

H9- Networking and learning impact on employee satisfaction

#### **Data Collection**

In this study reserachers have used quantitative method and the study is a cross-sectional analysis. And also research is based on deductive approach which is concerned with building up hypotheses which is relavant to an existing theory and





measure the hypotheses. The sample will represent the population of Managerial level employees in Western Province of Sri Lanka. Initially the researchers carried out a pilot testing with 35 managerial level employees to investigate whether the questions are relevant, exhaustive and accurate. Finally 184 responses were gathered to test the planed hypotheses. As per to Usman (2016), questionnaire is an important data collection tool to collect primary data. Accordingly the data were collected using questionnaires with five point likert scale questions. Researches used 'Solvin formula' ( $n = N/1 + Ne^2$ ; n =Sample size, N = Total population, e = Level of precision (Margin of error), Confident level = 95%) to identify the sample size and used simple random sampling to deliver the questionnaire.

## **Data Analysis and Discussion**

The reliability test was conducted through Cronbach's alpha test. Study can be considered reliable according to Cronbach's alpha so the data set can be generalized with the population.

To determine the validity Kaiser-Meyer-Olkin (KMO) test can be used and generally KMO should be lie between 0 - 1. If the KMO value is closer to 1 means, that collected data set is acceptable (Kim and Mueller, 1978). The value 0.90 in KMO test shows excellent while 0.8, 0.7, 0.6 and 0.5 are define as meritorious, middling, mediocre and miserable respectively. According to the KMO test the validity of the study is 0.895 (meritorious), so that it can be considered as data set is scientifically valid.

The researchers tested the normality of the data and the Skewness and Kurtosis values of each variable including their standard errors using SPSS as given in the table below.

	imployee atisfactio n	Boundaryless career	Organizatio ns_Cultural _differences	Changes_in _Organizati ons_strategy	Changes_in_ Socio_cultur al_conditions	Networking _Learning
N Validity	187	187	187	187	187	187
Missing	0	0	0	0	0	0
Skewness	451	349	.402	390	284	481
Std. Error of	.1	.178	.178	.178	.178	.178
Skewness	78					
Kurtosis	.018	.105	715	338	<del>-</del> .745	.335
Std. Error	.354	.354	.354	.354	.354	.354
of						
Kurtosis						

Source: Author(2020)

All the skewness and kurtosis values of variables are witinthe acceptable level provided, according to the study findings. Therefore, the data are considered as approximately normally distributed.

Linearity was tested between boundaryless career and four variables including organization's cultural differences, changes in socio cultural conditions, changes in organizations strategy and networking and learning respectively. According to the results of the analysis the relationships between the variables shows a linear relationship. The adjusted R value for organizations cultural differences and boundaryless career is shown as 0.502 which implied that 50.2% of variation in boundaryless career is explained by organizations cultural differences likewise, all the other factors namely changes in organizations strategy, changes in socio conditions, networking cultural learning and boundaryless career with employee satisfaction indicates 53.9%, 34.6%, 40.2% and 35% variations respectively. Furthermore, when considering the significance values all relationships show a high significance level.

Pearson's coefficient of correlation is usually used to determine the correlation as a tool. The coefficient(r) should range from -1 to + 1 for a proper correlated relationship.



Table 2: Correlation test

	Pearson's	Significance
	Correlation	
Organizations cultural differences	0.710	0.000
Changes in organizations strategy	0.736	0.000
Changes in socio cultural conditions	0.591	0.000
Networking and learning	0.634	0.000
Employee satisfaction	0.595	0.000

Source: Author(2020)

Pearson correlation coefficient is greater than 0.5 in most of the hypotheses above. So that it can be concluded that, Organizations cultural differences, Changes in organizations strategy, Changes in socio cultural conditions, Networking and learning and Employee satisfaction have moderate positive relationships.

Regression is a statistical tool which is used to study relationships between variables. The relationship linear between Boundaryless career and Satisfaction of employees will be analyzed initially. Organizations cultural differences, Changes in organizations Strategy, Changes in Socio Cultural Conditions and Networking and Learning were identified the as independent variables which represents employee satisfaction. According to the study R value indicates a positive linear relationship with the dependent variable because it is a positive value which is 0.644. The adjusted R square which is 0.636, is statistically significant and it suggests that the variance of organizations cultural differences, changes in organizations strategy, changes in socio cultural conditions and networking and learning determines 63.6% of the variance of boundaryless career. Reflecting to the value of standard error is .40453 which indicates that the sample (n= 184) could be representative of managerial employees of the Western Province of Sri Lanka. The overall regression model is relevant, where F=81.072 and p<0.05 are below the confidence level of 95 percent.

So, it can be concluded that in the above case the linear regression is significant.

Model		Unstandardized Coefficients		Standardi zed Coefficie nts	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.518	.256		2.023	.045
	Organizations_Cultural _differences	.252	.060	.298	4.207	.000
	Changes_in_Organizati ons_strategy	.252	.064	.319	3.912	.000
	Changes_in_Socio_cult ural_conditions	.051	.071	.047	.724	.470
	Networking Learning	.328	.070	.269	4.718	.000

Source: Author(2020)

By using beta coefficient of Table:3 we conclude the following equation

Boundaryless career = 0.319(OCS) + 0.298(OC D) + 0.269(NL)

According to the above equation, if differences Organizational cultural increases by one unit while holding all the other factors constant, boundaryless career will increase by .298 units on average. Likewise, when Changes in organizations strategy increases by one unit while holding the other factors constant, Boundaryless career will increase by .319 units on average, if Networking and learning increases by one unit while holding all the other factors constant, Boundaryless career will increase by .269 and when the changes in socio cultural conditions increase by one unit while holding all the other factors constant the boundaryless career will decrease by .047.

The second regression test to check the mediating effect would be understanding the impact of boundaryless career to employee satisfaction. The most important SPSS output in regression to conclude the mediating effect in this situation is the Coefficient table of the linear relationship which boundaryless career is added as an independent variable.



		Table:				
Model		Unstandardized Coefficients		Standardize d	t	Sig.
		Cocin	iciciiis	Coefficient		
	-	В	Std. Error	Beta		
1	(Constant)	1.768	.232		7.609	.000
	Boundaryless_car eer	.584	.059	.595	9.979	.000.

Source: Author(2020)

According to the table there is a significant relationship between boundaryless career and employee satisfaction.

The mediating research was carried out to ensure that Baron and Kenny (1986) suggested criteria. Sobel z-statistics (Sobel, 1982) has been used to check the significance of the mediating effect and prove that the mediating effects of all three models are important at p<0.05.

Models Sobe	l test statistics
Organizations cultural differences	3.8663425
Changes in organizations strategy	3.65865172
Changes in socio cultural conditions	0.7164259
Networking and learning	4.23514658

#### **Discussion**

a. To identify the factors that affecting boundaryless career

The findings conclude that organization's Cultural differences, changes in organizational strategy, networking and learning held a positive relationship with boundaryless career. This was due to the linear relationship between organization's cultural differences, changes in organizational strategy, networking and learning and boundaryless career initiate to have a significant effect (at p<0.05).

b. To identify the factors of boundaryless career on employee satisfaction.

Boundaryless career helps to develop new career plat forms unless stagnating in the same career development cycle this will lead to Win-Win situation for both parties. Due to the prevailing competition individuals are talented, the most deciding factor is the motivation to follow up something that is fascinating to have satisfaction. Boundaryless career path creates a skillful and knowledgeable employee and even the employee will gain so many opportunities, it will direct them to enjoy and finally they are satisfied with the career.

c. To identify the factors influencing boundaryless career in local setting.

The findings declare that the organization's cultural differences, changes in organizational strategy and networking and learning have a linear relationship with boundaryless career in local setting.

#### **Conclusion**

Researchers mainly focus in this study to the examine impact of employee satisfaction in organizational setting. **Among** the independent variables Organizations cultural differences, Changes in organizational strategy and Networking and learning were proven as statistically significant whereas Changes in socio cultural conditions was proven statistically insignificant. Arguments build with respect to Changes in socio cultural conditions interpret that, there is lack of part time engagement of employees in job solid connection market. between employer and employee and significant degree of firm commitment in employees towards the organization. With reference to Herzberg's two- factor theory the statistically significant independent variable factors are Organization's cultural



differences, Changes in organizational strategy and networking and learning. Among these independent variables Organizations cultural differences, Changes in organizational strategy and Networking and learning have an impact on employee satisfaction through boundaryless career.

#### References

B.wernerfelt. (1984). A Resource Based View Of the Firm. *Strategic Management Journal*, vol-5(No-2), 171-180.

Bandura, A. (1986). The explanatory and predictive scope of self efficancy.

Barney, J. (1991). Firm Resource Sustain Competitive Advatage. *Journal Of Management*, 17-99.

Becker, G. (1964). *Human Capital* . New York: Columbia University .

Bridges, W. (1994). *The end of the job.* Fortune.

Hamel, C. a. (n.d.). The Core Competence Of The Corporation . *Harward Business Review*.

Hirsh, P. (1987). *Pack your own parachute.* MA: Addision-Wesley.

Hofstede, G. (1984). Cultural consequences: International diVerences in work-related values. *Journal of Management*, *1*, 81-99.

Pfeffer, S. (1978). *The external control of organizations*. New York: Haper & Row.

Sexenian, A. (1994). *Regional Advantage" Culture and Competition in Silicon Valley and Route128*. Cambridge MA: Harward University Press.

## Acknowledgement

We would like to forward special thanks to the lecturer Ms. D.D Lokuge for giving all the nessesary knowledge and guidance about the research. Also we would like to thank the authority of General Sir John Kotelawala Defence University for organizing International Research Conference in 2020. Finally, we take this opportunity to express a sincere thanks to lecturers, parents, friends and everybody who supported us.

## **Author Biographies**



R.H.P.M. Ranasinghe,

BSc.Logistics Management (Undergraduate), Department of Management and

Finance, Faculty of Management, Social Science and Humanities, General Sir John Kotelawala Defence University



W.A. Harini
Wanniarachchi,
BSc. Logistics
Management
(Undergraduate),
Department of
Management and
Finance, Faculty of

Management, Social Science and Humanities, General Sir John Kotelawala Defence University



D.M.D.V.B Dissanayake, BSc. Logistics Management,

(Undergraduate), Department of Management and Finance, Faculty of Management, Social Science and Humanities, General Sir John Kotelawala Defence University





Dinusha Dushanthi
Lokuge Senior
Lecturer- Grade II
Department of
Management and
Finance, Faculty of
Management Social
Sciences and
Humanities, General

Sir John Kotelawala Defence University

MSc. In Management, 2014, University of Sri Jayawardanepura and BSc in Eco Business Management (Special), 2018, Sabaragamuwa University of Sri Lanka, Performend as a plenary technical session Coordinator of the Management, Social Science and Humanities session at the 8th International Research Conference Inculcating Professionalism for National Development of General Sir John Kotelawala Defence University held on 27th – 28th August 2015



Paper ID: 480

# Perceived Work-life Balance for the Job Satisfaction of Banking Employees in Sri Lanka

Asanka D Dharmawansa<sup>1#</sup> and RAM Madhuwanthi<sup>2</sup>

<sup>1</sup>Department of Industrial Management, Wayamba University of Sri Lanka <sup>2</sup>School of Business, Esoft Metro Campus, Kurunegala, Sri Lanka

#asankad@wyb.ac.lk

Abstract: Human capital generates greater value for an organization and presently modern organizations highly focus on their human capital. Work-life balance is common in employee job satisfaction. The main objective of this study is to determine the impact of work-life balance on job satisfaction of banking employees in Sri Lanka. The indicators of work-life balance are organizational factors and individual factors. Organizational factors consist of work demand and organizational support. Individual factors consist of family demand and family member support. There were 123 respondents selected as the sample, and primary data were gathered through questionnaire method. Gathered data were analyzed through the SPSS Statistical Software. Multiple Regression analysis and Correlation analysis methods were used to analyze the research data. 84.7% variation of satisfaction is explained by independent variables. The correlation analysis reflects that work demand, family demand, organizational work-life balance support and family member support are significantly and positively correlated with employee job satisfaction. The findings of the regression analysis highlighted the impact of each independent variable on employee job satisfaction.

**Keywords:** Job satisfaction, Work-life balance, Banking sector

#### Introduction

Human resource management is a vital managerial function in modern organizations. Quality of the service, customers' friendly service and competent employees generate a competitive advantage to organizations (Batarliene et al., 2017). Human resources practices enhance the employee motivation and employee competencies which generate sustainable competitive advantage (Pe'er, 2016). Highly satisfied and hardly stress employees are an invaluable source of company productivity (Deivasigamani & Shankar, 2017). Today context work-life balance and job satisfaction of the employees become much important research area related to human resource management (Kottawatta & Arunika, 2015). Work-life balance is the satisfactory level of an employee who engages with multiple roles in his/her life (Judith, 2016). Profession related activities and personal related activities need to manage by an employee. The proper balance between professional life and personal life enhance the employee's quality of life as well as the productivity level at the workplace.

Banking sector contributes to the Sri Lankan economy with strong financial aids to individuals and business entities. The banking sector has 69.5% market share based on assets in financial system Sri Lanka in 2017, there are 25 licensed commercial banks and 7 licensed specialized banks to distribute in the country (Central Bank of Sri Lanka, 2017).





According to central bank statistics, there are 13 numbers of licensed commercial banks, licensed commercial bank (LCB) branches, 181other licensed commercial banking outlets and 339 total licensed commercial branches and banking outlets in Kurunegala district of the second quarter in 2018 (Central Bank of Sri Lanka, 2018). Sri survey conducted labour Department of census and statistics revealed that 160,000 persons employed in the financial and insurance industry around the country (Department of census and statistics, 2017). With this strong establishment research on the banking sector will useful for further development. This study aims to enhance the knowledge regarding work-life balance and job satisfaction with the banking sector in Sri Lankan context. This study aims to investigate the research topic considering both public and private sector banks in Sri Lanka with special reference to Kurunegala District.

Researchers found that the absence of the work-life balance enhance the dissatisfaction among employees and there is a strong relationship between work-life balance and job satisfaction (Shujat et al., 2011). In Sri Lanka banking employees need to work mostly from 9 am to 5 pm. But tight deadlines and unpredictable workflow pressure to employees work in long hours and many employees reported that they experienced job stress and work-life imbalance (Adikaram, 2016). Kottawatta and Arunika empathized that study on work-life balance and job satisfaction is much important in the current context to create an efficient and effective workplace. They addressed that bankers in Sri Lanka became more competitive and public bankers also more customer-oriented. Bankers have implemented strategies to attract more customers through long opening hours, opening more branches, more workload and high work pressure. It creates a poor work-life balance among employees and high dissatisfaction on the job (Kottawatta & Arunika, 2015). Researcher encouraged with these justifications to investigate this matter on both private and public banking employees in Kurunegala district. In Sri Lankan context there are few types of research on this subject and this study contributes to fill up the research gap and facilitate future researchers with great support. The objective of this study is to determine the impact of work-life balance on job satisfaction of banking employees in Sri Lanka with special reference to Kurunegala District.

#### **Literature Review**

Job satisfaction is widely considered subject in the research field. Job satisfaction highly refers to an individual's attitude towards his/her job. Job satisfaction is a complex phenomenon and it is resulting through assessment of various job elements (Azeem & Altalhi, 2015). As per (Ciarniene et al., 2010), when employees have higher job satisfaction their attitude towards the company and job is positive. Researchers have found that job satisfaction enhances employees' performance through enhancing their productivity, responsible for their task, mental and physical health (Ahmed & Ramzan, 2013). Employee satisfaction highly associated with employee engagement and only satisfied employees more tend to become an engaged employee (Wiseto, Hubeis, & Sukandar, 2016). Researchers revealed that a low level of job satisfaction is associated with a high level of absenteeism, employee turnover, poor commitment, and employee stress (Judge & Ilies, 2004; Shadab & Arif, 2015). Job satisfaction of employees and negatively related to significantly employee turnover intention (Rajapaksha & Kappagoda, 2017). As cited in (Azeem & Altalhi, 2015) Samavi, 2011 addressed that employee job satisfaction significantly contributed to enhancing employee





commitment towards the organization. Further Lambert et al., 2006 emphasized that work-life balance can be achieved if employee satisfaction with their work and personal life only. Job satisfaction is effected through salary and remuneration package, workplace conditions, organizational culture, physical environment, and administrative control (Judge & Ilies, 2004; Shadab & Arif, 2015). Job satisfaction is influence by extrinsic and intrinsic factors. Extrinsic factors refer to pay, working conditions, job security, and nature of the job, team cooperation, promotions, coworker support and leadership. Intrinsic factors are employee autonomy, recognition, meaningful work, responsibility, training and development, responsibility, skill variety, job involvement, job feedback, and task significance (Godfrey, 2014).

The work-life balance concept was first used during the 70's in the United Kingdom (Prasad, 2012). Later on, it began in the United States as well and in 80's and 90's organizations were began to implement work-life balance policies. The main purpose of such policies is enhancing employees focus on their families since they were highly focused on achieving organizational goals. Work-life balance is not limited to family members support. It includes other areas of employee's life such as travelling, sports, studies, leisure, entertainment, and personal development. According to (Zedeck & Moiser, 1990) work-life balance has been explained through segmentation, spillover and conflict models. Segmentation model identified that family and work are two different areas and there is no relationship and influence between these two areas. Currently segmentation model doesn't work in the real scenario. Spillover model reflects that work and family life affect each other and the effect may be both in positive and negative directions. Conflict model denoted that work, personal and family life creates demands to

satisfy by competing with a resource like time and energy (Benito-Osorio et al., 2014).

The work-life balance consists of three components called time balance, satisfaction balance and psychological involvement balance (Anuradha & Pandey, 2016).

- Time Balance Employees should have adequate time to spend on their work roles as well as their family roles. It is not enough to satisfy with either job role or family roles.
- Satisfaction Balance Employees should keep balance satisfaction among both job role and family role satisfaction.
- Psychological Balance Emotional involvement should be equal among work role and family role.

## Work-Life Balance

Researchers investigate the impact of worklife balance on employee job satisfaction with special reference to private sector commercial banks in Sri Lankan context and they considered working hours, working conditions, work pressure, change of job, and work-life balance programs as the work-life balance dimensions (Adikaram & Jayatilake, 2016). According to (Poulose & Sudarsan, 2017) work-life balance dimensions are personal life strains, personal life to work strains, personal life to work gains, and work to personal life gains. Further supervisory colleagues support, support, and the perceived organizational support considered under dimensions of work-life support (Yahya & Ying, 2014). Work-life balance can be divided into four dimensions namely work demand, family demand, work-life support and family support (Nishanthi Thalgaspitiya, 2015).

#### Work Demand

As cited in (Sheikh et al., 2018) Boyar & Mosley, 2008 explained that work is the task and activities that an individual needs to perform at the workplace. Work demand





means the commitments and obligations required to perform a given job including time spent at the workplace and the workload amount that employee should perform in his/her job role. (Poulose & Sudarsan, 2017) found that workload significantly and negatively related to work-life balance. Most of the time employees face work and family conflicts because of insufficient time to dedicate to work responsibilities as well as family matters. Overtime working hours and high workloads are the indicators of work demand. Work demand is positively associated with work-family conflicts and reduces the work-life balance (Lu et al., 2008). Long working hour's effect on employees performance and work overload have consequences on employees as well as their families. Further researchers found that work-family conflict has a significant mediating effect on the association between work demand, home (family) demand and work-life balance (Sheikh et al., 2018).

#### Family Demand

Family demand means the commitments and obligations of the family including children, parents, and spouse. Family demand highly involves married employees since they have to care for their children (Lu et al., 2008). Further, they found that family demand positively related to work and family conflicts. As per (Boyar et al., 2008) family demand indicators are hours in care, children at home, dependent at home, and marital status. The latent constructs of the perceived family demand are family role conflict, family role ambiguity, family support and family to work support. Home demand has significant and negative effects on employee work-life balance (Sheikh et al., 2018).

# Organizational Work-Life Support

The organizational work-life support means strong support (organizational policies and procedures) provide by the employer to the employee in helping achieve a balanced work life. According to (Eisenberger et al., 1986) it is more important than the employer or organizational support on employees' socioemotional needs by providing an adequate resource to manage role demands, provide enough appreciation for the employees, and concern employee' well being to maintain a work-life balance. **Further** better organizational support is recognized as an important factor for employee work-life balance as well as employee job satisfaction. Organizational support has a positive correlation with employee work-life balance (Yahya & Ying, 2014).

#### Family Member Support

The family support means the support from employee's family members like spouse, parents, and children to maintain a balance between work and personal life. Researchers found that family support provides positive energy to achieve work-life balance (Russo et al., 2015). The role of family support in balancing professional and personal life is more significant. Especially women who are having adult children easily balance their work and personal life than women with young age children and kids. Similarly, employees who have to take care of their parents also reflecting work-life imbalance. Therefore they need support from their partners, siblings, friends to handle children and parents (Padma & Reddy, 2013).



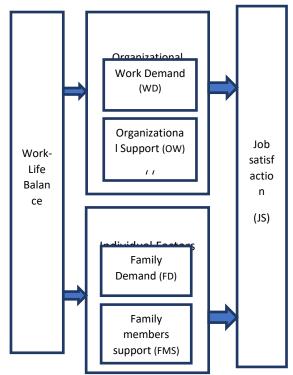


Figure 7. Conceptual Framework

## Methodology

In depth literature review is assist to identify the theoretical background and dimensions of work-life balance and job satisfaction. The independent variable of this study is work-life balance and the dependent variable is job satisfaction. Figure 01 represents the conceptual framework of this study.

#### Result & Discussion

The researcher has selected 123 respondents from the total population of banking employees who are working in the executive category and residing in Kurunegala district in Sri Lanka. The researcher has used simple random sampling to collect the data since there is a larger population who are working in the banking sector in Kurunegala District. The primary data was gathered using a questionnaire prepared by the researchers. The researchers have used SPSS Statistical Software to analyse the research data. Multiple Regression analysis and Correlation analysis were used to further justify the validity of the research objectives. Reliability and validity are being considered

measurements to the accuracy of research findings. The researcher has used Cronbach's Alpha ( $\alpha$ ) by using SPSS Statistics to measure the reliability of the data set. Cronbach's Alpha value is 0.693, which indicates a high level of internal consistency for the data sample. This implies that the data sample can be used for further analysis.

Generalizability is being considered as an assessment criterion for measuring the quality of research work. As explained by (Smith, 2018) "when properly applied quantitative methods can produce reliable results from a representative sample of participants that can be applied to a wider population or different contexts". The researcher has used a sample representing the banking industry who are permanently engaging as the banking employees in Sri Lanka. However, the captioned work-life balance is a common requirement for all the working organizations and the findings of this research would be able to apply to a wider population easily.

The descriptive statistics has been undertaken to understand and to get an idea on the minimum and the maximum values of each variable together with the mean and the standard deviation of each variable as shown in Table 01.

Table 01. Descriptive Statistics

	N Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic
JS	123	2.3907	.25482	.065
WD	123	3.7534	.58493	.342
FD	123	2.9695	.59677	.356
ow	123	3.5589	.62240	.387
FMS	123	3.3313	.56945	.324





Table 02. Correlation Analysis of the Variables

Tak	ole 02. Corre			FD	ow	FMS
		JS	עעט	Fυ	UW	FM3
JS	Pearson Correlati o	1	.370*	.152*	.760* *	.754* *
	Sig. (1- tailed)		.000	.046	.000	.000
WD	Pearson Correlati o	.370*	1	.309*	.138	.303*
	Sig. (1- tailed)	.000		.000	.064	.000
FD	Pearson Correlati o	.152*	.309*	1	005	.166*
	Sig. (1- tailed)	.046	.000		.479	.034
OW	Pearson Correlati o	.760* *	.138	005	1	.680*
	Sig. (1-tailed)	.000	.064	.479		.000
FM S	Pearson Correlati o	.754* *	.303*	.166*	.680*	1
	Sig. (1- tailed)	.000	.000	.034	.000	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (1-tailed).

Table 01 mentioned the needed values of the variables and all are under the specified ranges and suitable for undertaking the analysis.

Correlation analysis was done as shown in Table 02. It can be concluded that all the interrelationships between the variables are significant except the correlation between the variables working demand and organizational work-life support and between the variables family demand and organizational work-life support.

Table 03: Multiple Regression Analysis

d Coeffi	icients	Coeffi.		
I	d Coefficients			
В	Std.	Beta	t	Sig.
	Error			
.793	.110		7.207	.000
.079	.023	.182	3.399	.001
.017	.022	.039	.749	.455
.201	.028	.491	7.243	.000
.161	.032	.359	5.087	.000
	.793 .079 .017 .201 .161	Error .793 .110 .079 .023 .017 .022 .201 .028	Error .793 .110 .079 .023 .182 .017 .022 .039 .201 .028 .491 .161 .032 .359	Error 7.207 .793 .110 7.207 .079 .023 .182 3.399 .017 .022 .039 .749 .201 .028 .491 7.243 .161 .032 .359 5.087

a. Dependent Variable: JS

As per the analysis, as shown in Table 03, the independent variables and the dependent variable relationships are mentioning and the working demand is having a significant positive relation with the job satisfaction with the beta value of 0.079 and the t value of 3.3999 and the p-value of 0.001 which is less than 0.01. Hence they are significantly related at 0.1 level of significance. In the same time, the variables organizational work-life support and the job satisfaction also have a significant positive relationship with the beta value 0.201 and the t value of 7.243 and the p-value of 0.000 which is less than 0.01 and hence they are significantly related at 0.01 level of significance. Further, the variables family member support and the job satisfaction also having a significant positive relationship with beta value 0.161 and the t value of 5.087 and the p-value of 0.000 which is less than 0.01 and it can be concluded that the two variables are significantly related at 0.01 level of significance. Further, the variables family



<sup>\*.</sup> Correlation is significant at the 0.05 level (1-tailed).



demand and the job satisfaction are not significantly related with each other since the beta value is 0.017 that is quite low and the t value is 0.749 which is low value proving the insignificance and more importantly the p-value is 0.455 which is greater than 0.05. Hence, the two variables are not significant at the 0.05 level of significance.

Table 04. Model Summary

Model	R	R Square	•	Std. Error of the Estimate
1	.847ª	.717	.708	.13777

a. Predictors: (Constant), FMS, FD, WD, OW

As per the model summary results shown in Table 04, the R squared value is mentioning as 0.847 which is a higher value. This explains that 84.7 per cent of the variation of the dependent variable (job satisfaction) as explained by the independent variables (working demand, family demand, organizational work-life support, family member support) around its mean. Thus, the model can be explained as more fitted and can be used in the estimation.

The model fit can be identified further by looking at the ANOVA table also. Table 05 explains the ANOVA output of the analysis.

As per the Table 05, the F statistics can be understood and value of the F statistics needs to be in the higher value and the here it is 74.837 which is considerably higher and the p-value is 0.000 which is considered to be significant. Thus, the model can be considered as correct and reliable enough to use in the estimation.

Table 05. ANOVA output of the analysis

M	Iodel	Sum of	df	Mean	F	Sig.	
1	Regressio	5.682	4	1.420	74.83	.000	
	Residual	2.240	11	.019			
	Total 7.922 12						
a.	a. Predictors: (Constant), FMS, FD, WD, OW						

Table 05. ANOVA output of the analysis

M	Iodel	Sum of	df	Mean	F	Sig.
1	Regressio	5.682	4	1.420	74.83	.000
	Residual	2.240	11	.019		
	Total	7.922	12			

b. Dependent

#### Conclusion

The study has been undertaken to determine the impact of work-life balance on job satisfaction of banking employees in Sri Lanka with special reference to Kurunegala District. The impact of the factors like working demand, family demand, organizational work-life support and the family member support on the job satisfaction has been measured in this study to increase the performance of the employees through the job satisfaction.

The study has been used the primary data and the data has been collected through self-administrated questioner and the population was the banking employees in Kurunegala district in Sri Lanka.

The multiple regression has been given the results for the independent and the dependent variables and the results are showing that the working demand is having a significant impact on job satisfaction. Working demand is explaining how much time they spend on the work and the family comparatively. If the employees are missing the family time because of the tie spend in the working place, the satisfaction will be reduced. Thus, there is a relation between those two measures and the management needs to take steps to make the steps to allow the employees to have the needed time with the loved once. Further, there is a significant relationship between organizational work-life support and job satisfaction. This explains that how is the feasibility of the working place to attend the family matters in urgent situations and normal situations. Accordingly, if the company management is allowing the



workers the freedom and easiness in the management in urgent situations, the workers will be more satisfied with the working. Thus, the banks need to increase the procedures and should make the steps easier for the employees to make life easier with satisfaction. If so, satisfaction can be achieved. The family member support and job satisfaction also having close relationships with each other. If the family members are understanding the situation and the job type, the employee will be more satisfied. Accordingly, not only the organizational factors are impacting on the satisfaction but the personal factors also do have an impact on this. In the same time, there is no relation between family demand and job satisfaction. The family needs to understand the nature of the work and if so the employee will be more satisfied to work.

Accordingly, there can be many suggestions for the banking sector of Kurunegala district to enhance the satisfaction of the employees and to achieve the objectives and the success of the business. The company factors are not the only concern but the personal factors do impact on this. Thus, the company management needs to take the proper steps like not to be much harsh on the employees and having the humanity side with them. Having the processed work plan to handle the employee's issues and aiding them in urgent cases and providing full support for the employees on behalf of the working organization.

If such a practice is not undertaking the job stress will be there and it leads to the working imbalance of the employees and it will be a mental disturbance for the employees. The present times, most of the banks do have a stressed working environment and tied schedules. This needs to be changed in a way that satisfaction can be achieved successfully.

As this research study found that the family is a critical sector in the employees to make a satisfying working life. Thus, the company management needs to understand the working load given to a worker and the number of hours of the working of every employee. All the actions that are undertaken need to be in the order. If the employees are getting what they are expecting, the satisfaction of the job can be achieved successfully and it will be impacting the working quality and the working life of the employees also.

This study has helped the banking sector to understand the working balance of the employees and accordingly, the banks need to follow correct steps to make the employees motivated.

#### References

Adikaram, D.S.R. & Jayatilake, L.V.K., 2016. Impact of Work Life Balance on Employee Job Satisfaction In Private Sector Commercial Banks of Sri Lanka. *International Journal of Scientific Research and Innovative Technology*, 3(11), pp.17-31.

Ahmed, & Ramzan, M., 2013. Effects of Job Stress on Employees Job Performance A Study on Banking Sector of Pakistan. *IOSR Journal of Business and Management*, 11(6), pp.61-68.

Anuradha & Pandey, M., 2016. Impact of work-life balance on job satisfaction of women doctors. *Problems and Perspectives in Management*, 14(2).

Azeem, S.M. & Altalhi, H., 2015. Role of Perceived Work-life Balance and Job Satisfaction in Developing Organizational Commitment among Hospital Employees in Saudi Arabia. *International Journal of Academic Research in Business and Social Sciences*, 5(12), pp.185-197.

Batarliene, N. et al., 2017. The Impact of Human Resource Management on the Competitiveness of Transport Companies. *Elsevier*, 187, pp.110-16.





Benito-Osorio, D., Muñoz-Aguado, L. & Villar, C., 2014. The Impact of Family and Work-Life Balance Policies on the Performance of Spanish Listed Companies. 17(4), pp.214-36.

Boyar, S.L., Maertz, C.P., Mosley, D.C. & Carr, J.C., 2008. The impact of work/family demand on work-family conflict. *Journal of Managerial Psychology*, 23(3), pp.215-35.

Central Bank of Sri Lanka, 2017. Annual Report.

Central Bank of Sri Lanka, 2018. *Distribution* of Banking Outlets (2008 - Latest). Central Bank of Sri Lanka.

Ciarniene, R., Kumpikaite, V. & Vienažindiene, M., 2010. Expectations and Job Satisfaction: Theoretical and Emperical Approach. *6th International Scientific Conference*, pp.978-84.

Deivasigamani, J. & Shankar, 2017. Dimension of Work Life Balance in Software Companies. *Asian Journal of Applied Sciences*, 5(2).

Department of census and statistics , 2017. Employement - Department of census and statistics.

Eisenberger, R., Huntington, R., Hutchison, S. & Sowa, D., 1986. Perceived organizational support. *Journal of Applied Psychology*, 71, pp.500-07.

Godfrey, S., 2014. Factors Influencing Employee Job Satisfaction and Its Impact on Employee Performance.

Judge, T.A. & Ilies, R., 2004. Affect and Job Satisfaction: A Study of Their Relationship at Work and at Home. *Journal of Applied Psychology*, 89(4), p.661–673.

Judith, J., 2016. Influence of Work Life Balance on Job Satisfaction of Employees in Milimani Law Courts, Nairobi, Kenya.

Kottawatta, H.K. & Arunika, M.M.A., 2015. The Effect of Work Life Balance on Employee Job Satisfaction among Non Executives in the Public Banking Sector in Colombo District. *Human Resource Management Journal*, 3(1).

Nishanthi, H.P.M. & Thalgaspitiya, U.K., 2015. Impact of Work and Family Life Balance on Job Engagement of Machine Operators of the Apparel Sector in Dehiowita Divisional Sector, Kegalle District in Sri Lanka. *2nd International HRM Conference*, 1(2).

Padma, S. & Reddy, M.S., 2013. Role of Family Support in Balancing Personal and Work-Life of Women Employees. *International Journal of Computational Engineering & Management*, 16(3), pp.93-97.

Pe'er, A.A., 2016. Human Resource-based Competitive Advantage: The Case of Motivational Rents. *Journal of Entrepreneurship & Organization Management* 5(162).

Poulose, S. & Sudarsan, N., 2017. Assessing the influence of work-life balance dimensions among nurses in the healthcare sector. *Journal of Management Development*, 36(3), pp.427-37.

Prasad, V., 2012. Work-Life Balance among Human Resources, Emerging Trends in select corporate Businesses in India and Abroad- A study. *Internacional Journal of Research in Commerce and Management*.

Rajapaksha, U.R.D.S. & Kappagoda, U.W.M.R.S., 2017. Factors Affecting to Turnover Intention of Non- Managerial Employees in Apparel Industry: A Sri Lankan Experience. *International Journal of Managerial Studies and Research*, 5(11), pp.76-82. http://dx.doi.org/10.20431/2349-0349.0511008.

Russo, M., Shteigman, A. & Carmeli, A., 2015. Workplace and family support and work-life balance: Implications for individual psychological availability and energy at work. *The Journal of Positive Psychology*, 11(2).

Shadab, M. & Arif, K., 2015. Impact of Work-Life Balance on Job Satisfaction A Case of Health Care Services in Pakistan. 5(9).





Sheikh, M.A. et al., 2018. mpact of Work and Home Demands on Work Life Balance: Mediating Role of Work Family Conflicts. 4(5), pp.48-57.

Shujat, S., Cheema, F.-E.-A. & Bhutto, F., 2011. Impact of Work Life Balance on Employee Job Satisfaction in Private Banking Sector of Karachi. *Journal of Management and Social Sciences*, 7(2), pp.8-15.

Wiseto, A., Hubeis, A.V. & Sukandar, D., 2016. Analysis of Employee Engagement to Improve the Performance of Retail Risk Group PT Bank Mandiri. *Journal of Education and Practice*, 7(24).

Yahya, F. & Ying, J.Y.Y., 2014. THE RELATIONSHIP BETWEEN WORK SOCIAL SUPPORT AND WORK-LIFE BALANCE IN HOTEL INDUSTRY. *Institut Penyelidikan Pembangunan Belia Malaysia*, pp.27-41.

Yin, R.K., 1994. *Case Study Research: Design and Methods*. Newbury Park: Sage.

Smith, B., 2018. Generalizability in qualitative research: misunderstandings, opportunities and recommendations for the sport and exercise sciences. Researchgate.

### **Author Biographies**



Asanka D.
Dharmawansa
obtained his PhD and
M.Sc. degree in
Management and
Information systems
Engineering from
Nagaoka University of
Technology, Japan. He

obtained his B.Sc. Degree in Industrial Management & computing & Information Systems from the Wayamba University of Sri Lanka.



R.A.M. Madhuwanthi obtained her PhD in the Department of Information Science and Control Engineering at Nagaoka University of Technology, Japan. She received her M.Sc.

Degree in Operational Research from the Department of Mathematics, University of Moratuwa, Sri Lanka.

Paper ID: 559

# Impact of Psychological Capital on Academic Performance and Study Stress among Second Year Undergraduates of KDU

Deshini Sirinaga#, Jithmi Payagala and KKNP Rathnayake

Department of Social Sciences, Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defence University

#deshinisirinaga155@gmail.com

**Abstract:** When compared to researches about job performance, a little attention has been given to academic performance. Psychological capital (PsyCap) and study stress are major concepts when it comes to academic performance. During the first year, many undergraduates find it difficult to adjust themselves the to new university environment and to face unexpected study stress suddenly due to exams and continuous assignments in their second year as well. Therefore, very few may overcome those challenges due to their strong positive psychological resources. Others may get affected due to their unbearable stress. Therefore, this study examines the impact of PsyCap and study stress on academic performance among second year undergraduates of KDU. The study adopted the mixed research design. A random sample of 128 students (n=128) were given a structured questionnaire and interviews for key informants. Regression analysis using SPSS in quantitative approach and thematic analysis in qualitative approach were used to analyse the data. Study results indicate that PsyCap of second year undergraduates has a significant and positive impact on their academic performance. However, a higher level of study stress affects negatively on academic performance, but it was not a significant impact. Furthermore, this study highlights the ways in which PsyCap of undergraduates could be further enhanced. Nevertheless, maintaining a moderate level of study stress is possible to generate better academic performance. As future research,

researchers intend to consider other state and private university undergraduates in all streams. More importantly, key informants stress on the importance of mitigating higher stress levels among undergraduates.

**Keywords:** Psychological capital, Study stress, Academic performance, Positive organizational behaviour

#### Introduction

Psychological Capital (PsyCap) was first introduced by Dr. Fred Luthans in the University of Nebrasca- Lincon. He found a concept called positive PsyCap. Psychological capital is known as the positive psychological development of an individual which includes main four components as HERO. Hope is a feeling of trust, Efficacy is the ability to achieve a target, Resilience means ability to overcome quickly from barriers Optimism is the confidence. The term HERO is used to introduce psychological capital as an abbreviation of components and generally HERO is a person who is admired for achievements and courage. PsyCap can be varying from one person to another in every person as well as in every undergraduate with related to study.

Due to continuous assignments, exams and class tests and lack of social relations many undergraduates are undergoing with study stress. However, a student with higher PsyCap can defeat the negative outcomes of study stress. But some may suffer with depression and phobia because they cannot control those academic pressure or stress and those will





directly affect for their academic performances. This study aims to examine the impact of Psychological Capital on academic performances while testing the relationship between study stress and academic performance among second year undergraduates. As second year undergraduates are well experienced from their first year due to continuous exams, assignments and not being familiar the university surrounding. Further due to lack of social relations and separation of parents, the study has focused on their first-year academic performance. Considering about the problem statement, in order to fulfil objectives people should have the confidence and as well as positive thinking, but some circumstances like stress, depression and phobia etc. may cause as a barrier in fulfilling individuals' tasks. But also, positive stress can be help to create moral thinking in student mind, helps to work effectively and efficiently, to make strategic objectives, easy to handle work breakdown success. Even though, positive stress may even help to develop a student, most of students may suffer with negative stress. Previous studies have found that the most of the undergraduates undergo with phobia, depression and stress due to their academic work load and maybe for some other causes as well, like lack of social relations in the surrounding university and also the separation from the parents. But some are having the capacity to solve these situations and achieve their objectives. We are predicting that kind of people have high psychological capital in order to overcome the situations like stress. In this study we are examining how capable were the second-year students dealt with study stress by their psychological capital and the impact of psychological capital towards their first-year academic performances due to changes in the surroundings. The moment this research was conducted, the second-year undergraduates have not received the results for the secondyear academics. Therefore, this study is focussed on their first-year academic results with all experiences in first year. Our Research is based on both research questions and hypothesis as it is conducted by using both quantitative and qualitative approaches. Quantitative approach will be used to recognize the ground level of study whereas the qualitative study will help to realize its philosophical understanding.

#### A. Field of Study

Luthans, states that the concept of psychological capital is known as individual's positive psychological state of development. When focusing further about the concept of positive psychological capital, Psychological capital is focusing on the last decades with the concern of present working conditions and expectations of employees in gaining competitive advantage. It is said that there is clear evidence that positive psychological capital has contributed a lot to gain employees' desired outputs and to supply new ideas to understand and to manage potentially the negative and stressful organizational situations. Therefore, when it comes to disciplines of organizational behaviour and industrial and organizational psychology, the concepts of psychological capital and stress are most important. At present, Study stress is considered as a deep concept which has driven further from the field of stress. There can be several kinds of stress but for a student, study stress is one of the most suffering situations which they may face at school or at university. eustress and distress which are main concepts of stress, so, the psychiatrists believe that the stress should be in a moderate level for a person to perform well in something that they engage.

The rationale of the research is that the most researches are completed mainly based on the PsyCap among employees in several organizations. But this study is worth because





it has proved that if PsyCap is measured in organizational basis to improve employee performance which has a greater positive level, it can also make effort for a student performance towards their academic performance. If students undergo with stress, this study examines whether it is possible to deal with the stress and overcome from the problems to perform well in academics. Also, it has explained the remedies which a university can take in order to build PsyCap as in positive individual among undergraduates by reducing stress. As this study is a mix research the research questions can be created as:

#### **Research Questions:**

- 1. Which factors determine the level of Psychological Capital among second year undergraduates?
- How Psychological Capital of students' can be further improved in a defence university.

#### **Literature Review**

#### a. Foundation for PsyCap

About a decade ago, the positive psychology movement emerged as a reaction to the obsession that psychology has traditionally had with the pathological, predominantly negative aspects of human functioning and behavior. Therefore, as the former president of American Psychological Association Martin Seligman and some of his colleagues believed that too much attention in their field was centred on what was wrong with people and little attention was being directed toward the positive qualities and characteristics of individuals or what was right with people. The purpose of the positive psychology movement is to use as a scientific method to examine and wellbeing, make people's strengths rather than being concerned about their weaknesses. So, the emphasis is on optimum functioning of humans opposed pathological as to

functioning of humans.('Seligman\_2000\_Positive', no date)

Dr.Luthans found a concept called Positive Organizational Behavior (POB) and described as the "the analysis and application of positively focused human resource strengths and psychological skills that can be assessed, built and managed effectively to enhance performance in the workplace of today" (Luthans, 2002) and also he identified a specific inclusion criteria to distinguish POB and its mainly constructs from the popular self-help or even traditional positively oriented organizational behavior constructs (Luthans *et al.*, 2007) The positive psychology movement and the subsequent POB, PsyCap also identified as going beyond traditional economic capital, human capital, and social capital and also consist of who you are and what you can become (Luthans, Luthans and Luthans, 2004)While there are several applicants who can be drawn from positive psychology to operationalize this PsyCap, those have been selected to best meet the above mentioned inclusion requirements includes hope, efficacy, resilience and optimism and are described as a core construct is defined as, an individual's positive psychological state of development mainly characterized by having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging making a positive attribution (optimism) about succeeding now and in the future, preserving toward the goals and when necessary, redirecting paths to goals (hope) in order to succeed and when the best by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success. (Luthans, 2002).

The best definition for PsyCap can be found in the literature can be viewed as follows:

"an individual's positive psychological state of development characterized by: (1) having confidence (efficacy) to take on and put in the





necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" (Avey et al., 2010)

# b. Psychological capital and student academic performance

When it comes to the relationship between the various psychological contracts that make up PsyCap individually (i.e. hope, efficacy, resilience or optimism) or sometimes two of them on the impact regarding the impact of student academic performance. For example, according to Bandura's (1997) social cognitive theory and defined for application to performance as "one's conviction about his or her abilities to mobilize the motivation, cognitive resources or courses of action needed to successfully execute a specific task within a given context" (Hobfoll, 2002) was shown to be a strong predictor of first year college student academic performance and also through a meta-analysis, Valentine, Dubois and Cooper (2004) found efficacy was shown to be a strong predictor of academic success.

So, along with the psychological construct of optimism, an individual makes and the explanatory style an individual uses in response to situations and events and it linked to academic performance as well. For example, several studies shown, that students with more positive perspectives considerably outperform those with negative perspectives in the classroom(Ruthig *et al.*, 2004) As the third psychological resource in the core construct of PsyCap hope is characterized as a "positive motivational state based on an interactively derived sense of successful and pathways. As the final PsyCap variable

resilience is defined a person's ability to bounce back or rebound when faced with disappointing outcomes, failures or even positive changes and events. (Luthans, Youssef and Avolio, 2007) According to the above literature findings, the following hypothesis can be created;

H1: There is a significant positive relationship between PsyCap and students' academic performance.

#### c. Study Stress and Academic Performance

Considering about the Academic Performance and Study stress, Academic problems have been reported as the common kind of stress when it comes to the students in schools and universities, (Aldwin and Greenberger, 1987) As an example, (Schafer, 1996) questioned about the stressful daily life from the college students. Then he observed that most irritating stresses were by school related stresses like studying workload pressure, limited time, writing exam papers, taking tests and future plans as well as boring instructors. The stresses which are associated with academic activities has been engaged into various negative outcomes such as poor health, (Armsden and Greenberg, 1987) depression (Armsden and Greenberg, 1987) and also poor academic performance (Saipanish, 2003). Aldwin Greenberg in 1987 found that the perceived stress of academic was related to the depression among college students. Therefore, many studies have proved and found a relationship between academic performance and study stress (Akgun and Ciarrochi, 2003). Students are experiencing high level of academic pressure because of continuous assignments, exams, pressure, grade pressure uncertainty. So, as a summary, this stress has an impact on their academic performance. So, in this study we are examining relationship between study stress academic performance of second year undergraduates of our university KDU.

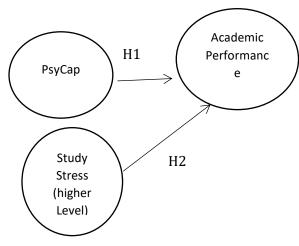




Therefore, this following second hypothesis can be created.

H2: There is a significant negative relationship between study stress (higher level) and students' academic performance.

#### Research Model



### **Experimental Design**

# 1) Philosophy

The beginning of the field of psychology was started with some of concepts regarding to examine what was right with people and what contributes human flourishing and growth capacity. Mainly the positive focus was emerged in the field of clinical psychology which was then extended to workplace by influencing in both the value of micro oriented positivity in individually as well as macrooriented positivity in organization. PsyCap is already existed in the organizational background and personal development. It distinguished PsyCap from other concepts. PsyCap helps to share a positive relationship and among individuals firm besides motivating organizational and individual performance. Forbes discovered a positive relationship between efficacies which is a of PsyCap basic component with entrepreneurial performance as well. On the other hand, well-being can be defined as a secondary related to optimism with a positive relationship (D.P.Forbes, 2005). As conclusion related component of

psychological capital, there are different and inter- related relationships between concepts and basic components of psychological capital. The positive relationship between self-efficacy and satisfaction bring along the positive relationship between self-efficacy and performance.

The main concepts which have been used in this study are psychological capital and study stress. It is true that the negative effect of study stress will affect an individual's performance but the positive stress is also can be taken as a motivator to work hard when considering about the factors of this particular study.

# **Research Approach**

The research study is based on a Mix Approach which consisted with both quantitative and qualitative in order to get more accurate and in-depth data as findings. The survey was conducted using structured questionnaire with related to quantitative data and the case study-based questions were asked in the interviews when gathering qualitative data. The data analysis was done through SPSS software for quantitative data and thematic approach was used to analyse qualitative data. Therefore, both inductive and deductive methods were used to get results from the study.

# Data Collection Methods, Tools and Analysis

For the quantitative data collection procedure, the population of research is chosen as the Second Year Undergraduates of KDU among private universities because of the convenience due to the limited amount of time. Second Year is the well experienced year after handling the first year with sudden academic pressure, which they get to know the university surrounding better. Among Second Year Undergraduates of KDU, the sample is taken from the main three faculties due to the higher rate of undergraduates.





Main subgroups were selected by using stratified sampling in order to get more accurate data and to highlight specific subgroups according to the interest of the study. Sample (n=100%= 128 Undergraduates).

From the total amount of second year 583 undergraduates, the strata were identified from the faculties which have a higher rate of students as, from the Faculty of Engineering: 45%= 111 undergraduates, Faculty of Allied Health Sciences 25% = 05 students from each five of their departments and from the Faculty Management, Social Sciences Humanities as 12% = 08 Logistic Management Undergraduates, 2% = 02 Management and Technical Science Undergraduates and 8% = 2 Social Sciences Second Year Undergraduates to the total sample of n=100% which is 128 undergraduates. This research used Online Survey method which is an online structured questionnaire. Judgemental Sampling was also used in order to collect qualitative data from a Senior Lecturer / Mentor at KDU and from a Psychiatrist of KDU Hospital based on in depth interviews.

The quantitative data collection was followed by a five likert scale online questionnaire. The questionnaire was consisted with three statements with related to Hope, Two statements in Self-Efficacy, three related to Resilience and six statements regarding Optimism in five likert scale questions. (1= strongly disagree to 6= strongly agree) and the analysis was done by using SPSS Software.

#### 2) Measures

#### Demographic Data Analysis

The demographic analysis was focused on mainly the age, faculty, gender, hometown, daily transport method, GPA rate, religion, nationality, the way they got to know about KDU and hobbies etc. in order to check whether these demographic factors affects second year undergraduates' academic performance and study stress.

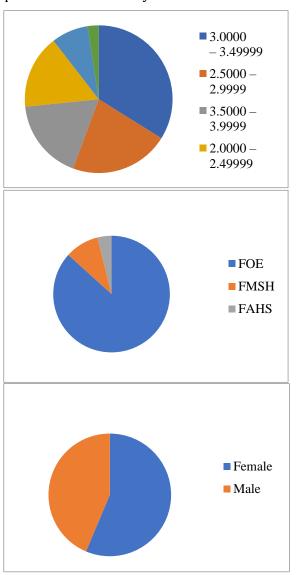


Figure 1 to 3: Sample data

In the quantitative analysis, the study aims in finding how strong and the negative the relationship between PsyCap, academic performance and study stress is. Therefore, the research has used SPSS software in order to show the appropriate measures. Those can be represented in a table mentioned as follows.



Tabla 1	Measurement mo	- d - l +
Tanie i	-weasurement ma	naerassessment

Construct	Items	Loadings	∝
Psycap	PsyHo1	0.759	
	PsyHo2	0.789	
	PsyHo3	0.8	
	PsySE1	0.692	
	PsySE2	0.827	
	PsyR1	0.569	
	PsyR2	0.564	
	PsyO1	0.748	
	PsyO2	0.733	
	PSyO3	0.671	
	PsyO4	0.546	
	PsyO5	0.732	
	Psy06	0.67	0.779
Study			
stress	SS1	0.617	
	SS2	0.754	
	SS3	0.748	
	SS4	0.926	
	SS5	0.926	
	SS6	0.783	
	SS7	0.781	0.754
Ac.per	Ap1	0.86	
	Ap2	0.849	
	Ар3	0.867	
	Ap4	0.841	0.408

Table 2. Means, Standard Deviations, and Correlations of Study Variables

	Mean	Std.Devi	Ac Per	PsyCa
		ation		p
AcPer	3.230 5	.60070		
PsyCap	3.751 2	.50164	0.462*	
Stress	2.984 4	.71152	-0.49	0.081

Table 3. Regression (R<sup>2)</sup> Results for PsyCap, Study Stress and Academic Performance

Hypotheses	R <sup>2</sup>	В	F. Value	Significance
Но		0.553	34.124	0.000
	0.221=			
H1	22 %			
H2		-0.042	0.308	0.58
Но				

#### **Results**

We have tested three factors like how related the questions in the questionnaire succeeded to find the impact when it comes to ∝ value, the co-relation of three factors PsyCap, Academic performance and Study Stress and the regression analysis in order to check how significant is the relationship between PsyCap and Study stress as well as PsyCap and academic performance.

### A) Results from Quantitative Analysis

Table 1 presents that all the loadings were responsively higher than nominal threshold of 0.5 but here in the variable of academic performance, the average has become 0.4, so, it interprets that there is a quite small relationship in the items of academic performance Variables such as in PsyCap and study stress similarly gained the scores concerning composite reliability a higher rate than the recommended value (0.70) these scores are basically noted to assure the convergent validity and so the results have shown its achievement in Psycap and study stress as the main determinants of academic performance. Table 1 indicates that the study responsively attained significant convergent reliability and scale validity.

Table 2 represents the correlation, there is significance relationship between psychological capital (independent variable) and academic performance (dependent variable) with the rate of 0.462\*\*. So, it means that there is a positive and significant



relationship of PsyCap towards academic performances of second year undergraduates. With the comparison between PsyCap and study stress, study stress looks like that there is no significance but negative weaker relationship. But it predicts that when the stress is increased, undergraduates will demotivate to perform well in academics. Between study stress and academic performance there is a negative relationship as -.049 and there is a lower relationship between PsyCap and study stress as 0.081.

When referring to the Table 3,  $\beta$  value is 0.553 between PsyCap (Independent variable) and academic performance (dependent variable). In addition, the independent variable of PsyCap: the R2value, β value, F value is high as well as the significance is also 0.000. If the  $\beta$  > 0.5, it shows that there is a high impact, so, this study indicates that the PsyCap has a high impact towards second year undergraduates' academic performance. It clearly shows that when students' PsyCap increases the academic performance also increases. So, the independent variables explain 22% of dependent variable. Therefore, the alternative hypothesis (H1) was acceptable and null hypothesis (Ho) is rejected. When comparing study stress with academic performance, β is -0.042, F value is very low (0.308) and also insignificant (P Value is 0.58> 0.5), it should be less than 0.5. In summary, there is a very weak and insignificant negative relationship among the study stress and academic performance. So, it means that the null hypothesis (H2o) is accepted and alternative hypothesis (H2) is rejected. That means there is a negative relationship between study stress and academic performance but there is no huge impact towards it.

# B) Results from Qualitative Analysis

In the qualitative analysis, this study has used thematic approach in order to take appropriate results. Therefore, there are five main themes which are created with related to answers given by the interviewees that can be help to explain the determinants further.

- a. Factors Determining the PsyCap
- b. Remedies for build-up Psychological Capital in universities
- c. Study stress as a motivation
- d. Developing PsyCap along with stress among undergraduates' factors determining PsyCap

When explaining each theme in detail, the following explanations can support as qualitative findings in order to show the how PsyCap is important for an undergraduate as well as how an undergraduate can overcome study stress.

#### a. Factors determining PsyCap.

According to the information gathered from in depth interviews, the determinants of Psychological Capital can be listed as, fulfilling desired goals, Leadership goals, building confidence, Goal orientation, Accepting challenges, Motivation and Successful planning.

# b. Remedies for build-up Psychological Capital in universities

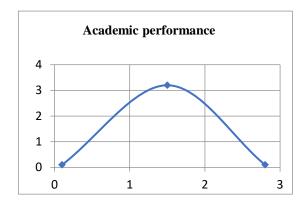
Regarding the concept of PsyCap as an individual university surrounding can play a major role to build up PsyCap on undergraduates like academic staff should give challenges to students. Along with this kind of things students will get know people start making their own plans as well selfmotivating them toward success. The other remedy is organizing academic programs to develop and open up leadership opportunities. For example, give them to conduct a first aid camp. These factors tend to increase their engagement. The other factor is creating the university system as a challenging system. This tends to motivate students bear up the challenges and get experiences and also through these remedies they can increase their PsyCap.





# c. Study stress as a motivation

The qualitative analysis proved that the study stress is not always negative, tis quite positive because to achieve study goal a person should have the stress and also it will be led to plan and motivate towards building inner PsyCap.





The stress which can be bearable

According to this curve when stress increases academic performance also increases. So, stress is a helper regarding our studies. If we cannot get stress, we cannot do our studies in a best manner. So, stress motivates us do our studies well and also it may also reduce our academic performance. Everyone should have a particular stress level in their bodies. When stress become lower, we call it eustress and when stress become higher, we call it as distress. So, as the conclusion study stress is not always negative it helps to perform our academics well.

# d. Strategies taken by policy makers, educationalists and parents

In order to develop PsyCap in students the policy makers, educationists and parents should play a major role since their childhood. As policymakers they should be aware of the psychological capacity and the interest of the students rather than failing them in exams, they should be able to do researches and identify the mistakes and get analytical knowledge for students in an applicable manner. As educationists should actually do a

survey to see the education system and should take proper decisions.

# e. Developing PsyCap along with stress among undergraduates

Our analysis proved that the study stress should need up to a certain level for a student in order to motivate. Doing a sport, engage in meditation, doing music and dancing are the actions a students can take when he/she get stress and also student should make a deadline for their own work as well as they should be able to plan all their studying time and other activities because it proves that students should make plans and have little bit of stress I order to do a better and effective performance by motivation.

#### **Disscussion and Conclusion**

The purpose of this study was to examine the effect of PsyCap and study stress both on academic performance. It was hypothesised that academic stress can have a significant negative impact towards studies and PsyCap can have a significant effect on academic performance. The quantitative results shown proved that there is a significant effect of PsyCap as an impact on second year undergraduates' academic performance and there is an effect of study stress as well but it is not a significant negative impact which means study stress also should be there as a motivator. In the literature we found that many of the studies have proved the importance of PsyCap when it comes to the performance of human being and also how a stress can be a motivator not only for academics but for office work as well. Therefore, the Students should need to increase their PsyCap for good academic performance by taking bearable stress as a positive factor which will motivate for good performance. From the findings it can conclude that the second-year undergraduates have a greater impact as a



percentage of twenty-two (22%) on PsyCap towards their academic performance and oth

er factors may influence the remaining from the quantitative data which we analysed. But this means that it has a greater influence in their studies.

Even though we believe that the study stress is demotivating and depressing students. But it proved that study stress also should be there in order to motivate and to direct to their academics. Therefore, this study suggests that the university surrounding should be friendly to the undergraduates and the staff, parents should identify the students' capacity and they should give more and more challenges to deal with so that the student will develop her/his PsyCap on own. Parents should not force their students to study they should let their children to take challenges of her/his own. It will directly influence the psychological strength of an undergraduates as well as a school student as we identified from the qualitative data.

Therefore, as mentioned in the qualitative data in thematic approach we can consider that the university should let the undergraduates to organize events, build up new challenges and bonds, aware about their psychological strength when dealing with them. The policy makers should hardly focus to change the system which will not affect a student who failed in mathematics has no future.

### a. Future Research Directions

This study is inclusive with few of general limitation. First, the research is based on only two factors which affect academic performance of second undergraduates. There are also plenty of mediators in influencing when determining the academic performance from PsyCap. And also, lot fourth year undergraduates may face problems due to finals. Those can be done in future research studies. The study is also based only on study

stress not considering the symptoms of depression and areas like phobia in deeply. Though there are other private and state universities operate in Sri Lanka, some issues may occur relates to the generalizability of the study findings. Thus, the model needs further extension, and critical evaluation in terms of other educational institutions, schools, or other private universities in Sri Lanka to provide useful insights. Thirdly, this study has completed within a short period of time, comparatively this period of short time may not enough to get more accurate data or reliable data So, it is worth to spend more time in the area of the study.

Finally, the study was based on quantitative approach and qualitative approach and collected data based on a structured online questionnaire following survey as well as in in-depth interviews. Since this study mainly deals with positive emotions, psychological resources, attitudes, on favourable job behaviours at academic, and only on study stress structured questionnaire and few interviews may not fully capture them. Therefore, future research needs to more fully examine the nature of causation between PsyCap, Study Stress and academic performance as well the factors which may affects all undergraduates' academic performance.

#### **References:**

Akgun, S. and Ciarrochi, J. (2003) 'Learned Resourcefulness Moderates the Relationship between Academic Stress and Academic Performance', *Educational Psychology*, 23(3), pp. 287–294. doi: 10.1080/0144341032000060129.

Aldwin, C. and Greenberger, E. (1987) 'Cultural differences in the predictors of depression', *American Journal of Community Psychology*, 15(6), pp. 789–813. doi: 10.1007/BF00919803.



Armsden, G. C. and Greenberg, M. T. (1987) 'The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence', *Journal of Youth and Adolescence*, 16(5), pp. 427–454. doi: 10.1007/BF02202939.

Avey, J. B. *et al.* (2010) 'Impact of positive psychological capital on employee well-being over time.', *Journal of occupational health psychology*, 15(1), pp. 17–28. doi: 10.1037/a0016998.

Hobfoll, S. E. (2002) 'Social and Psychological Resources and Adaptation', *Review of General Psychology*, 6(4), pp. 307–324. doi: 10.1037/1089-2680.6.4.307.

Luthans, F. (2002) Positive Organizational Behavior: Developing and Managing Psychological Strengths, Academy of Management Executive. doi: 10.5465/AME.2002.6640181.

Luthans, F. et al. (2007) 'DigitalCommons @ University of Nebraska - Lincoln Positive Psychological Capital: Measurement and Relationship with Performance and Satisfaction Positive Psychological Capital: Measurement and Relationship with Performance and Satisfaction', Personnel Psychology, 60, pp. 541–572.

Luthans, F., Luthans, K. W. and Luthans, B. C. (2004) 'Positive psychological capital: Beyond human and social capital', *Business Horizons*, 47(1), pp. 45–50. doi: 10.1016/j.bushor.2003.11.007.

Luthans, F., Youssef, C. M. and Avolio, B. J. (2007) *Psychological Capital: Developing the Human Competitive Edge, Psychological Capital: Developing the Human Competitive Edge.*doi: 10.1093/acprof:oso/9780195187526.001.00 01.

Ruthig, J. C. *et al.* (2004) 'Optimism and attributional retraining: Longitudinal effects on academic achievement, test anxiety, and voluntary course withdrawal in college students', *Journal of Applied Social Psychology*, 34(4), pp. 709–730. doi: 10.1111/j.1559-1816.2004.tb02566.x.

Saipanish, R. (2003) 'Stress among medical students in a Thai medical school', *Medical Teacher*, 25(5), pp. 502–506. doi: 10.1080/0142159031000136716.

'Seligman\_2000\_Positive' (no date).

## Acknowledgement

Our gratitude to Dr. (Mr) WMAGHA Premarathne for providing us with all necessary facilities in order to complete our research project. We place on record, our sincere gratitude to Dr. (Mrs)KKNP Rathnayake for her great encouragement, dedication and also for the great guidance that a student can ever have. We also thank Dr. (Mr) MM. Jayawardena and (Ms). HMAGK Ekanayake, senior lecturers for helping us from the beginning to make the project a success as research coordinators. We take this opportunity to record our sincere thanks to KDU Hospital as well for the lecturers in the Department of Social Sciences Management and Finance and all the faculty members for their support encouragement. We also thank to our batch mates for their help whenever we needed. We also place on record, our gratitude to one and all who has indirectly and directly, have lent their helping hands in this project.

#### **Authors**

The authors ar the final year undergraduates who are following BSc in Social Sciences degree at General Sir John Kotelawala Defence University.