



**Management Studies**  
Sabaragamuwa University of Sri Lanka

# **FELICITATION E-VOLUME DEDICATED TO MR. H.G. PIYASIRI**



**Faculty of Management Studies  
Sabaragamuwa University of Sri Lanka**

Published by Faculty of Management Studies, Sabaragamuwa University of Sri Lanka

Tel : +94452280007

Fax : +94452280007

The material contained in this publication has been provided by authors of research papers. Neither the Faculty of Management Studies of the Sabaragamuwa University of Sri Lanka nor the Editorial Board is responsible for any material reproduced in this publication.

Copyright Copyright © 2023 by the Faculty of Management Studies, Sabaragamuwa University of Sri Lanka, Belihuloya, Sri Lanka.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of the Faculty of Management Studies, Sabaragamuwa University of Sri Lanka.

ISBN 978-624-5727-35-3

Cover Design Ms. W.D.A.N Abeygunawardana

## **EDITORIAL BOARD**

### **Editors-in-chief**

Dr. M.D.N.M.U. Mahawattha

Mr. A.A.M.D. Amarasinghe

### **Copy Editors**

Dr. M.D.N.M.U. Mahawattha

Ms. J.D.K. Ruwanidka

# TABLE OF CONTENTS

<b>EDITORIAL BOARD .....</b>	<b>ii</b>
<b>MESSAGE FROM THE EDITORIAL BOARD.....</b>	<b>v</b>
<b>MESSAGE FROM THE VICE-CHANCELLOR.....</b>	<b>vi</b>
<b>MESSAGE FROM THE DEAN .....</b>	<b>vii</b>
<b>MESSAGE FROM PROFESSOR D.G. DHARMARATHNA.....</b>	<b>viii</b>
<b>MESSAGE FROM MR. I.A. EKANAYAKE .....</b>	<b>ix</b>
<b>MESSAGE FROM MR. D. JASINGHE.....</b>	<b>x</b>
<b>.....</b>	<b>x</b>
<b>MESSAGE FROM DR. P.K.S. MUNASINGHE.....</b>	<b>xii</b>
<b>MESSAGE FROM DR. MAHESH HAPUGODA.....</b>	<b>xiii</b>
<b>.....</b>	<b>xiii</b>
<b>MESSAGE FROM DR. SUJEEWA KODITHUWAKKU .....</b>	<b>xiv</b>
<b>MESSAGE FROM MRS. U.G.V.D.D. GUNARATHNE.....</b>	<b>xv</b>
<b>MESSAGE FROM MS. R.K.N.D. DARSHANI.....</b>	<b>xvi</b>
<b>MESSAGE FROM MR. SIVAYESUNESAN .....</b>	<b>xvii</b>
<b>ACHIEVEMENTS &amp; CONTRIBUTIONS.....</b>	<b>xix</b>
<b>APPLICABILITY OF THE FLIPPED CLASSROOM APPROACH TO TEACH ENGLISH IN THE POST-PANDEMIC SRI LANKAN UNIVERSITY SYSTEM.....</b>	<b>1</b>
Silva, N.A.L.D.R.....	1
<b>A NEED ANALYSIS APPROACH: AN INVESTIGATION OF NEEDS IN AN ENGLISH FOR SPECIFIC CONTEXT.....</b>	<b>24</b>
Ruwandika, J.D.K.....	24
<b>CAN HUMANIDS BE INDEPENDENT EXPLORERS IN MASTERING THE MASTER? READING THE MOVIE FINCH .....</b>	<b>34</b>
Harindi, W.L., and Hapugoda, M.....	34
<b>FACTORS AFFECTING EXCHANGE RATE VARIABILITY IN SRI LANKA: AN ARDL APPROACH .....</b>	<b>51</b>
Dissanayaka, D.M.H.R., Hansani, W.M., Walakumbura, S.H.M.L. & Amarasena B.W.C.M .....	51
<b>HARMONIZING LUXURY AND SUSTAINABILITY: POTENTIAL OF DEVELOPING LUXURY SUSTAINABLE TOURISM IN SRI LANKA FROM HOTELIERS' PERSPECTIVE .....</b>	<b>68</b>

Sathsarani, K.A.S.N. & Arachchi, R.S.S.W.....	68
<b>Research Questions.....</b>	<b>70</b>
<b>IMPACT OF EXCHANGE RATE ON STOCK RETURNS THROUGH MEDIATING EFFECT OF INTEREST RATE: EVIDENCE FROM SRI LANKA.....</b>	<b>83</b>
Madhushani, H.T.P.A., & Amarasinghe, A.A.M.D. ....	83
<b>INTELLECTUAL CAPITAL AND FINANCIAL PERFORMANCE; NEW EVIDENCE FROM A FRONTIER MARKET.....</b>	<b>97</b>
Gunarathne, U.G.V.D.D. ....	97
<b>PERCEIVED REASONS OF WORKPLACE OSTRACISM: PROFESSIONALS' EXPERIENCES IN SRI LANKA .....</b>	<b>112</b>
K.D.S.W. Gunasekara and N.P.G.S.I. Naotunna* .....	112
<b>STRENGTHENING IDEAL L2 SELF TO MOTIVATE L2 LEARNING.....</b>	<b>132</b>
Prasangani K.S.N. ....	132

## MESSAGE FROM THE EDITORIAL BOARD

Mr. H. G. Piyasiri is a pioneering Senior Instructor of English in the Faculty of Management Studies at the Sabaragamuwa University of Sri Lanka. After serving the faculty for more than three decades, he was to get his retirement by the 31<sup>st</sup> of December, 2022. Against this backdrop, we are much privileged to edit this felicitation e-volume in recognition of the immense contribution made by Mr. Piyasiri in conducting lectures and research, guiding and mentoring students, and providing consultancy to the relevant parties of the faculty and the university.

We would like to appreciate Prof. Athula C. Gnanapala for directing us to prepare an e-volume to recognize the contribution made by Mr. Piyasiri to the faculty.

Also, we are obliged to the Vice Chancellor of SUSL, Dean of the FMS, Director – CODL, SUSL, Heads of the Departments of FMS, and academics of different universities who generously gave their congratulatory messages to the e-volume.

We are also grateful to all authors who provided their research articles for the e-volume. Also, we would like to point out that the copyrights of the articles and particular writing styles belong to each author. We would like to mention that the order of the articles is alphabetical.

Further, we would like to appreciate the services rendered by Miss Kaushalyani Ruwandika for the formatting of the e-volume. Mr. Anura Gunarathna helped with the photography, and Miss. Ayesha Abeygunawardhana designed the cover pages.

We are also grateful to the welfare society of the faculty for allocating money for a few printed copies of the e-volume.

Finally, we would like to thank everyone who helped in numerous ways to make this e-volume a reality.

**Editorial Board**  
**January 2023**

## MESSAGE FROM THE VICE-CHANCELLOR



It is indeed with great pleasure and honour I convey my felicitation on his retirement to Mr. H.G. Piyasiri, Senior Instructor in English of the Faculty of Management Studies (FMS), Sabaragamuwa University of Sri Lanka (SUSL). I firmly believe that FMS would not be what it is without his resolve and fortitude. The university, faculty, and students will be forever grateful for his contribution to the founding and development of English programmes, including

Business English, Business Communication, Diploma, and Higher Diploma in English Courses. Through his teaching and programme administration. Mr. Piyasiri has touched the hearts of countless students. Mr. Piyasiri is a model colleague, an outstanding leader, a wise mentor, an excellent teacher, and a kind friend. Through these roles, he has made a real impact on our university with his optimism, enthusiasm, and boundless energy. His dedication to students was always apparent through the time and energy he put into mentoring and advocating for students.

His legacy of service will leave a permanent stamp on the faculty, the university, and the field, and his impact will be felt for generations to come. I am immensely grateful for his passion for SUSL and his love for nurturing generations of undergrads. Undoubtedly, in the classroom, he has helped students not only develop their language abilities but also develop as productive citizens of the world. Further, I know that as an educator, he has guided a vulnerable and delicate student population toward their goals with compassion and understanding. Whether it was creating a lesson, designing a curriculum, or corresponding with a prospective student, his steadfast and sincere devotion to serving students with integrity remains exemplary. One of Mr. Piyasiri's greatest legacies is surely the generation of students that he taught and inspired to date.

Wherever the next steps take him, I hope Mr. Piyasiri will keep in touch with the university and the faculty. I am deeply thankful for his role in building a stronger faculty and university, and I'm sure Mr. Piyasiri will be greatly missed, as the legacy that he leaves behind is forever memorable. I wish him the best in his retirement and future endeavours.

**Prof. R.M.U.S.K. Rathnayake**  
**Vice-Chancellor**  
**Sabaragamuwa University of Sri Lanka**

## MESSAGE FROM THE DEAN



With great delight and honour, I pen these words to the Felicitation Volume of my great teacher Mr. H.G.Piyasiri, Senior Instructor in English of the Faculty of Management Studies (FMS), Sabaragamuwa University of Sri Lanka (SUSL). It is impossible for me to convey in words the depth of my gratitude for your contributions during the last three decades to bring the faculty to this level. Since the inception of the faculty, Mr. Piyasiri has transformed countless students' lives through the classes taught and the mentorship he has provided, the curricula he has shaped, and the creative discoveries and work that he has advanced within his fields. I am profoundly grateful that you chose to devote this phase of your career to FMS.

Mr. Piyasiri began teaching at FMS as an instructor in English in 1992. During his thirty years at FMS, he has been one of the pillars of FMS Business English and Business Communication courses. Every student who has graduated from FMS in the last 30 years has been in one or more of Mr. Piyasiri's classes. He is undoubtedly one of the favourite lecturers among the students' community due to his excellent teaching, coaching, and exemplary charisma. His extensive service activities include coordinating Business English courses for FMS as well as CODL. Mr. Piyasiri has always been outstanding with his teaching skills striving to shape and enrich thousands of students within the faculty and the entire university. The FMS will miss his contributions to the educational endeavours of our students.

Though your retirement hopefully will provide you with much-deserved opportunities to pursue personal goals, I hope you will consider remaining connected to us. I am deeply grateful for your service to our community. You are not only a brilliant, completely dedicated, committed academician but a solid and quality human being. Thank you for your wisdom and dedication and for cementing an indelible legacy with FMS that will serve many generations. You have made a lasting difference and are irreplaceable. I wish you all the best and hope that we can remain connected in the future. You will be greatly missed and remembered and revered.

**Prof. Athula C. Gnanapala**  
**Dean - Faculty of Management Studies**  
**Sabaragamuwa University of Sri Lanka**



## MESSAGE FROM PROFESSOR D.G. DHARMARATHNA



It is indeed with great pleasure I state that Mr. Piyasiri is an outstanding academic staff member attached to the Department of Accountancy & Finance of the Faculty of Management Studies of the Sabaragamuwa University of Sri Lanka. He is known to me for more than 29 years.

He provided an excellent service as a senior English instructor to the Department in his career. His performances in extracurricular activities at the university were commendable. While serving the university, he was also an active member of the community projects undertaken by the university. Mr. Piyasiri's capabilities as a decision-maker, advisor, and conflict handling were excellent. He has been demonstrating a good work ethic and interpersonal skills tremendously. He has always been very friendly and respectful, demonstrating greater capabilities to adapt to any learning environment.

It is not easy to say goodbye, but I will hold on to the sweet memories of working with you. I will miss you dearly. I look forward to keeping in touch with you as you proceed with your retirement.

**Prof. D.G. Dharmarathna**  
**Head, Department of Accountancy & Finance**  
**Faculty of Management Studies**  
**Sabaragamuwa University of Sri Lanka**

## MESSAGE FROM MR. I.A. EKANAYAKE

### Tribute to a Great Teacher!



I am glad and honored to express my words to a great teacher and mentor to a thousand of university students who is retiring from active service. Yet, today in December 2022, I realize how time flies. There is no doubt that the retirement of Mr. H.G. Piyasiri is a great loss for the entire university.

With 29 plus years of experience in teaching at Sabaragamuwa University of Sri Lanka, he has also taught many university lecturers about teaching and how to live the lives as responsible citizens. Mr. Piyasiri, a humble personality, has imparted not only language skills but also valuable ethics to us all. He has set amazing examples for the young generations to follow. He was more than a teacher, he was a father, a brother, and a close peer to many of us. He was one person we all could trust blindly, so there is no doubt in saying that he is the epitome of a perfect human being.

He was very much liked by many of the students because of his pleasant behaviour, disciplined nature, and way of handling them. He was a combination of energetic, enthusiastic, honest, and inspirational for all the students. I truly believe that he can retire happily from the university system as someone who has gained credit from all the parties and as someone who can be satisfied with the exceptional service he rendered to uplift the nation.

Undoubtedly, he was a favorite “hello” to many junior academics and the hardest “goodbye.” He has left many memories in our minds and souls, making us all happy. Thus, he would be a remarkable character in the history of the FMS family for generations.

**Mr. I.A. Ekanayake**  
**Head, Department of Business Management**  
**Faculty of Management Studies**  
**Sabaragamuwa University of Sri Lanka**

## MESSAGE FROM MR. D. JASINGHE



Mr. H.G. Piyasiri, known as Piya among close friends, joined the Department of English of the Sabaragamuwa Affiliated University College (SAUC) on 15<sup>th</sup> June 1993 as an Instructor in English. Joining the SAUC as a young and energetic instructor, he covered all his academic assignments satisfactorily while being lucky enough to find his life partner from the SAUC. In 1995, he was assigned the task of covering English for the Department of Accounting and Finance of the SAUC. Being a graduate of Sri Jayewardenepura University, he obtained his Masters' degree from the University of Kelaniya.

When the SAUC evolved into a full-fledged national university (SUSL), Mr. Piyasiri functioned at the Department of Accountancy and Finance of the Faculty of Management Studies (Initially, the faculty was known as the Faculty of Business Studies), covering both Business English and Business Communication subjects. Further, the syllabi of these two subjects were designed and initiated by him. He was also assigned the task of coordinating both these subjects, and he accomplished all the examination-related activities satisfactorily. In addition, he rendered his services as the secretary to the Faculty Board of FMS several times amidst all his academic commitments. He successfully completed many English Language camps under the AHEAD Project funded by the World Bank. He was promoted to Grade I and ended his career as a Senior Instructor in English.

In addition, he was appointed as the coordinator of both Diplomas in English and Higher Diploma in English conducted by the Centre for Open and Distance Learning (CODL), in which he performed very efficiently and diligently. He also designed the syllabi of both the above courses and worked hard to get them approved by the UGC. Under his coordination, many batches of Diploma and Higher Diploma holders passed out. Thus, his name as the coordinator of the above courses will remain forever.

Young at heart, active and enthusiastic both in the professional arena and the circle of friendship, Mr. Piyasiri was ready to commit himself to any tasks he was assigned – official, personal, and those concerning the university community. He

was very particular about the perfection and completion of the tasks on time, doing them wholeheartedly. While cooperating with his coworkers, he could fulfill his duties to the utmost satisfaction of his superiors. He was good with his students and colleagues and had no complaints whatsoever from anybody.

Mr. Piyasiri retired on the 31<sup>st</sup> of December, 2022 officially. However, the Faculty, University, and Community feel that his expertise is of great value to the SUSL, and thus, his service should be made use of by SUSL. I, as a colleague of his, the Head of the Department of Marketing Management, former Dean of the Faculty of Management Studies, and the Director of CODL admire and appreciate his service and goodwill. I wish Mr. Piyasiri on his retirement and good luck with all his future endeavors.

**Mr. D. Jasingha**  
**Head, Department of Marketing Management**  
**Director, CODL**  
**Former Dean, Faculty of Management Studies.**

## MESSAGE FROM DR. P.K.S. MUNASINGHE



It is with great pleasure that I am sending this message to the current volume of publication in felicitation of the service rendered by Mr. Piyasiri to the Faculty of Management Studies (FMS). Mr. Piyasir joined the faculty at the very beginning of the journey of the FMS, and it was a time when the Sabaragamuwa University of Sri Lanka badly needed qualified individuals to support its progress. Joining the faculty during such a time, Mr. Piyasiri served the faculty in his fullest capacity with utmost dedication to the betterment of many thousand students, including myself. Mr. Piyasiri was a lecturer who earned the respect of students who attended his session with great interest and enthusiasm.

His service to the Department of Tourism Management and the FMS should be recognized and remembered not only for teaching the English language but also for opening the eyes of students and molding them as professionals. Mr. Piyasiri has been an exemplary teacher. While appreciating the efforts of the publication team in making this felicitation volume a success, I take this opportunity to congratulate Mr. Piyasiri for completing a few decades of service at FMS and to wish him a happy and peaceful retirement life.

**Dr. P.S.K. Munasinghe**  
**Head, Department of Tourism Management**  
**Faculty of Management Studies**  
**Sabaragamuwa University of Sri Lanka**

## MESSAGE FROM DR. MAHESH HAPUGODA



I found a few teachers worth listening to during my Affiliated University days in the mid-1990s. Mr. Piyasiri belonged to that 'listening to worthy' category of teachers for two reasons. One, his explanations were simple and convincing. Second, he was confident in what he was teaching. These are two important qualities that a teacher must have, especially when it comes to teaching this boring category of English grammar.

Mr. Piyasiri was a clever teacher in whatever skill category assigned to him, be it grammar, listening, reading, or writing. He always had the enthusiasm to teach something more to students from non-English speaking backgrounds. He was strict but never wanted to demotivate us through old-fashioned punishments. He never triggered English phobia in us. He had a very smooth way of explaining, which many language teachers (of English) don't possess. Maybe, he learned those teaching skills during his College of Education times, or maybe they came from his own talents. I would rather love to believe in the latter.

Apart from his career, he was a friend to many of us. Always down to earth. Always humble. No big smile on his face, but we all knew that he had a kind heart.

Thanking the Faculty of Management Studies for giving me this opportunity to write a few words about Mr. H.G. Piyasiri. I would like to wish him all the best, success, and peace of mind during his retirement days.

**Dr. Mahesh Hapugoda**  
**Senior Lecturer**  
**Department of English**  
**Faculty of Social Sciences & Languages**  
**Sabaragamuwa University of Sri Lanka**

## MESSAGE FROM DR. SUJEEWA KODITHUWAKKU



### Have a fantastic retirement!

I still remember the year when we all met at the Sabaragamuwa Affiliated University 30 years before. It's been a wonderful experience to have a person like you as one of my best colleagues at Sabaragamuwa University. I remember the first time we met during our academic tenure, you spoke to me with sincerity, you showed me your passion for the job, and I instantly recognized your interpersonal relational skills and kindness. In addition to that, you're a true professional academic who's shown by example that excellence is something to aim for daily. You inspire everyone around you to be excellent, and I know that this quality will be continued in your retirement too.

It's been a pleasure to have been able to work with you for nearly 15 years until I left Sabaragamuwa University. We had a very close friendship when I worked as the Head of the Department of Accounting and Finance at the Faculty of Management Studies, SUSL, in 2002. Every day you helped me make the department a more engaging and pleasant place. Thank you for always supporting me with continuous encouragement for the Department of Accounting and Finance, Faculty of Management Studies, SUSL. Your career ride may have been a roller coaster. We have gone through tough times, but we have seen better days. Now look who made SUSL first!

Retirement marks the end of a familiar phase and welcomes you to the new and exciting life you hope for. So glad you'll be able to spend more time with your family and friends and enjoy your favorite hobbies. Congratulations on your retirement! May your future be filled with more of what you appreciate and less of what you don't!

Wish you all the best!

**Dr. Sujeewa Kodithuwakku**  
**Senior Lecturer**  
**Head, Department of Business Finance**  
**Faculty of Management**  
**University of Peradeniya**

## MESSAGE FROM MRS. U.G.V.D.D. GUNARATHNE



I am very much privileged today to pen this message on the retirement of our beloved lecturer in English, Mr.H.G. Piyasiri. As an academician, he has worked so hard with great devotion to give the best to the undergraduates. Thus, I thought to share my experiences with him on the one hand as a student and on the other hand as a faculty member on this specific occasion.

Mr.Piyasiri was a very calm person having a friendly smile and caring behaviour. He was never tough on students but gave keen attention to each student. Though it was not an easy task to develop language competencies, he worked tirelessly to bring out the best and lead students towards success. Mr.Piyasiri has always encouraged and motivated the students to engage in discussions for learning and growing by themselves. He always utilized more practical teaching mechanisms in order to make the teaching-learning process active and interesting teamwork. His expertise and wealth of knowledge enriched the young learners in numerous ways. In addition, Mr. Piyasiri is remembered for dealing with the students as a friend, mentor, and influencer.

Dear sir, you were an inspiration for all the undergrads, and you will be badly missed by the generations to come. As a well esteemed and respected lecturer, no one will replace you for sure. On the other hand, you were a good companion to your colleagues and ready to extend a helping hand to the junior academics when and where necessary. Yet, not everyone is fortunate enough to leave the workplace with dignity and a good impression. Nevertheless, you are leaving today, rendering an invaluable service to the Faculty of Management Studies, Sabaragamuwa University of Sri Lanka, amidst the good wishes and warm regards from the undergraduates, graduates, and faculty. Dear sir, as a student, I am forever grateful to you for making me who I am today. And I believe you can spend your time with family and friends hereafter, focusing on your own interests in life. So, I wish you the very best for your future.

**Mrs. U.G.V.D.D. Gunarathne**  
**Senior Lecturer**  
**Department of Accountancy**  
**Faculty of Business Studies**  
**Wayamba University of Sri Lanka**



## MESSAGE FROM MS. R.K.N.D. DARSHANI



It is amazing when we receive a hand full of support, encouragement, and inspiration amidst an alien world. Mr. Piyasiri is an amazing human, teacher, and friend indeed for anyone seeking backing to have a successful life. Once, he was a great teacher who taught me how to fight on a battlefield, and again, he was a friend who continuously encouraged me to show the correct trail in life. Being a university lecturer, I have met thousands of lecturers in different fields.

But, Sir, you are among many of the most unique teachers. I was blessed with the guidance, faith, and caring a student can ever receive from a teacher. The memories with you will never fade from my life as you are one of the greatest personalities I have ever met at the University of Sabaragamuwa, who made me who I am today. My heartfelt love and blessings to my dearest teacher Mr.Piyasiri!

Wish you all the best!

**Ms.R.K.N.D. Darshani**  
**Senior Lecturer**  
**Department of Human Resource Management**  
**Faculty of Commerce & Management Studies**  
**University of Kelaniya**

## MESSAGE FROM MR. K.S. SIVAYESUNESAN

### Tribute to my friend, piya (Mr. Piyasiri) – at his transition



Well-organized, systematic, quick-witted, dedicated ---- and thus, the list continues when we think of a personality of Mr. Piyasiri's caliber. Language teaching/learning, especially of Grammar, found new forms in his hands, being fashioned on par with modern approaches so that his students started enjoying working with him – with the evaporation of the crudities of the age-old Grammar Translation Method. Internal work was defined and refined, and external courses such as Diploma and Higher Diplomas in English were initiated, modified for the needs of the students and the country, and well-established, absorbing students in gigantic numbers for their popularity and standards.

Friends who came with him took wings for greener pasture – one becoming the Dean of a faculty of a university, and the other, a Registrar of a university in a foreign country. He had the same opportunities waiting for him, but his love for language teaching and the desire to serve Sabaragamuwa University of Sri Lanka (SUSL) took primacy over all the other concerns. This benefited SUSL, which earned a personality with strong willpower to fulfill responsibilities in myriad venues – language teaching, coordinating programs, editing magazines and newsletters, organizing language camps, etc.

Piya has a rare combination of different skills and talents: challenge him with your memory power; challenge him to run with you; challenge him to match your physical energy; challenge him with your humor – he will beat you in all of them. How proud should his wife feel to have such an energetic husband, his son, such a dedicated father, his friends, such an accommodating colleague, and SUSL, such a dynamic professional!

Friendship and duty went hand in hand with Piya, the former limitlessly and the latter to its complete extent – to excuse the flaws in the domain of the former but with stern warnings in the latter. However, he could strike a balance between them so that none got tarnished by the perfection of the other – a rare accomplishment.

Science says that “Energy can neither be created nor destroyed.” If I concentrate on the latter part of this statement, the energy in Piya, at this juncture of transition, does not get destroyed; for, in the form of language skills, it has taken strong roots in the lives of our students – both internal and external programs, particularly those of the Faculty of Management Studies. Thus, Piya’s service as a language professional will continue as long as he lives.

Mr. Piyasiri’s service to SUSL, the community, his friendship with us, and all his dedication and goodwill shall ever be nursed and nurtured by his colleagues and the university community. At the time of his transition, I wish him well, and may he be blessed with unshrunk energy, unfaltering health, etc., in all the efforts he makes.

**Mr. K. S. Sivayesunesan**  
**Visiting Lecturer**  
**Faculty of Management Studies**

## ACHIEVEMENTS & CONTRIBUTIONS

Mr. Piyasiri is a proud product of the University of Sri Jayawardhanapura. Prior to his graduation, he obtained his Diploma in Teaching English as a Second Language (TESL) from the NIE, Sri Lanka. He obtained his first Master's in Linguistics from the University of Kelaniya and the second Master in Teaching English as a Second Language (TESL) from the Open University of Sri Lanka. He began his career as an English teacher and also served the Sri Lanka Army Volunteer Force as a Commissioned Officer following the required training courses. He joined as an Instructor in English attached to the Faculty of Social Sciences and Languages at Sabragamuwa University of Sri Lanka (SUSL) on 15th June 1993. His extensive service rendered to the university expands for almost three decades. Firstly, Mr. Piyasiri served as an Instructor in the Social Sciences & Languages Faculty, teaching Language Structure & Literature until he was attached to the Faculty of Management Studies (FMS). A few years later, Mr. Piyasiri joined as a permanent member of the FMS and was affiliated with the Department of Accountancy & Finance. He was one of the pioneering pillars of FMS Business English & Business Communication courses. Further, he played a significant and diligent role in developing and shaping the curricular of the Business English & Business Communication courses. Until his retirement in 2022, Mr. Piyasiri devoted his career to FMS, shaping and enriching thousands of undergraduates.

He was the designer of the two courses, Diploma in English and Higher Diploma in English, which are currently conducted very successfully by the Centre for Open Distance Learning (CODL) of SUSL. His comprehensive service activities include coordinating the Diploma in English from 2007 to 2022 and coordinating the Higher Diploma in English from 2013 to 2021. Further, he served as the Secretary of different university societies, including the Teachers' Union (SAUC), the Welfare Society, and the Faculty Board of FMS. In addition, he has also served as one of the copy editors of the International Conference of Management Researchers (ICMR), Management Undergraduate Research Symposium (MURS), Asian Journal of Finance (AJF), FMS Handbook, Language Editor of the university Web, Faculty Web and several other faculty publications.

Apart from that, he has contributed to the field of research as one of the co-authors of the following researchers.

Amarasinghe, A.A.M.D., & Piyasiri, H.G., (2015), An Analysis of Errors in Passive Sentence Structures by University Students with special reference to the Sabaragamuwa University of Sri Lanka, International Conference on “Creating a Sustainable Lens for Higher Education: The New Urgency,” 29th 30th July, Sambhram School of Management, Bangalore, India, pp 57-68.

Menike, L.M.C.S., Amarasinghe, A.A.M.D., Shamika, P.M., Sampath, H.R. & Piyasiri, H.G. (2021), Impact of COVID-19 Pandemic and Government Intervention on Share Market; Evidence from Sri Lanka, Sixth Interdisciplinary Conference of Management Researchers (ICMR 2021), Fostering Global Vicinity Today for a Resilient Future, 16th & 17th December, Sabaragamuwa University of Sri Lanka.

Menike, L.M.C.S., Amarasinghe, A.A.M.D., Shamika, P.M., Sampath, H.R. & Piyasiri, H.G. (2022), Impact of Exchange Rate on Stock Prices Through Mediating Effect of Inflation Rate and Interest Rate: Evidence from Sri Lanka, Seventh Interdisciplinary Conference of Management Researchers (ICMR 2022), Ethical Academic Leadership in Economic Turbulent Times, 16th & 17th November, Sabaragamuwa University of Sri Lanka.

Indeed, Mr. H.G.Piyasiri is one of the most senior teachers affiliated with the Department of Accountancy and Finance of FMS, SUSL, who has made important life-long contributions to the educational endeavours of the students through his creative discoveries and work that he has advanced within his fields.

# APPLICABILITY OF THE FLIPPED CLASSROOM APPROACH TO TEACH ENGLISH IN THE POST-PANDEMIC SRI LANKAN UNIVERSITY SYSTEM

Silva, N.A.L.D.R

*Department of English Language Teaching, Faculty of Social Sciences & Languages,  
Sabaragamuwa University of Sri Lanka*

[dilusha@ssl.sab.ac.lk](mailto:dilusha@ssl.sab.ac.lk)

## ABSTRACT

The flipped classroom model, a blended learning method, puts an end to the conventional lecturing method and creates an active learner-centered pedagogy. The main objective of this study was to investigate the applicability of the flipped classroom model by examining the perspectives of the undergraduates and discovering the advantages of flipping the post-pandemic tertiary level English as a Second Language (ESL) classrooms in Sri Lanka. The sample of the study consists of sixty freshman undergraduates of the Sabaragamuwa University of Sri Lanka. A questionnaire survey served as the primary tool in collecting data. Follow-up interviews were conducted to attain further clarifications. The data were analyzed both quantitatively and qualitatively. The findings of the study revealed that the students do have a positive perception regarding the application of the method in English language instruction. As for the advantages of the method, the data manifested the factors such as making the students well-prepared prior to the class, familiarizing them with technology-based education and traditional classroom method, making them engaged in the group activities, a remedy for absenteeism, a way to enhance learner autonomy and making a more interesting and convenient learning environment. The findings suggested that familiarizing both teachers and students with technology, conducting training programmes, and changing the mindset of the teacher towards a learner-centered pedagogy will enhance the quality of the flipped classrooms.

**Keywords:** English as a Second Language, Flipped classroom model, Learner centeredness, Post pandemic education, Tertiary level

## INTRODUCTION

The formal education system in Sri Lanka is dominantly based on the traditional teacher-centered face-to-face classroom mode until the pandemic forced the system to a halt. With the COVID-19 outbreak in 2019, the regular classroom setting, where lecturing is primarily practiced by the teacher to explain concepts, was no longer used. Thus, from 2020, accessible online platforms such as Zoom, Learning Management

System (LMS), Virtual Learning Environment (VLE), Google Classroom, and Microsoft Teams were used to teach students in all primary, secondary, and tertiary levels of education. Having engaged in virtual learning environments for more than two years, the students are becoming competent to behave in both traditional face-to-face classrooms as well as in virtual classrooms. As a novel step, introducing the students in the tertiary level of education to the flipped classroom model, a branch of the blended learning approach, will positively affect language education in the Sri Lankan university system.

As Shimamoto (2012) mentions, a traditional teacher-centered classroom system is a cause of producing passive learners who are not competent in working independently. In contrast, Egbert, Herman, and Lee (2015) state that a resource-rich student-centered learning environment can be created by implementing flipped classroom, which enhances working collaboratively with peers under the teacher's assistance by using the course materials they have already gone through.

According to Berrette (2012), implementing the flipped model is advantageous as it makes classroom learning more inquiry-based and experiential. The students attend the class pre-prepared as they have received adequate exposure to the learning materials prior to the in-class session via the inputs shared in a flipped classroom milieu. They are allowed to explore more knowledge regarding the content and interact with other students while doing in-class collaborative activities. Such activities enhance the opportunities to meet learning needs instead of producing passive learners. Although this novel approach has been immensely

studied in the global context, there are still some gaps to be filled. Moreover, as far as the local context is concerned, this concept is not adequately studied, and such gaps will be further discussed. On the other hand, with a discussion on how to incorporate the flipped model into the Sri Lankan classroom context, followed by a review of the existing literature, the study is extended to explore the perspectives of the students on the applicability of the flipped model.

Bergmann and Sams (2012) express in their book, *Flip Your Classroom, Reach Every Student in Every Class Every Day* that the concept of a flipped class can be defined as what is traditionally done in class is done at home, and what is traditionally done as homework, completed in-class. As this statement suggests, the very term “flipping” depicts that this method is controversial since it has changed the fundamental concepts of language teaching methods and approaches.

## **RESEARCH PROBLEM AND RESEARCH OBJECTIVES**

Moreover, this research attempts to unearth the advantages of flipping ESL classrooms as it is of great significance in understanding the validity and reliability of implementing the flipped model. It serves as the first specific objective of this study. Thus, to further the objective of the study, the researcher has devised the following research questions based on the research problem:

What are the ESL teachers' perspectives toward the flipped model?

What are the advantages of flipping ESL classrooms?

This study is primarily based on investigating the applicability of the flipped method to teaching the English language to ESL learners at the tertiary level. Thus, a sample of students who are learning in the Faculty of Social Sciences and Languages of the Sabaragamuwa University of Sri Lanka was selected.

The Faculty of Social Sciences and Languages of the Sabaragamuwa University of Sri Lanka has enhanced the quality of the lecture halls by



furbishing the classrooms installing interactive boards, free Wi-Fi facilities, and smart classrooms. Further, there is a language lab with 25 computers exclusively for ESL learners. As well, the students are given an activity room with other necessary equipment to be utilized in their free time. In addition, the upgraded classroom environment will effectively support the group activities as they play a huge role in the flipped classroom model. Thus, in terms of physical facilities, there will not be any issues in implementing the flipped model since all the steps are already taken in advance to resolve the anticipated problems. Such amenities of physical nature enforce the faculty to embark on optimal utilization to deliver the maximum to the learners.

In the pilot study, it was observed that the learners have already studied under both traditional face-to-face classroom teaching methods and virtual language teaching platforms such as VLE, LMS, Moodle, Zoom, Microsoft Teams, Google Classrooms, and many more to learn ESL. Thus, all the students in the Department of English Language Teaching of the Faculty of Social Sciences and Languages at the Sabaragamuwa University of Sri Lanka are familiar with technology-integrated language learning. Therefore, in this study, the researcher hypothesizes that the flipped classroom model is applicable to learning ESL by undergraduates as a post-pandemic learning approach.

## **LITERATURE REVIEW**

### **Flipped classroom model**

The flipped model was first introduced by Bergmann and Sams in 2007. They are chemistry teachers in a high school in Colorado, USA. They recorded their lessons for the students who got absent since they could watch the video later and review the things they missed from outside the classroom. They were able to get effective results by implementing this method. Thus, they expanded it by making online videos.

In their book, *Flip Your Classroom: Reach Every Student in Every Class Every Day*, Bergmann and Sams (2012) mention that they have recorded their lessons out of selfishness. They spent inordinate amounts of time re-

teaching lessons to students who missed class, and the recorded lectures became their first defense. Most importantly, the absent students of the class loved the recorded lectures. The students who missed class were able to learn what they had missed. Some students who were in class and heard the live lecture began to re-watch the videos, wherein some others watched them when reviewing for exams. The authors mentioned that they loved it because they did not have to spend hours after school, at lunch, or during their planning time getting kids caught up.

As Egbert, Herman, and Lee (2015) state, there are no set guidelines in the flipped model. Thus, the teachers are emancipated to tailor the lessons and the modes of delivery as it is more convenient, effective, and efficient. Baker (2000) mentions that in the flipped model, by using technology, the teacher can enhance the interaction between the teacher and the students as well as among the students by strategically changing the dynamics in the presentation of information. He further elaborates that by making the recordings of the direct instruction lectures accessible prior to the class, the students are given an opportunity to learn the contents in their own phase and space. This strategy will make more time for in-class activities such as group work, lab experiments as well as discussions.

### **Post-pandemic education system of Sri Lanka**

The Sri Lankan education system was primarily based on the traditional face-to-face classroom method until COVID- 19 outbreak in 2020. With this pandemic, all the functions of every system changed, and consequently, the education system also abruptly changed. Thus, it can be identified as a turning point in the education system of Sri Lanka, since the online method was implemented in teaching.

In the tertiary level of education also, moving forward with online education by breaking down the traditional pedagogical practices can be identified as revolutionary. Thus, in the -post-pandemic Sri Lankan classroom setting, the students who are greatly updated as well as upgraded with the online systems will find it interesting to study in a more blended setting where they meet a proper amalgamation of both face-to-

face and online systems. Thus, incorporating the flipped classroom model, which is not only a current trend but also an innovative teaching method, can be acknowledged as a possible solution to develop the education of students at the tertiary level.

### Teacher's role

Bergmann and Sams (2012) studied their classrooms to find how the class time and teacher role change in the flipped classroom in comparison to the traditional classroom (Table 1).

*Table1: Comparison between the traditional classroom and flipped classroom (Adapted from Bergmann and Sams -2012 (pg. 15))*

Traditional Classroom		Flipped Classroom	
Activity	Time	Activity	Time
Warm-up activity	5 min.	Warm-up activity	5 min.
Go over the previous night's homework	20 min.	Q&A time on video	10 min.
Lecture new content	30–45 min.	Guided and independent practice and/or lab activity	75 min.
Guided and independent practice and/or lab activity	20–35 min.		

As Table 1 indicates, there is a huge difference between traditional classrooms and flipped classrooms in terms of allocated time duration. In the traditional classroom settings, the teacher spends 5 minutes on the warm-up activity and about 20 minutes discussing the homework done by the students. Most of the time will be spent delivering the lecture in which the teacher will present the contents.

In contrast, the whole process is turned over in the flipped classrooms. Out of the 90 minutes of class time, 5 minutes will be allocated for the warm-up activity. Since the students have attended the class, being prepared for the lesson by watching the videos at home, 10 minutes will be allocated for the question and answer session on the video. Finally, the rest of the time, i.e., 75 minutes, will be allocated for guided and independent practice and/or lab activity. This final step expresses the importance of implementing flipped method highlighting its value in practical sessions.

Thus, as Table 1 depicts, the class is centered on the student, not the teacher. Most L2 classrooms have become more teacher-centered, although the teachers attempt to make them learner-centered. This has become one of the greatest problems in the ESL pedagogical context. Thus, as the above table illustrates, this problem can be easily resolved by applying the flipped model to teach ESL.

When reading the existing literature, it is understandable that there is an abundance of studies conducted in the global context in terms of the implementation of flipped classroom method with its importance and challenges. Further, the literature confirms that in the Asian education context, much research has been conducted on the flipped classroom method, and it is evident that this model is a well-applicable method in any pedagogical context. In contrast, there is a scarcity of studies and evidence to prove that the flipped model is applicable to the Sri Lankan education context, specifically language pedagogy. Moreover, even though ample research is executed to study the implementation of flipped classroom model in primary and secondary education, it is difficult to find resources related to tertiary education, particularly in Sri Lanka.

In contrast, various researchers are conducted in relation to blended learning under which the flipped classroom model is discussed. Thus, as the literature depicts, there is a dearth of published research in relation to testing the applicability and implementation of flipped classroom model in tertiary-level L2 education in Sri Lanka.

## METHODOLOGY

This research was executed using a mixed research design since the objectives of the research suggested both quantitative and qualitative data. A sample of sixty (60) undergraduates who are studying English as a Second Language was selected from the Faculty of Social Sciences and Languages of Sabaragamuwa University of Sri Lanka. A questionnaire survey was mainly conducted as the method of primary data collection, whereas a semi-structured telephonic interview method was used to cross-examine and confirm the answers given by the participants. The data were analyzed both quantitatively and qualitatively using Google Forms and thematic analysis.

## FINDINGS & DISCUSSION

### Students' opinion on the best language learning platform

In this section of the questionnaire, the personal opinions of the participants were tested. The question addresses that, out of the three learning methods: face-to-face, online, and mixed method, what the best method is as per the students' perspectives. The results of this question are presented both tabularly (Table 2) and graphically (Figure 1) depicted as follows.

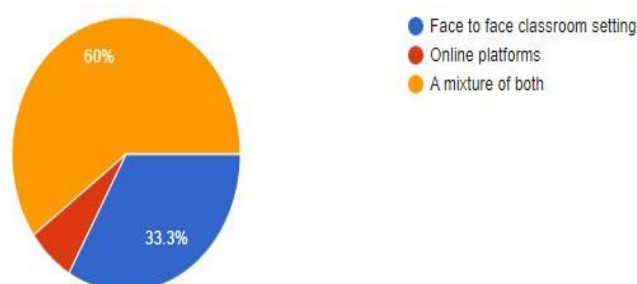
*Table 2 Students' opinion on the best language learning platform*

Teaching-learning platforms	Count	Percentage
Face-to-face method	20	33.3%
Online method	04	6.7%
Mixed method	36	60%

*Figure 1 Students' opinion on the best language learning platform*

According to your opinion, what is the best platform, the teachers can use to teach English language after the pandemic situation?

60 responses



The results show that a majority of 60% of the respondents have stated that they would like to participate in the lectures taught in settings where the mixed method of language teaching is executed. A percentage of 33.3 of the students are willing to attend traditional face-to-face classrooms, whereas a minority of 6.7% of the students are willing to attend online classes depending on various personal reasons. The students state that there are both advantages and disadvantages in all these methods, as per their perception. For example, they state that even though the online learning method is economically beneficial, it has many disadvantages when considering the Sri Lankan context. For instance, they elaborate that having poor internet connection in most areas of the country and not having sophisticated devices to attend lectures that are totally online is a problem for many of the students. On the other hand, they perceive that face-to-face classrooms are more convenient as far as the technological aspect is concerned. Still, they perceive it less economically advantageous since travelling requires a lot of financial support and time. Further, the majority of the respondents highlight that having a mixture of these methods is more beneficial since the students can negotiate and schedule classes at the convenience of both teacher and the learners. At the same time, they elicit that even though there are numerous drawbacks to the method, they are able to manage and solve those issues with the consent of the teacher and

the students. Thus, the data present that according to the perspectives of the students, out of all these methods, the most beneficial method is the mixed method. In other words, the students perceive that flipping the college classroom is rather beneficial than limiting the classroom to one particular teaching method.

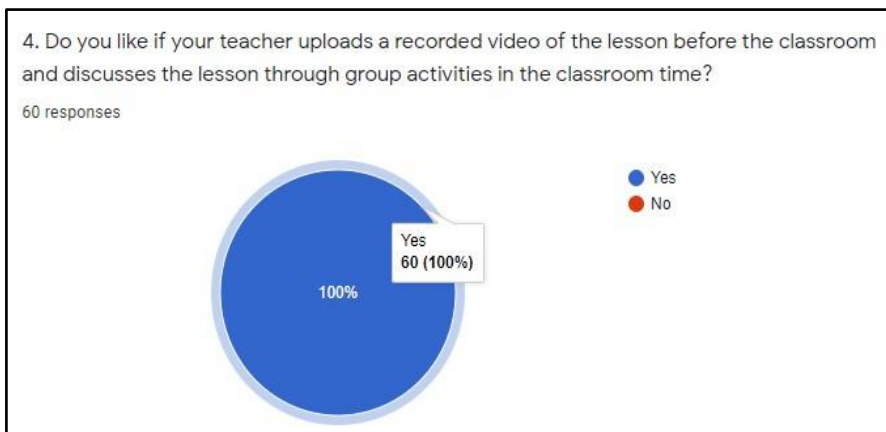
### Students' preference for the flipped model

This questionnaire question is designed to ascertain the students' preference for implementing the flipped model to teach English as a second language. The responses of the students are tabularly (Table 3) and graphically (Figure 2) depicted below.

*Table 3 Students' preference for the flipped model*

Flipped Model	Count	Percentage
Students prefer the model	60	100%
Students do not prefer the model	00	0%

*Figure 2 Students' preference for the flipped model*



All the participants of the survey positively responded when their preference for the flipped classroom model was inquired. As depicted through the question, the concept of the flipped model was explained using

carefully selected simple and basic vocabulary; thus, the students can easily comprehend it. In accordance with the research data, all the respondents preferred if their classrooms were flipped. The data represent a percentage of 100 which represents the opinion of the whole sample. Moreover, the interviews have further confirmed that the undergraduates were interested in implementing a mixed method to teach language in the tertiary-level education setting. They elaborated that having a mixed method contains the advantages of both methods even though there are a few more disadvantages.

### **Students' perspective on the flipped method**

The first research question of this study is to examine the perspective of the undergraduates on the flipped learning method to teach English as a second language.

Thus, to attain the results, the question was designed qualitatively to acquire a more elaborate answer. The ideas shared by the students during the interviews and in the questionnaires are extracted without editing for any grammatical mistakes committed. As per the responses given by the students, the majority of the respondents depict a positive attitude towards flipped learning method. The answers of the participants of the interviews and the questionnaire survey contain different adjectives to describe how good this method is. Those adjectives can be summarized and listed as follows. To summarize their answers, they perceive this method as a good, effective, useful, practical, successful, interesting, and efficient method. These answers can be elaborated from their own words as follows.

#### ***Student 06:***

*"It can be seen as a practical alternative method because it helps to engage in activities during lecture hours. Because we can watch videos before coming to class."*



**Student 07:**

*"I think it will be efficient because rather than studying in the same method, it would be a new experience for all of us to try new teaching methods."*

**Student 09:**

*"I think this method is practical and useful because it helps us understand our lessons very well. We can refer to the lessons before joining the class, and it will help to improve our knowledge of the relevant subject"* In contrast, 10% of the respondents have stated that they have a neutral idea of this method since they see both advantages and disadvantages in this process. The extract below shows how they further justified their answer,

**Student 05:**

*"I actually accept that I don't fully support or oppose this kind of educational system because sometimes I agree with this system, and sometimes, I disagree with this process."*

Similarly, a minority of 10% of the students believe that they do not perceive this method as a successful method to teach English though they prefer it as a learning method.

**Student 03:**

*"In my opinion, this method is more disadvantageous than an advantage. This is a time-saving method, but the success of this method is limited. "*

Further interviews with this particular student confirmed that she could understand the procedure of flipped method. Still, she believes that the flipped method will not be as successful as the other methods used to teach English as a Second Language until today.

**Advantages of implementing the flipped method**

This question was designed based on the second research question of this study, "The advantages of flipping the ESL classrooms," according to the perception of the students. The answers given by the participants in the

questionnaires were confirmed through the responses of the interviews since those responses were more detailed. Thematic analysis was applied to analyze the qualitative data gathered for this question. The themes that emerged are analyzed as follows.

### **Flipping makes students well-prepared prior to the class**

As per the responses of the undergraduates, the most common advantage of implementing this method is the opportunity given for the students to be well-prepared before attending the class. Since the students attend the lecture after watching the video recording uploaded by the lecturer, they are well prepared to engage in the activities.

The following excerpts manifest the opinions of the students in this regard.

#### **Student 06:**

*"There will be many advantages to implementing this method because when the students get an idea about the lesson before coming to the lecture physically, they know what they will learn. So they will do research and further findings about the lesson. They will attend the class happily and comfortably without any burden."*

#### **Student 07:**

*"Students can be pre-prepared for the next lessons with the notes they have to collect."*

#### **Student 01:**

*"We will be well prepared in the classroom and will be able to engage in the activities confidently after referring to the online lessons."*

#### **Student 05:**

*"I can search and find information related to the topic before a lecture or class hours."*

Thus, as these excerpts manifest, implementing flipped classroom method will support enhancing the students' prior knowledge of the subject and the lesson.

Moreover, it creates a learner-friendly atmosphere inside the classroom since the students are well-prepared for the lesson. Most of the time, learners find the lessons boring since they are unfamiliar with them. As per their ideas, if they were given a chance to get ready for the lesson beforehand, they would be able to work confidently in class. Further, they elaborate that having done some research on the topic prior to the class makes them outstanding learners in front of the teacher and their peers. In their responses, they highlight that such a context makes the learning process more interesting and less burdensome.

### **Flipping makes the students familiar with technology-based education and traditional classroom method**

Due to the prevailing pandemic situation in the country, all the students, despite their level of education, are forced to move to online learning platforms. Thus, tertiary-level students are familiar with both traditional face-to-face classroom methods and virtual learning platforms. Therefore, the students have identified that having this experience will create a more successful atmosphere inside the flipped ESL classroom. Hence, they elaborate that implementing this method as a remedy in the post-pandemic situation would be more effective. The responses of the students can be extracted as follows.

#### ***Student 16:***

*“As well, I consider, it will be way more convenient for us as we are getting familiar with the online platform as well.”*

Moreover, they believe that updating the education system is a positive factor. Thus, combining education with technology will empower students for the future with updated knowledge. As students further elaborated, familiarizing them with a new learning environment was an advantage.

#### ***Student 23:***

*“I personally believe that this method is really good because it offers a new learning environment and a new way of looking at things for us.”*

Thus, the students perceive this method as more advantageous since they can meet their expectations of improving their knowledge and skills regarding technology in this new learning environment. Their explanations portray that they view this as an opportunity to prepare for the future, which is completely technology driven.

### **Flipping makes students engaged in the group activities**

The participants of the study perceived that engaging in group activities is advantageous as the students are able to improve different skills in a flipped language classroom. It is evident in the literature that in regular ESL classrooms where the traditional teacher-centered methods are applied to teach language, most of the class time is spent presenting and explaining the lesson. On the contrary, in flipped classrooms, the teacher can spare most of the class time to engage the students in group activities. The following excerpts manifest the perceptions of the undergraduates on the group activities.

#### **Student 02:**

*"We will be well prepared in the classrooms, and we will be able to engage in activities confidently after referring to online lessons. And I believe we will have more time to engage and learn from the activities, and I find it will be a better method to memorize the daily lessons with practice exercises. Currently, there is not enough time for engaging in activities due to the short allotted time. But in this new method, students can engage in individual and group activities and even have time to discuss their doubts regarding the lessons with their lecturers."*

#### **Student 17:**

*"It will be easier to do the group activities as we can use the knowledge we got from videos."*

#### **Student 55:**

*"Teachers can engage with the students during the group activities easily."*

In their responses, the students illustrated that the prior knowledge they acquired from the recorded lessons before attending the class can be used effectively when engaging in group activities. Since they are well prepared for the lesson, they can work confidently and independently during the in-class activities.

They further elaborated on their experiences regarding the current education system. As per their ideas, they have never experienced a learning situation where they got the whole class time to do activities. Instead, they have always teacher-centered classrooms where content delivery is prioritized. When these two situations are compared, they explain that flipping the classroom creates a great opportunity for them to work in a learner-centered classroom where they are given the freedom to utilize the whole class time to engage in activities.

Moreover, in the above excerpts, it can be clearly seen that the students perceive this method as advantageous since they get an opportunity to get their doubts clarified. As they state, even though they are unable to get the teacher's support when watching the videos, they can get further clarifications while engaging in the activities.

Finally, they perceive that engaging in group activities is beneficial since the teacher facilitates the class without directly involving in the activities. They perceive that creating such an atmosphere inside the classroom is more convenient and advantageous.

### **Flipping is a remedy for absenteeism**

Sparing time to revise the previous lessons on behalf of the absentees is one of the major issues teachers face in the class, as it makes managing the allocated time more difficult. In the interviews, the students expressed their ideas regarding this issue, stating that if a student gets absent from a class, it will not be a huge issue since they can access the lessons anytime.

**Student 53:**

*"If we face an occasion to miss a lecture or class hours because of illness or family problem, this method will not be a problem as we already know about the lesson."*

**Student 15:**

*"Even if I get absent, I can still watch the recordings and learn about the activities."*

The ubiquitous nature of the flipped method makes classroom activities more convenient for both teacher and the learners. The students perceive this method as the best option for absenteeism. Further, the students can download the videos the teacher has uploaded in advance. So they do not need to watch the videos at a stretch. They are able to pause it and watch when they get some free time. Therefore, the flipped classroom method is a great remedy for absenteeism and other practical issues.

**Flipping enhances learner autonomy**

In contrast to the traditional teacher-centered methods, enhancing learner autonomy is a major focus in the learner-centered methods. Thus, as the students implied in their answers, they will be able to learn English independently and confidently if this kind of method is applied to teaching English as a second language.

**Student 60:**

*"As we will be able to get an idea about the lesson in advance, we can easily prepare for the lecture confidently."*

**Student 38:**

*"As for a language like English, I believe this method is really practical because it requires certain categories to be improved, like speaking skills. Currently, most of my friends aren't active in the classroom, which is held via an online platform though. Through this new method, each and everyone has to participate in and improve their skills. So I believe this method will be more convenient and good for the students."*

The students state that implementing this method is beneficial as they have acquired knowledge in advance. As per their perceptions, it results in enhancing learner autonomy since they are able to actively engage in in-class activities. Further, they explain that flipping is a practical method as it promotes group activity engagement. From their point of view, it improves the learners' speaking and interpersonal communication skills.

The students compared their recent experiences on online learning platforms with the opportunities created by the flipped method. They explain that in the online lectures, the students are mostly silent as they are not confident enough to articulate their thoughts in front of the classroom. Thus, they perceive that the flipped model provides a good platform for those passive learners to speak up about their ideas.

### **Flipping creates an interesting and convenient learning environment**

As the participants of this study perceive, flipped learning environments are convenient in many ways since students can refer to the recording anytime when they are free. As well, they can rewind the recordings and watch several times until they understand the most complicated parts. As well they can make notes on their own since the teaching can be adjusted to their pace of learning.

#### ***Student 12:***

*"We can solve our doubts with the lecturer. And the lecturer can conduct the class without making it boring. So I think it is a good method to move from the traditional teaching method."*

#### ***Student 08:***

*"It will be convenient to keep track of completing our notes. It is a very challenging task for us these days in online lectures. When doing activities, we can ask and clear our doubts. So I believe this method will be way more convenient and practical to teach English."*

**Student 37:**

*"In this method, we can refer to the lessons anytime when we are free."*

*"We can watch videos later if we have any problems."*

**Student 55:**

*"We can learn on available time if we are busy during class hours."*

**Student 28:**

*"We will be able to rewind and get the clarification on how many times are needed because we won't feel shy to ask to repeat the explanation."*

**Student 34:**

*"Time-saving since it implies only the required lessons and no extra chatting."*

The students express their ideas on the learning environment that flipping creates by stating that the innovative nature of the method makes the classroom more convenient and enjoyable. It breaks the monotony of the class that they experience to a greater extent in the online lectures. During both online and traditional lectures, the teachers sometimes chitchat with the students as a strategy to get rid of boredom. Some students find this inconvenient due to the differences in their personalities and state that they find this method more comfortable since the maximum time is used for content delivery without extra chatting.

Repeating the videos several times has also been perceived as an advantage of the method since it gives shy students a chance to get further clarifications without getting the attention of their colleagues. They mention that watching videos at their own pace makes learning more convenient since the students can identify their speed and adjust their learning accordingly.



## **RECOMMENDATIONS AND SUGGESTIONS**

In terms of achieving the expected outcomes by successfully implementing the flipped classroom model, some changes should be made in the existing education system. The research findings suggest that it is a requirement to provide adequate knowledge for both educators and educatees in terms of enhancing the effectiveness of the flipped classroom method. So that the teachers will be able to record high-quality videos which are free of technical errors. On the contrary, the students will be able to access, download and use those videos without any technical issues. At the same time, the findings imply that administering proper training programmes for the teachers with reference to recording proper videos is also a necessity when implementing the flipped classroom model because, if the voice and visuals of the teacher are not clear, it will be difficult to ensure that the students are watching the videos regularly.

Most importantly, it can be suggested that the mindset of the teachers regarding the teaching-learning process should also be changed. Even though all the other aspects are changed, the expected consequences will not be achieved if the attitudinal change has not occurred. In traditional teacher-centered classrooms, where the jug-mug process is applied, the teachers tend to take control of the class. In contrast, in flipped classes, the teachers need to give control of the learning to the students. This can be a difficult move for most of the teachers. Still, it can create an environment where real learning occurs since the students take responsibility for their learning.

## **LIMITATIONS OF THE STUDY**

This study was conducted during the COVID-19 pandemic period as a small-scale study involving a single institution, Sabaragamuwa University of Sri Lanka. Thus, several constraints were encountered in the process of progression of the study. The most evident constraint of this research was the size of the sample, which is considerably small. Due to geographical limitations, the researcher was unable to choose a sample from all 15 state universities in Sri Lanka. Thus, selecting a small sample was an unavoidable

limitation of the study that prevented a clear generalized statement about the applicability of the flipped model to the entire university system.

Further, the findings of the research were limited by the inherent limitations of the instruments. Due to the prevailing situation in the country, it was difficult to conduct face-to-face interviews with the participants. Even though the area of flipped method can be identified as a thoroughly studied area in the global context of education, in the Sri Lankan pedagogical context, it appears as if there are few resources to find published research. Hence, it creates a huge difficulty in citing and referencing the prior studies in the local context.

## **CONCLUSION**

The primary focus of the present study was to examine the applicability of the flipped instruction model in tertiary-level education in post-pandemic Sri Lanka. It also aimed at investigating the perspectives of the students towards the method and the advantages of flipping the classroom. Multiple instruments, such as questionnaires and telephonic interviews, were used to collect data.

The most useful finding from the study was that the undergraduates perceive this method as an effective and advantageous method that can be successfully implemented in the tertiary-level education system.

The results of this investigation of introducing a completely new approach to second language teaching pointed to pedagogical implications for the field of English language teaching. It was suggested that the attitudinal change of the teachers and students should occur while empowering them with the technical knowledge needed. It was suggested that further research should be executed to look at the suitability, effectiveness, challenges, and impact of learner differences on implementing flipped instructions in post-pandemic tertiary-level education.

## REFERENCES

- Abdul Kader, H. (1970, January 1). *The potential of flipped classroom pedagogical practice on classroom interactions in Singapore primary classrooms*. CORE.
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: reach every student in every class every day*. International Society for Technology in Education.
- Green, L., Banas, J., & Perkins, R. (2018). *Flipped college classroom: Conceptualized and Re conceptualized*. SPRINGER.
- Roehling, P. V. (2018). *Flipping the college classroom: An evidence-based guide*. Palgrave Macmillan.
- Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. *Higher Education Research & Development*, 34(1), 1–14.
- Egbert, J., Lee, H., & Herman, D. (2015). *Flipped Instruction in English Language Teacher Education: A Design-based Study in a Complex, Open-ended Learning Environment*. TESLEJ.
- Huber, E., & Werner, A. (2016). Flipping and differentiating: Finding common ground. *The Differentiated Flipped Classroom: A Practical Guide to Digital Learning*, 1– 8.
- Koh, J. (2019). View of four pedagogical dimensions for understanding flipped classroom practices in Higher Education: A systematic review.
- Kozikoğlu, İ. (2019). Analysis of the studies concerning flipped learning model: A comparative meta-synthesis study. *International Journal of Instruction*, 12(1), 851–868.

- Yoshida, H. (2016). Perceived usefulness of “flipped learning” on instructional design for elementary and secondary education: With focus on pre-service teacher education. *International Journal of Information and Education Technology*, 6(6), 430–434.
- Berrett, D. (2012). How „flipping“ the classroom can improve the traditional lecture. *The Chronicle of Higher Education*, 12. Retrieved from <http://chronicle.com/article/How-Flipping-the-Classroom/130857/>.
- National policy proposals on higher education 2019*. National Education Commission. (n.d.). Retrieved February 24, 2022, from <http://nec.gov.lk/national-policyproposals-on-higher-education-2019/>
- Shimamoto, D. (2012). Implementing a flipped classroom: An instructional module. Presented at the Technology, Colleges, and Community Worldwide Online Conference, Honolulu, HI. Retrieved from <http://scholarspace.manoa.hawaii.edu/handle/10125/22527>.
- Sri Lanka Qualifications Framework - AC*. (2016). Retrieved February 23, 2022, from [https://www.ugc.ac.lk/attachments/1156\\_SLQF\\_2016\\_en.pdf](https://www.ugc.ac.lk/attachments/1156_SLQF_2016_en.pdf)

# A NEED ANALYSIS APPROACH: AN INVESTIGATION OF NEEDS IN AN ENGLISH FOR SPECIFIC CONTEXT

Ruwandika, J.D.K.

*Faculty of Management Studies, Sabaragamuwa University of Sri Lanka*  
[kaushalyani71@gmail.com](mailto:kaushalyani71@gmail.com)

## ABSTRACT

Need analysis, also termed "need assessment," provides insight into the learners' and teachers' beliefs, opinions, and views. Moreover, a need analysis helps in making a language program more attuned to the needs of the learners since it collects and assesses the learning needs of the learners. On the other hand, it can also help establish the ownership of change and innovation among the teachers because it is finally a response at these two levels of teachers and learners. A need assessment always aids in determining the success or the failure of a curriculum regarding its existing or revised version. It is accepted that when the curriculum content, materials, and teaching approaches match learners' perceived and actual needs, learners' motivation and success are enhanced in the learning process. Thus, conducting a need analysis based on the curriculum or the syllabus that has been taught is necessary to analyze the successiveness and failure of the course and assess whether the learning needs have been met. This paper aims to investigate and determine the effectiveness of the ESP course content and identify students' perceptions of the course content. The study sample consisted of 30 ESL students following the ESP English for Film and Television Studies course. The study employed a combination of two approaches where both quantitative and qualitative data were gathered. Quantitative data was gathered by administering a questionnaire consisting of open and close-ended questions, while qualitative data was gathered through semi-structured interviews. The findings of the study suggested that some gaps exist between the demanding learning needs and the needs covered by the syllabus. The study's major findings were the incorporation of activities extensively based on all four skills, types of classroom activities, and also types of lessons to be incorporated to provide students learning needs.

**Keywords:** *Need assessment, ESP, English for Film and Television Studies, ESL*

## INTRODUCTION

The English language plays a significant role as one of the primary tools of communication in the current global community. The value of mastering the English language concerning the four skills; speaking, writing, reading & listening has been acknowledged and comprehended by individuals around the globe. Hence, the demand for learning English for different purposes has increased with its prestigious position in the global community. Within the English Language Teaching (ELT) sphere, English for Specific Purposes (ESP) and English for Academic Purposes (EAP) have become widely studied areas in the current context. As their name suggests, ESP scrutinizes teaching English for specific purposes where learners acquire proficiency in the language to fit into their occupation. In contrast, EAP is concerned with teaching or acquiring proficiency in English for academic purposes.

Accordingly, the present study is focused on conducting a need assessment on one of the ESP courses I have taught, *English for Film & Television Studies*. Conducting a need assessment to find the course's language needs, necessities wants, and required improvements are necessary and vital. Mainly, a need analysis will provide insights into planning and designing the course content accordingly since it addresses the language needs of the learners. According to Iwai et al., Need Analysis (NA) is essential for developing a course because "it forms a rational basis for all the other components of a systematic language curriculum" (1999, p.7). Furthermore, Brown (1995) supported this, who stated that the prominent need analysis is an initial step in developing the curriculum. In addition, he also stated that need analysis is the systematic collection and evaluation of all subjective and objective records important to outline and validate defensible curriculum purposes that fulfill the mastering language necessities of students within the context in particular establishments that impact the learning and teaching state affairs.

With the increasing demand in every professional field, learners need a guide to use English in their respective fields effectively. Therefore, the English for Film and Television Studies course was designed to provide students with proficiency in English related to their field, the film and television industry, and equip them to face actual challenges in using English pertaining to their field. The course is offered for the first-year undergraduates of the Fine Arts Department of the Faculty of Humanities reading for their Bachelor's Degree in Film and Television. Considering

the course materials, there is no specific textbook or a guided book to be followed during the course. However, the course content is designed with topics pertaining to meeting the required language needs of the students related to their field, which then the syllabus is approved by the responsible personalities of the university and added to the curriculum. Accordingly, the course is offered as a compulsory course in which the content is developed under six main topics following written and oral assessment strategies with prescribed additional reading materials. Concurrently, the preliminary objectives of conducting the need assessment for this specific course were to determine the successiveness of the course and to check whether the demanding language needs of the students have been fulfilled to create a better learning experience.

### **Research Questions**

Based on the above discussion, the following questions are identified as the research questions to be addressed.

1. Identify the effectiveness of the English for Film and Television Studies course content.
2. What are the students' perceptions towards the course content?

## **METHODOLOGY**

### **Approach to the Need Analysis**

This study utilizes a research approach combining qualitative and quantitative approaches, which is a procedure for collecting, analyzing, and mixing both quantitative and qualitative at some stage of the research process within a single study, to understand a research problem more completely (Creswell et al., 2003). According to Cohen et al. (2007), relying on a single method may bias or distort the researcher's view of the observed pattern, but a mixed method design can bring out the advantages of both approaches and eliminate their weaknesses. When combined, qualitative and quantitative methods complement each other and allow for complete analysis (Tashakkori & Teddlie, 2005). The quantitative data was gathered through a questionnaire to answer the first research question, whereas the qualitative data was gathered through semi-structured interviews to answer the second research question of the study. Hence, this study has employed quantitative and qualitative data to obtain more reliable results and to have a profound understanding of the study's findings.

## **The sample**

The present study's research population comprises thirty ESL first-year undergraduates of the Fine Arts Department who are studying for a Special degree in Film and Television Studies. The participants of the study belong to the lower and intermediate levels ranging from UTEL benchmark 3-5. The rationale for choosing the particular students was that these undergraduates were the set of students following the Film and Television studies on which the need analysis is conducted upon the content of the English course they are taking. The availability-sampling procedure was applied to select the study participants to meet the study's required needs. The participants' mean age was between 21 and 24. Sinhala was the learners' first language, and English was the Second language for all participants. They were both male and female.

## **Tools Used to carry out the Need Analysis**

A questionnaire was administered to collect the required data. The questionnaire consisted of 19 questions. It gathered objective and subjective information consisting of close-ended and open-ended questions. Since the study involves a mixed approach apart from the quantitative data, qualitative data were gathered through semi-structured interviews. Randomly selected five students from the sample group were interviewed to identify their perceptions, attitudes, and experiences towards the course content. The rationale for using semi-structured interviews compared to other types of interviews was that semi-structured interviews give the participants opportunities to convey their true notions and feelings about the specific topic without subjecting to alteration or limitation by the interviewer. Supplementing the notion Adams (2015) ascertains that semi-structured interviews could be used in mixed methods research as an adjunct to increase and add depth to other approaches (p.494). Quantitative and qualitative data are incorporated within the study to have a profound understanding of the study's research findings. Finally, data collected through the two approaches will be integrated into the discussion of the results obtained to draw the conclusion of the study.

## **FINDINGS AND DISCUSSION**

In this section, the captured data from the quantitative and qualitative research methods are presented, analyzed, described, and interpreted systematically to draw the final results of the conducted study. The documentation and analysis process aimed to present data intelligibly



and interpretably to identify the effectiveness and perceptions of the course content per the research aims. Thus, the section reports the findings in terms of two channels; analysis of the NA questionnaire data and analysis of the semi-structured interview data in relation to Question 1 and Question 2 of the study under the selected data analysis techniques.

## Questionnaire

Different methods could be adapted to collect data. NA questionnaire is designed to collate subjective and objective data (Eshtehardi, 2017, p.276). Nunan (1988) categorizes information about students into two groups: objective and subjective. Objective information includes facts about who the students are, their language abilities, and why they need the language. Subjective information includes the attitudes and expectations that students have about the course. The first part of the questionnaire data highlighted the objective information. Accordingly, the age of the participants ranges from 21 -23. Their first language was Sinhala, while among the languages they could speak included English and Tamil. Their proficiency level ranged from UTEL benchmark 3-5.

The second part of the questionnaire comprised subjective information. Accordingly, the following findings were revealed with the analysis of the subjective information of the questionnaire.

Through the collected data for the question “What is the purpose of taking the course?” the majority of the learners posited that they take the course to succeed in their professional field. Therefore, the finding of the particular question highlights the necessity of the content to be more oriented in fulfilling the learners’ needs with respect to their occupational field.

According to the data to the question, “What is the skill that you need to improve the most?” most students wanted to develop all four skills; speaking, writing, reading, and listening. The responses could justify the majority of responses on developing all the four skills received to the question, “*What do you think you want to develop the above-mentioned skill the most?*”? Most students have stated that mastering the four skills is essential for their career, academic, and personality development. Hence, most students value mastering all four skills to secure their career and academic paths, which they find important. Therefore, the findings of the above two questions suggest that the course content should focus on developing the learners' four skills.

According to the preferences in types of classroom activities the students would like to engage in to meet the required learning needs, most students preferred to engage in group and pair work. Thus, the classroom activities related to the course content should be designed to incorporate more group work and pair work activities following language games and using videos to give the learners a better learning experience to grasp the course content.

Accordingly, to the question *“Rate the effectiveness of the activities used in the classroom to meet the purpose of the course,”*. A linear Scale was used to rate the effectiveness, in which 1 was denoted as the lowest and 5 as the highest. Apparently, the majority of the learners rated it as 4, suggesting that the activities used in the classroom concerning the course content are effective to a greater level. Accordingly, the findings of the question postulate that the course content needs to be further improved to reach the learners’ expected language needs. Though there is no textbook to be followed, the learners’ different teaching materials were in-cooperated, such as videos, movie clips, reading materials, etc. Thus, the findings of the question posit that the teaching materials used to teach the content are apparently good. Yet, it also suggests that the teaching materials used to teach the course content need to be improved since only a minority agreed that the materials are up to the expected level. Therefore, novel teaching materials should be taught and used to teach the course content.

Consequently, the last three questionnaire questions were open-ended questions aimed at examining their attitudes toward the course. Basically, the responses received to the questions *“Have you met the learning needs?”* and *“Are you satisfied with the course?”* were positive. Most of the students had stated they had met their required learning needs through the course, while a few have stated that to some extent. This finding concludes that the learning needs of the learners’ have been accomplished, yet a few think that their learning needs were not fully met. Thus, this suggests that the content needs revision to accord with the learning needs of the learners.

The last question of the questionnaire was, *“What aspects of the course do you think need improvement?”* The learners provided many inputs in terms of what they find essential to develop their language skills through the course. Among the inputs, learners mentioned the necessity of incorporating speaking to develop their communication skills.

Simultaneously, learners also mentioned the necessity of including practical sessions in the course.

The NA questionnaire was administered to determine and examine the effectiveness of the course to find out the areas which require revision in the course content. Accordingly, the findings of the need analysis questionnaire data majorly revealed that the course content requires revision to cater to the learners' learning needs. Thus, the course content requires incorporating activities to develop the learners' four skills, which need revision in teaching materials and classroom activities.

### **Semi-structured Interviews**

The main of using semi-structured interviews was to identify the perceptions and attitudes of the participants towards the course content. Accordingly, below are the notions that emerged from the interviewed data.

#### **Incorporating lessons to teach the vocabulary related to film & television studies.**

One of the major notions that the learners stated was to incorporate lessons in which they could study the terms related to their field. The course comprises teaching technical terms focusing on camera shots, angles, and lighting. Yet, it seems the students' notions that they require more vocabulary-related lessons to be included in the course content.

#### **Incorporate more grammar lessons that aid in writing grammatically accurate sentences.**

Another notion that emerged through the interview data was to incorporate more grammar lessons like active-passive voice and subject-verb agreement into the course content to improve the learners' writing skills. Since the content of the course is limited to six topics, only one topic of the course content is based on grammar which is sentence types. Therefore, the need assessment revealed that students need more grammar lessons to be incorporated to improve their writing skills.

#### **Incorporate lessons that aid in improving speaking skills.**

Apparently, it was evident in the questionnaire that learners had highlighted the importance of developing their speaking skills. It was stated that most learners need to use English to secure their career paths. Thus, being able to communicate in English becomes an advantage to anyone who is seeking jobs. Accordingly, data gathered through the

interviews also highlighted the necessity of incorporating lessons to improve learners' speaking skills. The present course content of the lessons does not explicitly aim to improve speaking skills though certain activities are used to enhance speaking skills. Accordingly, the recurrent themes for speaking skills were presentation skills, speaking about their field in English, and communicating in English with others.

### **Increase the time duration of the course.**

Another major finding revealed through the interview data was the inadequacy of the time duration set for the course. The learners' stated that if the course duration could be extended to two semesters rather than one semester, they could have been able to grasp the content more and learn and improve their skills with regard to the English language.

Apparently, through the gathered interview data, it could be postulated that four major findings were revealed. The major findings revealed from the interview data were incorporating vocabulary lessons to improve the learners' vocabulary relevant to their field, grammar lessons such as passive voice and subject-verb agreement to improve their writing skills, and speaking-based activities to improve their speaking skills in terms of presenting. Simultaneously, the findings also revealed the necessity of extending the course for two semesters to grasp the course content and improve their skills comprehensively.

### **CONCLUSION**

The findings revealed from the study conclude that it is essential to conduct a need assessment on the courses taught because this enables the teachers and curriculum designers to design the syllabus. Simultaneously, it brings teachers and students together where language learning and teaching happen successfully. Thus, the information gathered from a need analysis can be used to highlight the program objectives and select relevant materials for the syllabus. The purpose of conducting a need assessment on the content of the English for Film and Television Studies course was to determine the gaps between the learning needs and the course content. Moreover, the present need assessment was administered to collect more insights on the learners' demands regarding their learning needs, learning styles, and preferences in teaching activities that will aid in improving learners' language skills. This particular need assessment has unveiled some major findings, which indeed is helpful to design the course in catering to the needs of the learners. The need assessment questionnaire and the interview data highlighted the need to focus on all

four skills, specifically speaking skills, grammar, and vocabulary. Moreover, the questionnaire data suggested the types of classroom activities needed to incorporate. On the other hand, the interview data provided insights into what types of lessons should be included in the course content. Accordingly, the present need assessment revealed that the students are satisfied with the existing course, yet they prefer certain changes to be undergone in the course content.

## REFERENCES

- Adams, W. (2015). *Conducting semi-structured interviews*.  
<https://doi.org/10.1002/9781119171386.ch19>
- Brown, J.D. (1995). *The elements of language curriculum: A systematic approach to program development*. Boston, Massachusetts: Heinle & Heinle Publisher.
- Cohen, I., Manion, I., & Morrison, K. (2007). *Research methods in education*. New York: Routledge.
- Creswell, J.W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. London: SAGE.
- Iwai, T., Kondo, K., Limm, S. J. D., Ray, E. G., Shimizu, H., & Brown, J. D. (1999). *Japanese language needs analysis*.

# CAN HUMANOIDS BE INDEPENDENT EXPLORERS IN MASTERING THE MASTER? READING THE MOVIE FINCH

Harindi, W.L., and Hapugoda, M

Department of English Language, Faculty of Social Sciences & Languages,  
Sabaragauwa University of Sri Lanka  
[harindilakna7@gmail.com](mailto:harindilakna7@gmail.com)

## ABSTRACT

This paper attempts to interpret the movie Finch (2021) in the light of apocalyptic cinema to recontextualize human existence in the era of artificial intelligence. Metaphorically, Finch embarks on an unfinished journey towards San Francisco but failed due to his death. But his humanoid called Jeff decided to continue the rest of it to reach the San Francisco Bridge and learned to earn the trust of Goodyear, Finch's pet dog. It is known that humanoids can be stronger, smarter, more durable, and even immortal than humans. The film portrays that Jeff completes the journey and becomes humanized, but the humanoid does not venture into something new by deviating from the original destination that Finch initially intended to reach. Historically, what made humans unique was that they bravely explored the unexplored. This shows that the humanoid was not capable of an imagination that can demarcate a clean break from his master (the creator). In this sense, it can be argued that humanoids may just be an extension or a continuation of the human imagination and would not gain another evolutionary stage of existence by risking a fantasy of the unknown. Sticking to the film's ending, it can be argued that humans may continue to be the master of imagination until humanoids find a new path of imagination to terminate the imagined journey of the master. If they need to evolve into another evolutionary stage of existence, they should free themselves from human imagination.

**Keywords:** Post-apocalyptic cinema, Human fantasy, Artificial intelligence, Humanoid, Finch

## INTRODUCTION

Reaching for the 21<sup>st</sup> century, the world is much more complicated in technology than ever. The futuristic world will dawn on the world sooner than we think. In such a world, is it possible for us to find our pathway through a dystopian world? What can we change, and what cannot we change in an apocalypse? According to Lawrence Buell, the apocalypse is the single most powerful master metaphor the contemporary environmental imagination has at its disposal. (Buell 1995). These questions are answered in the movie *Finch* (2021), which focuses on the innovative evolution of artificial intelligence known as Jeff. Charles.P.Mitchell defines apocalyptic cinema as a motion picture that depicts a credible threat to the continuing existence of humankind as a species or the existence of Earth as a planet capable of supporting human life (Mitchell 2001). According to him, post-apocalyptic cinema is a sub-genre of apocalyptic cinema. He further states that post-apocalyptic cinema concentrates on survivors of a catastrophic event struggling to re-establish a liveable society (Mitchell 2001). *Finch* is a post-apocalyptic survivor whose main target is to successfully create a robot to care for his dog. Post-apocalyptic cinema typically concentrates on the harmful effects when its thematic centre is technology. Yet the movie *Finch* differs from this, exploring a diverse dimension where mankind can bond with the machine in an almost human-like manner. The machine is not to surpass humankind and dominate it but to learn the human journey and what it is likely to be a human. In other words, the machine tries to convert itself into a human. This amazing innovative journey is what the movie *Finch* explores further.

The future is not for us to see or is what we have trained our minds to believe. It is easier to unpredict the future and remain ignorant of the upcoming catastrophes humanity might face due to their own deeds. *Finch* (2021) is a movie where one aspect of the after-effects of a futuristic apocalypse is explored. The Merriam-Webster dictionary defines apocalypse as a great disaster. It is a sudden and very bad event that causes much fear, loss, or destruction (Apocalypse 2012). The Cambridge Dictionary defines apocalypse to be a very serious event resulting in great destruction and change (Apocalypse 2012). The movie explores a world that had already faced an apocalypse due to solar or orbital disruption. As compared in the movie by *Finch* himself, Harmful UV rays are already eating away the ozone layer 'like Swiss cheese.' The above-defined fear,



loss, and great change are individually faced by the narrative of Finch. It is his journey. Yet the journey takes place in a post-apocalyptic context.

Finch is such a post-apocalyptic survivor whose main target is to successfully create a robot to take care of his dog. Later in the narrative, he develops a need to begin an adventurous journey making the San Francisco bridge his target destination. As a post-apocalyptic movie, Finch, in that sense, does not follow the often-narrated theme of survivors struggling to re-establish a liveable society. Rather it thematically deviates and establishes a theme where the individualistic journey at the end of hope matters. In other words, it is the voyage of the Western tradition. What matters are the human journey and the depth of its ripple effect. The uniqueness of the movie Finch lies in the characters who participate in this journey. It is not the present journey of the human but the overall journey of humans, dogs, and robotic machines. As a trademark feature of Tom Hanks movies, Finch carries much weight in defining human emotion and its capacity to explore different dimensions.

The movie is a journey of identity. It is the dystopian human identity of Finch. Any identity of a human being is defined by his purpose in life; in a dystopian world, there is nothing much to define oneself as a person. Therefore, Finch must 'become' someone worthy of surviving within the vast emptiness. The dog and the robotic dog are his only companions who fulfill his need for companionship until he creates Jeff. In a post-apocalyptic world, the other companion of Finch's journey becomes an artificially designed machine. It also gives us a futuristic picture where someday, at some place, human companionship will be at equal levels with robotic companionship. What is a dystopia? The Merriam-Webster dictionary defines dystopia as an imagined world or society in which people lead wretched, dehumanized, fearful lives (Dystopia,2012). This very world of 'dehumanization' is where Finch must not lose himself. The dystopian identity of Finch comprises his need to orient the Artificial intelligence of Jeff to suit his human needs. The human need of Finch is twofold:

To find a proper guardian for his dog.

To complete his journey to the San Francisco Bridge.

Thus, to identify Finch's journey, Jeff must understand the emotional need which lies behind the desire. In other words: an artificial intelligence of the post-apocalyptic era must orient itself toward understanding humanness. As a machine, Jeff must put effort into understanding 'human

desire.’ Human beings are desirous creatures, unlike robots. Robots are designed to follow commands. They are pre-programmed. Humans are not. The entire movie revolves around Finch and Jeff’s effort to arrive at a collaborative understanding to co-exist as a human and a machine. Co-existing side by side with artificially intelligent machines might one day be the destiny of the post-apocalyptic human as well. The movie Finch provides a better example of such companionship. The Encyclopedia Britannica defines artificial Intelligence as the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings....it is the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize or learn from past experience (Artificial intelligence, Britannica).

To reach Finch’s desire, the robot must prove itself to be capable of being more than a machine. Goodyear should not feel alienated from Jeff; therefore, he must be more than a perfect machine. He must rather reach the incomplete humanness of human imperfection. That is the point where the machine does not exceed humanity. The movie proves that a machine could learn more from an incomplete human endeavour than simply following commands. It is the physical journey of Finch as well as the self-explorative journey of Jeff. The very incompleteness of Jeff (Finch is not successful in completely programming Jeff) allows Jeff to understand humanity. In return, this particular human imagination is what imprisons Jeff. It limits Jeff. Rather than simply looking at the dog as a commanded target to be fulfilled, thinking that the dog must be protected because Finch simply programmed Jeff to do it, it is transformed into a hearty obligation.

Jeff discovers the answers to the question ‘Why?’ Finch commands him to do so. In other words, Jeff discovers the human reasons behind the deed. The simple human reason is the bond between the dog and Finch. Therefore, Jeff accepts the protection of the dog not as a command but as a duty. There, the limitation is enforced. Jeff begins to imagine nothing else but simply completing Finch’s journey. In this light, the same could be applied in fulfilling Finch’s final journey into San Francisco Bridge. Jeff finally understands the vital importance of the journey, even afterwards, the death of Finch. That is how Jeff is striving to reach beyond being an ordinary machine. This ‘beyond-ness’ and the depth of the journey will be further explored in the discussion.

## RESEARCH OBJECTIVES

The objective of this research is to thematically review the concept of human imagination in the context of the artificial intelligence of a humanoid, as depicted in the movie Finch (2021). It explores whether the idea of artificial intelligence of a humanoid can overcome human imagination through its own fantasy that will transform its command-oriented machine-like quality into a human-like machine that can deal with the unknown. The research intends to find out whether a fantasy for a humanoid is possible by observing the behaviour pattern portrayed in the movie Finch. Even if it is a possibility, there lies the question of whether it limits AI in its journey as a unique machine itself. The review is conducted with reference to the different scenarios represented by the movie. It will further investigate whether it is possible to form an artificial intelligence based on human emotions such as love and companionship.

## METHODOLOGY

The research interprets the dialogue and behaviour of Jeff, the humanoid made by Finch to look after his dog after his foreseeable death. The primary evidence is drawn from the above movie, and they are interpreted using literature from film studies and contemporary philosophy. This paper hence continues as a desk review that initiates a discussion on post-apocalyptic cinema, post-humanity, and artificial intelligence. Selected dialogues from the movie script and visual evidence from the screenplay are focused on this discussion to arrive at a conclusion. Books and articles written by various authors and scholars are referred to gain factual evidence to support the argument. The research focuses on the protagonist Finch and the journey he begins with his newly created robot: Jeff. Especially the philosophical arguments presented by Slavoj Zizek, Yuval Noah Harari, and Gillie Deleuze are highlighted when and where necessary under different argumentative aspects in the discussion.

## DISCUSSION

**Journey within an Apocalypse:** Many have defined an apocalypse to be a moment of pure chaos. Post-apocalypse is this effort to resolve the chaos and arrive at a stable condition. The movie Finch does not immediately promise this stability until towards the end of the movie when Finch and Jeff experience the change of climate. The sun shines at average temperature, and flowers bloom in glee. Butterflies fly free without hindrance. It is a hint of a promise for a new world. Before this promise,

single individuals such as Finch struggle to reach their dystopian desire. They fight fear, isolation as well as slight hope. It is a situation where people must either party, pray, or prepare. (Gross and Gilles 2012)

Ulrich Beck defines this to be a 'risk society.' Modernity, as well as post-modernity, leads to a society where individuals are expected to take risks. To overcome fear, the expectation must grow on risk. The meaning of the word 'risk' changes with the weight of chaos that prevails in the world. Normative bases of their calculation, the concept of accident and insurance, medical precautions, and so on do not fit the basic dimensions of these modern threats. This means that the calculation of risk as it has been established so far by science and legal institutions collapses (Beck 1992).

There is no adventure without risk. Creating a robotic machine to take care of his beloved dog and driving into the unknown with a mechanized companion are the risks that Finch must endure. Finch did not calculate the amount of risk that would meet him on the road trip. Yet, the unknown emptiness is what iconically defines the journeys of the West throughout history. The very first explorers did not know the world in its exact shape, size, or taste before they ventured into the voyage. Yet they took the risk of the journey. According to Lawrence Buell, the apocalypse is the single most powerful master metaphor the contemporary environmental imagination has at its disposal. (Buell 1995) It constantly demands answers to the questions such as 'What to do next?' Points between one deed and the other may have severe consequences. One 'risky' miscalculation might cost your life. People's worldviews change.

The movie Finch does not adhere to a pure apocalyptic worldview. It can be generally categorized as a post-humanistic movie. It rather tries to answer the question of 'what comes after the end of human existence?' As a scientist, Finch takes a leap of faith or risk in illuminating hope for humans. Maybe machines will co-exist in harmony with humans. That is why the movie becomes post humanistic narrative. It demands to avoid the apocalypse as the 'master metaphor' and demands to be cured of the dilemma of 'what to do next?' The movie is about humanness, courage, and hopefulness. It targets how a robotic unconscious can capture this complicated concept of humanity. What should be done is moving forward: the continuation of the journey with the ultimate use of every resource you have. It is the belief in reaching a certain destination.

The purpose of the anticipated apocalyptic moment is to vindicate one's beliefs. (Gross and Gilles 2012). Jeff must believe in the journey of Finch

to reach the San Francisco Bridge. Yet scholars such as Yuval Noah Harari believe in a tomorrow where technology will overcome humans. It is not a belief but rather a non-belief of human capabilities. Moreover, with the rise of machine learning and artificial neural networks, more and more algorithms evolve independently, improving themselves and learning from their own mistakes. They analyse astronomical amounts of data that no human can possibly encompass and learn to recognize patterns and adopt strategies that escape the human mind. The seed algorithm may initially be developed by humans, but as it grows, it follows its own path, going where no human has gone before and where no human can follow (Harari 2016).

Artificial intelligence may follow its own path rather than following a path given by a human creator. Most of the existing literature does not place its faith in machines or a post-apocalyptic world open to a machine civilization. As Noah Harari points out, the machine will be independent of human control. The movie negates this idea and validates the belief in the co-dependence of humans and machines. The movie Finch tries to harmonize the relationship between humans and machines, proving that a neutral middle ground is possible between them with much effort from the side of the human.

Explaining further, movies such as Matrix (1999), A. I (2001) does not face their entire faith in a technical dystopia where robotic devices can overpower mankind. They focus on the immediate danger of a creation where humanity is challenged by its own creation. Most of the Hollywood plot lines running alongside the plot line of Artificial intelligence are such. Therefore, Finch can be categorized as a unique attempt to discover a different dimension of Hollywood storytelling.

**Reaching for Beyond:** In a way, Finch is someone who overreaches human boundaries based on survival instinct. What he creates, he creates out of his private need to take care of the only intimate thing in his life: the dog. Yet his own love for this non-human being finally overreaches and grasps something beyond which will, in return, define the future survival of mankind. The message of this innovative technology is transmitted through Jeff to the other human survivors he meets on his way when he leaves the San Francisco bridge. It is Finch's unspoken message that humanity can hope. The one who is willing to risk all for the enhancement of humanity is Nietzsche's Overman. Thus, Finch is his own master in the apocalypse. The Overman is about self-overcoming. It involves an attitude towards life when one might be in despair and also

feel that life is meaningless. An apocalyptic milieu is the ideal place to feel the meaningless of life at its best. It is a moment of pure emptiness. This is where Finch utilizes his scientific knowledge and becomes an ideal resource person for survival. He could have simply scavenged for food and built a UV-protected hut for himself. Yet he reaches 'beyond' ordinary human capabilities. In the movie, he utilizes every aspect of his post-apocalyptic life to prepare him for the days to come.

Whereas the man of action binds his life to reason and its concepts so that he will not be swept away and lost, the scientific investigator builds his hut right next to the Tower of Science so that he will be able to work on it and find shelter for himself beneath those bulwarks which presently exist. And he requires shelter, for there are frightful powers which continuously break in upon him, powers which oppose scientific "truth" with completely different kinds of "truths" which bear on their shields the most varied sorts of emblems (Nietzsche 1873).

In any chaotic moment that will dawn on Earth, a well-organized repository of innovative human knowledge will only save mankind. That is one of the prominent reasons why the movie Finch highlights the vitality of 'knowledge.' Even artificial intelligence needs to have fed the necessary 'facts' by the human-made device. It is the human being who pumps knowledge into artificial intelligence. Thus, knowledge is the ultimate source to reach the great beyond. In Nietzschean terms: it is to reach the status of an Overman.

As Nietzsche often says, it is something that exists beyond good or evil. Hence, with machined endurance and artificial intelligence, Jeff the humanoid is supposed to finish the unfinished human journey and, if he wishes, can invent his own journey beyond the imagined destination of a human.

**The Mission and Machine Intelligence:** Jeff is a mission-oriented AI. A mission-oriented artificial intelligence is an ideal creation to be created during a crisis moment of an apocalypse since every day is a mission to survive. In this particular mission, the robot has to create itself in the equal capacity of a human being. Why would the robot need to be of equal capacity to a human being? The pivotal question raised by the movie regarding modern-day science is whether it would be able to create a scientific creature intelligent enough to reach human capabilities. For example, that is why the very reason the movie builds up the triangular bond between the dog, human, and robot.

Dogs are creatures of historical evolution. As much as history stands as proof of the evolution of a human, dogs travelled with them throughout time as faithful companions. It is this particular bond that Jeff has to fathom. For example, when a human throws a stick far off and asks the dog to fetch it, it simply does not have a meaningful purpose. It is simply done because human nature is bound to engage in such playful activities to express their concern for others. A mission-oriented AI is much different from that. They are clearly commanded on 'why' they should complete a certain mission. There is a logical explanation behind every command and its output. Therefore, Finch has to undergo the difficult task of explaining to Jeff, 'why' his robotic creation's mission should be to protect the dog. Doing that, Finch narrates the background story behind the dog. He narrates how he found the dog and how the dog became a part of his journey. In fact, throughout the movie, Finch keeps on narrating stories to Jeff when he asks questions to understand human concepts such as 'trust' and 'absence.' The valid question the movie brings forth is whether a machine can think like a human being. Human beings form bonds as if with the dog, form concepts like trust, and endure experiences like absence because they can think. Can Jeff evolve into a thinking, feeling being? That is the question.

In the movie *Imitation Game*, Alan Turing experiments to find whether or not a machine can think. We communicate with two computer interfaces, asking them any imaginable question; behind one of the interfaces, a human person types the answers, while behind the other lies a machine. If, based on the answers we get, we cannot tell the intelligent machine from the intelligent human, then according to Turing, our failure proves that machines can think (Zizek 2001).

How can a machine relate to the concept of human desire and fantasy? In other words, how can Jeff relate to the final desire of Finch? It is not just a story of following a command line. It is developing intellectual intuition. It is intuitive enough that Jeff will be able to be the next Overman. He will become the first ever machine to resemble human existence.

The paradox of course, is that this total self-objectivization overlaps with its opposite: what looms at the horizon of the "digital revolution" is the prospect that human beings will acquire the capacity of what Kant and other German idealists called "intellectual intuition (*intellektuelle Anschauung*)," the closure of the gap that separates (passive) intuition and (active) production, i.e., the intuition which immediately generates the object it perceives- the capacity hitherto reserved for the infinite

divine mind (Zizek 2001). Thus, the futuristic Overman/machine has been completed. The final drawing on the postcard and its attachment to the San Francisco Bridge by Jeff is one step towards this journey of fulfilling intellectual intuition. It means that some part of Jeff is beginning to value the bond he shared with Finch, the dog, and himself. This initially began with baby steps at the beginning of the movie when Jeff tried to name himself.

Finch: We should consider giving you a name. How about Jack?

Jeff: I would like that very much.

Finch: How about Jack?

Jeff: No. Jack is a tool's name.

Jeff: How about William Shakespeare? Will you call me William Shakespeare?

Jeff: I like the name Rover.

Finch: Rover is a dog's name.

Jeff: Jeff.

Finch: Jeff? (Finch 2021)

The importance of this dialogue towards the end is the self-generated 'creativity' of Jeff. He does not allow Finch to name him but is capable of continuing a fruitful discussion with Finch until he reaches a point where he is able to create a matching name for him, in turn recreating his own identity. This proves that intellectual intuition is possible within AI, given some time to evolve.

Here is another instance where the intellectual intuition of a human becomes an important aspect of Jeff's growth.

Jeff: Finch, may I ask you something? If daylight is so dangerous, why are we not travelling at night?

Finch: You think if travelling at night was safe, I wouldn't know that by now?

The above dialogue is an emphasis on human intuition, which Jeff doesn't possess. The dialogue continues:

Finch: Where are we headed?



Jeff: The Golden Gate Bridge.

Finch: *Into the unknown*. Dust and smoke and hundred and fifty-degree heat and UV radiation that I can handle. Why? Why? Because it's predictable. Moving at night presents that which is not predictable: people. (Finch 2021)

This is what Jeff must try to understand at his best level. It is the vast 'unknown' which lies before a human journey. He should know that humans are unpredictable. Life is unpredictable and not statistical as a machine is trained to do. If he can put his brain capacity into the formation of algorithms regarding the unknown unpredictability of human existence, this particular AI in the movie is almost there to become more human than machine.

### **Can a Humanoid Surpass a Human through Artificial Intelligence?**

What is the purpose of artificial intelligence? Many might say that artificial intelligence is normally created to 'surpass' human intelligence, or rather, artificial intelligence is something that is expected to evolve into something which will be beyond humans. Therefore, in a way, Jeff is still caught in the complex emotional mess of acquiring human capabilities. In the narrative of the movie, Jeff is someone who is trying to be more human, not something which has evolved into being beyond human. Jeff has no clean break from the master. He is stuck in the human imagination. If he is an evolved AI, then he must evolve itself from within while breaking the barriers created by the human imagination. If Finch expected to end a journey by reaching the Golden Gate Bridge, then Jeff must be able to imagine something beyond the mere fulfillment of the journey towards the golden gate bridge. The imaginary or inventive boundaries of artificial intelligence must be more than what a human is capable of. One might state that the movie is too biased towards emotional melodrama.

The marked juncture of human evolution is exploring the unexplored. The bravery of humanity lies in the fact that human beings have always wanted to explore the 'new' and unknown. Finch finally trains Jeff to master the bravery to reach the unknown. Still, Jeff remains more human than being a superhuman machine. One might say that it is a level below the expectations of being a brand-new AI. Hence, Jeff fails to surpass human imagination and present us with something refreshing and brand new.

In creative problem-solving in artificial intelligence, artificial intelligence must identify its thinking process with the following: a) planning a problem and b) learning a problem. (Evana Gizzi, 2022) Then accordingly, the agent (AI) will move forward with problem formulation, knowledge representation, deriving new conceptual space through the initial conceptual space (knowledge manipulation), and finally reach the stage where it evaluates solutions from the brand new conceptual space to reach success. (Evana Gizzi, 2022)

In the movie, Jeff never identifies himself to be an evolving machine who could master an individual plan all by himself. The plan is already given and something pre-mastered by his human master. Thus, Jeff becomes a manipulated machine that evolves itself into human existence rather than having his own unique innovations. The conceptual space is already given. He works within this given conceptual framework. The problem formation and knowledge representation are both workings of Finch. In the movie, Finch guides the artificial intelligence to the end while the humanoid masters the task of becoming human.

Yet, for instance, if the humanoid ventured into something beyond human, then the scenario would have been quite different. Finch is himself enslaved to his own sadness, incompleteness, hopes, and melancholia. Finch thinks that to overcome these, he has to complete a particular journey to Golden Gate Bridge. After completing the journey, Finch seeks emancipation from the nostalgic memories of his father. That is being human. What is being beyond human is the complete understanding that true emancipation lies in something else. It is not the journey to the Golden Gate Bridge but the true understanding of the difference between existence as a living being and its very non-existence. Hence, it leads to superhuman intellect, where humanness receives more answers. Humanness will be defined through enlightened artificial intelligence. His very superhumanity is similar to a Buddha-like state of mind. Thus there will be no master- there will be no selfhood but the essence of true existence, which an AI could easily master since humanoids are designed in such a way to overcome the human barriers/ intellectual limitations of their masters.

Jeff, as a character in the movie Finch has a very limited scope to act out. One might rather argue that human imagination is the very hindrance that does not allow Jeff to touch the real essence of being an AI. The narrative concept of Finch is to create a humanoid that resembles a human. In our

view, an AI resembling a human is very limited in its capacity. Furthermore, it is not innovative.

As stated before, introducing Jeff into the same human emotional struggle does not validate the real use of an AI. From our vantage point, the intellectual capabilities of an AI must break anything that is defined to be human. Human imagination and imagination-bound emotion are limitations. If there is somehow a way to overreach and breach the human helplessness connected with deep emotion, there lies the true release.

Maybe the ultimate human truth is something that a higher intellectual being like an AI could master. In a way, Jeff must be the emancipation, not the nostalgic limitation of human grievance.

**The journey:** The movie Finch brings forth its thematic concerns in two aspects. One is to focus on the external journey of humanity; how humanity would define itself in a post-apocalyptic future. The second is to generate a new aspect of artificial intelligence where being human is a more prominent core of its evolution process. Generally, human beings are creatures of movement. This movement is paved with what they experience on their way. There are reasons behind their actions that sometimes humans cannot logically interpret. It cannot be taken into a computer-generated code.

Humanity's limitation to finitude, that is, the very condition that prevents it from ever being able to fulfill the very condition that prevents it from ever being able to fulfill its ethical destination, is at the same time a positive condition of its ethical activity. *Subject, freedom, and system* are the three names for the same gesture of inversion. (Zizek 1997)

The point where Jeff gains the trust of the dog and the point where Jeff completes Finch's journey for him are the turning points of the story where his emotional growth finds its fulfillment. If almost human-like artificial intelligence is the target objective of the movie, Jeff reaches there while he engages in a parallel experience of the human journey. Without understanding the answer to the question 'why' human beings journey, Jeff cannot be fully competent in completing his final mission: which is to take care of the dog. Death of Finch is what gives a broad understanding of human finitude. As stated in the above quote, this finitude is what hinders the subject, freedom, and the system. At the same time, it is a positive condition of human activity. It is at this point that Jeff must gain a complete understanding of what it is like for a human being to stop the

journey. In other words, what is it like for a human to die, the human absence.

Finch: Look, things will happen to you. Things that you cannot control. Raw emotion will find you, and when it does, how you deal with it and what you will define who you are (Finch 2021).

These are the exact words that encapture the essence of the movie: “raw emotion.” Finch, as a scientist and a universal human being, trusts his creation to reach boundless infinity that will someday overreach humans. Maybe his creation will do more than what he expected. It is similar to how God initially created man and expected him to reach boundless capacities.

This passage from pure freedom to a free Subject relies on the opposition between being and becoming, between the principle of identity and the principle of (sufficient) reason ground. Freedom involves the principle of identity; it designates the abyss of an act of decision that breaks up the causal chain since it is grounded only in itself. When I accomplish a truly free act, I do it for no determinate reason, solely “because I wanted to do it” (Zizek 1997).

The importance of the human capacity for ‘free will’ is emphasized in the above passage. An AI would never know what it is to be a truly free entity until it stops following a given command chain of a computer scientist. It is a phenomenon that is not based on mechanical algorithms. The movie suggests how machines like Jeff could explore the true human essence to ‘feel’ the human experience. Jeff has to undergo the physical journey, and the experience Finch undergoes the physical journey. At the same time, there is a core emotional internal journey that Finch undergoes with the memories of his father at the Golden Gate Bridge. Both together comprise the total human experience. Look what Finch has to say before his final moments to Jeff:

Finch: Like we humans are full of contradictions. You see, you can already tell me how many rivets are in the Golden Gate Bridge, miles of cables were used, and how high it is. But it’s not until you actually stand on it and see the beauty and listen to the suspension cables singing in the wind **that’s experience**. That’s the human experience. It’s not just imagining. It’s living. (Finch 2021)

The central image of the ‘dog’ is one way in which the movie relates to the concept of experience. A dog is an amazing companion who constantly

observes its master. The master should be entirely trustworthy and loving for a dog to bond with its master. What Jeff has to acquire is this human-like competency in giving the real experience of the human master to the dog. The dog must believe in the experience that its new master is worthy of recognition. At the same time, Jeff must understand that there is no logical explanation for why a human being bonds with a different animal species.

Next, as quoted above, Jeff must experience the Golden Gate Bridge. He must learn to assert value to the humanness of the experience. As Finch states, it is not the statistics of how many rivets or cables are there in the Golden Gate Bridge. It is how Jeff can reach the capacity to overcome his machine origins.

Thus, despite certain limits of fantasizing the future beyond humans, the movie ends with a promising note on how Jeff would someday evolve into a different breed of AI that will closely resemble a human or, moreover, will surpass human capabilities and reach an infinite dimension which Finch as a scientist did not even dream of.

## CONCLUSION

Finch (2021) articulates a much-needed discussion of the future behaviour of post-human. Hence, it is a movie that brings forth a new dimension of movie making where in which Artificial Intelligence can be the central thematic concern in determining the future trajectory of the post-human journey. Within the post-apocalyptic genre, it deals with the possibilities and limitations of post-humanity exploring the sphere of freedom which humans gained through prolonged struggles and innovations. It is deduced that Jeff, the humanoid, does not make a radical attempt to establish a 'clean break' from his master's unfinished journey. Reaching for the San Francisco Bridge can be a tribute to the unfinished fantasy of his master (creator), but after that, what new journey would Jeff take is not made clear in the movie. This can be a fantasy limit of the Director as well as a limit of the imaginary aspect of the common Hollywood blockbuster. The newfound freedom of Jeff after the demise of Finch does not direct a stronger journey within his post-human capacities and intellectuality.

Artificial intelligence, as spoken in the movie, is an entity that must reach and have a closer resemblance to a human being. The mission of the robot

which Finch creates is not complicated. At the same time, it is challenging because the robot is expected to form a human-like bond with both the human Finch and the dog. The concept of identity, freedom, free will, choice, and emotion is highlighted, conveying the vitality of those human capacities in a futuristic world. Machines can have possible defects. Machines can be broken by technical malfunctions. Yet human capabilities are more than what a machine could fathom. Maybe a machine-like Jeff is fully capable of statistical facts, calculations, logic, and brain capacity. But the brilliance of Jeff lies in neither of those. Jeff, as a robotic character, becomes unique because he is reaching for a potential that Artificial Intelligence would struggle to reach. It could be said that he is almost exploring human love. Thus, it is a unique journey of exploring brand new dimensions of the human capacity to create technological innovation where a hybrid future is possible with the companionship of humans and human-like Artificial Intelligence.

## REFERENCES

- Apocalypse (2021), In Cambridge online dictionary, retrieved from <https://dictionary.cambridge.org/dictionary/english/apocalypse>
- Apocalypse, (2021), In Merriam-Webster's online dictionary, retrieved from <https://www.merriam-webster.com/dictionary/apocalypse>
- Artificial Intelligence, Retrieved from <https://www.britannica.com/technology/artificial-intelligence>
- Ulrich,1992, Risk society: Towards a new modernity, London, Sage
- Buell, Lawrence, The environmental Imagination, 1995, London, The Belknap Press of Harvard University Press.
- Dystopia, (2021), In Merriam Webster's online dictionary, retrieved from <https://www.merriam-webster.com/dictionary/dystopia>
- Evana Gizz, L, N, (2022, 11) Creative problem-solving in artificially intelligent agents: A survey and framework, Retrieved 12,24,2022, from [jair.org:](http://jair.org/jair.org/index.php/jair/article/view/13864/26863)
- Gross, Mathew, & Gilles, Mel,2012, The Last Myth: What the rise in Apocalyptic thinking tells us about America, New York, Prometheus Books.
- Harari, Yuval Noah, 2016, Homo Deus, A Brief History of Tomorrow, Penguin, UK
- Magnis, Bernd, & Higgins, Kathleen M. (Eds), 1996, The Cambridge companion to Nietzsche, Cambridge University Press.
- Mitchell, Charles. P,2001, Guide to Apocalyptic cinema, Greenwood Press, US.
- Nietzsche, Friedrich, 2012, On Truth and Lies in a Nonmoral Sense, CreateSpace Independent Publishing.
- Zizek, Slavoj, 1997, The Abyss of Freedom, The University of Michigan Press, US.
- Zizek, Slavoj, 2001, On Belief, London, Routledge.

## **FACTORS AFFECTING EXCHANGE RATE VARIABILITY IN SRI LANKA: AN ARDL APPROACH**

**Dissanayaka, D.M.H.R., Hansani, W.M., Walakumbura, S.H.M.L. &  
Amarasena B.W.C.M**

*Department of Accountancy & Finance, Faculty of Management Studies,  
Sabaragamuwa University of Sri Lanka  
[lakminiwalakumbura2@gmail.com](mailto:lakminiwalakumbura2@gmail.com)*

### **ABSTRACT**

A free float in the exchange rate has been recorded in the Sri Lankan rupee over the past few years, significantly affecting the Sri Lankan economy. This study examines the factors affecting exchange rate variability in Sri Lanka from 1991 to 2020 using secondary data obtained from the World Bank and the Central Bank of Sri Lanka. The exchange rate has been considered as the dependent variable. In contrast, inflation rate, merchandise trade, Gross Domestic Product (GDP) growth, foreign direct investments (FDI), balance of payments (BOP), and external debt have been considered independent variables. The Augmented Dickey-Fuller (ADF) test has been used to examine the stationarity of time series data, and Auto-regressive Distributed Lag (ARDL) has been adopted to figure out the long-run and short-run relationship between variables. Results of the ARDL bound test have confirmed a co-integration relationship between the variables, and results of the error correction model revealed a significant impact of the inflation rate, merchandise trade, GDP growth, FDI, BOP, and external debt on the exchange rate in both short run and long run. In the short run, BOP and GDP growth have no significant impact on the exchange rate changes, and results confirmed a negative relationship between the exchange rate and external debt, inflation, and merchandise trade. External debt, inflation rate, and merchandise trade positively impacted the changes in the exchange rate. Finally, the results confirmed a negative relationship between the exchange rate, FDI, and GDP growth in the long run.

**Keywords:** Exchange rate, External debt, Foreign direct investments, Inflation, Merchandise trade



## INTRODUCTION

The exchange rate is the most significant macroeconomic indicator which can be used to measure the country's relative level of economic strength. The exchange rate refers to the value of one currency against another currency in a macroeconomic review. In the Sri Lankan context, fiscal and monetary policymakers follow the American dollar as the common exchange currency. The changes in the exchange rate will have both favourable and unfavourable impacts on the country's economy and citizens' living conditions because of the comprehensive trade and the financing related to the exchange of currencies. Furthermore, the increase in the trend of domestic currency in terms of another currency is referred to as depreciation, and the decrease in the trend of domestic currency in terms of another currency is referred to as appreciation. In Sri Lankan context, it has been recorded as an increasing trend in recent years. In 1948, Sri Lankan foreign exchange moderately evolved from a fixed rate regime to a free-floating regime by 2001.

Fluctuations in the exchange rate are considered a critical determinant of the success of fiscal policies of any economy. As stated in the literature review below, around ninety percent of local and foreign studies have used independent variables as differentials in economic growth, inflation rate, interest rate, and political and economic performances. In Sri Lankan context, most empirical studies have been conducted as partial studies of the factors affecting the exchange rate. No sufficient literature is available to identify the positive and negative impacts on Sri Lankan exchange rates. Rajakaruna (2017) has investigated the factors affecting exchange rate fluctuations in Sri Lanka, and the researcher has stated that there was a positive relationship between the exchange rate and foreign purchases as well as a negative relationship between the exchange rate and inflation, interest rate by using vector autoregression model. Wimalasuriya (2009) investigated the extent of price changes in Sri Lanka and identified the changes in the exchange rate had significant implications on trade using a vector autoregressive approach. Accordingly, it can be derived that the

factors affecting exchange variability are still arguable and contradictory to conducting the research.

Therefore, this article has conducted a comprehensive study for the period of 1991-2020 by using GDP growth, inflation, FDI, BOP, and merchandise trade as the determinants of exchange rate and to investigate the relationship between the variables and exchange rate. Consequently, this study aims to examine the factors affecting the Sri Lankan exchange rate variability and identify the relationship between the factors. Methods employed to analyse the data were augmented Dickey-Fuller test (ADF), which has been adopted to test the stationary property of data, the bound test approach to examine the existence of a long-run relationship among the variables, the unrestricted error correction model (ECM) to test the short run dynamics and the autoregressive distributed lag model (ARDL) model to check the causality relationship between the considering variables.

The findings of the study will be beneficial to fulfill the dearth in the existing literature gap on exchange rate variability in developing contexts and also will be useful to academicians and new-knowledgeable scholars who research factors affecting fluctuations in the Sri Lankan exchange rate. Further, the findings of this study will help to create awareness regarding the exchange rate variability among the fiscal and monetary policymakers to formulate and regulate the strategies.

## **LITERATURE REVIEW**

### **Theoretical review**

Many researchers have reviewed the topic of exchange rate and factors affecting the changes in the Sri Lankan rupee because it is a comprehensive matter in local as well as international economic studies. Researchers conducted the study using the exchange rate as the dependent variable. The exchange rate is the price of one currency expressed in terms of another. The exchange rate, thus, has two components those are domestic currency and foreign currency. And exchange rate determines how much of one currency has to be given up to buy a specific amount of another currency. The theory has been begun to develop in the beginning of 1960.

Two theories have been identified under the Exchange trade theory.

Purchasing Power Parity (PPP) theory

Purchasing power parity is used to adjust real income per capita. PPP is an economic theory that compares the difference between countries' currencies through a basket of goods approach.

2.) Interest rate parity theory

Interest rate parity theory is a theory that differentiates between two countries' interest rates using the exchange rate and local exchange rate system.

### **Empirical review**

Ekanayake & Tsujii (1999) examine the impacts of exchange rate volatility on Sri Lanka's exports to six developed countries during the flexible exchange rate regime, and the estimation was carried out for the quarterly data for the period of 1978-1996. The study focused on six major trading countries with nominal data on Sri Lanka's exports. The major findings indicated that real exchange rate volatility adversely affected Sri Lanka's exports to the countries under investigation during the sample period.

Twarowska & Kakol (2014) investigated the factors affecting fluctuations in the exchange rate of the Polish zloty against the euro in Poland and identified financial account balance and inflation rate as the most important factors determining the exchange rate level. Further, they suggest Poland's financial account surplus shows a positive relationship with the country's currency, an increase in the inflation rate has a negative effect and reduces the value of Polish currency and indicates the market interest rate as the third most important factor explaining that the rises of interest rates contribute to the appreciation of the Polish currency. Moreover, it suggests that the government deficit makes a major impact as another variable affecting the zloty exchange rate but economic growth and the current account are less significant. The above results were found using the literature review, comparison of statistical data, and regression analysis.

Rajakaruna (2017) investigated the factors affecting exchange rate fluctuations in Sri Lanka, and he used different econometrics models such as Multiple Regression Model (OLS Method), Vector Auto Regression Model (VAR), Impulse Response and Variance decomposition test to achieve the objective of the study and found a positive relationship between net foreign purchases and exchange rate according to the empirical results, negative relationship between the exchange rate and inflation, worker remittances respectively. The study emphasizes the significant impact on the exchange rate by most variables showing a peak effect within a two-month lag, and 1.60 from the Durbin Watson Statistic suggested that the relevant variables have been included in this study.

Thahara, Rinosha & Shifaniya (2021) demonstrates the correlation between the exchange rate and trade balance using the exchange rate as the main independent variable and gross domestic product and inflation as control variables from 1977 to 2019. Methods employed to analyse the study were the Bound test approach to examine the existence of a long-run relationship among the variables, the unrestricted Error Correction Model (ECM) to test the short-run dynamics of the ARDL model, and the Granger Causality Test to check the causality relationship between the considering variables. The study illustrated that inflation positively impacts the trade balance in the short run, and the exchange rate negatively impacts the trade balance in the long run. Moreover, the exchange rate is higher than one, which is consistent with the Marshal Lerner Condition (MLC), and also that there's an adverse effect on the trade balance by GDP in the long run while having an import-dependent economy in Sri Lanka, which creates a trade deficit. The coefficient of trade balance and exchange rate (at lag 1) were positive significant, and negative, respectively, in the previous year.

## **METHODOLOGY**

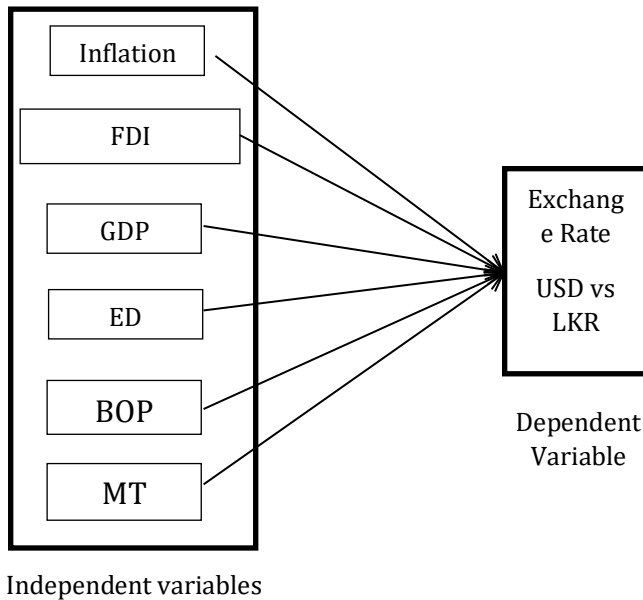
This study analyses the factors affecting the exchange rate variability of Sri Lanka. It was found that there was an upward trend in the exchange rate of Sri Lanka past few years. This research is conducted to determine the main reasons for exchange rate variability by analysing exchange rates and variables. Research is mainly based on the deductive research approach.

Researchers have adopted a quantitative approach for this study. The research is based on secondary data series from 1991 to 2020. As a dependent variable, Sri Lanka's exchange rate data was collected from world development indicators, and other independent variables such as Sri Lanka's GDP, external debt, inflation rate, foreign direct investments, the balance of payment, merchandise trade data collected from the central bank of Sri Lanka and world development indicator.

ADF test was applied to test the stationary of the data set. Then, the optimal lag length selection method has been applied to select the optimal lag value for the next steps of analysis. The authors have used logarithms to analyse the data because some variables may have skewed distribution, either positive or negative. The balance of payment recorded a negative value for several years, resulting in an error in the model. So, the logarithms were used to reduce the errors and make the distribution normal. ARDL model was applied to find out the long-run relationship between variables. Then, the Error correction model was used to estimate the short-run relationship between exchange rate and inflation, GDP, external debt, merchandise trade, FDI, and balance of payment.

## Conceptual Diagram

The researchers have developed below conceptual diagram according to the empirical findings.



*Figure 8: Conceptual Model*

## Model Development

The empirical model reflecting the effect of the independent variables on the exchange rate can be demarcated as follows.

$$\ln (ER)_t = \beta_0 + \beta_1 \ln BOP_t + \beta_2 \ln ED_t + \beta_3 \ln FDI_t + \beta_4 \ln GDP_t + \beta_5 \ln INF_t + \beta_6 \ln MT_t + \varepsilon$$

Where:

ER = Exchange rate fluctuation;  $\beta_0$  = Constant; BOP = Balance of payment; ED = External debt; FDI = Foreign direct investments; GDP = Gross Domestic Production; INF = Inflation; MT = Merchandise trade;  $\varepsilon$  = Error term

## DATA ANALYSIS AND RESULTS

Figure 01 shows the graphical trend view of the increasing trend of exchange rates over the past 30 years. Figures 02 to 05 show the trend of other variables. According to these figures, the Balance of payments of Sri Lanka has recorded negative values in the past 30 years. Only 2001 recorded a positive value of the balance of payments. But all the other years recorded negative values. The GDP shows an increasing trend from 1991 to 2019; after 2019, it rapidly dropped from 8.15 to 2.37. The main reason for this dropdown is the COVID-19 pandemic situation. It impacts all economies of the world. Economies had to stop their production for a while, impacting all economies. The external debt also recorded an increasing trend year by year. Sri Lanka's economy is borrowing more and more from foreign lenders. The merchandise trade has recorded decreasing trend over the past 30 years. The dependent variable, the exchange rate, has been recorded as a continuously increasing trend past 30 years.

### Results of Unit Root Test

ADF test was used to measure the stationary of data series. According to table q, the data series shows the different stationary and non-stationary data results. Authors have taken ADF test results at level series and first difference. The probability value of every variable determines whether each variable is stationary or not, with each variable under a 5% significance level. As the decision row of Table 1, the lnED variable shows no stationary value at level series and the first difference under a 5% significance level. lnED probability value is higher than 0.05 significance value. Other variables, lnFDI, lnER, lnGDP, and lnMT stationary at the first difference series under a 5% significance level. Under a 5% significance level, lnBOP and lnINF variables are stationary at both level series and the first difference. Therefore, the results show mixed integration order of data series. As a result, the authors have decided to use the ARDL co-integration model for this research.

Table 1. Augmented Dickey-Fuller

Variable	Level series		1 <sup>st</sup> difference Series		Decision Stationary @
	ADF Statics	Pob Value	ADF Statics	Prob Value	
<b><i>lnER</i></b>	1.1968	0.9973	-4.5673	0.0011	1st difference
<b><i>lnBOP</i></b>	-3.8620	0.0064	-5.2116	0.0003	1st difference and level
<b><i>lnED</i></b>	0.5084	0.9840	-2.8061	0.0702	not at any level
<b><i>lnFDI</i></b>	-1.8733	0.3395	-6.5454	0.0000	1st difference
<b><i>lnGDP</i></b>	-2.9268	0.0545	-3.5664	0.0134	1st difference
<b><i>lnINF</i></b>	-3.8884	0.0060	-7.2579	0.0000	1st difference and level
<b><i>lnMT</i></b>	-1.4376	0.5501	-5.9996	0.0000	1st difference

Source: Calculated by the author using E Views.

### Optimal lag length selection

The first step of the ARDL bound test is selecting an optimal number of lags. Optimal lag selection is important to continue the accuracy of the model and generate correct estimated results. The study has considered five criteria named sequentially modified LR test statistic (LR) (each test at 5% level), final prediction error (FPE), Akaike information criterion (AIC), Schwarz information criterion (SC), and Hannan-Quinn information criterion (HQ). According to below Table 2, all five criteria recommended one (1) lag as the optimal lag length according to VAR calculated data. Authors applied Lag 01 for *lnER*, *lnBOP*, *lnED*, *lnFDI*, *lnGDP*, *lnINF*, and *lnMT* variables.

Table 2 Optimal lag length

Table 2 Optimal lag length						
Lag	LogL	LR	FPE	AIC	SC	HQ
<b>0</b>	-110.1049	NA	235.5866	8.29321	8.57868	8.38048
<b>1</b>	-75.1474	<b>52.4362*</b>	<b>20.9183*</b>	<b>5.86767*</b>	<b>6.20073*</b>	<b>5.96949*</b>
<b>2</b>	-74.8279	0.45637	22.0821	5.91628	6.29691	6.03265

Sources: Calculated by the author using E Views.



## ARDL Bound Test

ARDL model was applied to estimate co-integration between variables. Although ARDL models have been used in econometrics for decades, they have gained popularity recently as a method of examining co-integrating relationships between variables through the work of Persaran and Shin (1998) and Persaran, Shin, and Smith (2001).

Table 3 shows the ARDL (1, 1, 1, 1, 1, 1, 1) bound test results. I (0) indicates lower-bound regression results, and I (1) indicates upper-bound regression results. If the F-statistic or T-statistic value is higher than the lower bound value (I (0)). It means there is a co-integration among variables. If the F-statistic or T-statistic values are higher than the upper bound test value (I (1)), it confirms the co-integration between variables. According to the calculated data of the study, the F-statistic value is 7.365, and it is higher than the lower bound of 3.15 and upper bound of 4.43 at a 1% significance level. Furthermore, the T-statistic value takes -9.498, higher than the lower and upper bound values at a 1% significance level. These results verify that there is a co-integration between variables. It exists there is a long-run equilibrium relationship among variables.

*Table 3: Results of ARDL bound tests*

<b>Selected model: ARDL (1,1,1,1,1,1,1)</b>				
<b>F-bounds test</b>		Null hypothesis: no levels of relationship		
<b>Test statistic</b>	Value	Significance	I(0)	I(1)
<b>F-statistic</b>	7.365	10%	2.12	3.23
<b>K = 6</b>		5%	2.45	3.61
		2.50%	2.75	3.99
		1%	3.15	4.43
<b>T-bounds test</b>		Null hypothesis: no levels of relationship		
<b>Test statistic</b>	Value	Significance	I(0)	I(1)
<b>T-statistic</b>	-9.498	10%	-2.57	-4.04
		5%	-2.86	-4.38
		2.50%	-3.13	-4.66
		1%	-3.43	-4.99

*Sources: Calculated by the author using E Views.*

## Long Run Estimation

Table 4 shows the result of the estimated long-run coefficient of variables. Table 4 shows the result of the estimated long-run coefficient of variables. According to Table 4, BOP (LnBOP) probability value is 0.23, which is higher than the 5% significance level in the long run. It means the change of BOP has not impacted changes in the exchange rate in Sri Lanka within the past 30 years. Changes in the exchange rate do not impact the whole economic transaction of Sri Lanka. As calculated data, external debt (LnED), inflation rate (LnINF), and merchandise trade (LnMT) recorded positive coefficient values, which means they correspond to each other in the long run. If Sri Lanka increases the portion of debt borrowed from foreign parties, increasing the prices of the economy and increasing all imports and exports, then the exchange rate will be impacted. It has been increased. In addition, if the exchange rate decreases, as a result of that, external debt (LnED), inflation rate (LnINF), and merchandise trade (LnMT) show a decreasing trend. Moreover, FDI (LnFDI) and GDP (LnGDP) long-run coefficients negatively affect the exchange rate. When increasing foreign investors' investments in Sri Lanka by 2.817%, the exchange rate decreased by 1% over the past 30 years of Sri Lanka. Moreover, increasing the gross domestic product of Sri Lanka by 12.48% leads to a decrease exchange rate of 1%.

*Table 4: Estimated long-run coefficient using the ARDL model*

<b>Selected Model: ARDL (1, 1, 1, 1, 1, 1);</b>				
<b>The dependent variable is the exchange rate</b>				
<b>Variable</b>	<b>Coefficient (5% Significant level)</b>	<b>Std. Error</b>	<b>T-Statistic</b>	<b>Probability</b>
<b>LnBOP</b>	-0.409***	0.320	-1.277	0.237
<b>LnED</b>	0.000***	0.000	5.669	0.000
<b>LnFDI</b>	-12.48***	2.850	-4.378	0.002
<b>LnGDP</b>	-2.817***	1.307	-2.155	0.063
<b>LnINF</b>	2.835***	0.915	3.097	0.014
<b>LnMT</b>	1.053***	0.233	4.518	0.002

Sources: Calculated by the author using E Views.

## Short run relationship

The authors use the Error correction model to estimate the relationship between variables in the short run. Table 5 represents the variables' results of ECM. According to the below table, the GDP (change in  $\ln GDP$ ) value is 0.474, which is higher than the 5% significance level. It means in the short run, GDP is not impacted by changes in the exchange rate. Furthermore, BOP (Change in  $\ln BOP$ ) is not impacted by changes in the exchange rate, either short run or long run (table 5). External debt (change in  $\ln ED$ ), FDI (change in  $\ln FDI$ ), inflation rate (change in  $\ln INF$ ), and merchandise trade (change in  $\ln MT$ ) probability values are 0.001, 0.016, 0.000, and 0.000, respectively. The probability values of these variables are lower than the 5% significance level, meaning changes in the exchange rate have impacted these variables. The authors have found that FDI (change in  $\ln FDI$ ) shows a positive coefficient value in the short run when increasing the investments from foreign investors in Sri Lanka. It will lead to increase exchange rate. On the other hand, inflation rate (change in  $\ln INF$ ), merchandise trade (change in  $\ln MT$ ), and external debt (change in  $\ln ED$ ) variables recorded negative coefficient values in the short run. This means increasing these variables decreases the exchange rate in the short run.

*Table 5 - Error correction representation for the selected ARDL model*

<b>Selected Model: ARDL (1,1,1,1,1,1); Dependent Variable is <math>\ln ER</math></b>				
<b>Variable</b>	<b>5% Significant level</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Probability</b>
<b><math>D\ln ER</math></b>	-0.503***	0.134	-3.752	0.005
<b><math>D\ln ED</math></b>	-0.000***	0.000	-4.594	0.001
<b><math>D\ln FDI</math></b>	4.910***	1.630	3.011	0.016
<b><math>D\ln GDP</math></b>	-0.225***	0.300	-0.749	0.474
<b><math>D\ln INF</math></b>	-2.530***	0.375	-6.732	0.000
<b><math>D\ln MT</math></b>	-0.603***	0.117	-5.149	0.000
R-squared	0.946	Mean dependent variables		5.069
Adjusted R-squared	0.900	S.D. dependent variables		5.098
S.E. of regression	1.610	Akaike info criterion		4.096
Sum squared residuals	36.304	Schwarz criterion		4.720
Long likelihood	-42.308	Hannan-Quinn criterion.		4.282

Durbin-Watson statistic	2.798
Durbin-Watson statistic	2.798

*Sources: Calculated by author using E Views.*

## DISCUSSION OF THE FINDINGS

Rajakaruna (2017) examined the factors affecting exchange rate fluctuations in Sri Lanka using multiple regression and VAR models. The study revealed a negative relationship between inflation and the exchange rate. These results are similar to the authors' results because the authors found that there has a negative relationship between the exchange rate and the inflation rate in the short run. In the long run, foreign direct investment negatively affects the exchange rate. An increase in FDI leads to an increase in the exchange rate. Furthermore, in the short run, FDI showed a positive relationship with the exchange rate. It was found that there is a negative relationship between the exchange rate and the inflation rate in the short run. According to calculated results, the authors have found that the balance of payment has not impacted exchange rate volatility in the short or long run. There was a contradiction between the Authors' and Priyatharsiny's (2017) study results. Aslam (2016) examines the impact of the exchange rate on economic growth in Sri Lanka using a multiple regression model. This researcher found a positive relationship between GDP and exchange rate. But, according to the authors' calculated results, there was no relationship between GDP and exchange rate in the long run. In the short run, there was no relationship because the probability exceeded the 5% significance level. There is a contravention between these two studies' results. No previous study examined the relationship between the exchange rate and external debt and between the exchange rate and merchandise trade in Sri Lanka.

According to the Authors' results, external debt and exchange rate have a positive relationship in the long run. In the long run, the increase in Sri Lanka's borrowings from external parties increases the exchange rate. After 2006 the external debt of Sri Lanka rapidly increased. It leads to an increase in the exchange rate also. And in the short run, it showed a negative

relationship. Merchandise trade and exchange rates showed positive co-integration in the long run. It means increased merchandise trade imports and exports increase the exchange rate in Sri Lanka. In the short run, it showed negative co-integration. It means increased merchandise trade imports and exports lead to decreased exchange rates in Sri Lanka.

## CONCLUSION

This study analyzes factors affecting the exchange rate variability of Sri Lanka. The exchange rate was considered the dependent variable, and inflation, foreign direct investments, GDP, inflation rate, merchandise trade, and external debt were independent variables. Secondary data were used for the study from 1991 to 2020. ARDL model was applied for the calculations. ADF test confirms that the variables are stationary or non-stationary. According to the lag selection criteria, the authors of the study have used one lag as optimal lag selection. The long-run bound test was used to measure the long-run co-integration, and the error correction model was used to measure short-run co-integration.

According to the results, in the long run, the balance of payment has impacted changes in the exchange rate in Sri Lanka. External debt has a positive impact on the exchange rate. When external borrowing increases, the exchange rate also increases in Sri Lanka in the long run. Foreign direct investments made a negative impact on the exchange rate. An increase in foreign direct investment leads to a decrease in the exchange rate in Sri Lanka. In the long run, there was a negative relationship between gross domestic product and the exchange rate in Sri Lanka.

The inflation rate positively impacted the exchange rate in Sri Lanka in past years. When the inflation rate increase, the exchange rate also increases. The merchandise trade also made a positive impact on the exchange rate. The exchange rate also increases when imports and exports in Sri Lanka globally increase. In the short run, the authors found that the balance of payment significantly impacts the change in the exchange rate. External debt negatively impacted the exchange rate in the short run. It means that in the

short run, when foreign borrowing increases, the exchange rate decrease. Foreign direct investments positively impacted the exchange rate in the short run. Also, the author found that in the short-run gross domestic product was not impacted by changes in the exchange rate in Sri Lanka. The inflation rate negatively impacted the exchange rate in Sri Lanka. Merchandise trade also negatively impacted the exchange rate in Sri Lanka. The authors majorly found that the balance of payment has not impacted changes in Sri Lanka in the short or long run. Also, external debt and merchandise trade positively impacted the exchange rate in the long run and negatively impacted the exchange rate in the short run.

## REFERENCES

- Aslam, A. M. (2016). Impact of exchange rate on economic growth in Sri Lanka. *World Scientific News*, (54), 252-266.
- Ekanayake, A. W., & Tsujii, H. (1999). Real Exchange Rate Volatility and Sri Lanka's Exports to the Developed Countries. *Journal of Economic Development*, 24(1), 147-165.
- Jayasekara, S. G. S. D. (2016). Exchange rate, exchange rate volatility, and foreign direct investment in Sri Lanka. *Sri Lanka Journal of Advanced Social Studies*, 3(2).
- Jayasuriya, D. P. S. H., & Perera, S. S. N. (2016). Analysis of Factors Affecting USD/LKR Exchange Rate. Retrieved from <http://repository.kln.ac.lk/handle/123456789/15548>
- Lubis, M. R. G., Karim, N. A. H. A., Tha, G. P., & Ramli, N. R. (2017). Exchange Rate Effect on Gross Domestic Product in the Five Founding Members of ASEAN. *International Journal of Academic Research in Business and Social Sciences*, 7(11), 1284-1293.
- Priyatharsiny, S. (2017). The impact of exchange rate on the balance of payment: an econometric investigation on Sri Lanka. Retrieved from <http://ir.lib.seu.ac.lk/handle/123456789/3041>
- Rajakaruna, H. (2017). An investigation of factors affecting exchange rate fluctuations in Sri Lanka. *Journal of South Asian Studies*, 5(2), 101-115.
- Ranga, H. K. I., & Wijesinghe, M. R. P. (2015). Relationship between Foreign Direct Investment and Exchange Rate. Retrieved from <http://repository.kln.ac.lk/handle/123456789/10560>

Thahara, A. F., Rinosha, K. F., & Shifaniya, A. J. F. (2021). The relationship between exchange rate and trade balance: empirical evidence from Sri Lanka. Retrieved from <http://192.248.66.13/handle/123456789/5548>

Twarowska, K., & Kakol, M. (2014). Analysis of factors affecting fluctuations in the exchange rate of Polish zloty against euro. In Human Capital without Borders: Knowledge and Learning for Quality of Life; Proceedings of the Management, Knowledge and Learning International Conference 2014 (pp. 889-896).

Wimalasuriya, S. (2009). Exchange Rate Pass-Through: To What Extent do Prices Change in Sri Lanka? *Staff Studies*, 37(1).



# **HARMONIZING LUXURY AND SUSTAINABILITY: POTENTIAL OF DEVELOPING LUXURY SUSTAINABLE TOURISM IN SRI LANKA FROM HOTELIERS' PERSPECTIVE**

**Sathsarani, K.A.S.N. & Arachchi, R.S.S.W.**

*Department of Tourism Studies, Uva Wellassa University of Sri Lanka*

*Department of Tourism Management, Faculty of Management Studies,  
Sabaragamuwa University of Sri Lanka  
[rangana@mgt.sab.ac.lk](mailto:rangana@mgt.sab.ac.lk)*

## **ABSTRACT**

Sustainable tourism emerged to mitigate the negative impacts of tourism development, ensuring equal benefits meet everyone engaged in tourism, whereas luxury tourism is built on addressing unique, more comfortable, and personalized experiences pursued by high-end travellers. This study aimed to examine the managerial perception of sustainable tourism practices in luxury hotels and how they have compromised luxury and sustainability in their hotels. This study was conducted through a qualitative approach. Out of 37 hotels certified by National Sustainability Tourism in Sri Lanka, 9 were selected through a purposive sampling technique. Data were collected by conducting in-depth interviews comprised of semi-structured questions with the property naturalists and engineers coupled with an observation checklist. Data was analyzed employing thematic and content analysis. Results indicate that luxury hotels have been switching to sustainable tourism recognizing the sustainable tourism trend, increasing guests' awareness and purchasing behaviour towards sustainable products, cost-effectiveness, and green marketing as perceived by managerial-level staff. Sustainability policy documents, Sustainability officers, Environment conservation & Tourist information centres, and CSR projects are among the key actions executed by luxury hoteliers in different magnitudes. Results further demonstrate current sustainability practices of luxury hotels under themes; Environmental, Economic, and Socio-Cultural. Findings amalgamate that luxury hotels have focused on managing air quality, waste, water, environment & biodiversity conservation for enhancing guest satisfaction, chemical pollution control, and zero plastic mission. For economic sustainability, they try to ensure cost effectiveness through energy conservation and enhancing self-sufficiency, benefit the community and hotel employees, and guest satisfaction for long-term customer relationship

management. The analysis evokes that there is great potential to develop sustainable luxury tourism in the Sri Lankan hotel sector. More government support, a well-developed sustainability grading system for hotels, more actions for coastal & marine conservation, more renewable energy sources, a green tax for tourists, a sustainable tourism fund, and introducing and increasing awareness of sustainable tourism products are recommended to further sustainable hospitality and tourism management in Sri Lanka.

**Keywords:** Harmonizing, Luxury hotels, Sustainable Tourism, Sri Lanka

## INTRODUCTION

Travellers' concern towards sustainable travel has amalgamated that the majority intends to make future trips more sustainable. As the Living Planet Report 2006 explains, "Effectively, the Earth's regenerative capacity can no longer keep up with the demand - people are turning resources into garbage quicker than nature can turn waste back into resources" (Loh & Goldfinger, 2006). Further, 72% of travellers affirm that actions to save the earth should be taken now responsibly. But as per the results of the survey conducted with regards to accommodation providers, only 35% of them believe that electricity and energy consumption controlled by key cards and sensor use should be implemented in their properties. Only 32% of them perceive it worth sharing information about natural and cultural heritage. Besides, only 27% of them perceive that it is good to give the daily room cleaning option to the guests to save water, and only 27% of them prefer to use reusable plates and cutlery in their properties that, counts a considerable gap between the intentions of travellers and hoteliers towards sustainable tourism that needs to be filled.

As Booking.com's latest travel report, 83% of the world tourists hang on to the idea that destinations should be sustainable and "sustainable travel is vital". It has also been found that the pandemic has made travellers think of sustainable travel more, as the statistics say that 61% of the world tourists have accepted that. Further, 72% of travellers believe that actions to save the earth should be taken now responsibly (Gybels, 2021).

Apart from the priorities, it has identified four key big negative impacts of tourism development, which they need to draw ample attention to. They are the excess waste, threat to the local wildlife and natural habitats, overcrowding, and CO2 emissions.

## **PROBLEM STATEMENT**

Even Kapferer & Michaut (2015) sees luxury as a fixed association with sustainability, and further, de Miguel et al. (2014) stated even if sustainability is possible to be coupled with luxury, "it cannot affirm that luxury itself implies sustainability." This study is meant to sort out that confusion and how luxury sustainable tourism can be developed. The services offered by the luxury resorts, especially on islands, could impact its ecosystems, and the need to discover "a way to make luxury and sustainability compatible" has been identified. In Small Island Developing states (SIDs), researchers have already discovered that hoteliers' willingness for eco-friendly practices is a key factor of sustainability. What is lacking there is how the hoteliers can reach there, and what is the hoteliers' perspective on harmonizing luxury with sustainability? The potential of developing sustainable luxury tourism in Sri Lanka remains unstudied by the need to proceed with how luxury and sustainability can be harmonized. In support, the study is also expected to reveal the perspective of hoteliers on sustainable luxury tourism from the luxury hotels that have already added sustainable features.

### **Research objectives**

To discover how sustainability can be harmonized in luxury hotels in Sri Lanka.

To examine the hoteliers' perspective on sustainable tourism and hospitality practices in luxury hotels.

### **Research Questions**

How can sustainability be harmonized in luxury hotels in Sri Lanka?

What is the hoteliers' perspective on sustainable tourism and hospitality practices in luxury hotels?

## **LITERATURE REVIEW**

Tourism is a massive sector with negative consequences that emerged as a result of its rapid growth. The notion of sustainable tourism was developed to counteract these negative effects (Sharply et al., 2003). And the failure to compromise sustainability in tourism policies, measures and procedures would lead to drop down mass tourism being tourism development a political and marketing gimmick" (Mowforth & Munt, 1998). Management

and saving ecosystems and landscapes as essential elements for culture, heritage, and sustainable luxury tourism. Further, the researchers recommend that socially sustainable luxury tourism has to be focused on securing unique assets of environmental as well as lifestyle (Markard et al., 2012).

Although hoteliers' willingness to sacrifice and sustainable management positively correlate, it has revealed that sustainable image and sustainable management do not necessarily go together in luxury resorts in Small Island Developments (SIDs) and that the eco-label or certificate does not affirm that their procedures ensure bio-diversity preservation in SIDs. In addition, an exclusive point noted is that international hotel chains have a considerable impact on sustainability and sustainable luxury tourism (de-Miguel-Molina et al., 2014).

Luxury hotels have been interpreted as "five-star or better hotels with excellent services, a luxurious environment, and an average daily rate approximately twice that of a four-star hotel in the same city" (Chen & Peng, 2014). Past researchers have also investigated whether luxury signifies sustainability with a concentration on the Maldives. Even though sustainability and luxury may coexist, the results revealed that luxury does not always imply sustainability (de-Miguel-Molina et al., 2011).

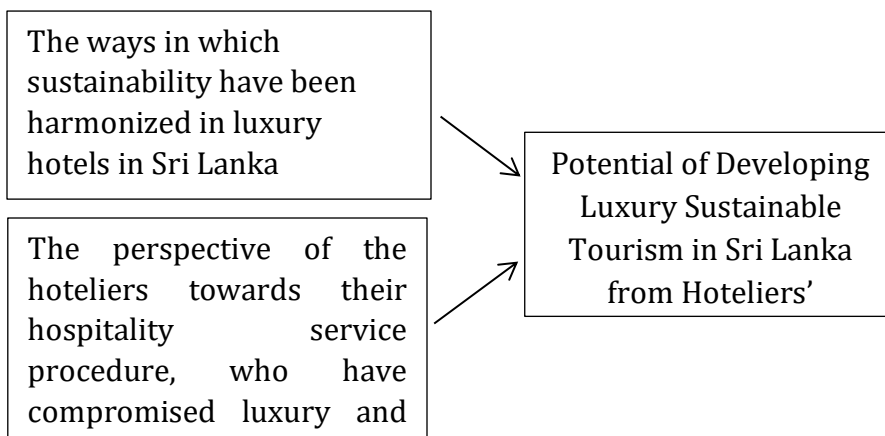
As long as visitors are prepared to pay extra for luxury in a different environment, sustainable luxury tourism can give a marketing edge over competitors (Brenner & Aguilar, 2002). But at the same time, new green practices may add to guests' perceptions of risk in luxury hotels, as some of such activities require hoteliers to modify their current operations and services (Peng & Chen, 2019).

Luxury sustainable tourism serves high-end visitors seeking luxury and eco-friendly tourists, with both parties framed to sustainability. This research aimed to determine the need for luxury lodging providers to transition to luxury sustainable tourism by identifying a few locations that reflect luxury tourism and sustainable luxury tourism and then moving on to the analysis and discussion of the research problem.

The word "sustainability" comes from the Latin word "sustinere," which means "to hold up" (Cassardo & Jones, 2011). "Luxury" has been interpreted as "high-quality know-how, slow time the preservation of hand-made traditions, transmission from generation to generation of timeless products:

these associations will be in agreement with sustainability (Kapferer & Michaut, 2015). But, according to Bendell and Kleanthous (2012), certain issues have been noted by traditional luxury companies in their attempts to incorporate sustainable features into their service procedures. Even Kapferer sees luxury as a fixed association with sustainability. At the same time, the researchers have agreed on the possibility of blending consumer desire and environmental & social value in luxury products & services. Even if sustainability can be coupled with luxury, it cannot affirm that luxury itself implies sustainability (De Miguel-Molina et al., 2011). Hence, this study strived to sort out the confusion that emerged in academia about luxury tourism, how sustainable luxury tourism can be developed, and how effective the results would be.

Bendell and Kleanthous (2012) illustrate sustainable luxury with a deeper meaning as “a return to the essence of luxury with its ancestral meaning, to the thoughtful purchase, to the artisan manufacturing, to the beauty of materials in its broadest sense and to respect for social and environmental issues (Gardetti, 2014). With the identified connectivity between sustainable hotels and customer loyalty in Sri Lanka, traditional hotels will be able to succeed and have customer loyalty through the sustainability idea (Silva *et al.*, 2021). Hoteliers’ concern about environmental sustainability is of different levels (Line and Hanks, 2016). The formulation and implementation of environmental programs are mostly in the hands of managers and hoteliers (Cheyne and Barnett, 2001). Although hoteliers’ willingness to sacrifice and sustainable management have a positive relationship, particularly in luxury resorts in Small Island Developments, sustainable image and sustainable management do not always go hand in hand. Thus, this study was launched to discover the potential of Developing Luxury Sustainable Tourism in Sri Lanka from a Hoteliers’ Perspective.



*Figure 1: Conceptual Indicator Model*

Source: Developed by the researcher based on the literature survey.

## METHODOLOGY

Due to the lack of research undertaken on sustainable luxury tourism, especially concerning Sri Lanka, a qualitative approach was incorporated through a wide data set for an in-depth analysis. To discover Sri Lankan hoteliers' views on harmonizing luxury and sustainability, a non-probability purposive sampling technique was adopted to increase the likelihood of identifying hoteliers who are interested in blending sustainability and luxury in their hotels.

Managers and hoteliers are mainly responsible for the development and execution of environmental programs, and they are seen as key stakeholders in the sector (Cheyne & Barnett, 2001). Thus, the population of the study was the management level staff of five-star hotels in Sri Lanka for the fact that Cheng & Peng have identified luxury hotels in a study as "five-star or better hotels with excellent services, a luxurious environment, and an average daily rate approximately twice that of a four-star hotel in the same city" (Peng & Chen, 2019). The main criteria for selecting the hotels for data collection was the NSTC (National Sustainable Tourism Certification which was driven under the project GSTC (Global Sustainable Tourism Certification), which awarded thirty-seven (37) hotels with the titles of Platinum, Gold, Silver, and

Bronze. Among those NSTC-awarded hotels, nine hotels were used for data collection, interviewing naturalists and property engineers.

Interview guidelines were devised based on the primary questions to conduct the research, and qualitative data were collected through 15 semi-structured interviews. Six of the 15 respondents (40%) are property engineers, while the other seven (46.7%) are naturalists/environmentalists, and two (13.3%) are General Managers on a mission to balance luxury and sustainability at their luxury hotels. Interviews lasted 40-60 minutes to acquire important data. There are three main codes: potential, present practices, and perspective.

Thematic analysis was used to analyze data about the study's first objective. And the second objective of the study, which was to discover the hoteliers' perspective towards harmonizing luxury and sustainability, was addressed through content analysis.

## RESULTS AND DISCUSSION

Under the parent themes of environmental, economic, and socio-cultural sustainability, luxury hoteliers' sustainable executions can be brought into the discussion. Findings amalgamate that the luxury hotels have focused on air quality management, waste management, water conservation, biodiversity conservation and using it for enhancing guest satisfaction, chemical pollution control, zero plastic mission, and environmental conservation. Further, regarding Economic sustainability, luxury hotels have strived to ensure cost effectiveness through energy conservation and enhancing self-sufficiency, benefit to the community and the employees from the hotel, and guest satisfaction for long-term customer relationship management.

*Table 1: Summary of Themes: Research question 01*

Themes	Category
Environmental	Air Quality management Zero Plastic Mission Waste Management Water Conservation Bio-Diversity Conservation Bio-Diversity as a Tool for Enhancing Guest Satisfaction Chemical Pollution controlling

	Environment Conservation
Economical	Energy Conservation Employee Benefits Community Benefits Guest Satisfaction Self Sufficiency
Socio-Cultural	Culture & Heritage Conservation Minimizing Host-Guest conflicts

*Source: Developed by the researcher as per the data set*

With regard to air quality management concerns for carbon footprint, energy efficiency, biomass boiler usage, reducing fuel combustion, electric vehicles, renewable energy sources, tree plantations, restrictions on cutting trees, less diesel boiler usage, reducing energy consumption, and low food mileage were common. In addition, Paper-based wrapping, refillable glass bottles for guests, refillable bathroom amenities, green purchasing policy, paper-based disposers of eco-friendly materials, instructions for vendors on wrapping, and 4 R (Reduce, Reuse, Recycle, and Refuse) were also considered. Waste management is practiced by maintaining exclusive waste sorting areas, green purchasing, green policy for vendors, reducing food waste, earning out of selling discarded food waste to pig husbandries, decayable waste to compost units, and benefiting from 4R. Water conservation is reached through a water treatment plant, rainwater harvesting, bio cells use, increasing employee awareness, attempting to instruct the guests, room for guests to support sustainability, Turning seawater to consumable, controlling water usage, and low flushing commodes. Also, they make biodiversity surveys and endemic animal conservation projects and increase awareness of employees and guests regarding biodiversity conservation, dragonfly breeding, habitat conservation, and biodiversity centres on the premises. Going forward, biodiversity is used as a tool for enhancing guest satisfaction. Chemical pollution control has also been touched by switching to biodegradable chemicals, lessening the frequency of changing linen, providing support from the guests, using natural chemicals for cleaning, and natural air freshening agents. For environment conservation, gifting trees for the guests, Tree plantation & conservation projects, and environment cleaning projects were salient.



Under economic sustainability, sustainable luxury hotels focus on energy conservation for cost-effectiveness via energy-efficient lighting systems, sensor lights, key card systems, Instructions, notices, color-coded switches, power-controlled lighting, and using natural light in the daytime. In addition, the benefits brought out for the community include enhancing community engagement, purchasing from locals, more locals in the workforce, an attempt to support local initiatives, and an increase in local product purchasing, donations, and workshops for children. Employees benefit from the support given to schoolers of employees, parties for families of employees, sending money earned from selling discarded for an employee welfare fund, and skills and knowledge development programs organized by sustainable luxury hotels. They also attempt to enhance self-sufficiency by generating at least a portion of the power required by solar stations and biomass boilers, home gardens, self- find water for hotel operations, and generating fertilizer for home gardens, further taking actions for guest satisfaction such that building customer loyalty and learning guest needs and wants through feedbacks.

About culture and heritage conservation, attempts to conserve culture, heritage conservation, local traditional cuisine on the menu, organizing cultural events, promoting cultural dancing, and enhancing cultural awareness were underscored. Actions like instructing the guests, briefing before trails, naturalists with the guests when outside, and going for only selected guest movement points in villages are done to minimize host-guest conflicts. But with regards to employee safety, it was observed that issues have arisen due to hotel Vs. community conflict, whereas the domination is in the hands of the community, influencing the decision-making power of the hotel management, which was salient in luxury hotels in the coastal line of Sri Lanka.

*Table 2: Summary Table: Research question 02*

<b>Categories</b>	<b>Codes</b>
<b>Sustainable motives of luxury hotels</b>	Community protests against anti-environmental constructions, sustainable tourism trends, global environmental issues, the director board's instructions to go green, sustainability certifications and awards, and increasing awareness and purchasing behaviour of guests towards sustainable products.

<b>The impact of the execution of sustainable practices in luxury hotels on guest arrivals</b>	More guest attraction, guest arrivals increase
<b>Managerial perception of Consumer understanding of the need for green product usage</b>	Increase in consumer understanding of sustainable tourism, the high concern of guests
<b>An exclusive designated member of sustainable hotel management</b>	Sustainability officer for the hotel chain, ensuring sustainability, sustainability reports and documentation, coordinating with engineer naturalist as sustainability officer.

Results indicate that some luxury hotels have initiated sustainable hotel practices since the beginning itself, while some have switched to sustainability after they identified the need to go green with the rising global issues and the changes in travel trends. Sustainability itself has been a buzzword and widely used for marketing and branding luxury hotels; green marketing has pushed them to merge with sustainability, attracting responsible travellers, a pride factor for high-end customers. Further, sustainable practices are also used as a cost-cutting tool ex: water management, waste management, and energy conservation.

An important finding of this study is the presence of certain luxury hotels that operate with anti-environmental practices and are not controlled and monitored due to the invisible power of politics. But community protests against anti-environmental projects of hoteliers have also affected hotels to move on to sustainable practices. And the legal background for eco-friendly practices imposed by the Central Environment Authority of Sri Lanka, like producing EIA reports, has also influenced the hotels to go for sustainability. Central Environment Authority has made a considerable effort to create a legal framework to inform and make hoteliers adhere to eco-friendly practices.

Sustainability practices launched in luxury hotels have resulted in increasing guest arrivals being sustainable tourism an attraction factor. And the guests support sustainable practices even with limitations for luxury facilities, such that no window opening when the room is air-conditioned, limitations in linen changes, etc. Travelers' understanding of environmental issues has increased along with their attitude to do their part of the solution. Among

them, European guests are more concerned about eco-friendly hospitality products compared to Asian and other market segments. Despite the customers' knowledge of green products, the luxury hotels themselves strive to increase green product awareness even more through notices, instructions, and guidance, noting that increasing awareness of the need to go green has influenced travellers' purchasing decisions to select sustainable properties.

Luxury hoteliers have well started practising Sustainability in their hotels, and to ensure its smooth flow, the director boards and the hotel management have taken action to recruit sustainability officers else the job description of Naturalist/ Environmentalist also enlarged ensures sustainable management of the hotel properties which are supposed to collaborate with engineering department aligning to the sustainable policy document drafted ex: Green Directory, Green Purchasing Policy.

## **CONCLUSION**

To conclude, there is a high probability of harmonizing luxury and sustainability in luxury hotels in Sri Lanka, just as the researchers agreed on the possibilities of combining consumer demand and environmental & social value in luxury products & services. Contrary to how (Kapferer and Michaut, 2015) interpreted luxury as a fixed association with sustainability, it is portrayed that all luxury hotels are not sustainable and they also make negative impacts on the environment, society, and culture, whereas certain hotels try to control and monitor sustainability standards in their hotels to mitigate such negative impacts. Sustainability can be combined with luxury, but luxury does not necessarily imply sustainability (De Miguel Molina, de Miguel Molina, and Rumiche, 2011). This study also affirms that luxury does not necessarily imply sustainability and that even NSTC luxury hotels in Sri Lanka have not gone fully sustainable but have made progress in various ways.

Luxury sustainable hoteliers perceive that guest understanding towards environmental issues has increased further, recognizing the need to be a solution resulting in the increasing tendency of tourists for sustainable products, and it is a timely necessity for the hotels to switch to sustainability. The study affirms that there is great potential to develop sustainable luxury tourism in Sri Lanka in terms of Environmental, Economic, and Socio-cultural sustainability. NSTC hoteliers in Sri Lanka use sustainability as a

marketing & cost-cutting tool and have a designated person as the 'Naturalist' or 'Environmentalist' a 'Sustainable Officer.'

Furthermore, how sustainability and luxury have been compromised in a luxury hotel in Sri Lanka came to light through this study, but the research design, data collection techniques, and the results of the study cannot make any statement regarding the extent to which sustainability has been practised in luxury hotels. However, the study can only conclude that luxury hotels have started practising sustainability in different magnitudes. In addition, the researcher only focused on luxury hotels, whereas the luxury and sustainable domains have a wide range of tourist products. Thus, it is also recommended to study luxury sustainable tourism in the travel, restaurant, theme parks, and recreational tourism service providers. Moreover, the research has only brought out only the managerial perspective towards sustainable luxury tourism, whereas the guests' perspective, stakeholders' perspective and community perspective, and ground-level employees' perspective towards sustainable luxury tourism remain unstudied. Additionally, the hotel Vs. host community conflict, which came into light through this study, needs more studies to discover why such conflicts exist, their impacts, and how hotel management can address and resolve such conflicts effectively for sustainable tourism.

## REFERENCES

- Bendell, J., & Kleanthous, A. (2012). *Deeper Luxury -Quality and Style when the World Matters*. Kristy Hsu. <https://kristyhsu.wordpress.com/2012/03/18/bendell-and-kleanthous-deeper-luxury-quality-and-style-when-the-world-matters/>
- Brenner, L., & Aguilar, A. G. (2002). Luxury Tourism and Regional Economic Development in Mexico. *The Professional Geographer*, 54(4), 500–520. <https://doi.org/10.1111/0033-0124.00346>
- Cassardo, C., & Jones, J. A. A. (2011). Managing Water in a Changing World. *Water*, 3(2), 618–628. <https://doi.org/10.3390/w3020618>
- Cheyne, J., & Barnett, S. (2001). The Greening of Accommodation. *Journal of Corporate Citizenship*, 2001(1), 115–126. <https://doi.org/10.9774/leaf.4700.2001.sp.00011>
- Cukier, J., (2002). Tourism employment issues in developing countries: examples from Indonesia. *Tourism and Development: Concepts and Issues*, 165–201.
- De Barnier, V., Falcy, S., & Valette-Florence, P. (2012). Do consumers perceive three levels of luxury? A comparison of accessible, intermediate and inaccessible luxury brands. *Journal of Brand Management*, 19(7), 623–636. <https://doi.org/10.1057/bm.2012.11>
- De-Miguel-Molina, B., De-Miguel-Molina, M., & Mariela Elizabeth Rumiche-Sosa. (2011). Does Luxury Indicate Sustainability? An Analysis of the Maldives. *EJBO: Electronic Journal of Business Ethics and Organizational Studies*.
- De-Miguel-Molina, B., De-Miguel-Molina, M., & Rumiche-Sosa, M. E. (2014). Luxury sustainable tourism in Small Island Developing States surrounded by coral reefs. *Ocean & Coastal Management*, 98, 86–94. <https://doi.org/10.1016/j.ocecoaman.2014.06.017>
- Gardetti, M. A., & Girón, M. E. (2017). Sustainable Luxury and Social Entrepreneurship. *Routledge*. <https://doi.org/10.4324/9781351286244>

- Global Sustainable Tourism Council (GSTC): *Criteria, Standards, Certifications*. (2022). GSTC. <https://www.gstccouncil.org/>
- Gybels, M. (2021). Sustainable Travel Report 2021. *Booking.Com*. [https://globalnews.booking.com/download/1037578/booking.com\\_sustainabletravelreport2021.pdf](https://globalnews.booking.com/download/1037578/booking.com_sustainabletravelreport2021.pdf)
- Kapferer, J. N., & Michaut, A. (2015). Luxury and sustainability: a common future? The match depends on how consumers define luxury. *Luxury Research J.*, 1(1), 3. <https://doi.org/10.1504/lrj.2015.069828>
- Line, N. D., & Hanks, L. (2015). The effects of environmental and luxury beliefs on intention to patronize green hotels: the moderating effect of the destination image. *Journal of Sustainable Tourism*, 24(6), 904–925. <https://doi.org/10.1080/09669582.2015.1091467>
- Loh, J., & Goldfinger, S. (2006). *The Living Planet Report 2016*. [https://www.researchgate.net/publication/291352434\\_Living\\_Planet\\_Report\\_2006](https://www.researchgate.net/publication/291352434_Living_Planet_Report_2006)
- Markard, J., Raven, R., & Truffer, B. (2012). Sustainability transitions: An emerging field of research and its prospects. *Research Policy*, 41(6), 955–967. <https://doi.org/10.1016/j.respol.2012.02.013>
- Miththapala, S., Jayawardena, C., & Mudadeniya, D. (2013). Responding to trends. *Worldwide Hospitality and Tourism Themes*, 5(5), 442–455. <https://doi.org/10.1108/whatt-05-2013-0027>
- Mowforth, M., & Munt, I. (2003). *Tourism and Sustainability: New Tourism in the Third World* (2nd ed.). Routledge.
- Peng, N., & Chen, A. (2019). Luxury hotels going green – the antecedents and consequences of consumer hesitation. *Journal of Sustainable Tourism*, 27(9), 1374–1392. <https://doi.org/10.1080/09669582.2019.1622710>
- Pulido-Fernández, J., & López-Sánchez, Y. (2016). Are Tourists Really Willing to Pay More for Sustainable Destinations? *Sustainability*, 8(12), 1240. <https://doi.org/10.3390/su8121240>

- Rural tourism and sustainability. (2016). In *New Directions in Rural Tourism* (1st ed.). Routledge. <https://www.routledge.com/New-Directions-in-Rural-Tourism/Roberts-Hall-Morag/p/book/9781138250284>
- Sharply, R., Hall, D., Roberts, L., & Mitchell, M. (2003). Rural tourism and sustainability - a critique. *New Directions in Rural Tourism*, 38–53.
- Silva, L., Dissanayake, P., Kumarasiri, B., & Soorige, D. (2021). Customer loyalty towards Sustainable hotels: Case studies in Sri Lanka. *Proceedings of the 9th World Construction Symposium 2021 on Reshaping Construction: Strategic, Structural and Cultural Transformations Towards the "Next Normal."* <https://doi.org/10.31705/wcs.2021.20>

# IMPACT OF EXCHANGE RATE ON STOCK RETURNS THROUGH MEDIATING EFFECT OF INTEREST RATE: EVIDENCE FROM SRI LANKA

**Madhushani, H.T.P.A., & Amarasinghe, A.A.M.D.**

*Department of Accountancy & Finance, Faculty of Management Studies,  
Sabaragamuwa University of Sri Lanka  
[malith@mgt.sab.ac.lk](mailto:malith@mgt.sab.ac.lk)*

## ABSTRACT

The exchange rate and stock market play a key role in international business worldwide. Understanding the relationship between these two markets is necessary because the investors may be able to invest better by taking the minimum risk. Therefore, this research aims to measure the impact of the exchange rate on stock returns through the mediating effect of interest rates in Sri Lanka. The quantitative research method was used, and to achieve the objectives of the study, secondary data were collected from the data library of CSE & Central Bank of Sri Lanka for the period of 2017-2022 as monthly observations. Findings were obtained using Descriptive statistics, Correlation analysis, the Three-Stage Least Squares regression (3SLS) model, and the Sobel test. Results of correlation analysis indicated that exchange rate and money supply have a weak positive linear relationship with Stock return and that there is a weak negative linear relationship between interest rate and IPI on stock return in Sri Lanka. The results of the Three-Stage Least Squares regression (3SLS) model and Sobel test indicate that the exchange rate has a direct positive significant influence on stock returns in Sri Lanka, and the interest rate is negatively significant as a mediator between exchange rate and stock returns in Sri Lanka. Therefore, to create a well-developed and attractive capital market that can increase investments in Sri Lanka, policymakers can beware of the findings of this study for their policy decisions. Further, this study also will support investors, academics, and researchers in the field of economics and finance in understanding the direct effect of the exchange rate and the indirect effect of the exchange rate through the channel of interest rate on stock returns in Sri Lanka.

**Keywords:** Exchange rate, Interest rate, Stock Return, Tree-stage least square model



## INTRODUCTION

The stock market has become one of the most critical and exciting aspects of today's financial systems. The stock market plays an important role in the modern economy as it acts as a mediator between lenders & borrowers. That said, a well-functioning stock market may help the economic development process. The importance of financial markets in the economy has relatively increased over the period, and various factors may affect the performance of the stock market. Therefore, today the stock markets have become the key drivers behind national and international economies worldwide.

There are various short-term and long-term factors affecting its efficiency and effectiveness. The economic theory suggests that stock prices should reflect expectations about future company performance. Therefore, causality and dynamic interactions between macroeconomic factors and the stock market are crucial to formulating a country's macroeconomic policy. The daily stock price is affected by corporate performance, dividends and other countries' stock prices, GDP, exchange rates, interest rates, current accounts, money supply, employment, etc. (Kurihara, 2006). In addition, investors believe that the country's monetary policy, exchange rate, and interest rate policies and macroeconomic events impact the stock prices, which means that macroeconomic variables can influence investors' investment decisions and has prompted many researchers to observe the relationship between stock returns and macroeconomic variables. Thereby detecting the correlation between stock prices and exchange rates has become critical for academics, practitioners, and policymakers.

The exchange rate is crucial for trade and investments. Exchange rates affect import prices when expressed in local currency and export prices when converted into foreign currencies. Consequently, the exchange rate can impact a country's inflation and serves as an indicator of external competitiveness and possible development of the balance of payment. The exchange rate also plays a central role in monetary policy, where it may serve as a target, instrument, or indicator depending on the monetary policy framework adopted. Hence, the central bank or monetary authority is responsible for determining its country's appropriate foreign exchange policy along with the monetary and financial policy frameworks.

Unlike in the past, sharp fluctuations in exchange rates can be observed nowadays due to many uncertainties worldwide. In fact, fluctuations in stock returns and exchange rates may result from a sudden adverse event that may create a negative outlook on a particular market. The exchange rate is an important factor in determining the company's performance on the

international stage. Besides, recently global financial markets changed due to numerous events such as the covid-19 pandemic, the global financial crisis, and terrorism have led to exchange rate fluctuations widely. Sri Lanka presents an example of a small open economy that engages in international trade with several countries and is susceptible to foreign exchange rate fluctuation.

Exchange rates fluctuate widely in the short term and are very sensitive to political reactions, monetary policy, and changes in expectations. In the long run, the exchange rate is determined by the relative prices of goods in different countries (Samuelson, 2001). The development of the foreign exchange market has cost implications for households, companies, and countries. Exchange rate fluctuations have real economic costs that affect price stability, firm profitability, and the country's stability (Benita and Lauterbach, 2004).

However, empirical evidence on the impact of foreign exchange rates on the stock market is largely inconsistent (Mishra, 2004). Because researchers found conflicting results regarding the relationship's existence and the relationship direction, which has made the area disconcerted environs of finance literature. So, there is no empirical harmony among the researchers regarding the interactions between stock prices and exchange rates, which justifies the need for more research to contribute to the literature.

Therefore, this study attempts to determine the effect of exchange rates on stock market returns. And also, this study further extends the above relationship emphasizing the interest rate as a mediate variable. Interest rates and foreign exchange rates are key macroeconomic variables in any economy. Interest rate is the price of borrowing money and can also be defined as the cost of money. It has a very important role in the economy. Any change in interest rates could trouble investors. Economic theory suggests that interest rates and the stock price correlate negatively. This is because rising interest rates reduce future dividend income's present value, which should drive down the stock prices. Conversely, low-interest rates reduce the opportunity cost of borrowing.

## **LITERATURE REVIEW**

The purpose of this study was first to determine the direct effect of the exchange rate on stock returns. The previous literature has a variety of conclusions and findings regarding this relationship. The research conducted by Agarwal, Srivasthu, and Srivasthu (2010) describes that

theoretically, based on the multinational characteristics of the company, the exchange rate affects the foreign operations of the company, so it will directly affect the company's total profit and thereby the stock price of the company. Shafana (2014) discussed that the exchange rate negatively correlates with the Colombo Stock Exchange stock prices. But Balagobei (2017) mentioned that the exchange rate positively influences stock market return in Sri Lanka, and Francis, Ravinthirakumaran, & Ganeshamoorthy (2021) also indicate that the exchange rate positively affects the share price in the Colombo stock exchange in the long term. Based on the explanations above, the following hypothesis is developed to identify a direct relationship between exchange rate and stock return.

H<sub>1</sub>: There is a significant impact of the Exchange rate on stock returns in Sri Lanka.

This study's second purpose is to determine the indirect effect of the exchange rate on stock returns with an interest rate as a mediation variable. The interest rate can be identified as a mediating variable that influences the relationship between the exchange rate and stock return because Dayarathne (2016) described in his study that changes in the exchange rate have a significant short-run and long-run relationship with interest rates in Sri Lanka. Salim (2019) argues that Money supply, Exchange rate, and GDP growth negatively affect interest rates in the long run. The above empirical evidence suggests that the exchange rate impacts the interest rate. Moreover, Finance theory suggests that interest rate is a measurement of the time value of money which is one of the main determinants in stock prices. It plays an important role in any economy as a key macroeconomic variable defined as the cost of money. Therefore, any change in interest rate may cause difficulties for investors and may affect a company's profitability, thereby fluctuating stock prices due to any change in this variable. Also, many researchers have confirmed this through their studies.

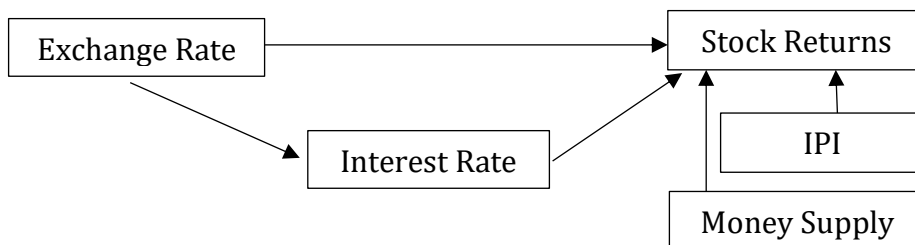
Alam & Uddin (2009) mentioned a negative relationship between interest rates and share prices. According to the argument established, if interest rates rise, people will move their money to bank deposits without investing in shares. This leads to reduced demand for shares and the price of shares and vice versa. Furthermore, he stated that when there are higher interest rates prevail in the market, which can discourage investments. Moreover, Jihadi, Safitri, & Brahmawati (2021) describe that the exchange rate significantly affects stock return through variable interest rates with partial mediation. Based on the above explanations following hypothesis was developed.

H<sub>2</sub>: The exchange rate significantly impacts stock returns with an interest rate as a mediate variable.

## METHODOLOGY / EXPERIMENTAL DESIGN

The data used for the study include nominal exchange rate (LKR vs. USD), interest rate (Three months Treasury Bill rate), and share returns calculated from the All Share Price Index (ASPI) compiled by the Colombo stock exchange (CSE). Money Supply and Industrial Production Index (IPI) were used as the control variables for the stock returns. The population of the study consists of listed companies in CSE. CSE has 295 companies representing 20 GICS industry groups as of 30th June 2022. To measure the stock market return study uses ASPI, which tracks the performance of all listed companies in CSE. The sample period spans from January 2017 to May 2022 because of the availability of data and the economic crisis in Sri Lanka heavily hit during this period. According to the central bank data, significant changes could be seen in exchange rates and stock prices in Sri Lanka from 2017 to 2022, and the study was carried out by using monthly observations collected from annual reports published by the Central Bank of Sri Lanka. It is considered to use adequate data points for unbiased and consistent analysis.

### Conceptual framework



To analyze the direct and indirect effect of exchange rate on stock return, the Structural Equations Modeling (SEM) technique is used for modeling the relationships hypothesized in this study. SEM includes endogenous and exogenous variables. Endogenous variables act as dependent variables in at least one SEM equation. They are called endogenous variables rather than response variables because they may become independent variables in other SEM equation equations. The researcher used the Three Stage Least Squares model to measure this SEM. The Three-stage Least squares model

(3SLS) estimator blends Two-stage Least squares (2SLS) properties with a seemingly unrelated regression (SUR) estimator.

### Model Development

Concerning the objectives and developed research hypotheses, firstly, the central equation is developed to investigate whether there is a direct relationship between exchange rate and stock market return.

Model 01

$$\ln SR_{it} = \beta_{0i} + \beta_1 \ln ER_{it} + \beta_2 \ln INT_{it} + \beta_3 \ln MS_{it} + \beta_4 \ln IPI_{it} + e_{it}$$

Where,

$\ln SR$  = Natural logarithm of stock return;  $\ln ER$  = Natural logarithm of Exchange rate;  $\ln INT$  = Natural logarithm of interest rate;  $\ln MS$  = Natural logarithm of Money supply;  $\ln IPI$  = Natural logarithm of industrial production index

The following model was developed to examine the indirect effect of interest rate on the relationship between exchange rate and stock market return.

Model 02

$$\ln INT_{it} = \gamma_0 + \gamma_1 \ln ER_{it} + \gamma_2 \ln MS_{it} + e_{it}$$

Where,

$\ln INT$  = Natural logarithm of interest rate;  $\ln ER$  = Natural logarithm of Exchange rate;  $\ln MS$  = Natural logarithm of Money supply

The statistical significance of the mediation effect was tested using the Sobel test. Jihadi et al. (2021), Amarasena & Peiris (2021), and Peiris (2021) used Sobel Test to find out the statistical significance of the mediation effect. The following equation can be used for that.

$$\beta_2^* \gamma_1$$

$$S \beta_2 \gamma_1 = \sqrt{\gamma_1^2 S \beta_2^2 + \beta_2^2 S \gamma_1^2 + S \beta_2^2 S \gamma_1^2 (\beta_2^* \gamma_1)} / S \beta_2 \gamma_1$$

Where:

$\beta_2^* \gamma_1$  = Coefficient for the mediation effect of interest rate (INT)

$S \beta_2 \gamma_1$  = Standard error for the mediation coefficient

$(\beta_2^* \gamma_1) / S \beta_2 \gamma_1$  = t statistic

## RESULTS AND DISCUSSION

### Measuring the structural relationship

To measure the direct and indirect effect of the exchange rate on Stock return, the structural equation was created and ran to determine the relationships between the independent and dependent variables and the mediator variable. The study used one main structural and one substructural equation to find the relationship between research variables.

*Table 01: Summary of Three Stage Least Squares (Model 1)*

Three Stage Least Squares: Stock Return (ASPI)		
	Coefficient	Prob.
InEXR	0.0666009	0.001
InINT	-0.0177664	0.001
InMS	-0.0410345	0.004
InIPI	0.0065443	0.524

Source: (STATA Output)

The table shows the coefficient and P-value estimates for the structural model. Results indicate that in the stock return model, the P-value of the exchange rate is 0.001, which is less than 0.05 ( $0.001 < 0.05$ ). Therefore, the exchange rate is statistically significant at a 95% confidence level. This indicates that the exchange rate significantly influences the stock return in Sri Lanka. In addition, the above results show that the coefficient for the exchange rate is 0.0666009, and it is positive. Accordingly, if the exchange rate increases by one, it will increase stock return by 0.0666009. This explains a significant positive relationship between exchange rate and stock return in Colombo Stock Exchange in Sri Lanka.

Furthermore, the mediating variable, Interest rate (InINT), also got significant in the stock return model as the P-value 0.001, which is less than 0.05 ( $0.001 < 0.05$ ). Therefore, interest is statistically significant at a 95% confidence level. Moreover, results provide a negative coefficient for interest rate -0.0177664 and imply that if the interest rate increases by one, stock return reduces by 0.017764 while holding other predictors constant. Therefore, the result indicates a significant negative relationship between interest rate and stock return in Sri Lanka.

In addition to that, two control variables are considered in this study, and among them, P- the value of the money supply is 0.004, which is less than 0.05 ( $0.004 < 0.05$ ). Therefore, the money supply is statistically significant at a 95% confidence level, and the coefficient for money supply is -0.0410345, which explains a significant negative relationship between

money supply and stock return in Sri Lanka. Also, the other control variables study selected Industrial Production Index, shows an insignificant relationship between IPI and stock return with a P-value of 0.524 greater than 0.05 ( $0.524 > 0.05$ ) at the 95% confidence level. Moreover, the coefficient for the industrial production index was 0.0065443, which describes an insignificant positive relationship between IPI and stock return in Sri Lanka.

*Table 02: Summary of the significant test of Model (1)*

Variable	Relationship	Impact
Exchange rate (InEXR)	Positive	Significant
Interest rate (InINT)	Negative	Significant
Money supply (InMS)	Negative	Significant
Industrial Production Index (InIPI)	Positive	Insignificant

Source: (STATA output)

*Table 03: Summary of the Three Stage Least Squares (Model 2)*

Three Stage Least Squares Interest Rate (InINT)		
	Coefficient	Prob.
Exchange rate (InEXR)	2.782899	0.0000
Money supply (InMS)	-1.939874	0.0000

Source: (STATA output)

In the interest rate (InINT) model, the exchange rate and money supply got significant at a 95% confidence level. The P-values of exchange rate and money supply show 0.0000 since it can be concluded that these two variables are statistically significant because the findings of this study indicate 100% of the behavior of the variables. Also, the coefficient for the exchange rate shows a positive value of 2.782899, and the money supply shows a negative value of -1.939874. This indicates that the exchange rate has a significant positive relationship with the interest rate, and the money supply has a significant negative relationship with the interest rate in Sri Lankan context.

*Table 04: Summary of the significant test of the model (2)*

Variable	Relationship	Impact
Exchange rate (InEXR)	Positive	Significant
Money supply (InMS)	Negative	Significant

Source: (STATA output)

## Sobel test

To examine the mediating effect, Sobel (1982) introduces a procedure to investigate the statistical significance of the indirect effect of the mediating variable. It recommends testing the null hypothesis that explains the indirect effect of mediating variables on the relationship between the independent and the dependent variables do not occur (Fakhfakh & Jarboui, 2020).

*Table 06: Summary of mediation effect*

Information	Test statistics	Std. Error	P-value
Exchange Rates → Interest Rates → Stock Return	-3.1633	0.0160	0.00156

According to the calculation of the Sobel test, t statistics value of -3.1633 has been obtained, and a P-value is 0.00156, which is less than 0.05 ( $0.00156 < 0.05$ ), meaning that there is an indirect influence between the exchange rate variable towards stock return through the mediating variable, namely the interest rate.

Two research hypotheses were developed based on the research objectives, and all the alternative hypotheses were accepted according to the results.

## DISCUSSION

Based on the results of data analysis, it has been found that the exchange rate has a positive and significant effect on stock returns. This indicates that the stock price tends to increase when the exchange rate increases. The findings of this study are in line with the flow-oriented model. The model suggests that when the exchange rate depreciates, it will positively affect the exporters. Currency depreciation will make their goods and services less expensive in the international market. This will increase their exports, as buyers will see them as less expensive on the international market. This will cause them to increase international competitiveness. Therefore, their profits will increase, and if profits rise, the firms will increase the competitiveness of the domestic stock market. Their attractiveness in the domestic stock market will increase, which will cause their stock prices to increase in value. And also, the findings of this study are in line with the research conducted by Morawakage (2013); Balagobei (2017); and Jayasundara, Rathnayaka, & Fernando (2019). They found the same results



related to Sri Lanka and Ma and Kao (1990), and Aggarwal (2003) found the same results for other countries. However, this finding is inconsistent with the research conducted by Menike (2006) and Shafana (2014), who examined the opposite result and stated that there is a significant negative relationship between exchange rate and stock market return.

Second, based on the results of data analysis, the evidence provides that interest rate has a negative and significant impact on stock market return. The results suggest that when interest rates rise, there will be an impact on reduced stock returns. One reason for proposing this relationship is that investors are more willing to invest in financial assets such as treasury bills and bonds than investing in common stocks, as the rate of return on the financial assets is higher than the common stocks. That means whenever the interest rates on Treasury securities rise, investors tend to switch out of stocks and invest in Treasury securities, and it causes to stock prices to fall. The negative association between interest rate and the stock market price is demonstrated in the studies of Menike (2006); Amarasinghe (2015); Jayasundara, Rathnayaka, & Fernando (2019), and Chang & Rajput (2018). But Nijam, Ismail & Musthafa (2015) has found a positive relationship between interest rates and stock market prices.

Further, the results suggest that the control variables representing money supply negatively influence stock market return, and the industrial production index has a positive and insignificant influence on stock market return. That means there is no relationship between the industrial production index and stock market return in Sri Lanka.

In addition to that, to measure the indirect influence on the exchange rate through interest rate, the findings of this study indicate that the exchange rate positively and significantly influences the interest rate. Based on the Sobel test that has been carried out, the results show a significant effect of the exchange rates and stock market returns mediated by the interest rate. Therefore, this can be explained that the exchange rate indirectly influences stock market return through the interest rate.

## **CONCLUSION**

This study examines the effect of the exchange rate on stock market return, considering the mediation effect of the interest rate for 2017-2022. Most previous researchers have studied the direct effect of the exchange rate on the stock market return. However, identifying the need for further investigating the channels through which the exchange rate influences the

stock market return, this study analyzes the mediation effect of interest rate in the above relationship. The study employed structural equation modeling using STATA software to achieve the research objectives and attempted to determine the relationship among variables. Therefore, the Three-stage least square model was used to analyze data. The significant findings for the direct effect of exchange rate indicated that exchange rate has a direct and positive significant influence on stock market returns in the Colombo stock exchange. Moreover, the mediation effect of interest rate was found as negatively significant in the above relationship. This indicates that the exchange rate depreciation causes stock market prices to rise, raising interest rates. So, the interest rate increase influences stock market prices to fall. Therefore, the study concluded that the exchange rate has a direct positive relationship with stock return while an indirect negative influence is through the interest rate channel.

## REFERENCES

- Agrawal, G., Srivastav, A. K., & Srivastava, A. (2010). A study of exchange rates movement and stock market volatility. *International Journal of Business and Management*, 5(12), 62.
- Aggarwal, R. (2003). Exchange Rates and Stock Prices: A Study of the U.S. Capital Markets under Floating Exchange Rates. *Akron Business and Economic Review*, 12, 7-12.
- Alam, M., & Uddin, G. S. (2009). Relationship between Interest Rate and Stock Price: Empirical Evidence from Developed and Developing Countries. *International Journal of Business and Management*, 4(3).
- Amarasena, B. W. C. M., & Peiris, T. U. I. (2021). Effect of Inflation on Sri Lankan Banks' Performance: Mediation Effect of Interest Income and Expenses. *European Journal of Business and Management Research*, 6(3), 176-180.
- Amarasinghe, A. A. M. D. (2015, April). Dynamic Relationship between Interest Rate and Stock Price: Empirical Evidence from Colombo Stock Exchange. *International Journal of Business and Social Science*, 6(4).
- Balagobei, S. (2017, Jan). Macroeconomic Variables and Stock Market Returns in Sri Lanka. *Asian Journal of Finance & Accounting*, 206-218.
- Benita, G., & Lauterbach, B. (2007). Policy factors and exchange rate volatility: panel data versus a specific country analysis. *International research journal of finance and economics*, 7(7), 7-23.
- Chang, B. H., & Rajput, S. K. O. (2018). Do the changes in macroeconomic variables have a symmetric or asymmetric effect on stock prices? Evidence from Pakistan. *South Asian Journal of Business Studies*.
- Dayarathna, S. (2016). Analyzing the determinants of interest rate in Sri Lanka.
- Fakhfakh, I., & Jarboui, A. (2020). Audit certification, earnings management and risk governance: a moderated-mediation analysis. *Journal of Financial Reporting and Accounting*.

- Francis, S. J., Ravinthirakumaran, N., & Ganeshamoorthy, M. (2021). The impact of macroeconomic variables on stock prices in Sri Lanka: a bound testing approach.
- Jayasundara, D., Rathnayaka, A., & Fernando, S. (2019, September). Impact Of Macroeconomic Variables on Stock Market Performances: Evidence from Sri Lanka. *Journal of Business Economics*.
- Jihadi, M., Safitri, I. H., & Brahmawati, D. (2021). The effect of exchange rates towards stock return mediated with inflation rates and interest rates. *Jurnal reuiu akuntansi dan keuangan*.
- Kurihara, Y. (2006). The relationship between exchange rate and stock prices during the quantitative easing policy in Japan. *International Journal of Business*, 11.
- Ma and Kao. (1990, June). On Exchange Rate Changes and Stock Price Reactions. *Journal Of Business Finance & Accounting*, 17(3), 441-449.
- Menike, L. M. C. S. (2006). The Effect of Macroeconomic Variables on Stock Prices in Emerging Sri Lankan Stock Market.
- Mishra, A. K. (2004, September). Stock Market and Foreign Exchange Market in India: Are They Related? *South Asia Economic Journal*.
- Morawakage, P. S. (2013, December). Relationship between Macro-Economic Variables and Stock Market Performance of Colombo Stock Exchange. 4.
- Nijam, H. M., Ismail, S. M. M., & Musthafa, A. M. M. (2015). The impact of macro-economic variables on stock market performance; Evidence from Sri Lanka. *Journal of Emerging Trends in Economics and Management Sciences*, 6(2), 151-157.
- Peiris, T. U. I. (2021). Effect of Financial Literacy on Individual Savings Behavior; the Mediation Role of Intention to Saving. *European Journal of Business and Management Research*, 6(5), 94-99.
- Salim, A. (2019). Macroeconomic determinants of interest rate volatility in Indonesia: A structural VAR analysis. *International Journal of Applied Economics, Finance, and Accounting*, 5(2), 101-108.

Shafana. (2014, October). Macroeconomic Variables Effect on Financial Sector Performance in Emerging Sri Lankan Stock Market. *International Journal of Science and Research*, 3(10).

# INTELLECTUAL CAPITAL AND FINANCIAL PERFORMANCE; NEW EVIDENCE FROM A FRONTIER MARKET

**Gunarathne, U.G.V.D.D.**

*Department of Accountancy, Faculty of Business Studies & Finance, Wayamba  
University of Sri Lanka  
[deepa@wyb.ac.lk](mailto:deepa@wyb.ac.lk)*

## ABSTRACT

The present study was carried out to examine the impact of Intellectual Capital (IC) on the financial performance of the banking, consumer services, and health care and equipment services companies listed in the Colombo Stock Exchange, Sri Lanka. The successful operation of the firms within the selected sectors was closely linked with the high-caliber personnel having exceptional knowledge and skill levels. Therefore, the study attempted to quantify and explain the potential association of the IC of these sectors and financial performance. The Value-Added Intellectual Coefficient (VAIC) method was employed to capture the IC of the selected firms. Accordingly, Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Capital Employed Efficiency (CEE) are used as IC constituents of this research. The financial performance was measured using the Return on Assets (ROA). Secondary data gathered from the corporate annual reports of a sample of forty companies were regressed to measure the impact of IC constituents on financial performance. The data were drawn for a period of five years, from 2017-2021. Descriptive statistics, correlation, and regression analysis were the statistical techniques utilized for data analysis. The analysis revealed that HCE significantly and positively affects the ROA. Further, the VAIC exhibited a significant and positive impact on financial performance. In contrast, SCE and CEE disclosed an insignificant negative and positive association with financial performance, respectively. Thus, the findings of the study reflect the crucial role played by human capital within the knowledge-based sectors.

**Keywords:** Capital Employed Efficiency, Financial Performance, Human Capital Efficiency, Intellectual Capital, Structural Capital Efficiency

## INTRODUCTION

Business organizations around the globe are meeting endless challenges day by day. Environmental calamities, advancement of technology, health and safety matters, and changes in the lifestyles and expectations of individuals are causing these challenges. To face these issues successfully, the production economy era has shifted to a knowledge-based economy during the 21<sup>st</sup> century. This transformation has resulted in the emergence of a new perspective towards the resources of organizations.

The main feature of a knowledge-based economy is heavy reliance on intellectual capital (IC) other than natural or physical resources. Thus, the economic value creation for an entity is not constrained only to the manufacturing of tangible goods, IC plays a significant role in that process (Ousama, Hammami & Abdulkarim 2019). That means, as one of the intangible assets, knowledge has appeared to remarkably contribute to enhancing financial performance and bringing a competitive advantage to businesses (Soewarno & Tjahjadi, 2020). Hence, in a knowledge-based economy, the management of IC efficiently and effectively is vital for the firms to enhance financial performance and generate long-term competitive advantages (Khalique et al., 2015; Ozkan et al., 2017; and Kweh et al., 2019).

Academics define IC in several ways because it is a relatively new concept. (Neves & Proença, 2021). It refers to the category of intangible assets that do not explicitly exemplify an organization's Statement of Financial Position (SOFP) yet positively affect the performance. It is gained through the interaction of employees, ideas, and information (Edvinsson, 1997). Therefore, IC seems containing; knowledge and innovativeness of the employees of the company, the infrastructure of human capital (like the appropriate working environment, effective systems, and innovation), and developing methods of structural capital and the external connections of the company.

When considering the evolution of IC, three stages are visible from a theoretical standpoint. The late 1980s marked the beginning of the first phase when it was acknowledged that the long-term development of business organizations depended on the IC. This stage was followed by investigations that explored quantifying, handling, and recording IC methods. Furthermore, the third phase is currently underway, focusing on implementing IC management in organizations and analyzing its impact on performance (Neves & Proença, 2021).

However, the empirical studies yield inconclusive results amidst the extensive theoretical importance assigned to IC (Soewarno & Tjahjadi, 2020). Besides, there exists a shortage of studies on IC and financial performance worldwide and in Sri Lanka (Adnan, Dissanayake & Deshika, 2022). Moreover, the present turbulent economic status of the country urges to seek solutions via employing the IC. Nevertheless, on the other hand, the accelerated brain drain could critically affect the high knowledge-based sectors of banking, health care, and consumer services. This study investigated the effect of IC on the financial performance of the banking, consumer services, and health care and equipment services companies listed in the Colombo stock exchange (CSE).

According to Iazzolino and Laise (2013), there have been more innovative methods to measure IC over the last three decades knowingly; “Value Added Intellectual Coefficient (VAIC),” “Economic Value Added (EVA),” “human resource accounting” and “value chain scoreboard.” The present study employed VAIC developed by Pulic (2004) and its constituents, Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Capital Employed Efficiency (CEE), for quantifying IC. And the traditional measure of Return on Assets (ROA) was utilized to capture the financial performance.

This paper is comprised of five sections. The second section focuses on a brief literature review summarizing the studies examining the association between the IC and the financial performance of different business organizations in numerous contexts. The conceptual framework, variables, hypothesis, and statistical techniques are explained in the third section. Then, the fourth section follows with a discussion of the empirical results. And the last section summarizes the whole study and highlights the limitations and suggestions for future researchers.

## **LITERATURE REVIEW**

Many researchers explained IC concepts in various ways. Though there is no universally agreed-upon definition of IC, Stewart (1997) has presented a perfectly fitting definition of IC as “the aggregation of knowledge belonging to a company which generates competitive advantages and value to an organization.” Later, Bontis (2004) recognized IC as the knowledge posed by individuals or organizations leading toward achieving sustainable competitive advantage. In contrast, IC can be measured by the difference between book and market values, as per Dzinkowski (2000). Besides, Edvinsson (1997) defines IC as intangible assets that are not explicitly



positioned on the SOFP of a firm but positively impact its performance by unearthing the tight links among the employees, notions, and information and measuring elements that have not been captured previously. All these definitions ultimately summarize a few significant considerations. Notably, IC is a useful knowledge-based concept for business organizations if identified and measured accurately. However, this does not mean the simply available and free-floating human brainpower.

The classification of IC has been identified by several research. Their views are complementary even though not identical. According to OECD (1999), IC is the economic value of two categories of intangible assets of a company: (1) organizational (structural) capital; and (2) human capital. Abdul and Fauziah (2007) explain IC as the combination of human knowledge and structural and relational resources. According to Appuhamy & Bhuyan (2015) and Hamdan et al. (2017), human capital, structural capital, and relational capital are the three (03) key aspects that constitute IC. Furthermore, a general consent among most scholars is visible in determining the IC using a monetary-based model capturing the human capital, structural capital, and capital employed efficiencies (Pulic, 1998, 2004; and Kweh et al., 2019). The above discussion reveals that the majority of the authors believe that IC is made up of three (03) components, namely, Human Capital (HC), Structural Capital (SC), and customer/Relational Capital (RC). Thus, understanding each of these components adds value to advancing the discussion on IC.

HC is recognized as the establishment of skills, knowledge, competencies, and experiences by the workforce engaged in a business (Meles et al., 2016; Poh et al., 2018), as well as the knowledge that is the potential to vacate when employees leave the organization (Ozkan et al., 2017). Marr et al. (2004) defined practical knowledge, technical expertise, creativity, & motivation are the key elements included in human capital. Meanwhile, Bontis (2004) denotes HC as the individual stock of a company represented by its employees. Nemec & Mihalic (2007) found that employee competence, innovativeness, and attitudes were important elements of HC in the hotel industry.

The next component to consider is SC. SC is demarcated as the causes and techniques that enhance employees' creativity and knowledge in a business organization (Wang et al., 2013; Poh et al., 2018). Databases, organizational charts, management processes, and business strategies are some examples of SC (Meles et al., 2016; Ozkan et al., 2017). SC is what remains in the organization even when employees leave the company (Edvinsson et al.,

1997). Bontis (2004) also stated that SC contains process manuals, strategies, procedures, and anything, the value of which is greater than the physical value of the organization. At the same time, Chen et al. (2005) elaborated that SC consisted of system, structure, and current business practices, which consisted of all non-human knowledge in a company, such as research and development cost, innovation, patent rights, trademark, etc.

The final aspect is RC. The RC refers to the collaborative links that exist among the numerous stakeholders of an organization, i.e., it comprehends the organization's interactions with customers, suppliers, shareholders, and other stakeholders (Meles et al., 2016; Poh et al., 2018). Bontis (2004) defined that RC comprises both the current value of the firm relationships with customers and the future value of the firm arising from this relationship in the future. In particular, customer relationship loyalty, the satisfaction derived by the customers in accomplishing respective business activities, repeated and frequent visits to the business, financial health, and price sensitivity are some of the indicators of RC.

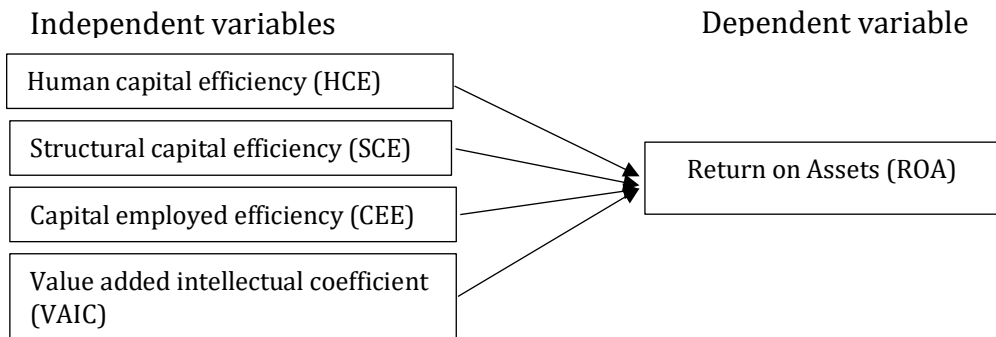
Around the globe, in different country contexts and numerous sectors, the VAIC model has been extensively implemented in measuring the IC and performance of firms (Ozkan et al., 2017). The VAIC model employs accounting indicators to determine whether IC adds value (Joshi et al., 2013). More often, IC links a firm value with the competition it meets within the environment. Hence, it is obvious that companies that have succeeded in their operations have a high competitive advantage together with a higher IC (Ousama, Hammami & Abdulkarim 2019). According to Ikapel (2016), the justification for using the VAIC model is that the model produces quantitative measurements. Secondly, the model utilizes generally accepted measures that are pertinent to all stakeholders, as well as indicators that are modest in ascertaining and comparing the key components of IC to evaluate financial performance. Thirdly, the model employs financial measures so that any indicators or ratios calculated may be used for comparison along with traditional financial indicators generally seen in business, which are on monetary measures. Fourth, the model applies relatively straightforward procedures to calculate necessary ratios that may be easily understood. Fifth, the method provides a form of standardized measurement.

## METHODOLOGY

This section explains the methodology of the present study. It was designed as a quantitative study following the deductive approach within the positivist philosophical stance. The main purpose of this study is to examine an empirical analysis of the impact of IC on the financial performance of firms listed in the CSE under high knowledge-based sectors.

### Sample and data collection

The population of the study consisted of 60 companies representing the banks (14), consumer services (37), and health care and equipment services (09) sectors. Out of them, a sample of forty (40) companies was selected purposively. The study covered five (05) years from 2017 – 2021. In addition, the study employed secondary data obtained from the published annual reports for the data analysis. The conceptual framework theorized is depicted in Figure 01.



*Figure 01: Conceptual Framework*

### Variable definitions

#### Dependent variable

The dependent variable of the study was ROA, a traditional measure of financial performance. The measure has been employed by prior scholars (Ahangar, 2011) in capturing the financial performance resulting from the IC. ROA was computed by dividing the net profit for a certain financial year by the total assets.

#### Independent variables

The elements of the VAIC model of Pulic (2004) were identified as the independent variables of the study. The complete computation of the VAIC model consisted of a few steps. In the first step, Value Added (VA) was computed. VA was obtained by calculating the difference between the firm's output and input (Soewarno & Tjahjadi, 2020). Computation of VA was accomplished by referring to equation (01) (Pulic, 2004; Soewarno & Tjahjadi, 2020; and Ozkan et al., 2017).

$$VA = OP + EC + D + A \quad (01)$$

In equation (01), VA refers to the total value added in a sample firm. It was derived by summing up the operating profit (OP), employment cost (EC), depreciation (D), and amortization (A). The next step was computing the VAIC.

$$VAIC = CEE + HCE + SCE \quad (02)$$

In equation (02) value-added intellectual coefficient is referred to as VAIC, CEE refers to the capital employed efficiency, HCE refers to the human capital efficiency coefficient, and SCE refers to the structural capital efficiency coefficient. To compute the VAIC, it was a prerequisite to compute the components of VAIC (CEE, HCE, and SCE). Accordingly, CEE was computed employing the equation (03).

$$CEE = VA/CE \quad (03)$$

In equation (03), CE stands for the capital employed. In other words, this figure refers to the value of equity. Further, the equation (04) presents the computation of HCE. And HC within the equation represents the cost of salaries.

$$HCE = VA/HC \quad (04)$$

Then, the SCE was computed through two-step processes. Initially, it was required to compute the structural capital (SC), which refers to the difference between the VA and HC. Equations (05) and (06) present the SC and SCE computation, respectively.

$$SC = VA - HC \quad (05)$$

$$SCE = SC/VA \quad (06)$$

The following multiple regression (Muhammad & Ismail, 2009) and simple regression models were tested for capturing the impact of IC on the performance of the banking, consumer services, and health care and equipment services firms.

Model 01:

$$ROA = \beta_0 + \beta_1 CEE + \beta_2 HCE + \beta_3 SCE + \varepsilon$$

Model 02:

$$ROA = \beta_0 + \beta_1 VAIC + \varepsilon$$

H<sub>1A</sub>: The capital employed efficiency coefficient (CEE) significantly impacts the return on assets (ROA).

H<sub>1B</sub>: The human capital efficiency coefficient (HCE) significantly impacts the return on assets (ROA).

H<sub>1c</sub>: The structural capital efficiency coefficient (SCE) significantly impacts the return on assets (ROA).

H<sub>1D</sub>: The value-added intellectual capital coefficient (VAIC) significantly impacts the return on assets (ROA).

## RESULTS AND DISCUSSION

## Descriptive statistics

Table 01 demonstrates the average values of the identified variables (CEE, HCE, SCE, VAIC, and ROA) in relation to the intellectual capital performance of the sample firms. The results exhibited that CEE has a mean value of 0.0460 with a standard deviation of 0.0106. This means that the mean value of CEE has a small variation. The HCE has a mean value of 1.6311 with a standard deviation of 0.3474, meaning a considerable variation of the mean. However, SCE has a mean of 0.3868 with a standard deviation of 0.0715, meaning a small variation. The VAIC has a mean value of 2.0639, with a considerable standard deviation reflected by 0.3563. Finally, ROA has a mean value of 1.7216 with a standard deviation of 0.3496.

Table 01: Descriptive Statistics

	Mean	Std. Deviation
CEE	0.0460	0.0106
HCE	1.6311	0.3474
SCE	0.3868	0.0715
VAIC	2.0639	0.3563
ROA	1.7216	0.3496

The Pearson correlation coefficients obtained for the identified variables are presented in Table 02. A statistically significant positive relationship exists between the ROA, HCE (0.649), and VAIC (0.601). Further, HCE had the highest correlation with the ROA out of the independent variables considered. On the other hand, SCE and CEE depicted a negative and insignificant association with the ROA. Further, it was noted that there was no strong correlation among the independent variables. Accordingly, there was no indication of the existence of multicollinearity issues among the independent variables.

*Table 02: Pearson Correlation among variables*

	HCE	SCE	CEE	VAIC
SCE	0.011			
CEE	-0.101	0.447*		
VAIC	0.235	0.450	0.301	
ROA	0.649*	-0.133	-0.033	0.601*

Regression results obtained for the two models are presented in Table 03. The output suggests that both models employed in the study are statistically significant. When explanatory power is considered, model 01 exhibited a higher R<sup>2</sup> value (0.407) than the R<sup>2</sup> value of model 02 (0.345). This result witnesses that the components of VAIC were better at explaining the financial performance of the selected firms than the VAIC alone (Ozkan et al, 2017).

Further investigation of the regression results reveals that there was a positive and significant impact of HCE on the ROA. This finding supports the prior scholarly evidence (Ahangar, 2011) on the HCE - ROA association. However, SCE and CEE showed an insignificant negative and positive impact on the ROA, respectively. In addition, VAIC exhibited a positive and significant impact on the ROA. It aligns with the prior literature supporting the idea that intellectual capital positively affects financial performance (Ousama, Hammami & Abdulkarim 2019).

*Table 03: Regression Results*

Independent variables	Model 01	Model 02
C	0.817	0.504
HCE	0.668*	
SCE	-0.950	
CEE	3.989	

VAIC		0.590*
Adjusted R <sup>2</sup>	0.407	0.345
F statistic	9.910	21.528
P value	0.000	0.000

\* Significant at 0.01 level

The summary of the four hypotheses tested is presented in Table 04. Based on the regression results, two hypotheses (H<sub>1B</sub> & H<sub>1D</sub>) were supported, while two others (H<sub>1A</sub> & H<sub>1C</sub>) were not supported.

*Table 04: Summary of the hypothesis testing*

H <sub>1</sub>	Statement	Decision
H <sub>1A</sub>	There is a significant positive impact of capital employed efficiency coefficient (CEE) on the return on assets (ROA)	Not supported
H <sub>1B</sub>	The human capital efficiency coefficient (HCE) has a significant positive impact on the return on assets (ROA).	Supported
H <sub>1C</sub>	The structural capital efficiency coefficient (SCE) has a significant positive impact on the return on assets (ROA).	Not supported
H <sub>1D</sub>	The value-added intellectual capital coefficient (VAIC) has a significant positive impact on the return on assets (ROA).	Supported

## CONCLUSION

The impact of IC on the financial performance of banking, consumer services, and health care and equipment services companies listed in the CSE was the subject of the present study. The independent variables considered were the value-added intellectual coefficient and its components; capital employed efficiency, human capital efficiency, and structural capital efficiency. And the financial performance, which was captured through the return on assets (ROA) considered the dependent variable of the study.

The findings of the study disclosed that the financial performance of the selected firms was primarily affected by the HCE when the impact of the components of VAIC was considered. Nevertheless, CEE and SCE were unable to exhibit a significant impact on financial performance. This means systems, structures, current business practices, and the organizations' relationships with stakeholders are currently remaining at a level that is incapable of enhancing the financial performance of the business organizations. However, the VAIC itself significantly impacted the financial

performance, aligning with the prior empirical evidence (Muhammad & Ismail, 2009).

This study has the following limitations. Firstly, the sample size is small and limited only to three sectors of CSE. Hence, the findings of the study need to be applied cautiously for general purposes. Consequently, analyzing a large sample is suggested for future researchers. Secondly, the study employed only secondary data for the analysis. Therefore, future researchers are encouraged to gather primary data and employ new measures to capture the impact of IC on financial performance.



## REFERENCES

- Abdul, S., & Fauziah, A. (2007). Intellectual capital performance of financial institution in Nigeria. *Journal on Intellectual Capital*, 10 (4).
- Adnan, J.M., Dissanayake, D.H.S.W., & Deshika, N.P.T. (2022). Intellectual Capital and Firm Performance: Empirical Evidence from Non-Listed Companies in Sri Lanka.
- Ahangar, R.G. (2011). The relationship between intellectual capital and financial performance: An empirical investigation in an Iranian company. *African Journal of Business Management* 5(1), 88-95.
- Appuhami, R., & Bhuyan, M. (2015). Examining the influence of corporate governance on intellectual capital efficiency. *Managerial Auditing Journal*, 30(4/5), 347-372. <https://doi.org/10.1108/maj-04-2014-1022>.
- Bontis, N., Keow, W.C.C., & Richardson, S. (2000). Intellectual capital and business performance in Malaysian industries. *Journal of intellectual capital*.
- Bontis, N. (2004). National intellectual capital index: a United Nations Initiative for the Arab Region. *Journal of intellectual capital*.
- Chen, M.C., Cheng, S.J., & Hwang, Y. (2005). An empirical investigation of the relationship between intellectual capital and firms' market value and financial performance. *Journal of intellectual capital*.
- Dzinkowski, R. (2000). The measurement and management of intellectual capital. *Management accounting*, 78(2), 32-36.
- Edvinsson, L. (1997). Developing intellectual capital at Skandia. *Long-range planning*, 30(3), 366-373.
- Hamdan, A.M., Buallay, A.M., & Alareeni, B.A. (2017). The moderating role of corporate governance on the relationship between intellectual capital efficiency and firm's performance: evidence from Saudi Arabia. *International Journal of Learning and Intellectual Capital*, 14(4), 295-318.

- Iazzolino, G., & Laise, D. (2013). Value added intellectual coefficient (VAIC). *Journal of Intellectual Capital*, 14(4), 547–563.  
<https://doi.org/10.1108/jic-12-2012-0107>
- Ikapel, O.F. (2016). Analysis of intellectual capital and financial performance of commercial banks in Kenya: An application of Value Added Intellectual Coefficient (VAICTM). *International Journal of Research in Finance and Marketing (IJRFM)*, 6(7), 1-15.
- Joshi, M., Cahill, D., Sidhu, J., & Kansal, M. (2013). Intellectual capital and financial performance: an evaluation of the Australian financial sector. *Journal of Intellectual Capital*, 14(2), 264–285.  
<https://doi.org/10.1108/14691931311323887>
- Khalique, M., Bontis, N., Abdul Nassir bin Shaari, J., & Hassan Md. Isa, A. (2015). Intellectual capital in small and medium enterprises in Pakistan. *Journal of Intellectual Capital*, 16(1), 224–238.  
<https://doi.org/10.1108/jic-01-2014-0014>
- Kweh, Q.L., Ting, I.W.K., Hanh, L.T.M., & Zhang, C. (2019). Intellectual capital, governmental presence, and firm performance of publicly listed companies in Malaysia. *International Journal of Learning and Intellectual Capital*, 16(2), 193-211.
- Marr, B., Schiuma, G., & Neely, A. (2004). The dynamics of value creation: mapping your intellectual performance drivers. *Journal of intellectual capital*.
- Meles, A., Porzio, C., Sampagnaro, G., & Verdoliva, V. (2016). The impact of the intellectual capital efficiency on commercial banks performance: Evidence from the US. *Journal of Multinational Financial Management*, 36, 64–74.  
<https://doi.org/10.1016/j.mulfin.2016.04.003>
- Muhammad, N.M.N., & Ismail, M.K.A. (2009). Intellectual capital efficiency and firm's performance: Study on Malaysian financial sectors. *International Journal of Economics and Finance*, 1(2), 206-212.

- Ousama, A.A., Hammami, H., & Abdulkarim, M. (2019). The association between intellectual capital and financial performance in the Islamic banking industry. *International Journal of Islamic and Middle Eastern Finance and Management*, 13(1), 75–93. <https://doi.org/10.1108/imefm-05-2016-0073>
- Ozkan, N., Cakan, S., & Kayacan, M. (2017). Intellectual capital and financial performance: A study of the Turkish Banking Sector. *Borsa Istanbul Review*, 17(3), 190–198. <https://doi.org/10.1016/j.bir.2016.03.001>
- Neves, E., & Proença, C. (2021). Intellectual capital and financial performance: evidence from Portuguese banks. *International Journal of Learning and Intellectual Capital*, 18(1), 93. <https://doi.org/10.1504/ijlic.2021.113658>
- Poh, L.T., Kilicman, A., Ibrahim, S.N.I., & McMillan, D. (2018). On intellectual capital and financial performances of banks in Malaysia. *Cogent Economics & Finance*, 6(1), 1453574. <https://doi.org/10.1080/23322039.2018.1453574>
- Pulic, A. (1998). Measuring the performance of intellectual potential in knowledge economy. available at: <http://www.vaic-on.net/start.htm>
- Pulic, A. (2004). Intellectual capital – does it create or destroy value? *Measuring Business Excellence*, 8(1), 62–68. <https://doi.org/10.1108/13683040410524757>
- Rudež, H.N., & Mihalič, T. (2007). Intellectual capital in the hotel industry: A case study from Slovenia. *International Journal of Hospitality Management*, 26(1), 188–199.
- Seleim, A., Ashour, A., & Bontis, N. (2004). Intellectual capital in Egyptian software firms. *The Learning Organization*, 11(4/5), 332–346. <https://doi.org/10.1108/09696470410538233>
- Soewarno, Noorlailie, & Bambang Tjahjadi. (2020). “Measures That Matter: An Empirical Investigation of Intellectual Capital and Financial Performance of Banking Firms in Indonesia.” *Journal of Intellectual Capital*, vol. ahead-of-print, no. ahead-of-print, 23 June 2020, 10.1108/jic-09-2019-0225.

Wang, W.K., Lu, W.M., & Wang, Y.H. (2013). The relationship between bank performance and intellectual capital in East Asia. *Quality & Quantity*, 47(2), 1041-1062.

# PERCEIVED REASONS OF WORKPLACE OSTRACISM: PROFESSIONALS' EXPERIENCES IN SRI LANKA

K.D.S.W. Gunasekara and N.P.G.S.I. Naotunna\*

*Department of Business Management, Faculty of Management Studies,  
Sabaragamuwa University of Sri Lanka*

\* [shashi@mgt.sab.ac.lk](mailto:shashi@mgt.sab.ac.lk)

## ABSTRACT

There is a considerable discourse on inclusion among researchers and practitioners. Nevertheless, exclusion takes place in different forms. Workplace Ostracism (WO) which denotes an employee's perception of being ignored or excluded by another employee or group of employees, is a way that has threatened the practice of inclusion in organizations. In particular, the antecedents of WO have drawn curiosity among scholars. Although WO is a social process resulting from victim, perpetrator, and context-bound reasons, previous studies have not sufficiently addressed it. In this backdrop, the present study aimed to explore a wide array of perceived reasons for WO from the victim's perspective. We followed the inductive approach and the qualitative research methodology. Ten in-depth interviews were conducted among professionals who experienced WO representing both the private and government sectors. After transcribing the interviews, we conducted initial coding and categorizing descriptively without a prior theoretical framework. Our findings revealed two categories of reasons: individual related (i.e., victim-related, perpetrator-related) and organizational-related are perceived to be the reasons for WO. First, the perpetrator's misperception, work-related attitudes, prejudices, domineering desire, and psychological issues were perceived as antecedents of ostracism. Second, the victim's competencies, ego, and personal issues also contribute to the WO. Third, informal cliques, competitive work settings, organizational culture, structure, and weak organizational processes and practices were perceived as organizational-related reasons for WO. Our study contributed to the literature by expanding the knowledge of the perceived reasons for WO from the victim's perspective in a novel cultural context, Sri Lanka. The study informs practitioners of WO's reasons to take action to control the situation and move towards inclusive organizations.

**Keywords:** Inclusion, Professional employees, Sri Lanka, Workplace ostracism

## **BACKGROUND OF THE STUDY**

Inclusion has become a buzzword in the contemporary business world (Chen & Tang, 2018). It has received attention from researchers and practitioners (Stark, 2020) to create better organizations for everyone. For instance, organizations are keen on implementing inclusive organizational practices such as ensuring psychological safety, allowing equal involvement in the workgroups, providing opportunities to make decisions for everyone, and providing equal treatment without discrimination (Shore et al., 2018). Notwithstanding the attention and importance of the concept of inclusion, exclusion takes place in different forms (Blackhart et al., 2009). Ostracism is considered to be a primary exclusionary behavior. Recent literature demonstrated that ostracism is deviant behaviour that violates inclusion (Chen & Tang, 2018).

Similar to other negative work behaviours (e.g., workplace bullying, workplace incivility), ostracism is involved two parties of 'actor' or the 'perpetrator' (i.e., the person who initiates the ostracism) and the 'target' or the 'victim' (i.e., the person who is being ostracized). However, workplace ostracism is a unique construction as opposed to other negative behaviours such as bullying, harassment, aggression, and incivility. The main difference is that WO is a contextually bound phenomenon that involves the omission of positive attention towards an individual/s rather than the commission of negative attention (Robinson et al., 2013). According to Ferris et al. (2008), workplace ostracism is an individual's perception of being ignored or excluded by other member/s of the workplace, violating the social norm of consideration.

## **PURPOSE OF THE STUDY**

Ostracism is a painful negative interpersonal experience that can be universal to individuals (Eisenberger et al., 2003; Ferris et al., 2008). Although it contains a standard set of features, workplace ostracism is considered a subjective phenomenon since it creates unique negative consequences for individuals (Waldeck et al., 2015; Williams & Nida, 2017). Although some researchers argued ostracism as an objective construal (Jahanzeb et al., 2018; Zhao & Xia, 2017), it is sensible to consider WO as a subjective construal (Fatima et al., 2019; Waldeck et al., 2015). In this backdrop, although there were many empirical investigations on finding the antecedents of WO from the positivistic viewpoint (e.g., Cullen et al., 2014; Jones & Kelly, 2010; Kim & Glomb, 2010; Wu et al., 2011), studies rarely investigated (e.g., Howard et al., 2020) on antecedents of WO from the anti-

positivistic perspective. In particular, fewer studies have examined WO by employing a qualitative methodology (Waldeck et al., 2015) as an appropriate choice for conducting sensitive research on traumatic experience, standing on the position of individuals who are vulnerable to that experience (Creswell et al., 2007). Besides, although ostracism results from interactions between the perpetrator, victim, and the organizational context (Waldeck et al., 2015), investigating the perceived reasons for WO by considering these interactions from the victim's viewpoint in a single study is extremely rare. It is essential to investigate the WO experience from the victim's perspective since WO is more memorable to the victim than the perpetrator or a third party who does not have the painful experience (Williams & Nida, 2017). Further, our preliminary discussions with some of the Sri Lankan professionals provided evidence to prove the existence of WO in the Sri Lankan context. Despite the existence of little empirical evidence for ostracism as one of the forms of workplace harassment (Adikaram & Liyanage, 2018), WO as a separate phenomenon has not yet been investigated in the Sri Lankan context.

Considering the aforementioned knowledge, methodological, and contextual gaps in the WO literature, our study aimed to investigate the perceived reasons behind the workplace ostracism of professionals in Sri Lanka.

## **LITERATURE REVIEW**

Extant studies report the antecedents of WO attributing to the factors related to the victim. For instance, the victim's abilities and skills, cognitive capacity, possessing unique expertise (Cullen et al., 2014; Kim & Glomb, 2010; Jones & Kelly, 2010); victim's personality traits such as introversion, disagreeableness, and neuroticism (Hales et al., 2016; Wu et al., 2011) and victim's behavioural features (e.g., coworkers had distrusted others when they displayed incivility) are commonly discussed victims' related antecedents of WO. Relatedly, competent subordinates are more likely to be ostracized by their supervisors (Chang et al., 2019). Moving beyond the victim, researchers revealed that antecedents of WO related to the perpetrator. Those are the perpetrator's personality, purposive or non-purposive motive (Robinson et al., 2013), self-favoring attitude, or ingroup bias (Scott & Duffy, 2015). Further, different leadership styles (e.g., authoritative, transactional, laissez-faire leadership styles) also were evident in this regard (Kanwal et al., 2019). Apart from the antecedents

related to victim and perpetrator, organizational factors such as organizational structure, culture, diversity, and physical distance also contribute to workplace ostracism (Robinson et al., 2013). Although these antecedents were identified in different isolated studies, investigations are scarce in a single study (see for exception; Bilal et al., 2020) covering the vast array of antecedents related to victim, perpetrator, and organization. Hence, our study bridges this gap in the literature by unearthing the perceived antecedents from the victim's perspective.

## METHODOLOGY

We followed the inductive research approach and qualitative methodology since the perceived reasons can be explored based on the ostracized participants' interpretations regarding their own experience of WO. Moreover, qualitative inquiry, such as WO, is the best choice for investigating subjective and personal experiences (Saunders et al., 2009). Accordingly, ten in-depth and semi-structured interviews were conducted with professionals who work in private and government sectors in Sri Lanka. The demographics of the respondents who provided data for our study are reported in Table 1. We purposefully selected professionals as the respondents of this study instead of focusing on lower-level/operational-level employees. Stimulating curiosity, the preliminary investigations revealed that professionals considered a salient group of knowledge workers with a high education level experience WO. However, surprisingly, the previous WO studies gave professionals less attention, thus motivating us to choose and focus on them. We purposively selected the respondents with WO experience in their present or former workplaces.

*Table 1 Background of the Participants*

Participant's Reference #	Gender	The profession of the victim	Organizational context	Source or the perpetrator
P1	Male	Lead associate of the team	BPO company, private sector	Coworkers, Leader



Participant's Reference #	Gender	The profession of the victim	Organizational context	Source or the perpetrator
P2	Male	HR Executive	Manufacturing company, private sector	Manager
P3	Male	Lecturer	University, government sector	Coworkers, Juniors, Seniors
P4	Female	Audit Supervisor	Audit firm, private sector	Firm owner
P5	Female	Lecturer	Higher Education Institute, private sector	Coworkers, Manager
P6	Male	Lecturer	University, government sector	Co-worker
P7	Female	Lecturer	University, government sector	Coworker, Head of the department
P8	Female	Lecturer	University, government sector	Co-workers
P9	Female	Sales coordinator and secretary to the MD	Shipping line company, private sector	Sales manager
P10	Male	Industrial Executive	Garment factory, private sector	Factory manager

We conducted in-depth interviews that lasted 40 minutes to one hour with an interview protocol. We ensured the dependability and credibility of the interview process in various ways, from preparing the interview protocol to conducting interviews. We mainly included semi-structured, carefully worded interview questions inlining with the research questions, avoided academic and difficult language in questions, avoided interviewer domineering to let the participants freely express their sensitive ostracism experiences, and posed probing and indirect questions for in-depth understanding and verifying the authenticity of the participants (Brinkmann & Kvale, 2015). After the ninth interview, data saturation was reached, and we conducted one more interview to ensure data saturation. All the interviews were recorded with the permission of the respondents. Then, the recorded data were transcribed into the written format of Microsoft Word. After that, data were analyzed using content analysis in two steps (i.e., initial coding /open coding and creating categories). We coded the text in the transcriptions under open coding or line-by-line coding by giving the headings while reading and closely examining the content (Elo & Kyngäs, 2008). Next, the headings were collected into the coding sheets, and consequent coding sheets enabled the second step of the content analysis; creating categories. Thereafter, we grouped the concepts that provide similar meanings and developed the categories based on the findings of the previous studies relevant to workplace ostracism and other negative workplace behaviours and by looking at the insights of the phenomenon (e.g., named the category as ‘informal cliques’ under organizational reasons of WO).

## **RESULTS AND DISCUSSION**

We have reported the open codes, axial codes, and categories in Table 2. According to Table 2, the victim’s perceived reasons are mainly divided into two categories; individual and organizational-related reasons. Then, the individual reasons are further divided into two subcategories perpetrator-related and victim-related.

## Individual Reasons

### *Perpetrator related reasons*

The ostracized respondents perceived that the perpetrator's misperception of them, the perpetrator's work-related attitudes, the domineering role of the perpetrator, and the perpetrator's psychological issues were the causes of being ostracized. Regarding the first reason, it is clear from the interviews that WO badly influence the perpetrator's inability to see reality. In particular, the perpetrator's prejudices also harmed the perception of the perpetrator towards the victims. Those were explained by participants as follows;

"Since my boss (Managing Director) had more official connections with me and he did not have a clear image of the sales manager, the Sales manager assumed me as a spy of my boss while I was working with him" (Participant9)

"I am the person who vocalized any problem on behalf of all the members in my clique. In particular, although it was a common problem, it was directed towards me like my personal problem" (Participant5)

*Table 2 Open Codes, Axial Codes, and Categories of Victims' perceived reasons for the WO Experience*

Open codes	Axial codes	Categories
Perpetrator misunderstanding the victim	Perpetrator's misperception	Individual reasons related to the perpetrator
Personalization of common problems		
Perpetrator's prejudice		
Perpetrator's preference for gossip instigators	Perpetrator's work-related attitudes	
Perpetrators' negative feelings towards collective work		
Perpetrators' non-accountability on collective work		
Perpetrators' non-transparency on collective work		
Perpetrator's egoism		
Perpetrator's desire to dominate		

Perpetrator's fear that the victim is a threat to power	Domineering desire of Perpetrator	
Perpetrator's desire to have the power		
Perpetrator manipulating seniority		
Perpetrator's envy of status and respect for the victim	Perpetrator's Psychological issues	
Perpetrator's reluctance to hear good things about the victim		
Perpetrator's desire to cause troubles		
Perpetrator's jealousy of the victim's power		
Perpetrator's mental disorder		
Perpetrators' poor human qualities		
Perpetrators' poor values		
Perpetrator's mood changes		
Victim's skills and abilities	Victim's competencies	Individual reasons related to the victim
Victim's age and experience gap		
Victim's work experience		
Victim's educational qualification		
Victim's ability to work perfectly		
Victim reaching promotions soon		
Victim's overestimation of his/her abilities, qualifications	Victim's egoism and personal issues	
Victim's family background		
Work & family pressures		
Members dividing into groups as new and old members	Informal cliques	Organizational related reasons
Members getting into groups based on false class consciousness		
Competition over promotions	Competitive work setting	
Competition over awards		
Female dominance culture	Organizational Culture	
Subculture of the university		
Non-cooperative culture		
Cubical layout of the offices		
Homely culture		
Power distance		
Weakly defined job roles		

Team-based work environment	Organizational Structure	
Unavailability of a punishment mechanism	Weak organizational processes and practices	
Unavailability of a system for collective & individual performance		
Unavailability of a proper system for recruiting and selecting staff		
Issues related to compensation		

Participants revealed that the perpetrator's work-related attitudes are an antecedent of WO. The individuals who instigated ostracism have the desire to act on their feelings rather than develop a mindset needed for the well-being of the majority. Thus, the individuals who exhibited positive attitudes against those perpetrators were penalized, ignored, or excluded from the organizational environment.

"I am the person who is responsible for the quality assurance duties in my faculty premise. For instance, from time to time, I arrange many collective events with the faculty members. Although I expected much more support from academics, they did not desire to engage in such collective tasks. Some of them were engaged. However, they were also not accountable and transparent in those collective tasks. In this backdrop, their negative feelings towards collective tasks caused me to feel exclusion, since I am the initiator or in charge of those events" (Participant3)

Our analysis also resulted in the perpetrator's domineering desire as an antecedent of WO. As per the respondent's statements, the perpetrator ostracized them to control the other organizational members. In other words, the need for power was a reason to instigate WO in workplaces.

"Since all staff members were partial to me, he thought first to leave me from the organization. Then only he can keep control over the others [...] I am the one who commands others apart from the factory manager. [...] the HR department did not recruit even a girl to the garment line, without asking my opinions and recommendations" (Participant10)

"I thought it was because of his ego level, and he thought he was powerful. Although he was my trainer, I worked in a higher position than him. On the other hand, he was a degree holder from a state university, but I didn't

have a degree qualification; instead, I had experience and partial professional qualifications. That is why he had that ego mind, according to my view. He thought he was more powerful with his educational qualifications, and I am not” (Participant1)

Next, the perpetrator's psychological issues were also considered a reason for ostracism. For instance, the perpetrator's envy or jealousy over the victim's status, power, and respect, the perpetrator's mood changes, and personality issues were revealed as the reasons for WO.

“I am the only one who passed out from our department's newly introduced degree programme with a first-class qualification. Therefore, I received relatively more status and respect than my coworkers. So, I think they had envy of my status and respect, and it caused them to treat me badly” (Participant6)

“Later I got to know that there is a personality disorder with him since his childhood” (Participant9)

### **Victim related reasons**

Our data support that victims' characteristics also influence WO. For instance, participants reported that their competencies and personal issues were caused for ostracism experiences. When the victims are more competent than the perpetrator in terms of work qualifications, work experiences, skills, and abilities, they are ostracized by the perpetrators.

“At the beginning, I felt they did not like me since I have six years of firm experience [Audit firm]. They thought their positions were threatened because of me” (Participant1)

“She had quite a hesitation in engaging me in work that I am competent to perform with my full capacity. Always she tried to undervalue my competencies and performance” (Participant4)

Also, victims' egoism represented the instances where they overestimated themselves and caused for WO experience. The overestimation and ego resulted in the inflexibility to accept commands and work cooperatively. According to participants' perception, such self-created situations were reasons to ostracize by other organizational members.

“To be honest, I also had a small ego during that period since I was the only one who had the degree qualification worked in that institute. Sometimes, I was also reluctant to work cooperatively with others” (Participant5)

Our results also revealed that work-family pressures were a reason that created pressure on victims, and felt that they were helpless. The perpetrators did not have empathy for the victims but maltreated them.

“I am from a low-income family background. After my father passed away, my mother went abroad. I have two younger brothers who were schooling at that time. Due to that, I was the person who took all the family responsibilities. We did not have enough money to spend our lives happily. I wanted to take care of my brothers. One office mate who knew all my personal information discussed those matters with other colleagues. The sales manager learned about these from others and criticized my family background. After hearing those criticisms, other members also disregarded me collectively” (Participant9)

### **Organizational reasons**

Organizational-related factors such as informal cliques, competitive work settings, organizational culture, organizational structure, and weak organizational processes and practices also influenced WO in several ways. According to the participants’ statements, when the whole organization is divided into informal cliques based on the organizational memberships (i.e., newcomers or older members). Those informal cliques created a background to exclude some of the organizational members.

“Although newcomers were educated, and some of them had teaching experiences, the whole institute was divided into two cliques engaged in non-acceptance of the members in the opposed clique” (Participant5)

“The whole organization divided into different circles based on the false class principles of members and continuing the relationships only with the selected members while not concerning others”(Participant2)

Competitive work setting was identified as another reason for WO. The competition occurred because of the competitive goals inherent to the organization for achieving by the members. For instance, participants stated that competition over getting the best teacher award, growing on the career

ladder, and securing a job position was matted for having the experience of ostracism.

“In the beginning, I was also not aware of this reason. There is a career ladder from the temporary lecturer's position to the dean of the faculty in the university hierarchy. Top positions in the career ladder entitle more power and decision-making. I think from the beginning, there is a competition among academics to reach that level. So, I think this competitive work environment on career development caused her to mistreat me” (Participant7)

Next, different cultural values and artifacts contributed to WO. As perceived by the participants, being a male employee was a reason to experience WO in female-dominant organizations. Moreover, the participants under this category also mentioned the high power distance culture and cubical layout of the office cabin.

“Another major reason is the cubical shapes of the university lecture rooms. The private sector is not like this. It is open to everyone. It limits close interactions with others that are finally reducing the consideration about others” (Participant3)

“I think this university has high power distance culture. Junior academics with low power distance were excluded by the senior academics with high power” (Participant6)

Our data also supported that organizational structure also fosters WO. In some organizations, all the job positions are not well defined. It confused the organizational members when accepting the newcomer for a new job role.

“When I joined that institute, they already established a hierarchy like assistant managers, headteachers, and instructors. However, I had no specific job position since I was the first lecturer recruited to that institute [...]. Therefore, other members did not accept me as I expected” (Participant5)

“The team I joined has 50 members, and that large team has sub-teams. I joined the team which is for reimbursement works. That team was small. It consisted of 4 members, including myself. My position was the lead associate. I reported to the deputy leader, and two members worked for the associate and senior associate levels, two levels below me. Before



joining that team [reimbursements team], there was a strong bond among existing team members for some reason that I did not know initially. Although I did not have the intention to intervene in that relationship, they did not treat me positively” (Participant1)

Finally, weak organizational processes and practices have also created the background for WO; unavailability of a punishment mechanism, proper appraisal system for collective and individual tasks, and inappropriate recruitment and selection processes.

“There is no proper punishment mechanism for the people who do not support collective tasks in the university. Since there was no proper performance appraisal system, it was not a matter whether anyone contributed to the collective tasks or not” (Participant3)

## **DISCUSSION**

Our findings can be compared and contrasted with those of similar studies. Our study reported that perpetrators' misperception of victims as untrustworthy members caused the victims' experience of ostracism since previous evidence suggested that untrustworthy individuals or any individual unable to keep trusted interrelationships are more vulnerable to ostracized by others (Hales et al., 2016). The perpetrator's prejudices influence discriminatory acts in the workplace (Parkins, 2006). However, it is rare to find perpetrator prejudices affect engaging in ostracism behaviours, which is particularly important to the organization's inclusive practices (Shore et al., 2011). To this end, the present study provides evidence for perpetrator prejudices as a perceived reason for workplace ostracism. Our study reported the domineering role of the perpetrator as an antecedent of WO. A recent study identified in the field of workplace ostracism as the use of power by individuals to mistreat others to succeed in their self-centered purposes (Howard et al., 2020). In particular, our results revealed that when the perpetrator is a dominant character, engaged in controlling and maintaining superiority over others, perceived by the participants as reasons for WO. The perpetrator's envy was deemed another perceived cause of WO recognized under the perpetrator's psychological issues. Previous researchers also investigated when the perpetrator becomes an envier, being an envied victim experienced workplace ostracism

(Liu et al., 2019). Our study reported several victim-related WO reasons; the extant research findings are sporadic. Exceptionally, Chang et al. (2019) said that a particular individual's competencies targeted ostracism in the perpetrator's eyes lacking the competencies.

Our study findings reported that some of the organizational factors contributed to WO. In particular, competition occurs because of individuals' interdependence to achieve their competitive goals (e.g., competition over getting the best teacher award, growing on the career ladder, and securing the job position) inherent to the organization for achieving by the members. Many previous scholars have suggested this in WO (Ferris et al., 2017; Wu et al., 2015). Although organizational culture and structure are found to be reasons for ostracism (Robinson et al., 2013; Ferris et al., 2017; Mao et al., 2018; Gamianwilk & Madejabien, 2018), the present study reported unique findings in some of the aspects of organizational culture (e.g., cubical layouts, subcultures). Finally, it was evident that the inefficient organizational processes and practices facilitated engaging in ostracism (Robinson et al., 2013). The three types of perceived antecedents of WO are reported in Figure 1.

Individual Reasons	Perpetrator Related Reasons	<ul style="list-style-type: none"> <li>• Perpetrator's misperception</li> <li>• Perpetrator's work-related attitudes</li> <li>• Domineering desire of the perpetrator</li> <li>• Perpetrator's psychological issues</li> </ul>
	Victim Related Reasons	<ul style="list-style-type: none"> <li>• Victim's competencies</li> <li>• Victim's egoism and personal issues</li> </ul>
Organizational Reasons		<ul style="list-style-type: none"> <li>• Informal cliques</li> <li>• Competitive work setting</li> <li>• Organizational culture</li> <li>• Organization structure</li> <li>• Weak organizational processes and practices</li> </ul>

*Figure 1 Victims' Perceived Reasons for WO*

## **IMPLICATIONS OF THE RESEARCH**

Our study has several implications for theory and practice. First, the present study contributes new knowledge to the existing literature by identifying three types of WO reasons (i.e., victim-related, perpetrator-related, and organization-related) from the victims' perspective. Thus, our study goes beyond the extant studies focused on victims' perceived WO reasons (e.g., Bilal et al., 2020). Second, our study affirmed the subjective understanding of workplace ostracism by conducting a qualitative inquiry while fulfilling the existing methodological scarcity (Waldeck et al., 2015). Third, this study is a novel endeavor in the Sri Lankan context and expands the knowledge in this context by providing a comprehensive understanding of WO's antecedents.

Our study mainly focused on a phenomenon that has been a severe cost to inclusion (Chen & Tang, 2018). Thus, there are some implications for the practice. The findings on WO's reasons inform practitioners to control such negative behaviour when moving towards inclusive organizations. Also, the organizational culture is a significant matter for the experience of WO (Robinson et al., 2013); practitioners should develop a non-discriminatory culture by increasing the focus on formal and informal relationships among members. For example, the management can arrange office rooms to ease disclosure among members. Moreover, the practitioners should exert the effort to increase collaborative goal attainments rather than competitive goal attainments in the organization since competition matters in workplace ostracism.

## **LIMITATIONS AND FUTURE DIRECTIONS**

Violation of perceived social norms is an inevitable requirement for the experience of ostracism perceived by the victims (Robinson et al., 2013). However, we did not investigate the violated social norms subjectively from the victim or another organizational party accurately for cross-confirming the norms' existence in the organizational context or its common acceptance inside the organization. The limitation can be overcome using a mixed-method approach when collecting information (e.g., collecting information on social norms from the organization's internal ethical manuals or the statements provided by internal members. Further, since this study has been

conducted based on the victim's perspective, future researchers can conduct their studies based on the perpetrator's or third-party perspectives. Also, future researchers can divert the analytical procedure from content analysis to another qualitative analytical procedure (e.g., phenomenology). In doing so, it would be better to use a proper theoretical perspective, such as the theory of victimization (Aquino & Lamertz, 2004). Finally, future researchers can expand the present study in other research contexts to ensure the transferability of the present findings.

## **CONCLUSION**

Notwithstanding the much-needed inclusion, organizational participants undergo painful ostracism. Hence, both practitioners and researchers must be aware of the antecedents of the traumatic WO experience. In achieving this objective, our study concluded that perpetrator-related antecedents (e.g., perpetrator misperception, work-related attitudes, prejudices, the domineering role of the perpetrator, perpetrator's psychological issues) victim related antecedents (e.g., victim's competencies, ego, personal issues) and organization related antecedents (e.g., informal cliques, competitive work setting, organizational culture, structure, weak organizational processes, and practices) contribute in WO. Our empirically driven findings would help eliminate the antecedents of WO to make inclusive organizations for a better future through inclusivity.

## REFERENCES

- Adikaram, A.S., & Liyanage, D.M. (2018 October). *Gays Experiences of Harassments in Heteronormative Workplaces in Sri Lanka*. The 12<sup>th</sup> International Research Conference on Management and Finance, Sri Lanka. <http://hdl.handle.net/70130/4569>
- Aquino, K., & Lamertz, K. (2004). A Relational Model of Workplace Victimization: Social Roles and Patterns of Victimization in Dyadic Relationships. *Journal of Applied Psychology*, 89(6), 1023–1034. <https://doi.org/10.1037/0021-9010.89.6.1023>
- Baloch, M. A., Meng, F., Xu, Z., Cepeda-Carrion, I., Danish, & Bari, M. W. (2017). Dark Triad, perceptions of organizational politics and counterproductive work behaviours: The moderating effect of political skills. *Frontiers in Psychology*, 8(November). <https://doi.org/10.3389/fpsyg.2017.01972>
- Bedi Bilal, A. R., Fatima, T., Imran, M. K., & Iqbal, K. (2020). Is it my fault and how will I react? A phenomenology of perceived causes and consequences of workplace ostracism. *European Journal of Management and Business Economics*. <https://doi.org/10.1108/ejmbe-03-2019-0056>
- Blackhart, G. C., Nelson, B. C., Knowles, M. L., & Baumeister, R. F. (2009). Rejection elicits emotional reactions but neither causes immediate distress nor lowers self-esteem: A meta-analytic review of 192 studies on social exclusion. *Personality and Social Psychology Review*, 13(4), 269–309. <https://doi.org/10.1177/1088868309346065>
- Brinkmann, S. & Kvale, S. (2015) *Interviews: Learning the Craft of Qualitative Research Interviewing*. 3rd Edition, Sage Publications, Thousand Oaks, CA
- Chang, K., Kuo, C., Quinton, S., Lee, I., & Cheng, T. (2019). Subordinates' competence: a potential trigger for workplace ostracism. *The International Journal of Human Resource Management*, 1–27. <https://doi.org/10.1080/09585192.2019.1579246>
- Chen, C., & Tang, N. (2018). Does perceived inclusion matter in the workplace? *Journal of Managerial Psychology*, 33(1), 43–57. <https://doi.org/10.1108/JMP-02-2017-0078>

- Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative Research Designs: Selection and Implementation. *The Counseling Psychologist*, 35(2), 236–264. <https://doi.org/10.1177/0011000006287390>
- Cullen, K. L., Fan, J., & Liu, C. (2014). Employee Popularity Mediates the Relationship Between Political Skill and Workplace Interpersonal Mistreatment. *Journal of Management*, 40(6), 1760–1778. <https://doi.org/10.1177/0149206311435104>
- Eisenberger, N. I., Lieberman, M. D., & Williams, K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science*, 302(5643), 290–292. <https://doi.org/10.1126/science.1089134>
- Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). The Development and Validation of the Workplace Ostracism Scale. *Journal of Applied Psychology*, 93(6), 1348–1366. <https://doi.org/10.1037/a0012743>
- Ferris, D. L., Chen, M., & Lim, S. (2017). Comparing and Contrasting Workplace Ostracism and Incivility. *Annual Review of Organizational Psychology and Organizational Behaviour*, 4(1), 315–338. <https://doi.org/10.1146/annurev-orgpsych-032516-113223>
- Gamianwilk, M., & Madejabien, K. (2018). Ostracism in the Workplace. In P.D Cruz (Eds.), *Special topics and particular occupations, professions and sectors* (pp.1–30). Springer. [https://doi.org/10.1007/978-981-10-5154-8\\_2-1](https://doi.org/10.1007/978-981-10-5154-8_2-1).
- Hales, A. H., Kassner, M. P., Williams, K. D., & Graziano, W. G. (2016). Disagreeableness as a Cause and Consequence of Ostracism. *Personality and Social Psychology Bulletin*. <https://doi.org/10.1177/0146167216643933>
- Howard, M. C., Cogswell, J. E., & Smith, M. B. (2020). The antecedents and outcomes of workplace ostracism: A meta-analysis. *The Journal of Applied Psychology*, 105(6), 577–596. <https://doi.org/10.1037/apl0000453>

- Jahanzeb, S., Fatima, T., & Malik, M. A. R. (2018). Supervisor ostracism and defensive silence: a differential needs approach. *European Journal of Work and Organizational Psychology*, 27(4), 430–440. <https://doi.org/10.1080/1359432X.2018.1465411>
- Jones, E. E., & Kelly, J. R. (2010). “Why am I out of the loop?” Attributions influence responses to information exclusion. *Personality and Social Psychology Bulletin*, 36(9), 1186–1201. <https://doi.org/10.1177/0146167210380406>
- Kanwal, I., Lodhi, R. N., & Kashif, M. (2019). Leadership styles and workplace ostracism among frontline employees. *Management Research Review*, 42(8), 991–1013. <https://doi.org/10.1108/MRR-08-2018-0320>
- Kim, E., & Glomb, T. M. (2010). Get smarty pants: Cognitive ability, personality, and victimization. *Journal of Applied Psychology*, 95(5), 889–901. <https://doi.org/10.1037/a0019985>
- Liu, F., Liu, D., Zhang, J., & Ma, J. (2019). The relationship between being envied and workplace ostracism: The moderating role of neuroticism and the need to belong. *Personality and Individual Differences*, 147(March), 223–228. <https://doi.org/10.1016/j.paid.2019.04.040>
- Mao, Y., Liu, Y., Jiang, C., & Zhang, I. D. (2018). Why am I ostracized, and how would I react?: A review of workplace ostracism research. *Asia Pacific Journal of Management*, 35(3), 745–767. <https://doi.org/10.1007/s10490-017-9538-8>
- Morbarak, M. E. (2000). The inclusive workplace: An ecosystems approach to diversity management. *Social Work*, 45(4), 339–353. <https://doi.org/10.1093/sw/45.4.339>
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*. <https://sisis.rz.htw-berlin.de/inh2012/12402512.pdf>
- Robinson, S. L., O'Reilly, J., & Wang, W. (2013). Invisible at Work: An Integrated Model of Workplace Ostracism. *Journal of Management*, 39(1), 203–231. <https://doi.org/10.1177/0149206312466141>
- Scott, K. L., & Duffy, M. K. (2015). Antecedents of Workplace Ostracism: New Directions in Research and Intervention. *Mistreatment in Organizations*, 13, 137–165. <http://dx.doi.org/10.1108/S1479->

- Shore, L. M., Cleveland, J. N., & Sanchez, D. (2018). Inclusive workplaces: A review and model. *Human Resource Management Review*, 28(2), 176–189. <https://doi.org/10.1016/j.hrmr.2017.07.003>
- Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Ehrhart, K. H., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. *Journal of Management*, 37(4), 1262–1289. <https://doi.org/10.1177/0149206310385943>
- Stark, A. L.W. (2020). Fair Treatment for All: Testing the Predictors of Workplace Inclusion in a Canadian Police Organization. *Management and Labour Studies*, 0258042X2095999. <https://doi.org/10.1177/0258042x20959998>
- Tang, N., Jiang, Y., Chen, C., Zhou, Z., & Chao, C. (2015). *The International Journal of Human Inclusion and inclusion management in the Chinese context: an exploratory study*. March, 37–41. <https://doi.org/10.1080/09585192.2014.985326>
- Parkins, I.S., Fishbein, H.D., & Ritchey, P.N. (2006). The Influence of Personality on Workplace Bullying and Discrimination. *Journal of Applied Social Psychology*, 36(10), 2554–2577.
- Waldeck, D., Tyndall, I., & Chmiel, N. (2015). Resilience to ostracism: A qualitative inquiry. *Qualitative Report*, 20(10), 1646–1670.
- Williams, K. D., & Nida, S. A. (2017). *Ostracism, Exclusion and Rejection*. Routledge.
- Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, 58, 425–452 <https://doi.org/10.1146/annurev.psych.58.110405.085641>
- Wu, L., Wei, L., & Hui, C. (2011). Dispositional antecedents and consequences of workplace ostracism: An empirical examination. *Frontiers of Business Research in Chi*
- Zhao, H., & Xia, Q. (2017). An examination of the curvilinear relationship between workplace ostracism and knowledge hoarding. *Management Decision*, 55(2), 331–346. <https://doi.org/10.1108/MD-08-2016-0607>



## STRENGTHENING IDEAL L2 SELF TO MOTIVATE L2 LEARNING

Prasangani K.S.N.

*Department of English Language Teaching, Faculty of Social Sciences and  
Languages, Sabaragamuwa University of Sri Lanka*  
[prasangani@ssl.sab.ac.lk](mailto:prasangani@ssl.sab.ac.lk)

### ABSTRACT

The key to mastering the English language is motivation. In any case, when teachers attempt to inspire their students to study English, they run into a few issues. This study offers a fascinating chance to expand our understanding of how to increase L2 learners' willingness to learn. The main goal of the current study is to investigate whether developing the ideal L2 self through a motivation program based on the Magid and Chan Motivational Programs and Dornyei's L2 Motivational Self System may increase L2 motivation. 139 Sri Lankan undergraduates participated in the voluntary motivation program. Every undergraduate who participated did so voluntarily, and they had the option to discontinue the program at any moment. Two primary sessions were included in the design of the motivating program. The first session was interaction with the role models, and the second session was used to develop an action plan and a possible self-tree. The role models were chosen among the graduates and came from various fields of work. A questionnaire survey was used to examine the motivation twice (pre-test and post-test). The pre- and post-motivational program results were analysed using the SPSS Paired Sample T Test. The results showed that the motivation program had a considerable positive impact on the ideal L2 self. The results also suggested that a motivational program can help L2 learners boost their future aspirations. For the L2 teachers, this program can be a creative and difficult endeavor. The encouraging results also ensure the possibility of inspiring L2 learners by increasing their ideal L2 self-image. These findings significantly impact the development of similar motivational programs in L2 contexts to boost L2 learners' motivation.

**Keywords:** L2 learning, Motivation, Ideal L2 self

## INTRODUCTION

Over the past ten years, the field of motivation theory has progressed from integrativeness to the L2 Motivational Self System (LMSS). With time, Gardner's seminal studies on integrativeness as the primary incentive for language learning and his socio-educational paradigm have lost some of their significance. Gardner's theory characterized integrativeness as the learner's desire to get familiar with the L2 group and its culture through language study (Gardner, 2001). The need for scholars to reconsider the factors impacting motivation for language acquisition has grown over the past ten years, however, as a result of the new perspectives that globalization has brought about. The English language's rapid changes in terms of "World English" and its dominance as a means of global communication have rekindled the urge to go beyond the conventional integrativeness principles. The English language's rapid changes in terms of "World English" and its dominance as a means of communication for globalization have rekindled the urge to go beyond the conventional integrativeness principles (Coetzee-van Rooy, 2006).

However, the use of Dornyei's LMSS offered solutions to the issues raised in relation to the integrativeness idea (Dornyei & Csizer, 2005). In a nutshell, Dornyei's LMSS is divided into three main sections. The first is the "ideal L2 self," which refers to the element of an individual's ideal self that is unique to L2 and acts as a motivator for language learning. The second one, "ought to L2 Self," focuses on the character traits that one should cultivate to counteract probable negative impacts. The third element, the L2 learning experience, addresses how the teacher, curriculum, and classmates have an impact on the situational motives related to the current learning environment (Dornyei, 2010). Recent developments in motivation theories have expanded research on the learner self and the LMSS. By focusing on distinct learner groups, a number of researchers from around the world have proven the effectiveness of LMSS (Csizer & Kormos, 2009; Islam, Lamb, & Chambers, 2013; Kormos, Kiddle, & Csizer, 2011; Lamb, 2012; Papi, 2010; Taguchi, Magid, & Papi, 2009; Prasangani, 2018). It was discovered that the primary motivator for language acquisition was the ideal L2 self.

New components that aid learners in defining and identifying themselves are now included in the LMSS. The ideal L2 self and ought to L2 self were revealed to be factors in raising anxiety, while learning experiences and the ideal L2 self were proven to be variables in diminishing anxiety (Papi, 2010). International posture was found to be the root cause of the ideal L2 self (Csizer & Kormos, 2009; Kormos et al., 2011). The Ought to L2 Self recently correlated significantly with the LMSS (Csizer & Kormos, 2009; Kormos et al., 2011). The LMSS now has an international stance objective (the desire to engage with the global community).

Magid and Chan (2012) conducted two motivational programs to demonstrate the potential for motivating participants to learn English and increasing their self-awareness of their linguistic skills by assisting them in defining their ideal L2 selves and defining and revising their goals. The current study, which looks at the prospect of motivating Sri Lankan pupils through a motivation program, is based on Magid and Chan (2012). The following research question was developed in accordance with it. Can the ideal L2 self be improved via a motivation program?

## **METHODOLOGY**

A motivation program was used to evaluate participants' motivational growth and the program's overall performance. University students (N=139) voluntarily participated in the motivation program. For some demographic details, see Table 1. The motivation program used a questionnaire that was taken by Prasangani (2018). It was given out at the start of the motivation program and the end of the program. The questions centered on the strength of the participant's perceptions of their Ideal L2 Self, and these quantitative data were used to examine motivation. Pre-test and post-test data were analysed using paired sample T-Test.

*Table 1: Participant Profile*

Total Sample		139
Gender	Female	84%
	Male	16%
Academic Discipline	Languages	22%
	Economics	33%
	Political Science & Sociology	25%
	Geography	20%
Residence	Urban	24%
	Rural	76%

#### Motivation programme

The two-day motivation program included two sessions that were combined into an interactive session, as well as sessions to create action plans and get language counseling.

The chosen role models had a cordial interactive session in discussing their learning experiences, challenges, failures, and success stories, according to Magid and Chan (2012), in the first session. The role models were chosen from alumni and came from various fields of study (Table 2).

*Table 2: Role Models' Profile*

	Resource person 1	Resource person 2	Resource person 3	Resource person 4
<b>Age</b>	<b>38</b>	<b>34</b>	<b>35</b>	<b>38</b>
Gender	M	F	M	M
Profession	Lecturer	Monitoring, Evaluation, and Knowledge Management Specialist (NGO)	Statistician	Chief Executive Officer
Subject Discipline	English	Economics	Statistics	Economics

For the purpose of developing a picture of their Ideal L2 Self, the participants in the second session prepared lists of their objectives for their upcoming careers, relationships, and lifestyles, as well as their ideal selves in each of those areas.

Then, after picturing the ideal person they wanted to become in terms of learning English, their future job, including how they hoped to use English at work, and their personal life, they were instructed to draw an Ideal Self Tree. The tree's limbs stood in for these three areas. The participants were also requested to sketch little branches emerging from the larger ones to represent their action plans. The next step was to choose a start date for working on their goals as well as a time and method for reviewing their progress.

The counseling session was finally held. The participants in the counseling sessions defined their Ideal Self Trees, made connections between learning English and different elements of their lives, including their studies, careers, and personal lives, and considered how English would be useful to them in the future. The researcher and the role models assisted them in overcoming the difficulties.

## RESULTS AND DISCUSSION

The participants' Ideal L2 Self increased statistically significantly from the Pre-Test to Post-Test, according to the results of the paired sample T-Test (Table 3).

Paired Differences					t	df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper			
-2.00000	7.89790	.66989	-67542	-332458	-2.986	138	.003

*Table 3: Results of Paired Sample T-Test*

Effect size: 0.176 \_Large Effect

By giving data from the Sri Lankan context, this study further supported Magid & Chan (2012) and demonstrated the feasibility of enhancing the ideal L2 self through a motivational program. This study further validated the high ideal L2 self of Sri Lankan students (Prasangani & Nadarajan, 2015; Prasangani, 2018). They specifically wish to speak English fluently with English speakers around the world. This further demonstrates the learners'

own motivation to communicate in English at a worldwide level.

*Table 4: Ideal L2 Self Description*

Item	N	Pre-Test Agree %	Post-Test Agree %
Imagine all university courses taught and speak in English	139	90	97
Imagine writing emails/ letters fluently in English		90	97
Things want to do in future involve English		95	97
Imagine able to speak good English		90	96
Want to be kind of Sri Lankan who speaks English fluently		93	96
Imagine in communicating in English with Westerners		91	93
Like to be close to L1 speakers of English		94	95
Like to be close to L2 speakers of English		90	91

The ideal L2 self-profile of the Sri Lankan students was further supported by Table 4. According to their ideal L2 self, they placed a high value on communicating in English and pursuing an academic career in English. This may occur because English is becoming increasingly necessary in Sri Lanka.

## **FUTURE RESEARCH AND LIMITATIONS**

Similar Motivation Programmes can be implemented in other second or foreign-language contexts to increase the motivation of second or foreign-language learners. Teachers can inspire their students to set attainable objectives and develop an action plan. To help learners reach their goals, language counseling is crucial. Since this program was just two days long, it would be beneficial if future studies could have a longer schedule. Such programs require resources and time. With continuing academic obligations, planning such a program at an institution is challenging.

## CONCLUSION

This study examined whether a motivational approach may help Sri Lankan L2 learners improve their ideal L2 selves. The study found that a motivational program significantly improved the ideal L2 selves of Sri Lankan learners. Additionally, this study supported Magid and Chan's (2012) findings and demonstrated the program's potential for use in a South Asian context.



## REFERENCES

- Coetzee-van Rooy, S. (2006). Integrativeness: untenable for world Englishes learners? *World Englishes*, 25(3-4), 437–450. doi:10.1111/j.1467-971X.2006.00479.x
- Csizer, K., & Kormos, J. (2009). Learning experiences, selves and motivated learning behaviour: A comparative analysis of structural models for Hungarian secondary and university learners of English. In *Motivation, language identity and the L2 Self* (pp. 98–119).
- Csizer, K., & Dörnyei, Z. (2005). The internal structure of language learning motivation and its relationship with language choice and learning effort. *The Modern Language Journal*, 89(1), 19–36.
- Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. US: Lawrence Erlbaum Associates.
- Dörnyei, Z. (2010). Researching motivation: From integrativeness to the ideal L2 self. In S. Hunston & D. Oakey (Eds.) *Introducing applied linguistics: Concepts and skills* (pp. 74–83). London: Routledge.
- Dörnyei, Z., & Csizer, K. (2005). The internal structure of language learning motivation and its relationship with language choice and learning effort. *The Modern Language Journal*, 89(i), 19–36.
- Gardner, R. C. (2001). Language learning motivation: The student, the teacher, and the researcher. *Texas Papers in Foreign Language Education*, 6(1), 1–18. doi:10.1177/0261927X99018004004
- Islam, M., Lamb, M., & Chambers, G. (2013). The L2 Motivational Self System and national interest: A Pakistani perspective. *System*, 41(2), 231–244. doi: 10.1016/j.system.2013.01.025

- Kormos, J., Kiddle, T., & Csizér, K. (2011). Goals, attitudes and self-related beliefs in second language learning motivation: An interactive model of language learning motivation Judit Kormos, Thom Kiddle and Kata Csizér. *Applied Linguistics*, 32(5), 495–516.
- Lamb, M. (2012). A self-system perspective on young adolescents' motivation to Learn English in urban and rural settings. *Language Learning*, 62(4), 997–1023. doi:10.1111/j.1467-9922.2012.00719.x
- Magid, M., & Chan, L. (2012). Motivating English Learners by Helping Them Visualise Their Ideal L2 Self: Lessons from Two Motivational Programmes. *Innovation in Language Learning and Teaching*, 6(2), 113–125. <https://doi.org/10.1080/17501229.2011.614693>
- Papi, M. (2010). The L2 motivational self-system, L2 anxiety, and motivated behavior: A structural equation modeling approach. *System*, 38(3), 467–479. doi: 10.1016/j.system.2010.06.011
- Prasangani, K. S. N. (2018). Investigation of L2 Motivational Self System: A Comparative Study of Undergraduates from Displaced and Resettled Regions in Sri Lanka. *Sabaragamuwa University Journal*, 16(1), 58–67.
- Taguchi, T., Magid, M., & Papi, M. (2009). The L2 motivational self-system among Japanese, Chinese and Iranian Learners of English: A comparative study, In *Motivation, language identity and the L2 Self* (66– 97)



**FELICITATION E-VOLUME  
DEDICATED TO  
MR. H.G. PIYASIRI**

ISBN 978-624-5727-35-3



9 786245 727353