



**Management Studies**

Sabaragamuwa University of Sri Lanka

# **FELICITATION E-VOLUME**

**DEDICATED TO**

**MR. P.J. JAYATHILAKE**



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

**28<sup>th</sup> January 2025**

## **Felicitation E-Volume Dedicated to**

**Mr P.J. Jayathilake**

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

Tel : +94452280007

Fax : +94452280007

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ISBN : ISBN 978-624-5727-56-8

Cover Design : Mr. G.G.W.M. Rajapaksha

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## MESSAGE FROM THE EDITORIAL BOARD

It is with great honor and heartfelt gratitude that we, the editorial team, dedicate this felicitation volume to Mr. P. J. Jayathilake, a Senior Lecturer in the Department of Business Management, Faculty of Management Studies, Sabaragamuwa University of Sri Lanka. After decades of dedicated service, Mr. Jayathilake retired on 30<sup>th</sup> September 2024, leaving behind an inspiring legacy of academic excellence, mentorship, and unwavering commitment to the university's growth.

Mr. Jayathilake has been a pillar of the department, contributing immensely to teaching, research, and student development. His guidance and expertise have shaped the careers of countless students, fostering a culture of learning and innovation. Moreover, his dedication to the academic and institutional progress of the university has been invaluable.

This felicitation volume is a humble attempt to recognize and celebrate the remarkable contributions of Mr. Jayathilake. We are deeply grateful to all those who contributed to the making of this publication possible. Special thanks go to the Vice Chancellor of Sabaragamuwa University of Sri Lanka, Professor M. Sunil Shantha. We are grateful for Professor W.K.A.C. Gnanapala, the Dean of the Faculty of Management Studies, for the guidance and encouragement provided in preparing this felicitation volume. Our appreciations extend to all the Heads of Departments, and academic staff members from the university, for their kind messages and support.

We also extend our gratitude to the authors who contributed their scholarly articles to this volume. Their efforts enrich this collection and stand as a testament to the academic excellence Mr. Jayathilake championed throughout his career. We wish to clarify that the copyrights of the articles included in this volume remain with their respective authors. Additionally, the articles are arranged in alphabetical order for ease of reference.

Finally, we acknowledge and appreciate the support of all individuals involved in the production of this volume, including those who assisted with design, formatting, and logistical support. Your contributions have been instrumental in making this publication a reality.

Mr. P. J. Jayathilake's dedication and service will remain a source of inspiration for generations to come. On behalf of the entire editorial team, we extend our warmest wishes for a fulfilling and joyful retirement.

*May this new chapter in life bring him happiness, health, and contentment!*

**The Editorial Team**

28<sup>th</sup> January 2025

## MESSAGE FROM THE VICE-CHANCELLOR



It is a great honor and privilege to issue this message to felicitate Mr. P.J. Jayatillake, an eminent scholar and renowned teacher who has made invaluable contributions to inspiring and mentoring young and upcoming academics and scientists. Pallihenage Jimson Jayatillake, born on the 17<sup>th</sup> of October 1958, received his primary education at Rambukkana Maha Vidyalaya, Bandaragama, and his secondary education at Sripalee College and Vidyaratne College, Horana. He completed his undergraduate and postgraduate studies in 1988 and began his academic career as a Lecturer in 1992. He later obtained M.Sc. in Management from the University of Sri Jayewardenepura, Nugegoda.

Mr. Jayatillake has generously shared his extensive knowledge, particularly in promoting an alternative marketing system for national development. He has also served as a member of numerous national committees in Sri Lanka. A pioneering academic member of Sabaragamuwa University of Sri Lanka, Mr. Jayatillake retired from university service in September 2024 as a Senior Lecturer. During his 32 years of service, he contributed significantly to the growth and development of the Faculty of Management Studies and the university. In recognition of his long-standing, distinguished, and dedicated service, he was honored by the university in 2022.

I extend my heartfelt gratitude to Mr. Jayatillake, a guiding intellectual who has been instrumental in helping both staff and students achieve success in their careers. I wish him immense happiness throughout his life and hope he takes pride in witnessing his students emerge as fountainheads of success.

***Professor M. Sunil Shantha***

The Vice Chancellor

Sabaragamuwa University of Sri Lanka



## MESSAGE FROM THE DEAN

### FACULTY OF MANAGEMENT STUDIES



It is with profound respect and heartfelt appreciation that I pen this message in honor of Mr. P.J. Jayathilake, whose retirement signifies the culmination of an illustrious career dedicated to academic excellence and unwavering commitment to the Department of Business Management, Faculty of Management Studies, at Sabaragamuwa University of Sri Lanka. Throughout his tenure, Mr. Jayathilake has been a beacon of knowledge, mentorship, and inspiration, profoundly impacting the lives of students and colleagues alike.

Mr. Jayathilake's contributions extend far beyond the confines of the classroom. He has been instrumental in the development and growth of our department, faculty, and the university at large. His dedication has not only elevated the standards of our institution but has also left an indelible mark on the broader academic community.

As we celebrate his remarkable academic contributions, we also acknowledge the enduring legacy he leaves behind, a legacy that will continue to inspire future generations of scholars and educators. While we bid farewell to his daily presence among us, we look forward to his continued guidance and hope that retirement brings a new chapter filled with love, hope, fulfillment, and joy.

As a faculty, we deeply appreciate his invaluable contributions since the inception of the university and wish him a happy and peaceful retired life.

***Professor (Dr.) W.K.A.C. Gnanapala***

Dean | Faculty of Management Studies

Sabaragamuwa University of Sri Lanka

## MESSAGE FROM THE HEAD

### DEPARTMENT OF BUSINESS MANAGEMENT



It's with great pleasure and honor that I wish to pen these words of felicitation on Mr. P.J. Jayathillake, one of my former teachers and a most senior member of the Department of Business Management, Faculty of Management Studies, Sabaragamuwa University of Sri Lanka. As a founding personality he has contributed in molding the culture of our department in a unique manner as '*One Family*'.

Mr. Jayathilake, though his specialization was Economics related, taught a variety of subjects at the university. And he did that well, with comprehensive notes, and occasionally changing the tempo of the lecture room with humour and drama acts. Undoubtedly, he was a great teacher, who paved the way for his students to be their best versions.

As an administrator, when he was the Head of the Department, Mr. Jayathilake was a calm character, never losing his temper. He would rarely burden his staff members and always gave the freedom to work independently. He never hesitated to step forward in accepting the leadership when there was a need. As a great leader, he made a solid platform for all of us to rise and shine while nurturing the togetherness for synergy. As a staff member, he was a very simple, and stress free personality. He was always a down to earth character and was humble enough to learn things even from younger staff and gave them the credit for it. He was always friendly, with a smile to offer anybody who would meet him.

As he is starting a new chapter in his life, I wish him all the success. His family will be the happiest now, with him having time to fully commit for his family.

Thank you for everything you have done and I wish you all the very best Sir!

***Dr. (Mrs.) J.K.S.C. Perera***

Head | Department of Business Management  
Faculty of Management Studies  
Sabaragamuwa University of Sri Lanka

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**MESSAGE FROM THE HEAD**  
**DEPARTMENT OF ACCOUNTANCY & FINANCE**



On behalf of the Department of Accountancy & Finance, Faculty of Management Studies, Sabaragamuwa University of Sri Lanka, it is with great pride and honour that we present this special felicitation e-volume in recognition of the exceptional career and remarkable contributions of Mr. P.J. Jayathilake, one of the most senior and respected academics of our Faculty.

Mr. Jayathilake's journey as an educator, mentor, and scholar has profoundly impacted generations of students and faculty members alike. His unwavering commitment to academic excellence, leadership in advancing the institution's mission, and dedication to the growth of management education in Sri Lanka stand as a testament to his lifelong devotion to the field. This volume is a tribute to his extraordinary contributions to the faculty and the academic community.

Thank you for everything you have done for the Faculty, the University, and the field of management education. We are proud to have been part of your remarkable journey.

With respect and gratitude,

***Professor D.G. Dharmarathna***

Head | Department of Accountancy & Finance

Faculty of Management Studies

Sabaragamuwa University of Sri Lanka

**MESSAGE FROM THE HEAD**  
**DEPARTMENT OF MARKETING MANAGEMENT**



Dearest Jayathilake sir, so you are retiring...nuh?

You are stepping in to the life in which you can do whatever you want. There are no more lecturing, paper marking, getting up very early in the morning, meeting deadlines, sitting hours and hours in meetings, etc, etc. First in the queue, I am very much pleased and honored to write my heartfelt sincere wishes on your retirement.

May your retirement life be the best ever chapter in your life!!! May the beautiful universe send you countless strength and joy to craft a wonderful retirement life!!

With my wishes, I would like to go down the memory lane and recap some striking moments of my academic career under your guidance. You became the first charming boss in my academic career and happened to be my shaping tool of the career. Your cheerful personality and calmness were main traits which made our lives in the department of Business Management super cool. Your personality showed us how to remain fresh and strong in any circumstance. Your words and cool tone displayed us the calmness of the life. Your enthusiastic teaching taught us to become enthusiastic teachers for kids.

With this short but very deep admiring note, I would like to show my deep sense of gratitude towards your humble personality.

Cheers sir!! May you be granted with a healthy and a long life!!

***Dr. (Mrs.) Vilasini De Silva***

Head | Department of Marketing Management

Faculty of Management Studies

Sabaragamuwa University of Sri Lanka

**MESSAGE FROM THE HEAD**  
**DEPARTMENT OF TOURISM MANAGEMENT**



It is with great respect and admiration that I extend my heartfelt congratulations to Jayathilake Sir, one of the most senior academics of the Faculty of Management Studies, on his felicitation.

Mr. Jayathilake has been an integral part of our faculty since the 1990s, contributing immensely to its growth and the academic development of countless students. Beyond his academic accomplishments, his warm personality, calm demeanor, and unwavering kindness have made him a cherished colleague and mentor. Before joining the university, Mr. Jayathilake's association with the stage drama community reflects his deep appreciation for the arts. Known among popular drama producers and directors, he brought a unique vibrant to our gatherings and parties by singing drama songs that resonated with the richness of Sri Lankan culture. His ability to enjoy life through music and camaraderie, while inspiring others to do the same, is truly commendable. A man of modern thought, Mr. Jayathilake's exposure to higher education in a European country shaped his progressive outlook. His willingness to embrace innovation and think beyond traditional customs has been a guiding light for many of us in navigating the complexities of the modern academic and professional world. Despite these forward-thinking qualities, he remained humble and altruistic, always prioritizing the well-being of others over personal gain.

As we celebrate this momentous occasion, I express my deepest gratitude for Mr. Jayathilake's exceptional contributions to our university and our lives. May he continue to inspire us all with his wisdom, creativity, and unwavering dedication to the values he embodies.

With heartfelt wishes,

***Dr. K.R.H.L. Gunasekara***

Head | Department of Tourism Management

Faculty of Management Studies

Sabaragamuwa University of Sri Lanka

## MESSAGE FROM THE CHAIRPERSON OF ACADEMIC STAFF WELFARE ASSOCIATION | FACULTY OF MANAGEMENT STUDIES



This is the moment to express my appreciation for the exceptional leadership and the companionship you've demonstrated within the Department of Business Management during the last period. Since the day I joined the FMS family, your character has been an example of genuineness, simplicity and sincerity. Being a pioneering Head, you not only nurtured peace and harmony but also created a positive work environment in the

Department of Business Management. Thank you sir, for being such a fatherly leader for us.

Your cheerful outlook and harmless attitude towards us not only brightened everyone's day but also inspired others to be inoffensive even at hard occasions. The values you've inculcated have set standards that others aspire to follow. Your positive attitudes too were a powerful catalyst within our team. Thank you for spreading positivity and being a good senior member of our family!

As you embark on this new chapter in life, we want to express our deepest gratitude for your years of dedication and leadership especially during the emerging period of our Faculty and some degree programmes. Your retirement marks the end of an era. We are grateful for your years of service and the impact you've had on our Department and the Faculty as a whole.

Enjoy the well-deserved relaxation and adventures ahead!

***Mrs. K.L.B.G. Dharmaratne***

Chairperson | Academic Staff Welfare Association

Faculty of Management Studies

Sabaragamuwa University of Sri Lanka

## **ACHIEVEMENTS & CONTRIBUTIONS OF MR. P.J. JAYATHILAKE**

Mr. Jayathilake is a proud alumni of the University of D. Biagoeve Varna, Bulgaria and University of Sri Jayawardenepura holding two Master's degrees. He earned his First MSc Degree in Tourism Economics from University of D. Biagoeve Varna, Bulgaria in 1988 and second MSc in Management from the University of Sri Jayawardenepura in 2000. He began his academic career as a College Lecturer in the Diploma in Travel and Tourism Management program at the Sabaragamuwa Affiliated University College on 04<sup>th</sup> May 1992. His remarkable service to the university spans almost three decades.

In 1996, Mr. Jayathilake joined the Department of Business Management as a Lecturer (Probationary) in Sabaragamuwa University of Sri Lanka (SUSL) and later promoted to a Senior Lecturer in 2000. He was one of the pioneering pillars of the Faculty of Management Studies (FMS) and played an instrumental role in the development of the Travel and Tourism Management (TTM) programme in 1992 at the Sabaragamuwa Affiliated University College. In 1993, he was appointed as the Programme Coordinator for this initiative. Mr. Jayathilake also held the position of Chairman of the Sabaragamuwa Affiliated University Teachers Association in 1993, during which he significantly contributed to the establishment of the Inter-AUC Teachers Association in 1994.

Notably, Mr. Jayathilake played a pivotal role in the transformation of the Sabaragamuwa University of Sri Lanka into an independent university in 1996, a hallmark achievement in his career. The same year, he facilitated the development of the Tourism Management Degree Programme, which has since grown and flourished within the Faculty. This accomplishment undoubtedly holds a special place in his career as it laid the foundation for the success of the programme today.

In addition, Mr. Jayathilake was appointed as the Head of the Department of Business Management three times, in 2004, 2008, and 2016. His leadership and vision were instrumental in shaping

the department. He was recognized as one of the most intelligent and valuable individuals in Sri Lanka, according to a survey conducted by Celltel from 2007 to 2010.

Throughout his 32 years of service, Mr. Jayathilake enriched the lives of countless students by delivering lectures on different subjects, including Introduction to Tourism, Tourism Marketing, Tourism Management, Strategic Management, Marketing Management, Consumer Behaviour, and Management Process. Beyond teaching, he has made significant contributions to research, publishing in peer-reviewed journals and presenting at conferences.

His scholarly contributions include:

- Book titled ***“The Essence of International Business Management”*** in 2015.
- Jayathilake, P.J., & Mahaliyanaarachchi, R.P. (2004). “Pola” (fair) as an alternative marketing system to the Vegetable and fruit farmers in the Monaragala District in Sri Lanka.
- Malintha, H.M.R, & Jayathilake, P.J. (2018). The Impact of Psychological Empowerment on Organizational Commitment of Executive Level Employees in National Development Bank Plc in Southern Province
- Ariyaratne, P.R.C.N, & Jayathilake, P.J. (2019). A Study on the Impact of Psychological Capital on Perceived Authentic Leadership: ABC Company in Apparel Industry in Sri Lanka

Though he retired on September 2024 after over three decades of dedicated service, Mr. Jayathilake’s impact on the academic and professional community remains profound. His distinguished career as a senior academic affiliated with the Department of Business Management at the Faculty of Management Studies, SUSL, is marked by his lifelong dedication to education. His innovative contributions and unwavering commitment have profoundly impacted both his students and his field. Indeed, his legacy stands as a testament to his creative discoveries and the significant advancements he has made within his discipline.



# BEYOND THE RIDE: NAVIGATING CHALLENGES OF TUK-TUK SERVICE PROVIDERS IN A DYNAMIC TOURISM ENVIRONMENT WITH REFERENCE TO BENTOTA, SRI LANKA

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## ABSTRACT

The research explores the challenges faced by tuk-tuk service providers in Bentota, Sri Lanka, within a dynamic tourism environment to identify their experience, assess the influence of those challenges on services and operations in the tourism sector and the purpose of developing feasible solutions. A qualitative, exploratory case study investigates the subjective experiences of 13 tuk-tuk drivers in Bentota to explore challenges within a tourism-driven economy. Semi-structured interviews were conducted using purposive sampling to achieve saturation. Thematic analysis revealed influential determinants at the operational, external and financial levels, including fluctuating tourist demand, language barriers, impact of ride-hailing apps, affection of hotel rebranding, unstable financial circumstances, and a lack of access to training or resources. These findings illustrate the need to address operational, external and financial barriers to improve the standard of service and driver welfare and tuk-tuk drivers' carrier sustainability. The study concludes by emphasizing solutions like standardized communication, advocacy for maintenance, government involvement and better partnership with the hospitality sector. Furthermore, the study offers valuable insights into the overall tourism industry by linking and highlighting the potential contribution of service providers in promoting transportation as a part of the tourist experience.

**Keywords:** *Bentota, Challenges, Operational Challenges, Tourist Transportation, Tuk-tuk Service Providers (Drivers)*

## INTRODUCTION

Transportation became instantly linked to tourism as tourists could now travel from their home countries to various locations around the world. Transportation and tourism have had a mutualistic relationship since the beginning of tourism in the modern era (Ge, 2009). The tuk-tuk

industry in Sri Lanka is the point of existence and an important ingredient in the transportation infrastructure and tourist industry. These small, three-wheeled contraptions, called tuk-tuks- also known as three-wheelers or auto rickshaws-are among the most common sights on roads in Sri Lanka, convenient and relatively cheap to use for transportation by locals and tourists alike. Tuk-tuks offer visitors an intuitive way to travel around, and their compact size and flexibility make them suitable for navigating narrow traffic areas (Leith, 2019). Tuk-tuk drivers have joined in their hosting role within the tourism industry in Sri Lanka, allowing domestic and international visitors to make transportation within the island. Apart from taking passengers from one point to another, tuk-tuk drivers often double as pseudo-guides with substantial knowledge of the area, its customs, its food, and, finally, the less popular attractions. The readiness of these people to do extra tasks needed to fulfil the different demands and preferences of tourists enhances total visitor contentment and delight in the Bentota Region. Renowned for beautiful beaches, green surroundings, and rich cultural legacy, Bentota draws a constant stream of travellers looking for exceptional experiences and exciting excursions.

This, hence, brings interest to policymakers, local communities, and other tourism sector stakeholders in the research on tuk-tuk drivers' challenges in Bentota. Lying at the core of this paper is a complex dynamic relevant to an important yet often overlooked part of the tourism infrastructure in the Bentota area: challenges and experiences that tuk-tuk drivers face in driving between tourists and a large number of tourist attractions in the region.

Renowned for beautiful beaches, green surroundings, and rich cultural legacy, Bentota draws a constant stream of travellers looking for exceptional experiences and exciting excursions. Among the many sightseeing and excursion journeys that this area has to offer, tuk-tuks stand out as essential modes of transportation, providing tourists with convenient access to a variety of locations. Given the complexities of road accessibility and the congestion typical of the area, tuk-tuks are practical and favoured options to negotiate small roads quickly and to reach further destinations.

In this regard, problems faced by the tuk-tuk drivers also mean a lack of resilience or sustainability in the tourism industry of Bentota. These drivers provide an important service for tourists to see many natural and cultural resources in the area. For this reason, their living standards then become critical for the level of the overall travel experience and attractiveness of the area. Drivers who get discouraged or depressed

may degrade the level of their services, which may affect feelings among visitors and cause negative publicity among tourists. This might eventually affect the local economy and livelihoods depending on tourism, along with the reputation and competitiveness of Bentota as a destination for travelling.

Addressing these issues also contributes to the greater objective of ensuring that tourist growth is more inclusive and sustainable. The intent here is for this research to contribute to creating an enabling environment where relevant stakeholders, including tuk-tuk drivers, may prosper and equitably benefit from tourism.

Besides its implications for the tourism industry, this study is important on the grounds of social justice. Tuk-tuk drivers are normally part of communities that are greatly challenged by socio-economic issues in society. This research chases greater equity and inclusion in the tourism sector by underlining concerns of tuk-tuk drivers themselves and advocating solutions so that they may actively help contribute toward economic growth and development in their respective communities.

Based on the preliminary survey, even while visitors frequently express pleasure with the services rendered by tuk-tuk drivers, there is still a significant gap in research regarding the challenges these drivers encounter in offering service to clients. The problem statement deals with the challenges imposed on tuk-tuk service providers in the Bentota region, whose role of providing easy transportation means through heavily congested and narrow roads is crucial to reach various destinations, while the tourist environment might be risky for their careers, apart from hindering the growth of tourism in the region.

### **Research Questions**

1. What are the main challenges tuk-tuk drivers face at Bentota when providing the service to the tourists?
2. How do these challenges affect tuk-tuk drivers' operations in the tourism sector?
3. What are some possible solutions or procedures to the challenges tuk-tuk drivers face at Bentota?

### **Research Objectives**

1. To identify the main challenges that Bentota's tuk-tuk drivers face.

2. To understand how these challenges impact the services and operations in the tourism sector.
3. To develop feasible solutions or procedures to address the challenges faced by tuk-tuk drivers in Bentota.

## **LITERATURE REVIEW**

The global tourism industry relies heavily on transportation, which serves both functional and experiential roles. Duval (2007) and Hall (1999) emphasize transportation for tourism (moving tourists) and transportation as tourism (boosting the tourist experience). In the "Transportation for Tourism" framework, transportation is a utilitarian function, primarily serving to move tourists from their origin to their destination. (Ge, 2009). "Transportation as Tourism" locates the mode of transportation as the centrepiece or focal point in the tourist experience. Transportation, here, is not a means; it is an essential part of the whole tourism experience. Public transportation significantly impacts tourist pleasure, with tuk-tuks playing a key role as essential tourist transportation. Beyond just transportation, many tuk-tuk drivers often serve as informal guides who offer local insights into the best-kept secrets and tell stories about the area's culture, food, and history. The personalized experience that comes with this makes for a far more memorable tourist journey. (Wijesundara., 2017 November). Beyond this, the tuk-tuks provide an opportunity for visitors to better reach out to the local community in an original and much more natural manner. Tuk-tuk drivers not only facilitate travel but also act as hosts, contributing to the overall experience while providing sustainable career opportunities in tourism. In tourism, part of the host community, including tuk-tuk drivers, plays an important role in shaping the tourist experience through their offer of cultural, social, and economic engagement. (Ramesh, 2022). Members of these communities are tuk-tuk drivers who provide transportation, thus serving informally as guides and ambassadors for the local culture (Leith, 2019).

## **METHODOLOGY**

The study follows a social constructivist philosophy, in which the subjective meaning given to experiences by tuk-tuk drivers in the tourism sector in Bentota is of interest. A qualitative approach offers the possibility to go deeper into drivers' challenges and adaptive strategies through interviews and observations, offering insights into their daily experiences and contributions to tourism. This research adopts an inductive, qualitative approach. Patterns and themes are identified by

collecting data through observations and interviews to understand the lived experiences of tuk-tuk service providers and their adaptations to tourism dynamics in Bentota.

This qualitative case study research design investigates tuk-tuk drivers in their naturalistic real-life settings. This naturalistic and interpretive approach prioritizes participants' voices and experiences in order to minimize potential power imbalances between the researcher and participants. The case study also investigates the local dynamics of tourism and transportation.

The target population is tuk-tuk drivers operating in the tourism industry in Bentota because they directly deal with tourists and are also affected by the changes in the industry. A purposive sampling method was used, wherein 13 drivers were chosen based on certain criteria of having at least one year of tourism experience with strong knowledge of the area and frequent contact with the tourists. It ensures the relevance and meaningfulness of the data with sample size determined through data saturation.

Primary data was collected through semi-structured face-to-face interviews, enabling participants to discuss challenges and experiences freely. The flexibility of open-ended questions allowed deeper insights aligned with research objectives. Observations of drivers' daily work complemented the interview data. Thematic analysis of interview data was done through familiarization, coding, and the identification of recurring themes. This method systematically presents data to identify main patterns, such as challenges, tourist interactions, and sustainability practices that emerge, which is important to ensure that this research meets its objectives. Credibility is established by valid approaches such as semi-structured interviews, prolonged engagement, and systematic thematic analysis. Triangulation, both interview data and observations, confirms the findings through the verification of emerging patterns. Variation in sampling ensures that diverse perspectives are present, thereby enhancing reliability.

## **FINDINGS AND DISCUSSION**

Based on the research objectives, this study is an exploratory investigation of the various challenges faced by the tuk-tuk service providers in Bentota within a dynamic tourism environment. This study aims to discover challenges in understanding their service operation impact and provides feasible solutions to improve the livelihood of drivers in this region. Discussions derived from findings will be analysed

and interpreted based on research objectives and linked to the broader context of tourism and transportation literature. This discussion will consider how these challenges impact adjustments in operational mode, driver morale, and sustainability of viability, where proposed solutions enhance overall service operation while supporting sustainable careers for drivers.

### ***Main challenges face by Bentota's tuk-tuk drivers***

**Table 1: Coding Table 01**

Theme	Category	Subcategories	Code
The main challenges that Bentota's tuk-tuk drivers face	Operational Challenges	Language Barriers	<ul style="list-style-type: none"> <li>– Translation Errors</li> <li>– Connection Issues</li> <li>– Misunderstandings</li> </ul>
		Roads and Infrastructure Issues	<ul style="list-style-type: none"> <li>– Narrow Roads</li> <li>– Congestion during Peak</li> </ul>
		Maintenance Issues	<ul style="list-style-type: none"> <li>– Maintenance Cost</li> <li>– Fuel crisis (Fuel queues, Price variations)</li> </ul>
	External Challenges	Competition among Drivers	<ul style="list-style-type: none"> <li>– Ride-hailing Apps (Uber, PickMe)</li> <li>– Fight for the same client</li> <li>– Non-tourist transport drivers</li> <li>– Misplacing tour guidebook</li> </ul>
		Beach Boys' Involvement	<ul style="list-style-type: none"> <li>– Appear as a licensed Facilitator</li> <li>– Bad Behaviours</li> </ul>
		Political Issues	<ul style="list-style-type: none"> <li>– Election</li> <li>– Curfew time</li> <li>– Protests during past time</li> </ul>
		Impact of Surrounding Hotels	<ul style="list-style-type: none"> <li>– Increasing room rates</li> <li>– Hotel Rebranding</li> </ul>

**Table 1. Continued.**

Theme	Category	Subcategories	Code
The main challenges that Bentota's tuk-tuk drivers face	Financial Challenges	Fluctuating Tourism Demand	<ul style="list-style-type: none"> <li>– Off Season</li> <li>– Climate issues</li> </ul>
		Unstable Income	<ul style="list-style-type: none"> <li>– Price Bargaining</li> <li>– Difficult to sustain families</li> </ul>

The main objective of this research paper was to identify and comprehend different challenges faced by tuk-tuk drivers in the Bentota area. From the research findings, some key issues have emerged and directly affect the livelihood and operational efficiency of the tuk-tuk drivers. These are operational challenges, external challenges and financial challenges. Each point under the main categories is related to another, forming some web of complications the tuk-tuk driver needs to go through to stay in business.

From the interviews conducted, the underlying findings revealed some of the significant challenges tuk-tuk drivers face, including language barriers, poor infrastructure, and very high maintenance costs. Language mishaps cause continuous misunderstandings with clients, who are deprived not only of proper service but also of satisfaction and trust. Along within roads and heavy traffic during rush hours, service providers face enormous challenges in offering sure services, which indirectly strike at their pocket-sized earnings. They undergo significant financial hassles in maintaining their vehicles, considering the surging fuel prices and high costs of vehicle maintenance. It has also agreed that the inefficiency of public transport impacts tourist satisfaction in Sri Lanka (Dissanayake, 2019).

External factors make their life cycle all the more challenging. With growing competition through taxi companies like Uber and PickMe, interference by Beach Boys, plus the negative implications of political instability, make this environment very challenging to the local-based tuk-tuk operators. Such factors commonly make tourists seek other forms of transportation, in turn, forcing the locally based ones to compete for the declining market share. This can also be attributed to the lack of participation of other local hotels, especially when they are in the process of rebranding or increasing prices. It leads to lower involvement with tuk-tuks, thus indirectly lowering the number of tourists using these local transport modes.

Financial constraints are directly associated with tourist seasonality and result in irregular income for the drivers. The off-season tourist figures drop dramatically, and they have to look for other jobs or slash their rates to the barest minimum just to get clients. This instability affects not only their ability to meet their families but also their morale and commitment to continuing in this line of work.

Apart from all these many challenges that the tuk-tuk drivers are currently fighting within Bentota, it is at this moment very relevant to discuss certain emergent issues that have come up lately, such as intense competition from ride-hailing services like Uber and PickMe and issues related to the rebranding of hotels along with an increase in their room rates. These issues, besides the COVID-19 pandemic, which set new levels of challenge before drivers, have deteriorated.

While these external, operational, and financial factors were in place even before the pandemic, their inception has heightened the threat to the drivers' livelihood. Ride-hailing apps have equally become very threatening in customer acquisition and retention because they offer convenience in booking a cab and prices that are very low. Simultaneously, hotel rebranding and an increase in room rates compelled the tourists to change their expenditure patterns. The drivers, therefore, encountered fresh challenges in searching for predictable income.

While the two long-standing causes of increased competition hailing service and changes within the hotel industry represented two great challenges that were demanding a faster response, the researcher found they require even more urgent attention. These are two changes in the tourism business of Bentota, and, finally, stakeholders have to address them even faster to help drivers find steadiness and stickiness in this new business environment.

### **How these challenges impact the services and operations in the tourism sector**

The second objective of the research study was to understand the impact of challenges faced by tuk-tuk drivers in Bentota on their services and operations within the travel industry. From the findings, it is evident that the challenges highly impact the drivers' ability to offer consistent services; therefore, this compels them to make some operational adjustments and develop new strategies that can help them survive in the changing environment. (Hall, 2009)



**Table 2: Coding Table 02**

Theme	Category	Subcategories	Code
How the challenges impacted the services and operations in the tourism sector	Operational Adjustments	Diversity of Income Sources	<ul style="list-style-type: none"> <li>– Additional jobs</li> <li>– Extended shifts</li> </ul>
		Adaptation to the market changes	<ul style="list-style-type: none"> <li>– Repairs</li> <li>– Postponement</li> <li>– Decline tours</li> </ul>
	Impact on Driver Morale	Decrease Flexibility	<ul style="list-style-type: none"> <li>– Inability for long tours</li> <li>– Minimal preparation</li> </ul>
		Damage to the image	<ul style="list-style-type: none"> <li>– Behaviour of beach boys</li> <li>– Political reasons</li> </ul>

The operational adjustments that were undertaken by drivers involved an effort to diversify sources of income through extra jobs and extended hours of work. The need to engage in ancillary income-generating activities also suggests the financial burden faced by tuk-tuk drivers, compelling them beyond their usual occupations into their core means of livelihood. It is indicative of the fact that, due to unstable demand and competition, they are not able to meet their financial needs.

The study also showed that adaptation to market changes was a factor leading to delays in necessary repairs of vehicles simply because of low financing; this aspect has a direct relation to service reliability and efficiency. Additionally, a reduction in the number of tours made by the drivers signifies the change in their market strategy towards making fewer trips to manage the limited resources available to them. Such an adaptation means reduced availability to serve the tourists, hence decreased overall pleasure from travellers depending on tuk-tuk services.

The other major theme that emerged was the impact on driver morale. There has been a decrease in flexibility in their operations. For example, long tours are beyond their capability, and even the preparation made is too minor to instil motivation and enthusiasm in them to serve the tourists effectively. The lack of such facilities ultimately makes them

disappointed to accept long tours that are part of the service offered by them.

Additionally, there were repercussions on the damage to the image of tuk-tuk services for external factors such as the behaviour of beach boys and political reasons. Bad behaviour of some individuals at tourist spots and politically unstable conditions have marred tuk-tuk drivers' reputations, thereby affecting the latter's confidence with prospective travellers. This is damaging to the image, both regarding tourists' confidence in drivers and the attractiveness of tuk-tuks as a means of transport.

***Feasible solutions or procedures to address the challenges faced by tuk-tuk drivers in Bentota***

**Table 3: Coding Table 03**

Theme	Category	Subcategories	Code
Feasible solutions or procedures to address the challenges faced by tuk-tuk drivers	Suggestions for Operational challenges	Standardized communication	– Language Training – Digital Literacy
		Maintenance Advocacy	– Discounted services – Infrastructural development
	Suggestions for external challenges	Government involvement	– Forum to address conflicts – Training programs – Tourist education
		Partnerships	– Hotels – DMC
	Suggestions for financial challenges	Seasonal strategies	– Engage with tourism-related careers – Seasonal promotions
		Price strategies	– Price Negotiating – Transparent pricing guidelines

According to the findings, some of the viable solutions suggested by tuk-tuk drivers in overcoming their challenges include the following:

For operational challenges, the drivers suggested standardized communication through language training and digital literacy programs to complement the language barrier challenge. Drivers also termed for discounted services and infrastructure improvement to handle the cost of maintenance of the solution. This supports (Ge, 2009) of service quality and technology integration in developing transportation services.

Governmental involvement in conflict resolution as well as in the training of drivers and tourists were mentioned as suggestions for external challenges. Greater partnership development efforts between hotels and DMCs would create an even better supportive environment for the tuk-tuk drivers, which could help in cooperation rather than competing against one another. (Stankova, 2009)

Recommendations towards the Solution of financial problems refer to maintaining incomes at a more stable level; there was a suggestion that there should be seasonal strategies in the form of tourism-related careers during the off-peak period of the year, apart from an open pricing policy. Of course, such measures are basically in tune with (Valcour, 2015) Exposition on sustainable careers, which aver that in dynamic industries such as tourism, long-term career strategies have to be utilized.

## **CONCLUSION AND IMPLICATIONS**

### **Conclusion**

These include operational, external, and financial challenges in the form of language barriers, road infrastructure issues, increased maintenance costs, and competition from ride-hailing platforms such as Uber and PickMe, among others, that hit tuk-tuk drivers very hard. In addition to these, emerging challenges, especially with the rise of ride-hailing apps and the rebranding of hotels post-COVID-19, that pose further risks to drivers' competitiveness in the evolving tourism environment.

This study calls for overcoming such challenges in the interest of attaining sustainable livelihoods among drivers and ensure that quality services are accorded to tourists. Among these steps include standardized communication, advocacy for maintenance, and partnerships with the hospitality sector. Long-term implications of the solutions or shifting dynamics about tuk-tuk services are some areas future research may look into.

## Implications of the Study

The study also highlights the impact of challenges such as online competition, language barriers, and infrastructure issues on the tuk-tuk drivers' income, morale, and operations, which eventually affect their role in facilitating tourist mobility. It is indicated that tourism authorities and the local community should support them in adapting to these new challenges by providing language training, investing in road infrastructure, and developing partnerships with the local business community.

This implies that policymakers and tourism development agencies should adopt supportive policies that integrate traditional tuk-tuk services with digital platforms to address market disparities and ensure the sustainability of drivers' contributions to tourism. The study highlights the need for a balance between technological innovation and traditional transportation services for inclusive growth in the tourism sector.

## FURTHER RESEARCH DIRECTIONS

The challenges faced by tuk-tuk service providers can be compared across different tourist destinations in Sri Lanka to find location-specific problems. Another avenue for study is the impact of technology, such as ride-sharing apps, on traditional transportation in the broader South Asian context.

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# CHALLENGES AND ISSUES FACING THE SRI LANKAN TEA INDUSTRY: A COMPREHENSIVE ANALYSIS

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## ABSTRACT

The Sri Lankan tea industry, a cornerstone of the nation's economy, faces numerous challenges that threaten its long-term performance and competitiveness. This study investigates the key issues impacting the sector, encompassing environmental, economic, social, labor, technological, and policy dimensions. Using a qualitative approach, the research integrates the analysis of qualitative insights from semi-structured interviews conducted with plantation managers and stakeholders. Findings highlight critical environmental concerns such as soil erosion, water scarcity, and climate variability, alongside economic pressures, including rising production costs, market price volatility, and an over-reliance on bulk tea exports. Labor shortages, poor working conditions, and outdated technologies further undermine productivity, while inconsistent government policies and insufficient support for smallholders exacerbate these challenges. The thematic analysis underscores the interconnected nature of these issues, revealing their compounded impact on the industry. The study recommends adopting innovative agricultural practices, enhancing labor conditions, diversifying product portfolios, and investing in research and technology to address these challenges. A coordinated effort among stakeholders is essential to ensure the tea industry's resilience and maintain its global reputation as a leading producer of quality tea.

**Keywords:** *Economic Pressures, Industry Challenges, Labor Shortages, Policy Implications, Sri Lankan Tea Industry*

## INTRODUCTION

Ceylon tea, originating from Sri Lanka, is globally renowned for its unique quality and rich history, dating back to the 19<sup>th</sup> century (Wickramasinghe, 2023). Initially, coffee was the primary crop, but after the coffee rust disease devastated coffee plantations, British authorities identified tea as a suitable replacement, particularly due to Sri Lanka's



favorable climate and fertile soil (Wickramasinghe, 2023). By the end of the 1880s, coffee estates were transformed into tea plantations, which led to the rapid development of the tea industry. By 1965, Sri Lanka emerged as the world's leading tea exporter, with annual production exceeding 200,000 metric tons (Central Bank Annual Report, 2022).

The tea industry remains a vital part of Sri Lanka's economy, contributing 4.1% to the GDP in 2022 and providing employment for over one million people (Central Bank Annual Report, 2022). Despite this, the industry faces significant challenges, including declining production, shrinking cultivation areas, and high production costs (Fernando & De Silva, 2019). Furthermore, environmental and social issues such as climate change, soil erosion, labor shortages, and contamination are increasingly threatening the industry's sustainability (Kamalakkannan et al., 2020).

Sri Lanka's tea exports are also under pressure from competing nations like India, Kenya, and China, which offer cheaper tea due to lower production costs and higher yields (Gunaratne & Perera, 2020). Additionally, the global shift toward value-added tea products, such as bagged tea and instant tea, has further reduced demand for Sri Lanka's traditional bulk tea exports (Central Bank Annual Report, 2022). Small tea plantation owners, who control 70% of the land, are particularly affected by inefficient cultivation practices, contributing to reduced productivity and overall production decline (Central Bank Annual Report, 2022).

While the Sri Lankan tea industry continues to play a crucial role in the nation's economy, its future competitiveness and sustainability are at risk due to various internal and external challenges.

## **Research Problem**

Sri Lanka's tea industry, once a global leader, faces significant challenges threatening its long-term survival. Tea exports, which accounted for 19% of global production in 2019, have sharply declined due to the country's severe economic crisis. The financial and political turmoil has driven up production costs by 30-35%, reduced crop yields, and compromised tea quality. The resulting high prices, driven by crop shortages rather than demand, have made Sri Lankan tea less competitive, leading to a loss of market share to countries like India, Kenya, and Vietnam (International Institute for Sustainable Development).

Changing global consumption patterns and the loss of traditional domestic markets have further weakened the industry. As the global tea

beverage market is expected to reach \$73.13 billion by 2024, Sri Lanka must address these challenges to remain competitive.

The Sri Lankan tea industry, once a global leader, is currently facing a range of challenges that threaten its competitiveness and long-term viability. Despite its historical significance and economic contribution, the industry is grappling with environmental degradation, rising production costs, volatile global market prices, labor shortages, outdated technologies, and inconsistent government policies. These challenges have compounded over time, leading to declining productivity and reduced profitability. There is a pressing need to systematically identify and analyze these challenges to provide actionable insights for addressing the issues and safeguarding the future of this vital sector.

## LITERATURE REVIEW

### Application of Triple Bottom Line (TBL) Theory

The Triple Bottom Line (TBL) theory, which emphasizes the three pillars of sustainability—People (Social), Planet (Environmental), and Profit (Economic)—is highly relevant to Sri Lanka's tea industry.

**Social Sustainability:** The tea industry in Sri Lanka is heavily reliant on labor, most of whom live in disadvantaged areas of tea plantations. Issues such as poor working conditions, low wages, and limited access to education and healthcare are prevalent in tea estate communities (Jayasinghe, 2019). From a TBL perspective, improving social sustainability involves addressing these issues through fair compensation, better healthcare facilities, and enhanced housing and education for workers. Additionally, empowering women and addressing childcare concerns are also critical for improving social equity (Silva, 2019).

**Environmental Sustainability:** The Sri Lankan tea industry depends on natural resources, including soil, water, and biodiversity, making environmental sustainability crucial. Unsustainable farming practices, such as excessive agrochemical use, soil erosion, and deforestation, threaten long-term productivity (Senanayake, 2020). Sustainable farming practices, including contour farming, organic methods, and agroforestry, can help mitigate these environmental risks. Moreover, climate change poses a significant threat, impacting yields and quality. Adaptation strategies, such as developing drought-resistant tea cultivars and improving water management, are necessary to preserve the environmental sustainability of tea production (Fernando & De Silva, 2019).

**Economic Sustainability:** Economic sustainability in Sri Lanka's tea industry is threatened by fluctuating global market prices, rising production costs, and the challenges posed by climate change. Competition from countries like India and Kenya further intensifies these economic pressures. To enhance profitability and sustainability, the industry could benefit from diversification, value addition (e.g., organic or fair-trade certifications), and improved marketing strategies (Ganewatta & Edwards, 2000). Additionally, supporting smallholder farmers through cooperative models, better market access and fair-trade practices can foster financial sustainability and ensure a more equitable distribution of income (Perera & Jayasuriya, 2020).

The application of the TBL theory to the Sri Lankan tea industry highlights the need for a balanced approach that addresses social, environmental, and economic challenges to ensure long-term sustainability.

## **Empirical Review**

Major global tea exporters include China, India, Kenya, Turkey, Indonesia, Japan, and Sri Lanka. While these countries invest significantly in research and development to enhance their competitiveness, Sri Lanka has lagged in this area, contributing to a decline in tea exports over the years (Gunatilleke & Gunatilleke, 2000). Once the top global tea producer, Sri Lanka now ranks fourth, facing challenges such as declining output, rising production costs, low farm productivity, and intense international competition (Wambugu & Nandwa, 2016; Alahakoon et al., 2022).

The tea industry also struggles with sustainability issues, including climate change impacts (Ganewatta & Edwards, 2000), decreasing land productivity, rising costs, insufficient value addition, and social inequalities in profit distribution across the global value chain (Kasturiratne, 2008). Historical factors, such as the nationalization of plantations, contributed to a decline in tea production, with output falling by 9% between 1965 and 1977, even as global tea production grew by 51% (Economic Review, 2001). Reduced land for cultivation and lower labor productivity has further compounded the issue.

Sri Lanka's reputation as a leading tea producer now contrasts with its declining performance, as domestic inefficiencies and international competition pose significant threats to the industry (Weerasinghe & Perera, 2019). Addressing these challenges will require innovation, enhanced marketing strategies, value addition, and improved multi-

stakeholder collaboration to ensure the sustainability and competitiveness of Sri Lankan tea.

Tea cultivation in Sri Lanka has historically involved deforestation, which has led to habitat degradation, soil erosion, and loss of biodiversity (Gunatilleke & Gunatilleke, 2000). This environmental imbalance, including reduced soil quality and forest cover, highlights the need for sustainable agricultural practices, such as integrating trees into tea farms to support reforestation and mitigate adverse environmental impacts (Wambugu & Nandwa, 2016).

Additionally, tea farming consumes significant amounts of high-quality water, often at the expense of local communities and ecosystems, and contributes to water pollution through the use of chemical pesticides and fertilizers (Fernando & De Silva, 2019). Climate change further exacerbates these challenges, with rising temperatures and erratic rainfall patterns negatively impacting tea plant health, yield, and quality. Addressing these issues requires adopting heat-tolerant cultivars, reducing greenhouse gas emissions, and enhancing resilience in tea production systems (Rukmini & Kumar, 2021; Perera & Jayasuriya, 2020).

The tea sector also faces economic challenges such as price instability, high production costs, and changing global market dynamics. Factors such as competition from other tea-growing nations, shifting consumer preferences, and economic fluctuations in key markets like Russia and the Middle East contribute to price volatility (De Silva & Wickramasinghe, 2021; Ranasinghe, 2021). Enhancing tea quality to secure premium pricing and developing financial strategies like cash reserves and derivatives can mitigate these risks (Kumarasinghe et al., 2020).

The sustainability of Sri Lanka's tea industry faces significant challenges, including high energy costs, labor shortages, and stiff international competition. Exploring renewable energy sources such as solar and biomass can reduce energy expenses while promoting environmental sustainability. Additionally, locally fabricating essential goods and sourcing materials can help lower costs (Fernando & De Silva, 2022). Operational efficiency improvements and innovation are critical to addressing escalating expenses and ensuring long-term industry viability.

Labor-related issues are a major concern, with worker shortages arising from rural-to-urban migration, where young workers pursue better-paying jobs in the manufacturing and services sectors. This labor scarcity undermines the industry's reliance on labor-intensive activities such as tea plucking and processing (Sri Lanka Tea Board, 2023). Improving

working conditions and offering competitive wages are essential to retaining existing staff and attracting new laborers. Mechanization, such as automated tea plucking, offers a viable solution to labor shortages, reducing dependency on manual labor while increasing efficiency, although it requires significant initial investment (Weerakkody, 2023). Poor working conditions further exacerbate labor issues, with workers enduring unsafe environments, inadequate facilities, and limited access to healthcare and education. These conditions negatively impact productivity, morale, and overall well-being (Perera, 2021). Addressing these challenges requires an integrated approach, combining technological advancements with better labor practices, such as modernizing operations while enhancing salaries and living standards (Sajitha & Yukio, 2014).

Globally, Sri Lanka's tea industry faces competition from leading producers like China, India, and Kenya, which benefit from lower production costs, advanced technologies, and economies of scale. For instance, Kenya leverages low-cost labor and efficient production, while India benefits from subsidies and large-scale operations. Similarly, China's large domestic market and bulk production capabilities provide a competitive edge (Pritchard & Williams, 2020; Ghosh & Gupta, 2018). To counter these challenges, Sri Lanka must emphasize its unique selling points, such as the distinct flavor profiles of Ceylon tea, derived from specific soil and climatic conditions. Strategic branding, marketing, and investments in innovation and quality improvements are crucial for maintaining a competitive edge in the global market (Pritchard & Williams, 2020).

Sri Lanka's tea industry faces sustainability challenges stemming from shifting consumer preferences, inadequate governmental support, and regulatory lapses. Adapting to consumer demands for organic and ethically produced tea is vital to retaining market share. Implementing environmentally friendly practices like integrated pest management and organic farming, coupled with certifications such as Rainforest Alliance and fair-trade, can enhance global market appeal (Fernando & Weerasinghe, 2022). Marketing campaigns showcasing the quality and sustainability of "Ceylon Tea" can build consumer trust and loyalty, strengthening the competitive edge of Sri Lankan tea producers.

Insufficient governmental support is a significant obstacle to sustainability. The lack of financial incentives and subsidies hinders investments in sustainable practices and technologies, which are critical for long-term viability. Policy gaps also restrict stakeholder collaboration and limit investments in research and development (R&D), impeding innovation and efficiency improvements. Subsidies and R&D

funding are essential to overcoming these barriers and fostering sustainable agricultural practices (Doe & Smith, 2021; Clarke & Desai, 2023).

Regulatory enforcement deficiencies further undermine labor rights and environmental conservation in the tea sector. Poor enforcement of existing laws has led to environmental degradation, such as water pollution and soil erosion, and inadequate labor standards, including unsafe working conditions and worker exploitation (Rajapakse & Sundar, 2022). Enhancing regulatory transparency, providing better training for regulators, and strengthening enforcement mechanisms are critical steps toward compliance and achieving sustainability goals (Weerasinghe & Perera, 2019).

A multifaceted approach is necessary to address these issues. Increasing subsidies, investing in R&D, and bridging policy-practice gaps through comprehensive frameworks aligned with industry needs can drive innovation and sustainable practices. This approach will ensure that Sri Lanka's tea industry adapts to global demands and remains competitive in the long term (Nisha & Reddy, 2023; Fernando & Weerasinghe, 2022).

## **METHODOLOGY**

The study aims to assess the issues and challenges of the Sri Lankan tea industry by collecting qualitative data. Qualitative methods will involve semi-structured interviews with plantation and factory managers to gain insights into social, environmental, and economic challenges faced by the industry. These interviews will provide valuable information on labor conditions, environmental impacts, and the effectiveness of policy measures that cannot be fully captured by quantitative data. The qualitative approach will offer a deeper understanding of sustainability challenges by contextualizing them and identifying how various factors are interconnected, improving the overall evaluation of the industry's sustainability environment.

Data collection will include both primary and secondary methods, with interviews being the main primary data source. Semi-structured interviews will allow for in-depth exploration of issues such as working conditions, environmental impacts, economic challenges, and regulations. These insights will contribute to a more comprehensive understanding of the sustainability challenges in the Sri Lankan tea sector and support the development of practical recommendations for its transition to sustainability.

By combining quantitative and qualitative methods, the research will provide a balanced and holistic view of sustainability in the tea industry,

leading to informed recommendations for improving sustainability in the sector.

FINDINGS AND DISCUSSION

Thematic Analysis

Thematic analysis has been used to analyze information from estate managers regarding key issues and challenges impacting the sustainability of Sri Lanka's tea industry. It provides insights into the challenges the industry faces and their effects on long-term sustainability. By systematically evaluating these themes, the analysis offers a comprehensive understanding of how these challenges overlap and hinder the sector's advancement and sustainable development.

Table 1: Thematic Table for objective

Codes	Sub-Themes	Themes
Irregular rainfall Temperature variations Droughts affecting yield	Climate Change Impact	Environmental Sustainability Challenges
Soil erosion Water scarcity Nutrient depletion	Soil and Water Management	
Rising production costs Volatile market prices Dependence on bulk tea Export	Cost and Profitability Issues	Economic Sustainability Challenges
Global competition Price fluctuations Limited value addition	Market Competitiveness	
Ageing workforce Young generation avoiding the tea industry	Labor Shortages	Labor and Workforce Issues
Outdated technology High cost of new equipment	Adverse Effects of Modern Techniques	Technological and Innovation Gaps
Minimal R&D investment Slow adoption of sustainable methods	Lack of Research and Development	

**Table 1: Continued.**

<b>Codes</b>	<b>Sub-Themes</b>	<b>Themes</b>
Changing export regulations Impact of fertilizer ban	Inconsistent Government Policies	<b>Policy and Regulatory Impact</b>
No training for sustainable practices Limited access to subsidies	Lack of Support for Smallholders	
Poor worker housing Limited access to healthcare and Education	Low Social Uplift	<b>Social and Community Issues</b>
Focus on yield over sustainability	Lack of Awareness of Sustainability	

Source: Researcher's Own Work

### **Environmental Sustainability Issues**

Sri Lanka's tea industry is grappling with significant environmental sustainability challenges that threaten its long-term viability. Extreme weather patterns such as irregular rainfall, prolonged droughts, and rising temperatures pose major obstacles to tea cultivation. One respondent noted, *"Irregular rainfall and long dry periods have significantly reduced the yield and health of tea plants"* (Respondent 01). Increasing average temperatures, which are unsuitable for tea growth, exacerbate the problem, as yields drop sharply when temperatures exceed 22°C (Leadership and Democracy Lab, 2018).

Soil degradation is another critical concern, driven by intensive farming, deforestation, and unsustainable land management. Years of continuous cultivation have caused soil erosion and nutrient depletion, affecting the health of tea plants. A farmer observed, *"The land used to be more fertile, but now we struggle to maintain the same quality of crops"* (Respondent 04). Similarly, water scarcity has become a pressing issue due to poor water management and drainage systems. Another respondent emphasized, *"Water shortages during dry seasons have become a serious issue, affecting not only our yield but also the overall health of the plants"* (Respondent 02).

In addition to these challenges, monocropping practices and inadequate crop diversification contribute to long-term land degradation, reducing productivity and worsening soil health. High plantation topography further increases soil erosion risks during intense rainfall (Leadership



and Democracy Lab, 2018; Wijeratne, 2019). Addressing these interconnected issues is essential to ensure the sustainability and productivity of Sri Lanka's tea industry.

### **Economic Sustainability Issues**

The economic sustainability of Sri Lanka's tea industry is under significant pressure due to rising production costs, fluctuating global market prices, and a lack of diversification. The increase in labor, fertilizers, pesticides, energy, and transportation costs has negatively impacted the profitability of both large estates and smallholders, making investments in sustainable practices difficult. As one manager stated, *"The cost of labor and basic supplies has skyrocketed, making it hard to remain profitable"* (Respondent 02).

In addition to rising costs, the volatility of global tea prices poses a major challenge. Sri Lanka's heavy reliance on tea exports, coupled with price fluctuations in the global market, creates financial instability for producers. The competitive edge of other tea-producing countries, such as China, Kenya, and India, where production costs are lower, further threatens Sri Lanka's market position. One respondent noted, *"Global competition and declining prices for bulk tea have made it difficult for Sri Lankan tea to compete with countries like Kenya and India"* (Respondent 04).

Moreover, the industry's over-dependence on large-scale tea exports without fully capitalizing on value-added products such as specialty teas, organic teas, or branded products has left it vulnerable to market fluctuations. This reliance has hindered the industry's ability to diversify its revenue streams, exacerbating the challenges it faces.

### **Labor and Workforce Issues**

Labor-related challenges are a critical factor affecting the sustainability of Sri Lanka's tea industry. Plantation managers highlighted issues such as labor shortages, poor working conditions, and socioeconomic dynamics that impact the stability and productivity of tea estates. One major problem is the scarcity of skilled workers, particularly among the younger generation, who are unwilling to work in the industry due to low wages and limited career advancement opportunities. As one manager noted, *"Many workers leave for better opportunities due to low wages and difficult conditions. Younger generations are not interested in the tea industry"* (Respondent 06).

Additionally, inadequate social services such as health and education further complicate the situation. As one respondent mentioned, *“Attracting a stable workforce is one challenge without access to improving employee welfare”* (Respondent 01). These labor issues, coupled with low dividends and poor worker welfare, present significant challenges to the tea industry's long-term viability.

### **Technological and Innovation Gaps**

Technological and innovation gaps are significant barriers to sustainability in Sri Lanka's tea sector. One of the main challenges is the continued use of outdated equipment and traditional farming methods, leading to lower yields and higher operating costs, which hinder competitiveness in the global market. Managers have noted that the high cost of importing modern machinery, compounded by taxes, prevents the adoption of newer technologies. As one manager stated, *“We are still using machines that were introduced decades ago. Even when we try to bring in a new machine, the taxes make it prohibitively expensive. This situation has forced many factories to continue with inefficient production methods”* (Respondent 07).

In addition to outdated equipment, a lack of technical training for workers further exacerbates the issue, making it difficult to implement modern methods effectively. As one respondent mentioned, *“Even when modern methods are introduced, workers don't have the necessary training, which makes it difficult to use these tools optimally”* (Respondent 03). Furthermore, the lack of investment in research and development (R&D) is a major hindrance to innovation in the industry. As one manager emphasized, *“There is minimal focus on R&D, and without innovations, it's hard to address challenges like climate change and soil degradation. The industry is falling behind due to this gap in technological advancement”* (Respondent 02).

### **Policy and Regulatory Impact**

The policy and regulatory environment in Sri Lanka has been a significant obstacle to the tea industry's sustainability. Inconsistent government policies and sudden regulatory changes, such as the recent fertilizer ban, have disrupted production and hindered long-term planning. As one manager stated, *“The recent fertilizer bans disrupted production, and no consistent policy supports the industry”* (Respondent 09).

The industry faces challenges related to taxes and export standards, with frequent changes in export policies and tax rates negatively impacting profitability. This instability not only harms economic sustainability but also deters long-term investments in modern technology and sustainable practices.

Additionally, the lack of support for small-scale tea plantation owners has emerged as a major sustainability issue. These smallholders struggle with limited access to technical knowledge, modern inputs, and capital. As one respondent noted, *“Smallholders lack support; the government needs to provide subsidies and training to help them adopt sustainable practices”* (Respondent 08). The lack of financial facilities and reduced government subsidies make it difficult for smallholders to address issues like replanting, water management, and fertilizer use, further threatening the industry's long-term viability.

Overall, the policy and regulatory framework in Sri Lanka has created uncertainty and limited support for smallholder estates, hindering the adoption of sustainable practices and obstructing the industry's sustainable development.

## **Social and Community Issues**

Social and community issues are a significant challenge to the sustainability of the Sri Lankan tea industry. Poor living conditions, inadequate social support, and limited access to basic services like health and education for plantation workers were highlighted as key issues. As one manager noted, *“The living conditions for many estate workers are substandard, with overcrowded housing and inadequate sanitation facilities”* (Respondent 07). This leads to low morale, high turnover, and labor shortages, further disrupting productivity. Another respondent mentioned, *“We face challenges retaining workers because many leave for better opportunities, citing poor living standards and a lack of healthcare”* (Respondent 04).

There is also a lack of awareness and training on sustainable agricultural practices among smallholders, hindering the adoption of long-term sustainability. As one manager explained, *“Most small-scale farmers are focused on immediate yield rather than long-term sustainability. Without proper training and awareness programs, it's difficult to change their mindset”* (Respondent 08).

These social challenges, such as low wages, poor housing, and limited social mobility, have been widely recognized as barriers to the industry's sustainability. Studies have shown that tea estate companies often struggle to provide comprehensive worker welfare programs, which

limits overall sectoral sustainability. Improving living standards, social services, and community development would motivate the workforce and encourage sustainable agricultural practices among smallholders, ultimately contributing to the industry's long-term sustainability.

## Discussion

The study aimed to identify and assess challenges to the sustainability of the Sri Lankan tea industry, revealing several critical issues threatening its long-term viability. Using thematic analysis, the research highlighted concerns related to labor, environmental sustainability, economic pressures, outdated technology, government policies, and social issues. Environmental sustainability is at risk due to climate change, soil degradation, and poor water management, aligning with findings from Rukmini and Kumar (2021) and Wijeratne (2019), who noted the impacts of climate variability on tea production. Soil erosion and nutrient depletion, exacerbated by deforestation and poor land management (Gunatilleke & Gunatilleke, 2000), threaten tea plantations, emphasizing the need for improved land management strategies.

Economic sustainability is challenged by rising production costs and fluctuating global tea prices. This confirms Fernando and De Silva's (2019) analysis, noting that increasing costs, such as fertilizers and labor, pressure tea estates' profitability. Over-reliance on bulk tea exports, without adding value, makes Sri Lanka vulnerable to global price fluctuations, affecting its competitiveness.

Labor issues, including shortages, poor working conditions, and an ageing workforce, were also prevalent. This aligns with Jayawardena (2023), who found that low wages and inadequate social services deter younger workers. The need for better living conditions and social services to retain workers is emphasized by Fernando and De Silva (2022) and Kamalakkannan et al. (2020).

Outdated technology and insufficient investment in research and development were identified as major barriers to sustainability. Managers cited the high costs of importing machinery and limited technical training, as noted by Samarasinghe and Fernando (2022), which hinder the industry's competitiveness. Lack of mechanization and inefficient farming methods lead to low yields and high production costs, preventing competition both locally and internationally (Kumar & Patel, 2020).

Government policies were seen as inconsistent, with sudden changes, such as the fertilizer ban, disrupting operations. This is consistent with Fernando and Weerasinghe (2022), who highlighted how policy

inconsistencies hamper sustainability efforts. Additionally, the lack of government support for smallholder tea farmers, who make up a significant portion of production, further exacerbates the challenges (Kumar & Singh, 2021).

Social issues, such as poor living conditions for workers and limited community development, were also identified as key sustainability threats. Weerakkody and Jayasinghe (2019) emphasized that inadequate housing, healthcare, and educational opportunities undermine social sustainability, highlighting the need for improvements to motivate and retain the workforce.

The study found that challenges related to environmental, economic, technological, policy, and social factors collectively threaten the sustainability of Sri Lanka's tea industry. Addressing these issues is crucial for ensuring the long-term viability of the sector.

## **CONCLUSION**

The research highlights that the Sri Lankan tea industry, a vital contributor to the national economy and a source of livelihood for millions, is facing significant sustainability challenges. These challenges, which span environmental, economic, social, labor, technological, and policy factors, are placing the industry's future at risk. Environmental concerns such as declining soil quality, poor water management, and the impacts of climate change, including fluctuating temperatures and irregular rainfall, are undermining tea production. Additionally, economic pressures, including high production costs, volatile international prices, and over-reliance on bulk tea exports, threaten the industry's competitiveness in the global market.

Labor-related issues, such as a shortage of skilled workers, poor working conditions, and an aging workforce, further exacerbate the challenges to sustainability. Young workers are leaving the industry in search of better opportunities, and labor shortages are affecting productivity and profitability. Technological deficiencies, including outdated machinery and limited research and development, prevent the industry from improving operational efficiency and competing globally. The high cost of mechanization and the lack of investment in technology further hinder progress.

Moreover, inconsistent government policies and poor implementation of regulations have created an unfavorable business environment for tea producers, particularly smallholders, who represent a significant portion of the industry. The recent ban on fertilizers and the absence of

targeted support programs have disrupted production systems, highlighting the need for more stable and supportive policies.

Given the interrelated nature of these challenges, the sustainability of the Sri Lankan tea industry requires a comprehensive and integrated approach involving multiple stakeholders. Immediate and coordinated interventions are essential to address these issues, safeguard the livelihoods of millions, and protect Sri Lanka's standing as a leading global tea exporter. Without these interventions, the industry's future remains uncertain, and the economic and social consequences could be profound.

## **RECOMMENDATIONS**

To address the sustainability challenges facing the Sri Lankan tea industry, the researcher recommends a multi-pronged approach. Key actions include:

**Environmental Sustainability:** Promote the use of organic fertilizers and reforestation efforts to reduce soil erosion and improve soil fertility. Additionally, adopting water management practices is essential to maintain environmental sustainability.

**Training and Awareness:** Small tea plantation owners should receive further training and awareness programs on sustainable practices to ensure broader adoption of environmentally friendly methods.

**Economic Sustainability:** Shift focus from bulk tea exports to the export of specialty or value-added teas to improve profitability and market competitiveness.

**Labor and Workforce:** Improve working conditions and provide competitive wages to attract and retain a skilled workforce, addressing labor shortages and ensuring long-term sustainability.

**Technological Innovation and Policy:** Establish a stable government policy to encourage the adoption of new technologies in the industry. The government should also invest in research and development and offer support to small farmers to promote sustainable practices.

By implementing these recommendations, the tea industry can work towards long-term sustainability, addressing the key challenges identified in the study.

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# EMPLOYEE EXPERIENCES WITH PATERNITY LEAVE IN A SRI LANKAN ORGANIZATION: A CASE STUDY OF CEYLON COLD STORES

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## ABSTRACT

From the beginning of life, the bond parents have with their children is vital for the child's physical and mental development. It has already been confirmed by many literatures that both parents are important with the child in early infancy. But in Sri Lanka, as an Asian developing country, many private sector organizations are still reluctant to give leave to fathers after childbirth. The purpose of this study is to identifying the challenges faced through the understanding and experience of Paternity leave to finding solutions to those challenges. This study is grounded on philosophical stance of interpretivism, inductive approach and qualitative research methodology. The study was conducted using a single case study strategy and data were directly collected from five participants through semi-structured interviews. This research helps to fill gaps in academic literature and provided a basis for further studies on the effectiveness of paternity leave policies. Practically, this study helped in examining paternity leave benefits, informing policymakers and businesses about the need for inclusive workplace practices. Finally, according to the study paternity leave improved family relations and helped men in Sri Lanka handle household responsibilities. Navigating the leave procedure and balancing job and family after returning were difficulties yet. In general, paternity leave promotes family well-being and helps both fathers and organizations.

**Keywords:** Paternity leave, gender equality, organizational culture, Sri Lanka, work-life balance

## INTRODUCTION

The concept of paternity leave has gained global attention due to its potential to promote family well-being and gender equality. Developed nations like Sweden and Norway have implemented robust paternity leave policies, leading to improved child development outcomes and

workplace satisfaction. However, such practices remain underexplored in developing countries like Sri Lanka, where traditional gender roles and workplace norms often create barriers to implementation.

This study examines the experiences of employees at Ceylon Cold Stores, focusing on the effectiveness of paternity leave policies. By analyzing employee perspectives, this research contributes to understanding the dynamics of paternity leave in a developing nation and its implications for work-life balance. The study is particularly relevant given the growing emphasis on workplace policies that support employee well-being and the need to align these policies with cultural and organizational contexts.

Babies require positive and meaningful interaction with both their parents get them facilitate a healthy environment for growth and development in the later stages of their lives (Pradeep & George, 2019). It is hence of utmost importance for infants to have both their father and mother with them in the early stages of their physical and mental development (Pradeep & George, 2019). It is evident that parent's bond with their children from the beginning of their life and considering this mental aspect, the baby needs to have both parents in the early stage of their physical and mental development. It is also equally important for both parents to spend time with their newborn without their work being a barrier (Singh, 2023).

When focusing on the Sri Lankan context, employees can be divided into three main sectors: Government/Public sector employees, Semi-Government employees, and Private sector employees. Considering public sector employees, the Public Administrative Circular 03/2006 states that a permanent, temporary, informal, or trainee Public Officer is entitled to a period of three consecutive days of leave on the occasion of the delivery of a child to his spouse (Saram, 2018). For Semi-Government employees, paternity leave policies may vary depending on the organization and its internal policies, as there is no standardized regulation. However, 'there is no well-defined provision within the labour or employment-related legal guidelines enforcing paternity leave for the private sector' (Samaranayaka, 2021). Even the labour law of Sri Lanka mentions only maternity benefits for private sector employees, with no law regarding paternity leave being introduced in Sri Lanka so far.

Keeping this in mind, the government of Sri Lanka implemented different legislative provisions for the benefit of mothers. Although women give birth, the father is also responsible for it. Therefore, the father also has a

crucial role during all the stages of the pregnancy. As both the mother and the child expect emotional and physical support from the father during pregnancy, the father cannot be denied during that period (Singh, 2023). The Maternity Benefit Act of 1939 was modified by the Maternity Benefit (Amendment) Act, No. 15 of 2018 and the Shop & Office Employees (Regulation of Employment & Remuneration) (Amendment) Act, No. 14 of 2018 in 2018 (Government of Sri Lanka, 2018). These new amendments to the law make all women entitled to 84 days of maternity leave irrespective of the number of children they have (Sri Lanka Leave Laws & Holidays, 2022). But till today, there is no law regarding fathers in private sector employment as discussed. A clear practical gap can be seen here. Because most of the literature states that a newborn wants his mother and father to be the same. But practically, only the mother can take leave from their workplace in most of the companies in Sri Lanka.

When studying JKH, it is clear that it has nearly 70 different SBUs in 7 different industries. However, the laws regarding paternity leave for each of these SBUs are different. Accordingly, it is clear to us that as a company, they have stated that they will provide 100 days of paternity leave, but clear and specific guidelines have not been given to their SBU. Accordingly, even though it is stated that the chairperson of JKH will be given 100 days' leave, it is not implemented in practice. Therefore, we can identify a huge gap here.

Research on paternity leave has primarily focused on Western contexts, with limited studies in South Asia. Developed countries like Sweden and Norway have shown that paternity leave promotes gender equality and strengthens family bonds, while studies in countries like India and China highlight cultural barriers to its acceptance (Sharm, 2018; Zhang et al., 2021). In Sri Lanka, research has largely focused on maternity leave, leaving paternity leave underexplored.

Studying paternity leave in Sri Lanka is essential to address this gap, improve work-life balance for fathers, promote active fatherhood and guide companies in creating family-friendly policies. Within JKH, variations in paternity leave policies across SBUs particularly in male-dominated sectors, further underscore the need for research. Based on this information researchers addressed the following research problem.

### **How do employees at Ceylon Cold Store PLC under JKH PLC experience paternity leave?**

As per the research question, the researcher formulated the following research objective for the present study;

To explore the experiences of employees who have already taken paternity leave at Ceylon Cold Store PLC under JKH PLC.

## **LITERATURE REVIEW**

Research on paternity leave and its effect on gender roles in parenting uses many different theories to explain its impact. Relative Resources Theory and Time Availability Theory suggest that household work is shared based on who earns more or who has more time. Gender Ideology Theory focuses on how societal attitudes decide who should do paid and unpaid work. Identity Theory explains how a father's commitment to his role can influence his decision to take leave and stay involved with his child. Becker's Theory of Household Specialization shows that when fathers take leave, household duties are shared more equally, allowing mothers to work more.

Beck's Theory of Advanced Modernity looks at the challenges of balancing traditional family roles with modern demands for independence and flexibility. Policy Feedback Theory shows that public policies, like paternity leave, can change societal norms, encouraging shared parenting. Role Theory, Job Demands-Resources Theory and Open Systems Theory explain how work and family roles can create stress but also how supportive systems can help. Care Theories focus on the importance of caregiving and suggest policies like flexible work schedules to promote fairness. Economic Household Theory and Social Structure Theory explore how paternity leave improves family dynamics and mothers' well-being. Overall, these theories show how paternity leave can help create equality in parenting, improve family relationships and reduce conflicts between work and family life.

Fathers' decisions to take parental leave increase their involvement in childcare, fostering stronger father-child bonds and supporting gender equality. Longer leaves, encouraged by supportive workplace policies are linked to higher engagement, but workplace norms and financial barriers often limit fathers' participation (Rehel, 2014; Huerta et al., 2014; Kaufman, 2017).

Successful policies, like those in Nordic countries, combine fathers' quotas with generous benefits, though similar outcomes are not always achieved elsewhere (Karu & Tremblay, 2017). In Sweden and Quebec, paternity leave has improved gender equity but still faces workplace challenges (Hass & Hwang, 2018; Harvey & Tremblay, 2018).

Studies show reserved leave increases fathers' solo parenting time and shared childcare improves maternal health, though barriers persist (Wray, 2020; Bratberg & Naz, 2024). Overall, promoting paternity leave can benefit families and advance gender equality.

Research on paternity leave has used quantitative (50%), qualitative (35%), and mixed-methods (15%) approaches. Quantitative studies utilized statistical methods like surveys, regression analysis, and descriptive statistics to explore factors influencing paternity leave. Qualitative research employed interviews, case studies, and thematic analysis to understand personal experiences and contextual challenges. Mixed-methods studies combined both approaches to cross-verify findings and provide comprehensive insights.

Data collection varied across studies: interviews were common in qualitative studies, while quantitative studies primarily used secondary data and questionnaires. Mixed-methods studies often combine interviews with quantitative tools like surveys. For data analysis, quantitative studies commonly used regression models, descriptive statistics, and grounded theory. Qualitative studies relied on thematic analysis and coding. Less frequently used methods included the DD model, template analysis, and narrative analysis, highlighting the diverse methodological approaches applied in understanding paternity leave dynamics.

Research in developed countries highlights various dimensions of paternity leave. In the U.S., studies (Rehel, 2014; Pragg & Knoester, 2015) explore its impact on gender dynamics and socio-economic factors. Cross-country studies (Huerta et al., 2014) show positive correlations between leave and father involvement, while European and Canadian research (Haas & Hwang, 2018; Wray, 2020) emphasizes workplace culture and parental responsibilities. Developed nations, like Sweden and Norway, lead in offering paternity benefits, encouraging extensive research in these regions. In contrast, Asian countries lack significant studies despite offering some paternity leave benefits. Nations like India, China and Sri Lanka show a critical research gap, underscoring the need for detailed analysis in this context.

## **METHODOLOGY**

The study employed a qualitative research design, guided by an interpretivist paradigm. Semi-structured interviews were conducted with five male employees who had utilized paternity leave between 2022 and 2024. A purposive sampling method ensured that participants had

relevant experiences to share. Data were analyzed using thematic analysis to identify key patterns and themes. The qualitative approach allowed for in-depth exploration of personal and contextual experiences, providing rich insights into the nuances of paternity leave implementation and its impact on employees.

Thematic analysis was chosen due to its flexibility in identifying, analyzing, and reporting themes within qualitative data. Each interview was transcribed, and coding was performed to categorize data into major themes. To enhance the credibility of findings, member checking was employed, allowing participants to review and confirm the accuracy of the interpreted data. This methodological rigour ensures the reliability and validity of the study's outcomes.

## FINDINGS AND DISCUSSION

Table 01 shows the list of open codes and themes related to the research question, "What are the experiences of employees who have taken paternity leave at Ceylon Cold Stores PLC?". A total of sixty-seven open codes are identified and grouped into five different themes. This structure helps to depict the key points about the experiences of employees during their paternity leave.

**Table 01: Open Codes and Themes**

Open Codes	Themes
Obtained application from HR Department/HR officer	Experience of Obtaining Leave
Required to submit Marriage Certificate and Pregnancy Report	
Submitted ID copies	
Submitted newborn Birth Certificate	
Simple to apply	
Learned about it from wife's father/father-in-law	
HR manager held a meeting and explained	
Lack of knowledge/awareness about the process	
Peer influence/friend encouraged applying	
Informed both managers	
Lack of knowledge of leave availability	
Legal right/paternity leave as a legal right	
Application process improvements	

**Table 1: Continued.**

Open Codes	Themes
The positive reception from coworkers	Experience of Organizational Culture Impact
Supportive work environment	
Support from colleagues	
Team encouragement to take leave	
HR officer gave explanations	
Peer support/peer influence	
Lack of understanding of company culture	
Positive company culture	
Support from managers and staff	Experience of Post-Leave Period
Warm welcome back	
Difficult transition back to work	
Stress after leave	
Hesitation for future leave	
Pressure to return early	
Treated the same as before	
Limited time with children post-paternity leave	
Workload and low leaves	Experience of Family Bonding
Adjusting to work changes post-leave	
Difficulty focusing on work during this period	
Increased time with older children	
Strengthened family bond	
Husband highly valued by wife	
Collaboration with extended family	
Bonding with newborn	
Strong bonding with the older child	Domestic Responsibilities
Emotional support for the mother	
Gained experience managing household tasks	
Took mother's responsibility as well	
Balanced childcare and home-care activities	
Supporting wife during pregnancy	
New experiences and responsibilities	Domestic Responsibilities
Appreciation of wife's role	
Free time for father	



**Table 1: *Continued.***

Open Codes	Themes
Completely stopped work during leave	Experience of Balancing Organizational Responsibilities
Limited work impact	
Minimum impact on work due to remote	
New administrative experience	
Learned to manage wife's stress	
Learned how to manage personal stress	
Supportive environment	

Source: Primary Data, 2024

The research explored the experiences of fathers at Ceylon Cold Stores PLC who took paternity leave. The main findings show that employees had both positive and challenging experiences. Most fathers learned about the paternity leave policy through HR or colleagues, and the application process was straightforward but could be improved. Fathers felt that the company's supportive culture made it easier for them to take leave and manage work-life balance. Participants learned about paternity leave through varied sources, including HR announcements and peer discussions. While the application process was generally straightforward, inconsistencies in communication led to confusion for some employees. The findings suggest the need for centralized and consistent communication strategies to ensure employees are well-informed about their benefits.

A supportive workplace culture played a significant role in enabling employees to take leave. Positive team dynamics and managerial support were noted as crucial factors in facilitating smooth transitions. However, gaps in policy communication were highlighted as a barrier. Participants reported varying levels of support across departments, indicating the need for standardization in policy application. Paternity leave allowed employees to engage more actively in childcare and household responsibilities. Participants reported strengthened family relationships and a deeper appreciation for their partners' roles. This involvement not only enhanced family dynamics but also contributed to the personal growth of the employees, as they navigated new responsibilities and challenges during the leave period.

Returning to work after leave posed challenges, including workload adjustments and the need to adapt to workplace changes. Structured reintegration programs were identified as a critical requirement to

support employees. Participants expressed the need for more proactive measures, such as phased return-to-work plans and better communication regarding workplace changes during their absence. While paternity leave supported family engagement, limited flexibility post-leave highlighted the need for better work-life balance initiatives. Flexible work arrangements, such as remote work options or compressed schedules, were identified as potential solutions to help employees maintain their productivity while meeting family commitments.

Overall, the study found that paternity leave had a positive impact on family bonding, but maintaining a balance between work and home responsibilities after the leave could be difficult. Most fathers valued the company's supportive environment but felt there could be improvements in managing work stress and finding time for family after returning from leave.

The findings align with global studies emphasizing the importance of paternity leave in fostering gender equality and improving work-life balance. However, the Sri Lankan context presents unique challenges, such as traditional gender norms and limited policy awareness. These challenges highlight the importance of tailoring paternity leave policies to align with local cultural and organizational dynamics.

From a policy perspective, enhancing communication and providing structured reintegration programs can address many of the identified challenges. Flexible work arrangements, such as remote work options, could further support employees in balancing their professional and personal responsibilities. The role of organizational leadership in fostering an inclusive and supportive culture is critical for the successful implementation of such policies.

## **CONCLUSION**

This study underscores the significance of paternity leave in improving family dynamics and workplace satisfaction. While Ceylon Cold Stores has made strides in supporting employees, there is room for improvement in communication, policy consistency, and reintegration support. The research has practical implications, showing that organizations should continue to support employees during and after paternity leave to help them balance their responsibilities effectively. By enhancing communication, providing flexible work arrangements, and fostering a supportive company culture, organizations can help reduce stress and improve overall employee satisfaction.

To address the challenges associated with paternity leave policies, it is recommended to develop centralized communication strategies to ensure clarity and consistency across all levels of the organization. Clear communication will help employees understand their rights and entitlements, reducing confusion and increasing accessibility to paternity leave benefits. Additionally, implementing formal reintegration programs for employees returning from paternity leave can support their smooth transition back into the workplace. Such programs can include mentoring, reorientation sessions, and updated task allocations to ensure continuity and productivity. Furthermore, introducing flexible work arrangements, such as remote work options, adjusted work hours, or job-sharing, can help sustain a healthy work-life balance for employees. These initiatives not only enhance employee satisfaction and retention but also foster a family-friendly workplace culture, aligning organizational goals with employee well-being.

Future studies should explore the perspectives of a larger and more diverse sample, including HR personnel and mothers, to provide a holistic understanding of paternity leave's impact in Sri Lanka. Longitudinal studies could also examine the long-term effects of paternity leave on employee performance, retention, and family well-being.

This study contributes to the body of knowledge on paternity leave by analyzing it from a Sri Lankan context, where research on fathers' roles in balancing work and family is limited. The findings show that clear communication from HR departments and supportive organizational cultures are crucial for the success of paternity leave policies. The study reinforces the importance of shared responsibilities in families and their impact on job performance, highlighting how strong family support systems allow employees to return to work without feeling overburden. The study also highlights the long-term impacts of paternity leave on employee's ability to maintain their work-life balance, providing theoretical understanding of how, depending on specific work contexts, post-leave transitions might demand different coping mechanisms.

From a practical perspective, the findings suggest that organizations like Ceylon Cold Stores PLC can enhance their paternity leave policies by providing better support mechanisms. This includes offering detailed guidance on how to apply for leave, creating flexible post-leave work schedules, and ensuring employees are not burdened with excessive workloads when they return. Furthermore, the study highlights the need to encourage a supportive culture where colleagues can step in during

an employee's absence, reducing the stress of readjusting after the leave period. Employees also reported difficulty in spending quality time with their families after returning to work, signaling that organizations should consider offering flexible work arrangements that can help mitigate work-life conflict.

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# EXAMINATION OF OCCUPATIONAL-RELATED ACCIDENTS IN THE MANUFACTURING INDUSTRY: BASED ON EMPLOYEES' PERSPECTIVES OF XYZ STATIONARY MANUFACTURING COMPANY IN SRI LANKA

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## ABSTRACT

This study investigates the reasons behind the high rate of occupational accidents in the manufacturing industry, focusing on employee perspectives at XYZ Stationary Manufacturing Company in Sri Lanka. Using a qualitative research approach, in-depth interviews were conducted with a purposive sample of participation of ten employees. The analytical tool of the current study was thematic analysis, and the analysis reveals that production pressure, aging machinery, inadequate safety training, poor work floor settings, and inconsistent use of personal protective equipment (PPE) are significant causes of workplace accidents from the employees' perspective. Furthermore, factors such as fatigue and mental exhaustion from long working hours further exacerbate these risks. These perspectives highlight a critical balance between production demands and safety compliance. The significance of the study lies in its potential to enhance employee well-being, boost productivity, reduce indirect costs, and ultimately create safer work environments not only for XYZ Company but for the manufacturing industry as a whole in Sri Lanka. Additionally, the study may contribute to knowledge sharing and adopting safety culture interventions in other organizations.

**Keywords:** *Employee's perspective, Occupational accident*

## INTRODUCTION

Manufacturing employees are the backbone of the global economy, producing essential goods for daily life. However, this sector is also among the most dangerous, with workers facing many daily physical hazards (Mobile Medical Corporation, 2023). According to the International Labor Organization (ILO), around 2.2 million people die from occupational accidents and diseases each year. At the same time,

270 million experience serious non-fatal injuries, and another 160 million become unwell for short-term or long-term reasons related to their jobs. The total cost of such accidents is four percent of the world's GDP.

In Sri Lanka, despite reporting over 4,000 workplace accidents annually, compliance with occupational health and safety practices among manufacturing workers while minor incidents often go unreported by companies aiming to avoid legal repercussions or public scrutiny (Sachitra and Gunasekara; 2023). Also, the literature shows that the manufacturing industry environment mostly involves working with different kinds of machines and people. And, they have a high chance of facing occupational risks and hazards (Thatshayini and Rajini; 2018).

XYZ Company is a Stationary Manufacturing Company in Sri Lanka. It is a strong and vital sector that contributes significantly to the education system and the country's economy. At present, the company occupies a total workforce of 360 employees in the operation section who work six days per week divided into two shifts. Manufacturers in this vibrant industry provide a wide selection of exercise books, notebooks, and stationery products utilized by students of all levels across the country. Also, Stationary manufacturing has several operations such as Book Printing, Injection Molding, Pen assembly, Pastel, Glue, Tape, Lunch Box, Water Bottle, and Kid's Block and Building toy manufacturing. These operations involve chemicals, equipment, and machinery which are sometimes hazardous for humans.

Safety at the workplace is an important topic, and production is carried out by large machinery and equipment. Safety issues appear in the working environment when considering the XYZ Stationary Manufacturing Company. The current environment in XYZ Company is

also not at a satisfactory level to ensure employee safety, with incidents increasing to 73 in the year 2023/24.

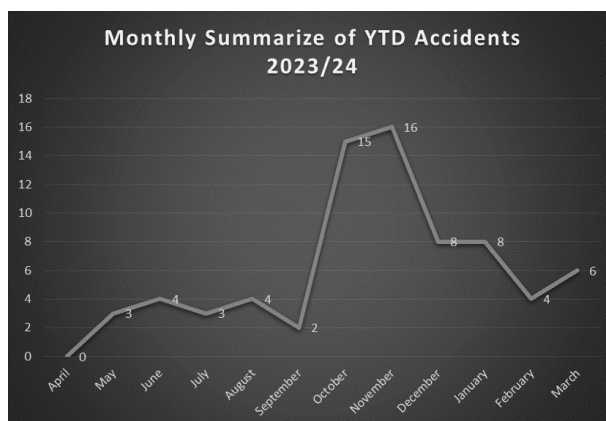


Figure 1: Monthly Summarize of YTD Accidents in XYZ Company

The prevailing safety culture frameworks, like the Bradley curve (1995), depict a progression where workers transition from passive receivers of risk management by their employer to active contributors who actively identify potential hazards and collaborate to mitigate risks (NEBOSH, 2013). Initially, employees are seen as passive recipients of safety measures imposed by their employers. However, as the culture matures, individuals become proactive participants, actively pinpointing potential hazards and working together to minimize risks. This progression highlights the shift from a reactive to a proactive approach to safety within organizations.

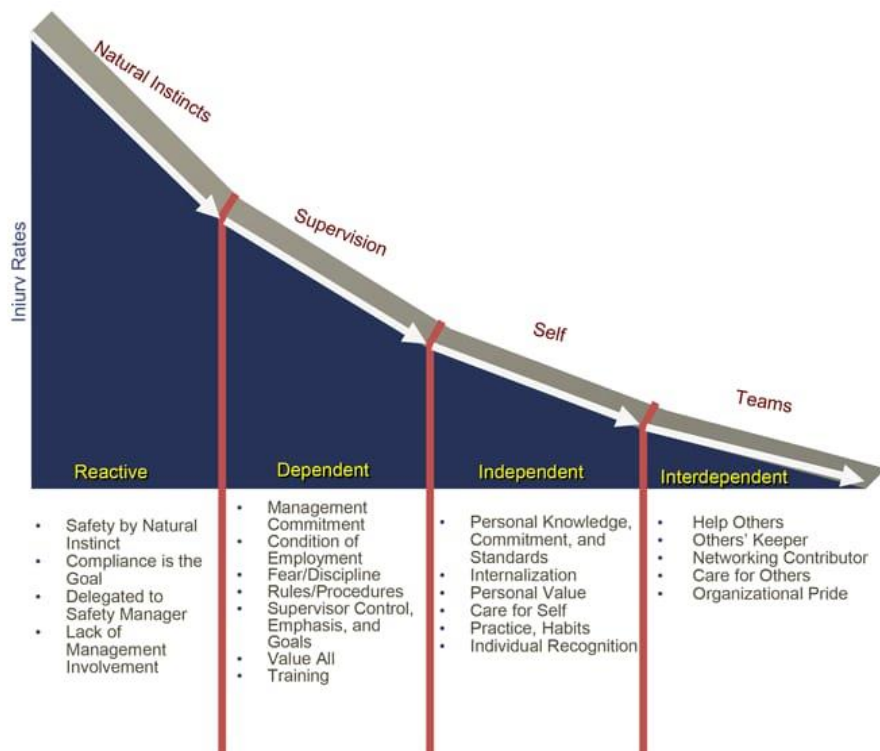


Figure 2: The Bradley Curve (NEBOSH, 2013).

According to the previous assessment report of XYZ Company's safety culture, they are presently operating at the dependent level. The safety management team has identified a gap between the dependent and independent levels. Also, XYZ company has reported the comparatively highest number of incidents per year in recent financial years. In the



financial year 21/22, there were 46 incidents, 22/23 - 49 incidents, and in 23/24, there were 73 incidents reported.

The expected safety level of XYZ Company is not zero, and they expect to keep the Total Recordable Incident (TRI) rate at the 7% level in the current financial year. TRIR (Total Recordable Incident Rate) stands for Total Recordable Incident Rate and is an important indicator in safety management. It calculates the amount of occupational injuries, and fatalities per 100 full-time workers during a given period. It is a valuable instrument for evaluating and enhancing organizational safety performance.

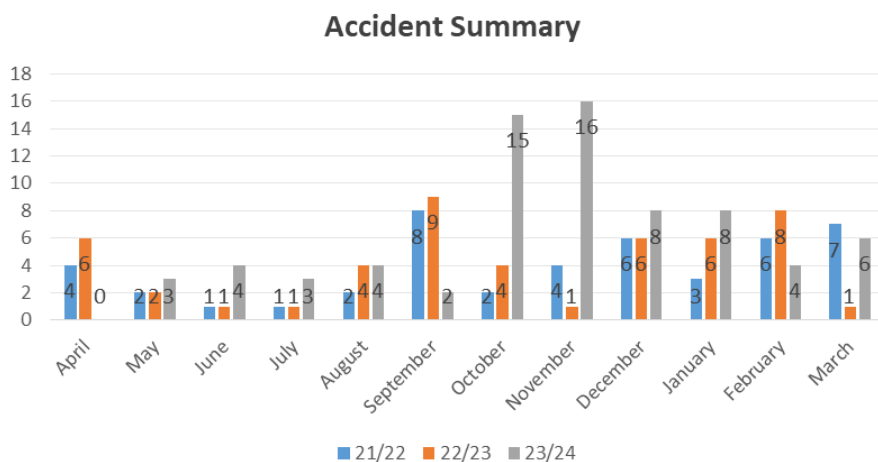


Figure 3: Occupational safety-related accident Summary in XYZ Company

Figure 1.3 highlights the monthly trends in occupational safety-related accidents over the past three years at XYZ Company, aiming to identify patterns and potential causes of the increased accident rates during specific months, such as November and October.

Therefore, we are investigating “Why does XYZ Company have a higher number of occupational safety-related accidents?”. The main objective of the current study is to explore the reasons for a higher number of occupational safety-related accidents in XYZ Company from an employee’s perspective.

## LITERATURE REVIEW

The overview of variables of occupational safety and safety-related accidents can be explained as follows;

## **Occupational Safety**

Palali & Ours (2017) Occupational safety is the protection of employees from injury or illness while in the workplace and it encompasses a wide range of practices and measures aimed at preventing accidents, hazards, and exposure to harmful substances. It encompasses a wide range of activities, including hazard identification, risk assessment, preventive measures, and emergency preparedness (ILO, 2013). The International Labor Organization (ILO) defines occupational safety as "the promotion of a safe and healthy working environment for all workers". It is necessary to integrate them with the organization's strategy, as safety is a part of the business strategy, as well as the continuous improvement circle that drives a company toward excellence (Mgmd & Hmrd, 2023). Have a relatively positive association between occupational safety well-being and job performance (Madushani and Nilwala, 2020). Workplace safety and wellbeing involves workers and managers working together to ensure continuous improvement in protecting and enhancing the health, safety, and welfare of all employees and the workplace's sustainability (World Health Organization (WHO), 2023).

## **Occupational Accident/Workplace Injuries**

According to Liu et al., (2015), workplace Injuries are mainly categorized as serious injuries (requiring hospital treatment), moderate (resulting in at least one day's work lost), and light injuries (needing immediate treatment but not affecting work, such as minor injuries). Workplace accidents are characterized as the negative consequences of poor safety management (Amarathunga et al., 2023). Enhanced safety practices address the concern of creating safe work environments for employees, aiming to prevent injuries and accidents from occurring (Taufek et al., 2016). A safe working environment not only reduces indirect costs like lost wages, insurance premiums, and legal fees but also decreases fatalities, injuries, and diseases and improvements in productivity and overall financial success (Sachitra and Gunasekara, 2023). Also, implementing leading safety indicators can positively influence injury rates within an organization by proactively addressing safety issues and improving overall safety performance (Derlyke et al., 2022).

## **Empirical Literature Review**

Based on various studies across different countries, the reasons for increasing accidents in the manufacturing sector vary significantly. In Malaysia, Taufek et al. (2016) emphasized the importance of training, supervision, and commitment to safety management in the

manufacturing industry. Similarly, Abukhashabah et al. (2020) identified human error, poor training, and inadequate safety measures as key contributors to accidents in Saudi Arabia's construction sector. In Italy, Cioni and Savioli (2016) highlighted poor working conditions as a significant determinant of workplace accidents.

In other contexts, Derlyke et al. (2022) highlighted a production-focused mentality, poor training, and lack of management commitment as key factors in the US dairy product manufacturing industry. Meanwhile, in Bangladesh, Alam et al. (2020) cited employer negligence and compliance issues as significant causes of accidents in the ready-made garments industry. Underreporting of accidents was flagged in the European Union by Palali & Ours (2017). Finally, in China, Liu et al. (2015) underscored the role of management commitment, supervision, and safety initiatives in preventing accidents.

Sri Lanka, with several studies in different industries, shows recurring themes. Sachitra & Gunasekara (2023) identified non-compliance with safety standards and regulations in the tire manufacturing sector, while Arachchige et al. (2019) pointed to employee negligence as a primary cause of accidents in MDF manufacturing. In the apparel industry, Amarathunga et al. (2024) emphasized training, supervision, and management practices. Mgmd & Hmrd (2023) further added that training, safety awareness, and inspections are crucial in maintaining employee engagement and safety.

## **Contextual Literature Review**

The contextual gap observed in the reviewed studies highlights a distinct focus on diverse industries across various countries, with minimal attention given to the stationery manufacturing sector in Sri Lanka. Multiple studies focus on different sectors, such as the Ceylon Petroleum Corporation (Mgmd & Hmrd, 2023), tire manufacturing (Sachitra & Gunasekara, 2023), and apparel (Madushani & Nilwala, 2020; Amarathunga et al., 2024), indicating a strong focus on domestic industries. Studies from other countries, like Malaysia (Taufek et al., 2016) and Saudi Arabia (Abukhashabah et al., 2020), emphasize the manufacturing and construction industries. Notably, Ethiopia (Abeje & Luo, 2023) and China (Liu et al., 2015) also study the manufacturing sector. Other countries, including Finland (Rantala et al., 2022) and the USA (Derlyke et al., 2022), explore niche areas like technical testing and dairy product manufacturing. Cross-industry studies, such as in the EU (Palali & Ours, 2017) suggested a broader view of occupational safety across multiple sectors.

## **METHODOLOGY**

To achieve the study's goal, we used an exploratory research approach and qualitative research methodology within the interpretative research paradigm. Eight workers of the XYZ Company participated in semi-structured, in-depth interviews with us (see Table 1 for participant backgrounds). We used a purposive or judgmental sample strategy to choose the research participants who had prior experience with workplace accidents. To get the best and most comprehensive information to meet the study's goals, we narrowed the participants based on their willingness to share their experiences. We used an interview guide throughout the process, and all the interviews were done in person. The questionnaires' first section asked more generic questions about the demographics of the respondents. In the interview's second section, we brought up more details. In the second part of the interview, we raised more specific questions regarding the experience of occupational accidents.

The duration of the interviews was between forty-five and one hour. With the interviewees' permission, all of the interviews were videotaped and subsequently verbatim transcribed. During the fifth interview, we achieved theoretical saturation. To make sure no new category appeared, we performed a few further interviews. Following thematic analysis (Braun and Clarke, 2013), we first became acquainted with the data before performing the preliminary analysis using an inductive, sentence-by-sentence coding procedure. Throughout this process, we paid close attention to the various stages of the study, the body of existing literature, and the context in which the respondents presented their experiences (to make sure we grasped the intended meaning in coding). Following the preliminary coding and analysis, we developed broader categories that were then refined into broader themes.

## **FINDINGS & DISCUSSION**

The first phase of the data analysis displays the demographic information of the respondents.

### **Demographic Information Analysis**

Demographic information is presented in Table 1 as follows:

**Table 1: Demographic Information**

Participant's Reference	Gender	Age (Years)	Department	Experience (Years)	Current Position
P1	Female	49	Production Department	16	Machine Operator
P2	Male	39	Production Department	16	Machine Operator
P3	Male	39	Production Department	16	Machine Operator
P4	Male	35	Production Department	13	Machine Operator
P5	Male	37	Production Department	18	Machine Operator
P6	Male	30	Production Department	8	Assistant Manager
P7	Male	37	Production Department	12	Senior Manager
P8	Male	38	Production Department	18	Senior Production Officer

**Reasons for a higher number of occupational safety-related accidents in XYZ Company from an employee's perspective**

The following data analysis was related to the main research objective: To explore the reasons for a higher number of occupational safety-related accidents in XYZ Company from an employee perspective.

We mainly identified two broad themes A) Target over Protection and B) Convenience over Compliance. In the analysis of accidents at XYZ Company based on the employees' perspective, the four subcategories mentioned above are collected together in one recurring theme: "Target over Protection." The theme "target over protection" had four sub-themes (1) production pressures, (2) aging machinery, (3) poor work floor conditions, and (4) a lack of proper safety training emerged as key factors contributing to the accidents. It was identified that employees prioritize meeting production targets over adhering to safety protocols.

This pressure, often driven by management, leads to unsafe practices and increased risk of accidents.

We will explain what these entail in what follows.

### **Production Pressure vs. Safety**

Analyzing the data from the participants' responses, a clear pattern emerges linking **production pressures** to increased workplace accidents at XYZ Company. The recurring theme is that employees often prioritize meeting production targets over adhering to safety protocols.

**Participant 1's experience** underscores the direct impact of speeding up machinery to meet end-of-month targets, resulting in severe injury.

*“On one of the last days of the month, the production was sudden, and the machine was sped up, and my hand went into the machine at once, crushing all four fingers.”*

**Participant 3** highlighted how management pressure to meet deadlines forces workers to focus on speed rather than safety,

*“One of the main reasons accidents happen is when employees are pushed to produce more, especially when upper management puts pressure to meet production targets.”*

**Participant 4:** Workers also sometimes try to fix machines while they're still running to avoid delays, which increases the chance of mistakes.

*“When production stops because of damage or something getting stuck in a machine, it can take about ten to twelve minutes to get it back up and running. Because of this, many workers try to fix these issues while production is still running... That's why workers sometimes try to touch the machines without turning them off”*

### **Lack of Safety Oversight and Training**

Participants also highlighted the Lack of Safety Oversight and Education as a significant contributor to the rising number of accidents at XYZ Company. Many felt that insufficient safety education and inadequate onboarding for new employees created unsafe conditions.

**Insufficient frequency and quality of training** emerged as a significant concern among participants. Many employees expressed that the existing training programs are not only infrequent but also lack the depth needed to adequately prepare them for the challenges they face in their roles. **Participant 1:**

*"The training that our employees receive about safety is not enough. We usually have two training sessions a year, but each session lasts only an hour or two."*

At XYZ Company, insufficient onboarding for new workers emerged as a significant concern impacting occupational safety. They express concern that new workers are not provided with adequate training upon recruitment,

*"When I came, there was no such thing. I don't know if there is such a process now. Most of the time new employees have more accidents than old employees"* **(Participant 3)**

Further **participant 5** one incident highlighted how a lack of safety knowledge led to a severe injury,

*"When a new employee is recruited, they do not know about safety accidents. A manpower employee reached his hand into a machine and broke all five fingers"*

Also, the researcher identified safety training seems to be held only twice a year, which many employees feel is inadequate. According to the **participant 2**,

*"We currently receive safety training only twice a year, and it would be beneficial to increase the frequency of this training and introduce more regular awareness programs for employees"*

Moreover, the existing literature supports participants' points of view. Abukhashabah et al. (2020) mentioned that poor occupational safety training is one of the main reasons for increasing workplace accidents. According to Amarathunga et al. (2024), a researcher identified the lack of adequate safety training as significantly contributing to an increase in occupational safety-related accidents.

### **Aging Machines & Mechanical Vulnerabilities**

According to the participant's insight, another main reason is aging machines & mechanical Vulnerabilities. It becomes prone to mechanical vulnerabilities such as Mechanical and Electrical Issues in machinery, inefficient machine guards, and more frequent breakdowns. These vulnerabilities increase the likelihood of safety incidents as older machines may lack modern safety features and are more difficult to maintain. Employees are experiencing,

*"Our company mostly uses old machines. As a result, these machines frequently break down. I've had an accident where my*

*hand went into the machine and all four fingers were crushed”  
(Participant 1)*

Further **Participants 2 and 7** explain, that inadequate or poorly installed safety guards on machinery are increasing the risks of accidents,

*“Sometimes, when machines are being repaired, the guards related to them are not properly installed. Because of this, the guards unknowingly break, increasing the likelihood of accidents during this time.” (Participant 2)*

*“Recently, a colleague had an accident where his hand got stuck in a machine guard. To free his hand, we had to remove the machine guard. If the guard isn’t properly installed after something like this, the chances of another accident happening are much higher”  
(Participant 7)*

### **Poor work floor setting**

In analyzing the data from XYZ Company, the researcher identified **environmental factors** as another significant contributor to the increase in occupational safety-related accidents. These factors include leading Electrical Issues, poorly marked roads and pallet handling issues, and unexpected machine movements that employees must navigate daily, leading to unsafe situations and accidents. The following insights from participants illustrate the influence of environmental factors.

*“If a machine is not working properly, accidents are more likely to occur during repairs. If a hand is inserted into the machine and the electricity suddenly goes off, it becomes impossible to pull the hand out” ” (Participant 6)*

*“The roads are not properly marked when the pallets are being moved here and there. Sometimes legs get tangled in the poles because of this. Additionally, pallets are not always properly stacked or stored, which further contributes to the lack of a proper safety system” (Participant 3)*

Liu et al. (2015) mentioned inappropriate building structure and construction as a reason for the increase in occupational safety-related accidents. Shafini et al. (n.d.) highlight that the work floor setting plays a critical role, demonstrating that the physical environment of the workplace is closely linked to and significantly impacts overall safety standards.



The second theme convenience over compliance had two sub-themes (1) **Failure to comply with safety protocols**, including inconsistent use of PPE; and 2) **Mental exhaustion** due to long working hours and personal stress. These subcategories collectively contribute to the increase in workplace accidents.

### **Failure to Comply with Safety Protocols**

Failure to comply with safety protocols, especially regarding the use of personal protective equipment (PPE), is a critical factor contributing to occupational safety-related accidents. In XYZ Company, adherence to safety guidelines such as wearing proper PPE is mandatory to protect employees from accidents.

**Participant 8** highlights a behavioral issue where workers may feel that PPE usage is only necessary for compliance in front of supervisors, not as an everyday safety measure.

*"Some employees might quickly put on these devices only when a senior manager or a safety officer arrives. Otherwise, they don't wear this equipment for their daily convenience"*

Participants 5 and 7 point out that even when PPE is provided, to employees it is not used properly or consistently.

*"There is a problem. There are many mistakes made by employees while wearing some personal protective equipment. Some employees do not wear earplugs properly. These issues can lead to consequences in the future later than now" (Participant 5)*

*"One day, one of our workers had a situation where a leaf got stuck in the machine. When he went to check it, a part of the machine unexpectedly fell, and it ended up breaking his thumb. The main reason for the increase in accidents is that some employees are not wearing safety shoes. " (Participant 7)*

Further **participant 2** revealed,

*"Prioritizing personal convenience over following established procedures for the use of personal protective equipment. Some accidents occur"*

Existing literature mentions that employees' non-compliance with established safety protocols can have serious negative consequences for the workforce and organizations (Ajmal et al., 2022). Additionally, research has identified that not wearing or improperly using

appropriate safety equipment significantly contributes to the rise in occupational safety-related accidents in the workplace (Alam et al., n.d).

### **Mental Exhaustion**

When it comes to Mental Exhaustion, in the context of XYZ Company, this could play a key role in increasing the number of workplace accidents. Employees facing family-related issues can experience distractions at work, reducing their ability to focus on tasks. This lack of concentration can increase the risk of workplace accidents, further **participant 1** revealed their real experience.

*“While I was working, my daughter was having a hard time, and my thoughts were mostly focused on her illness. During that time, my finger was caught in a machine and I had to get eight stitches”*

As well long-term working hours, especially beyond 8 hours, lead to physical and mental exhaustion. **Participants 4 and 7** experienced that,

*“The employee had worked a night shift (continuously for 24 hours), which meant he was likely fatigued. In such cases, the number of accidents is also high” (Participant 4)*

*“Sometimes when I work for ten to eight hours straight, it gets exhausting towards the end. Because of this exhaustion, something could happen even on my way home” (Participant 5)*

Further participants mentioned personal problems and mental distractions as well as becoming sleepy on the night shift.

*“Sometimes when I have problems at home, they occupy my mind while I’m working. It makes it difficult to focus and do my job effectively” (Participant 8)*

*“Yes, the number of accidents that occur during night shifts tends to be higher. If employees become sleepy, the chances of an accident are high” (Participant 5)*

Likewise, participants of employees mentioned various reasons for increasing occupational accidents in XYZ Company.

Moreover, the inconsistent use of personal protective equipment (PPE) reflects a failure to comply with safety protocols, often arising from the perception that PPE is inconvenient. This non-compliance significantly increases the likelihood of accidents, a concern highlighted in the literature that emphasizes the crucial role of proper safety equipment use in preventing workplace injuries (Alam et al., n.d). In response,

management emphasizes the need for behavioral change, recognizing the inconsistent use of PPE as a critical issue that must be addressed to improve workplace safety.

On the other hand, employees focus on internal, behavioral factors, viewing behavioral barriers to safety compliance, such as employees bypassing safety protocols or resisting the use of personal protective equipment, as the main issue. This perspective is supported by Ajmal et al. (2022), who emphasize that non-compliance with safety measures significantly raises accident risks. Employees also highlight the challenges of temporary contract workers, who often lack the safety training and long-term commitment of permanent staff, a concern echoed in studies by Liu et al. (2015), which show that inexperience and lack of adherence to safety practices by temporary staff increase accident risks.

## **CONCLUSION AND IMPLICATIONS**

To address the central research problem, "Why is there a high rate of occupational-related accidents in the manufacturing industry at XYZ Stationary Manufacturing Company?" the researchers have examined the employees' perspective on occupational-related accidents in XYZ Company. Production pressures, aging machinery, poor work floor conditions, and a lack of proper safety training were identified as key factors contributing to the accidents under the theme of target over protection. Employees often prioritize production over safety due to management demands, leading to increased risks. Moreover, the inconsistent use of personal protective equipment (PPE) and mental fatigue from long working hours were also identified as major concerns under the theme of convenience over compliance.

The study emphasizes valuable insights into occupational accidents within the manufacturing sector. It extends the understanding of how safety culture, employee behavior, and management practices contribute to workplace accidents.

The practical implications of this study provide actionable steps to improve workplace safety at XYZ Stationary Manufacturing Company. First, by enhancing safety training programs and increasing the frequency of safety oversight, both management and employees can better adhere to safety protocols, reducing accidents. The company should also prioritize upgrading outdated machinery to minimize mechanical failures contributing to accidents. Additionally, management needs to address behavioral compliance, especially in the use of personal

protective equipment (PPE). This study also suggests integrating temporary workers more effectively through proper training, as their lack of experience has been shown to increase risks. These changes can help foster a safer work environment, reduce costs, and improve productivity.

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# FACTORS AFFECTING ON THE INTENTION TO USE CRYPTOCURRENCY AMONG THE MILLENNIALS IN SRI LANKA

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## ABSTRACT

This study aimed to identify why there is a lack of intention to use cryptocurrency among the millennial generation in Sri Lanka. As per the existing literature, it was identified that four factors may affect the intention to use cryptocurrency. They were awareness, perceived usefulness, perceived ease of use, and perceived trust. Four specific research objectives were established to identify the impact of each factor on the intention to use cryptocurrency. The study adopted a quantitative and deductive research approach whereas the survey strategy was utilized to collect primary data. The sample consisted of 384 individuals born between the years 1980 and 2000 and currently residing in Sri Lanka. The questionnaire was developed based on five-point Likert scale. It received responses from 419 respondents and all responses were included for statistical data analysis. SPSS 26 version of the software was utilized for data analysis. Descriptive statistics showed that the majority of the respondents disagreed with the statements in the questionnaire. The author of the study conducted inferential statistical tests to test the research hypotheses. Pearson's correlation test proved that all four factors have strong positive correlation with intention to use. This relationship was further confirmed with the results of the multiple regression test. All corresponding sig. values showed statistical significance. Therefore, it was identified that awareness, perceived usefulness, perceived ease of use, and perceived trust have a significant impact on the intention to use crypto currency. Since descriptive statistics showed that the majority disagreed with the statements, it can be concluded that currently the millennial generation in Sri Lanka has a lack of intention to use crypto currency and it is affected by the poor status of awareness, perceived usefulness, perceived ease of use, and perceived trust.

**Keywords:** *Awareness, Crypto-currency, Intention to use, Perceived Ease of Use, Perceived Trust, Perceived Usefulness*

## INTRODUCTION

Money is important for everyone in the world. Mitchell and Mickel (1999) assert that individuals debate, ruminate, and dream about it. It uses a tremendous amount of mental and emotional resources. They added that money is an object and is an inanimate thing. The idea and concept of barter serve as its fundamental tenets. Money emerged as a convenience to speed up trade. At first, money was not physical, but gradually it became a physical object, especially, when coins were first introduced. Then notes of money were started to print.

Observing the development of money is interesting. According to Orrell and Chlupat (2016), money is one of humankind's first inventions and is solely based on social customs. Luo (1998) contends that the evolution of money is associated with key aspects such as the intrinsic values of the commodities; extrinsic beliefs on the other merchant's willingness to accept certain commodities, and the evolutionarily acquired practise of copying successful traders.

Now money has even evolved into an electronic form. Even social media has evolved to act as a medium which offers tokens as money. Then most recently money has turned into digital money. Humorously, Satoshi Nakamoto, who created the digital currency in 2009, claimed that individuals no longer need to work for money or steal it; instead, if they had his talents, they could even create money. Digital money is issued on a blockchain, typically of the permissionless variety, is created (or minted) by nonbanks, and is denominated in its own unit of account (Adrian & Mancini-Griffoli, 2021).

Blockchain-based, cryptographically secured crypto-currency is decentralized digital money, according to Vaidhyanathan and Jain (2023). Realizing how rapidly this cryptocurrency gained notoriety over the brief time it existed is remarkable. As of November 2022, more than 9000 crypto currencies had been created after the public release of the first anarchist cryptocurrency (Statista, 2023). Users of cryptocurrencies have grown globally; as of Triple (2023), there were more than 420 million users. Kakinuma (2021) and OutlookIndia (2022) noted that while cryptocurrency has grown in popularity in Asia, more than one-third of investors are young adults aged 25 to 34.

The context in Sri Lanka is drastically different. Although Satoshi Nakamoto created Bitcoin with freedom in mind, legality has frequently been a problem for it, according to the Central Bank of Sri Lanka (n.d.). Since there is no authority in the world that can claim it as its own and



thereby legitimise its existence and its rights as a currency, Bitcoin and other significant cryptocurrencies present this legality dilemma. Sri Lanka is one such nation which acted against Bitcoin and other cryptocurrencies. Central Bank of Sri Lanka (2023) announced that, in Sri Lanka, cryptocurrencies are not recognized as an asset class because they are unregulated investment products.

This caused many interested individuals in cryptocurrencies to give up their hope. Even the literature related to cryptocurrency revealed that there are many other reasons why people are reluctant to use cryptocurrency. This study focuses on such few factors to seek answers to the question ‘Why do people have a lack of intention to use cryptocurrency?’ However, the focus of the study will be on the generation ‘millennials’ as they are now playing the most crucial roles in the country’s economy. The study’s scope will be to study the millennials born between 1980 and 2000 (Mastrolia & Willits, 2013) and their intention to use cryptocurrency. The research will be conducted in a natural setting within the geographical boundaries of Sri Lanka.

### **Research Problem**

There are no known statistics on cryptocurrency users in Sri Lanka, either current or potential. As the value of the Sri Lankan Rupee drops, many Sri Lankans are investing in cryptocurrencies (Sathruwani & Nanayakkara, 2023). Crypto currency is expanding quickly, but new dangers are also appearing. Huang et al. (2023) claim that future developments may cause present or potential cryptocurrency users to change their usage patterns in addition to current problems with the currency. This study attempts to find the answers for the problem: ‘Why there is a lack of intention to use cryptocurrency among millennials of Sri Lanka?’

### **LITERATURE REVIEW**

This section describes the theoretical frameworks that can be applied to explain the research problem and concepts related to the study. The focus is placed highly on two specific theories. One is a model that describes the reasons behind new technology acceptance i.e., Technology Acceptance Model (TAM). Another one is one of the popular consumer behaviour models, i.e., the Theory of Reasoned Action (TRA).

#### **Technology Acceptance Model**

Davis (1989) initially introduced this Technology Acceptance Model (TAM) and it could be considered as a framework that accurately

predicts the level of new technology acceptance among adults. As per this model, "perceived usefulness" and "perceived ease of use" heavily influence individual attitudes towards accepting a new information system. The most critical feature of this model is that it focuses on the perceptions of potential technology users. In other words, this model explains that though the creator of a certain technology believes that it is user-friendly, there is a probability that the potential user perceives it as not user-friendly. This model's main objective is to examine the factors behind the acceptance or rejection of new technology.

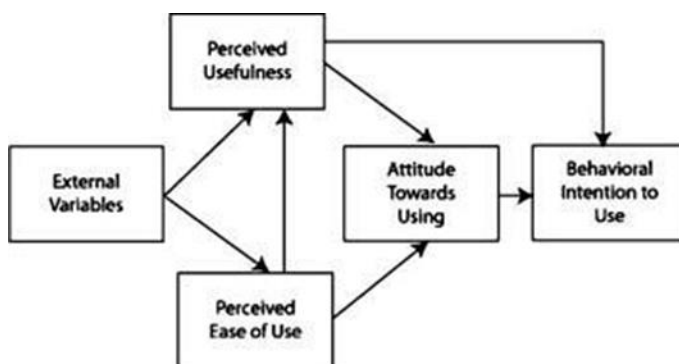


Figure 1: TAM Model

Source: (Davies, 1989)

Among scholars, there are some arguments about the validity of this framework. However, the TAM model is widely accepted as a suitable model to describe the intention of adults to accept new technologies. Many scholars have used the TAM model and extended versions of the TAM Model to discover the intention to use cryptocurrency. However, in the Sri Lankan context, this framework has been used limitedly to examine this scenario by scholars. Therefore, the present study could be linked with the framework as the study examines how the millennial generation of Sri Lanka shapes the intention towards using cryptocurrencies.

### The Theory of Reasoned Action

As per the Theory of Reasoned Action, a person is more likely to engage in certain behaviour if he or she sees that engagement brings favourable outcomes. Additionally, it must be accepted by other members of society who want the customer to exhibit the conduct.

In this theory, there are three significant concepts: beliefs, attitudes, and intentions. As per this theory attitudes and subjective norms directly contribute to an individual's behavioural intention. This theory is the basis for its extended version theory of planned behaviour. Here, the scholars who discovered this theory made attempts to distinguish individual attitudes and behaviour.

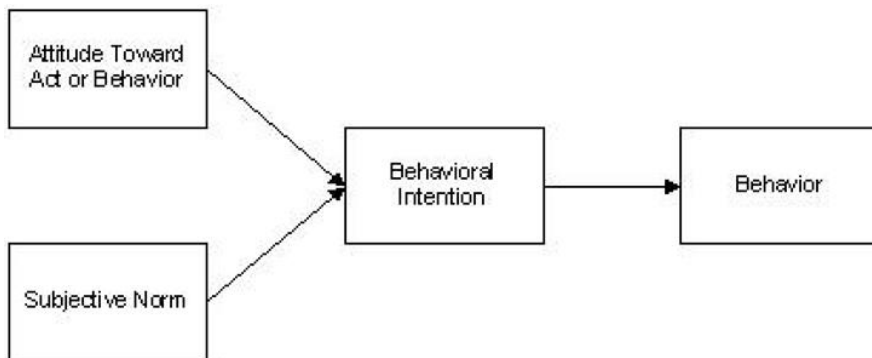


Figure 2: The Theory of Reasoned Action

Source: Fishbein & Ajzen, 1975, beliefs, Attitudes, intension and behaviour, Reading, M.A., Addison-Wesley

This theory discusses attitudes as positive and negative perceptions or evaluations which might lead to the corresponding behaviour of that individual. When it considers subjective norms, it is the collection of people who are important to a certain individual and their belief about the way that individual should behave. Another vital element of this theory is behavioural intention. This refers to someone's likability to perform a certain behaviour which was influenced by attitudes and subjective norms.

The adoption of cryptocurrency is studied in the current study using a variety of independent variables. This model could be used to explain these factors. As a result, it is possible to state that this theory is a relevant framework for the current research.

### Empirical Overview

This particular section deeply discovers the concepts and variables pertaining to the area of the present study while exploring the empirical evidence from recent research.

Over time, the currency has evolved progressively. The intrinsic value of early historical money, including metallic coins that date back to 2200

BC, was determined by the quantity and quality of the resources used to make them. Subsequently, the money was transformed into printed notes and coins, which are still in use today. The evolution of currencies ultimately made room for the newest type, known as electronic currency. As a result of technological advancements, such as the creation of numerous public and private telecommunications networks, alternative privately issued payment instruments, such as "virtual currencies" and "electronic money," are becoming increasingly common (Didenko & Buckley, 2018). Vlasov (2017) contends that an earlier iteration of non-cash payments that dates back thousands of years predates this modern invention of digital or electronic currency. The idea of electronic money, he continued, is a little unclear. People frequently comprehend the accounting system of rights to both public and private currency under electronic currency.

As a form of e-currency crypto currency was developed in the early 21st century. It was inevitable that the currency would evolve as a result of the digital and internet revolution. The first crypto currency to be successful, Bitcoin, was a development of the physical form of the cash. There are currently over 2100 cryptocurrencies in use, with a \$230 billion market valuation. Nonetheless, Aziz (2019) argued that though crypto has evolved as a new currency the infrastructure required for it has not been evolved according to the demand. Especially, the legalisation of cryptocurrencies has not kept up with their progress, as several nations have outlawed them while others are still having difficulty comprehending and enacting regulations.

Crypto-currency is mainly recognized by its premium currency type; Bitcoin. However, Bitcoin is not a synonym for crypto-currency. It is one popular brand of crypto-currency. According to Zohuri et al. (2022), cryptocurrencies and the technology that underpins them have the power to alter a wide range of businesses in addition to serving as a form of digital money. Cryptocurrency could be recognized as a type of digital currency launched with the help of blockchain technology. Tabatabaei et al. (2023) claim that the term "blockchain" generally refers to a paradigm for keeping data in a distributed system that is distinguished by several characteristics. If they couldn't be exchanged for conventional currencies, cryptocurrencies as a novel idea wouldn't have much worth at the beginning. Watorek et al. (2021) stated that the current crypto-currency industry is extremely fragmented and decentralised to make it more accessible to a wide range of users worldwide.

Intention to use is all about users' willingness to adopt cryptocurrencies. According to Guych et al. (2018), intention to use is mainly affected by factors such as ease of use, and usefulness of crypto currency. Cryptocurrencies have several advantages, such as their speediness, effectiveness, safety, and traceability. However, there are certain disadvantages such as inherent risk, technical faults, and financial difficulty in use. Therefore, a considerable portion of the existing users in the globe have minimised their usage and future intentions to use (Oliva et al., 2019).

Using cryptocurrency has grown in popularity all around the world for some reasons. Alqaryouti et al. (2019) emphasised that one factor contributing to the currency's widespread use is its low conversion costs, even when sent to the farthest reaches of the globe. Because of this, cryptocurrency is more trustworthy than fiat money, accessible to everybody, and unaffected by governments or other entities. Nonetheless, several academics have noted both advantages and disadvantages of cryptocurrencies in their writing. Oliva et al. (2019), cryptocurrencies have several benefits, like quick, disadvantages, easy, traceable, safe transactions, but they also have like inherent risk, the expense and difficulty of using them technologically, and the ambiguous social perception of owning them. Particularly, there are certain restrictions applicable for the use of crypto-currency in many parts of the world. In particular, it is clear that crypto-currencies are growing in popularity, yet they lack proper legal acceptability in many jurisdictions which could be a massive drawback of the currency (Limba et al., 2018).

It is important to understand the situation of cryptocurrency usage in Sri Lanka as a country. In the context of Sri Lanka, cryptocurrency usage is at its minimum level at the moment. Sachitra and Dayaratna (2023) identified that even the traditional banking system of Sri Lanka has not yet accepted crypto-currency or blockchain technology-based payment or financial systems. Currently, networks like the Society of Worldwide Interbank Financial Telecommunication, or SWIFT, connect banks in Sri Lanka and make it easier for data and information to move between them. However, no attention has been paid to establishing a formal system to accept crypto-currencies.

### **Relationship between Key Concepts**

This section examines the literature evidence that proves a potential relationship between the afore-mentioned key study concepts.

### ***The Relationship between Perceived Usefulness and Intention to use Cryptocurrency***

Perceived usefulness is a reliable indicator of a person's attitude toward using cryptocurrency (Albayati et al., 2020). Jankeepsard and Tewari (2018) were also managed to identify a strong connection between perceived usefulness and the behavioural intention to use cryptocurrency. According to a study by Shahzad et al. (2018) conducted in a Chinese setting, Bitcoin is a relatively new phenomenon and people are not well-informed about its primary purposes, yet this has an impact on people's intentions of using it. Though the government of China banned the cryptocurrency; Bit coin, Nadeem et al. (2021) emphasised that the perceived usefulness of Bitcoin still creates a heavy impact on the intention to use crypto currencies in China.

### ***The Relationship between Perceived Ease of Use and Intention to Use Cryptocurrency***

Accordig to a study by Guych et al. (2018), it was clearly identified that crypto-payment systems are widely accepted by the user depending on their simplicity. In simple terms, if a certain cryptosystem provides easy-to-use mechanisms, users have high intentions to adopt that. The perception of ease of use has a beneficial effect on users' willingness to adopt cryptocurrencies. Pitafi et al. (2020) discovered a beneficial relationship between attitude and ease of usage. Perceived ease of use cannot be ignored as it was identified as a significant factor that affects the intention to use crypto currencies such as Bit coin. Since this is an important factor, new technology developers must think of ways of improving the ease of use of that particular new technology. Further, research conducted by Shahzad et al. (2018) in the Chinese context identified that there is a strong positive relationship between the perceived ease of use of Bitcoin and users' intention to use it as a currency.

### ***The Relationship between Perceived Trust and Intention to use Cryptocurrency***

Shahzad et al. (2018) clearly emphasised that perceived trust in cryptocurrencies determines to what extent an individual has the intention to utilise that particular currency. According to Tello et al. (2018), cryptocurrencies mainly depend on the validity of a cryptographic test offered by the network, rather than depending on a central organisation

that aids in the development of the crypto currency's trustworthiness. This helps people to decide whether to use or give up the intention of cryptocurrencies. According to a study conducted by Mashatan et al. (2022), trust is initially determined by perceived security, anonymity, and traceability which will eventually affect the user's intention to use cryptocurrencies.

### ***The Relationship between Awareness and Intention to Use Cryptocurrency***

According to a study conducted by Alaeddin and Altounjy (2018), it was found that awareness of technology directly affects the user's attitudes and then it influences the intention to use the new currency. They further stated that previous generations were not aware of these new currencies whereas the present Z generation is completely aware of new cryptocurrencies and their usage. This depicts that selling crypto currencies to the previous generations who have no clear idea is highly difficult due to the simple fact that they have less education on the new technologies. Additionally, Shahzad et al. (2018) recognized that the level of knowledge and awareness of these new currencies is the main determinant of the intention to use these new crypto-currencies by the new users.

### **METHODOLOGY**

To achieve the study's goal, we used an explanatory research approach and quantitative research methodology within the ontological positivist stance. In this study, deductive reasoning is a technique utilized to assess hypothesis; as a result, the quantitative approach was the best option in terms of methodology. Researchers selected the quantitative method because the nature of the research objectives indicates that the outcomes of the research must be presented in measurable terms. The study adopted the 'Survey Research Strategy' because it analyses a large sample from a broader target population. As the researchers aimed to investigate the variables influencing millennials' intentions to utilize cryptocurrencies in Sri Lanka, we concentrated on the subject and looked into Sri Lanka's millennial population. So, the "millennial" generation in Sri Lanka those born between the early 1980s and the 2000s (Mastrolia & Willits, 2013) were considered as the study's target group. More than 8.3 million (38%) of Sri Lankans might be the target were chosen from the population. Data collected using a standard questionnaire were then validated using factor analysis and Cronbach's Alpha Test was used to test reliability. Multiple Regression analysis could

be considered a powerful statistical test that allows a researcher to inspect the impact of independent variables on the dependent variable.

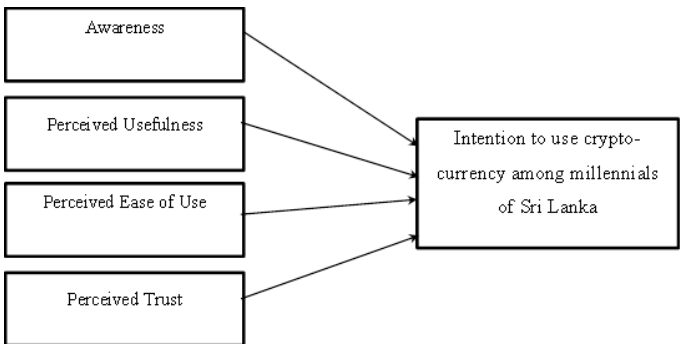


Figure 3: Conceptual Framework

Source: Developed by researcher based on literature

### FINDINGS & DISCUSSION

The first phase of the data analysis displays the demographic information of the respondents

#### Demographic Information Analysis

Demographic information is presented in Table 1 as follows:

**Table 1: Sample Profile - Gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	234	55.8	55.8	55.8
Female	185	44.2	44.2	100.0
Total	419	100.0	100.0	

Source: *Survey Data*, 2023

**Table 2: Sample Profile - Age**

	Frequency	Percent	Valid Percent	Cumulative Percent
23-25	183	43.7	43.7	43.7
26-30	140	33.4	33.4	77.1
31-35	66	15.8	15.8	92.8
36-40	29	6.9	6.9	99.8
41 and above	1	.2	.2	100.0
Total	419	100.0	100.0	

Source: *Survey Data*, 2023



**Table 2: Sample Profile – Area of Residence**

	Frequency	Percent	Valid Percent	Cumulative Percent
Urban	179	42.7	42.7	42.7
Rural	144	34.4	34.4	77.1
Suburban	96	22.9	22.9	100.0
Total	419	100.0	100.0	

Source: *Survey Data*, 2023

**Results of Multiple Regression Test**

Finally, the author used the results of multiple regression test to arrive at conclusions on research hypotheses.

**Regression Model:**

$$\begin{aligned} \text{Intention to Use} = & 0.131 + 0.151_{\text{Awareness}} + 0.268_{\text{Perceived Usefulness}} \\ & + 0.257_{\text{Perceived Ease of Use}} + 0.297_{\text{Perceived Trust}} \end{aligned}$$

**Table 4: Multiple Regression Test Results**

Coefficients						
Model	Unstandardize d Coefficients		Standar dized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.131	.052		2.523	.012
	Awareness	.151	.039	.159	3.887	.000
	Perceived Usefulness	.268	.044	.269	6.118	.000
	Perceived Ease of Use	.257	.048	.245	5.355	.000
	Perceived Trust	.297	.052	.289	5.693	.000

Source: *Survey Data*, 2023

As per the above Table the below findings were identified.

### Hypothesis 1

H1: 'Awareness' has an impact on the intention to use cryptocurrency among millennials of Sri Lanka.

H1 is accepted based on the statistical significance of the 0.151 impact of 'Awareness' on 'Intention to use crypto currency among millennials of Sri Lanka. ( $P < 0.05$ )

### Hypothesis 2

H2: 'Perceived Usefulness' has an impact on the intention to use crypto currency among millennials of Sri Lanka

H2 is accepted based on the statistical significance of the 0.268 impacts of 'Perceived Usefulness' on 'Intention to use cryptocurrency among millennials of Sri Lanka. ( $P < 0.05$ )

### Hypothesis 3

H3: 'Perceived Ease of Use' has an impact on the intention to use crypto currency among millennials of Sri Lanka

H3 is accepted based on the statistical significance of the 0.257 impacts of 'Perceived Ease of Use' on 'Intention to use ( $P < 0.05$ )

### Hypothesis 4

H4: 'Perceived Trust' has an impact on the intention to use crypto currency among millennials of Sri Lanka

H4 is accepted based on the statistical significance of the 0.297 impacts of 'Perceived Trust' on 'Intention to use Perceived Trust' ( $P < 0.05$ )

**Table 5: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.889 <sup>a</sup>	.790	.788	.36786

Source: *Survey Data*, 2023

As per Table 4 R-value of 0.889 shows a high correlation between independent and dependent variables whereas the 0.790 R Square value depicts 79% of the variance in 'Intention to Use Crypto Currency' among millennials of Sri Lanka is explained by four independent variables included in the model.

## Discussion

'Awareness' has an impact on the intention to use cryptocurrency among millennials of Sri Lanka. As per the regression analysis conducted, based on the statistical significance of the 0.268 impacts of 'Perceived Usefulness' on 'Intention to use cryptocurrency among millennials of Sri Lanka. ( $P < 0.05$ )

. This simply means that 'Perceived Usefulness' has an impact on the intention to use cryptocurrency among millennials of Sri Lanka. 'Perceived Usefulness' has an impact on the intention to use cryptocurrency among millennials of Sri Lanka. This is a key finding of the present study as the study aims to examine why there is a lack of intention to use cryptocurrency among millennials in Sri Lanka. Particularly, this relationship depicts that when there is a lack of intention to use cryptocurrency, it could be significantly affected by poor awareness factor. Specifically, descriptive statistics examined in chapter four indicated that the respondents of the survey provided a 'Disagree' response in average for all statements pertaining to 'awareness' variable. This shows that currently the millennial generation lacks awareness about cryptocurrency which leads to lack of intention. Therefore, this significant impact of awareness on intention to use provides a clear answer for one of the research questions.

This finding could be identified as like literature. As discussed in chapter two, Alaeddin and Altounjy (2018) discovered that technological understanding directly impacts a user's attitudes, which in turn affects the intention to use the new currency. They went on to say that although earlier generations were ignorant of these new currencies, the current Z generation is fully aware of them and how to use them. This demonstrates unequivocally that it is very difficult to sell cryptocurrencies to older generations who are ill-informed about them because of their lack of knowledge about this new technology. Furthermore, Shahzad et al. (2018) acknowledged that new users' intentions to use these new crypto currencies are primarily determined by their level of education and awareness about these currencies. Further, this finding will contribute to the literature in understanding

the millennial's intention to use cryptocurrency in the context of Sri Lanka.

Based on statistical significance of the 0.268 impacts of 'Perceived Usefulness' on 'Intention to use cryptocurrency among millennials of Sri Lanka. ( $P < 0.05$ ) 'Perceived Usefulness' has an impact on the intention to use cryptocurrency among millennials of Sri Lanka. This attests to the relationship's statistical significance. This is a significant finding of the current study, which tries to investigate the reasons behind Sri Lankan millennials' lack of intention to use cryptocurrency. Particularly, this relationship depicts that when there is a lack of intention to use cryptocurrency, it could be significantly affected by a weaker perceived usefulness factor. Specifically, descriptive statistics examined in chapter four indicated that the respondents of the survey provided a 'Disagree' response in average for all statements pertaining to the 'perceived usefulness' variable. This shows that currently, the millennial generation possesses weak perceived usefulness about cryptocurrency which leads to lack of intention. Therefore, this significant impact of perceived usefulness on intention to use provides a clear answer for one of the research questions.

This finding could be identified as similar to the literature. As discussed in chapter two, perceived usefulness is a good predictor of a person's attitude towards utilising cryptocurrencies (Albayati et al., 2020). Additionally, Jankeepsad and Tewari (2018) were able to show a substantial correlation between the behavioural intention to utilise cryptocurrency and perceived usefulness. A study conducted in the Chinese context by Shahzad et al. (2018) found that people's intentions to use Bitcoin are influenced by the fact that it is still a relatively new phenomenon and that most people are unaware of its main goals. Further, this finding will contribute to the literature in understanding the millennial's intention to use cryptocurrency in the context of Sri Lanka.

*'Perceived Ease of use' has an impact on the intention to use cryptocurrency among millennials of Sri Lanka*

Based on the statistical significance of the 0.257 impacts of 'Perceived Ease of Use' on 'Intention to use ( $P < 0.05$ ). This is a significant finding of the current study, which tries to investigate the reasons behind Sri Lankan millennials' lack of intention to use cryptocurrency. Particularly, this relationship depicts that when there is a lack of intention to use cryptocurrency, it could be significantly affected by weaker perceived ease of use. Specially, descriptive statistics examined in chapter four

indicated that the respondents of the survey provided 'Disagree' response on average for all statements pertaining to the 'perceived ease of use' variable. This shows that currently, the millennial generation possesses a weak perceived ease of use about cryptocurrency which leads to a lack of intention. Therefore, this significant impact of perceived ease of use on intention to use provides a clear answer to one of the research questions.

This finding could be identified as similar to the literature. As discussed in chapter two, Guych et al. (2018), identified that users generally accept crypto-payment systems due to their ease of use. Put simply, people are highly inclined to accept a cryptosystem if it offers straightforward methods. Users' desire to accept cryptocurrencies is positively impacted by their view of the crypto currencies' simplicity of use. Pitafi et al. (2020) found a positive correlation between attitude and usability. It is impossible to overlook perceived simplicity of use because research shows that it has a big impact on people's intentions to use cryptocurrencies like Bitcoin. Additionally, a study conducted in China by Shahzad et al. (2018) demonstrated a high positive correlation between users' intention to adopt Bitcoin and their perception of its ease of use. Further, this finding will contribute to the literature in understanding the millennial's intention to use cryptocurrency in the Sri Lankan context.

*'Perceived Trust' has an impact on the intention to use cryptocurrency among millennials of Sri Lanka*

Based on the statistical significance of the 0.297 impacts of 'Perceived Trust' on 'Intention to use Perceived Trust' ( $P < 0.05$ ). This attests to the relationship's statistical significance. This is a significant finding of the current study, which tries to investigate the reasons behind Sri Lankan millennials' lack of intention to use cryptocurrency. Particularly, this relationship depicts that when there is a lack of intention to use cryptocurrency, it could be significantly affected by the weaker perceived trust. Specially, descriptive statistics examined in chapter four indicated that the respondents of the survey provided a 'Disagree' response on average for all statements pertaining to the 'perceived trust' variable. This shows that currently, the millennial generation of Sri Lanka possesses weak perceived trust about cryptocurrency which leads to a lack of intention to use. Therefore, this significant impact of perceived trust on intention to use provides a clear answer to one of the research questions.

This finding could be identified as similar to the literature. As discussed in chapter two, Shahzad et al. (2018) made it abundantly evident that a person's intention to use a specific cryptocurrency is influenced by their level of perceived trust in them. Tello et al. (2018) claim that rather than relying on a central organisation to support the growth of the cryptocurrency's credibility, cryptocurrencies primarily rely on the validity of a cryptographic test provided by the network. The chapter also included the research conducted by Mashatan et al. (2022), which found that users' intentions to use cryptocurrencies are eventually influenced by their perceptions of security, anonymity, and traceability. Further, this finding will contribute to the literature in understanding the millennial's intention to use cryptocurrency in the context of Sri Lanka.

As per the above four key findings, it could be concluded that currently there is lack of intention to use cryptocurrency among the millennial generation of Sri Lanka, which is the consequence of negative aspects of awareness, perceived usefulness, perceived ease of use, and perceived trust.

## **IMPLICATIONS**

The results of the present study have two types of implications. One is its theoretical implication, and the other one is its practical implication.

### **Theoretical Implications of the Study**

Here, the theories discussed pertaining to the present study in chapter two are examined and implications of the outcome of the present study are discussed. In chapter two of the present study report, it was mentioned that the Technological Acceptance Model (TAM) founded by Davis (1989) could be linked to the study. Specially, TAM model highlights that there are factors which affect individuals to accept new technologies. Among those factors Davis (1989) identified that 'Perceived Usefulness' and 'Perceived Ease of Use' are primarily important in deciding behavioural intention of individuals. The present study also included these two factors in the study model. The results of the statistical data analysis exhibited that there is a significant impact of perceived usefulness and perceived ease on the intention of the millennials to use crypto currency. Therefore, it could be stated that the present study helped this TAM model to extend its validity towards accepting new currency. Generally, it was considered new technology. The new currency could also be considered as a part of new technology since crypto-currencies are based on blockchain technology. Therefore,

the obtained results of the present study have positive implications for the TAM model, and it could be validated as a framework that explains the acceptance of a new currency (digital).

### **Practical Implications of the Study**

The use of cryptocurrency has not yet been legally regularized in the context of Sri Lanka. Further, some parties are having discussions to legalize cryptocurrency as a payment method in the financial sector in Sri Lanka. Practically, the intention to use cryptocurrency was at a lower level and it was further confirmed by the present study results. However, the reasons behind this lack of intention were not yet discovered in a study. This study will help the policy makers, and financial sector decision-makers of Sri Lanka to identify the exact reasons why Sri Lankan millennial generation shows a lack of intention to use cryptocurrency. Particularly, millennials actively contribute to the country's economy and involved in vital decision-making processes in the economy. Therefore, this study helps the authorities to think further about restricting or releasing the regulations on cryptocurrencies and help the millennial generation of Sri Lanka to play a huge role in the economic growth of the nation. Further, the results of the study indicated that all four factors examined have a significant impact on the reasons why Sri Lankan millennials have a lack of intention to use cryptocurrency. Therefore, the financial sector and banking institutions which have some expectations to introduce cryptocurrency to the system might need to pay attention on these factors. Specifically, the trust factor showed the highest impact and therefore, first and foremost these institutions need to establish trust in crypto-currency before they introduce the currencies into the system. Awareness of cryptocurrency must be enhanced by conducting educational programmes for the public. Further, methods and processes of using cryptocurrency and its payment systems must be simplified before introducing them in the country. All these could be considered adding value to the practical significance of the present study.

### **FUTURE RESEARCH DIRECTIONS**

The present study revealed that awareness, perceived usefulness, perceived ease of use, and perceived trust have a significant impact on whether the millennial generation of Sri Lanka accepts cryptocurrencies. In the future, studies can be conducted to check whether other generations also have the same perceptions about the intention to use cryptocurrency. This will allow the researchers to make a comparison

between generations and provide much valuable insights into the existing literature. In addition, a qualitative study can be conducted to explore the reasons why millennials have a lack of intention to use cryptocurrency as opposed to the present study which found the impact of already identified four reasons.

The present study was unable to find the reasons behind the factors affecting the intention of using cryptocurrency. For instance, the present study identified that perceived trust in cryptocurrency is a major determinant of the intention to use crypto. However, what are the reasons for this poor perceived trust have not been explored adequately. There may be reasons such as payment problems, value fluctuations, etc. that could affect the poor level of perceived trust. Therefore, in the future, studies can conduct analytical studies which dig deep into the factors and find the reasons behind the present nature of these factors. In the future, researchers must pay attention to including open-ended questions in the questionnaire and obtain broader insights for the study.

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# HEDONIC AND UTILITARIAN FACTORS INFLUENCING CONSUMERS' CONTINUOUS INTENTION TO USE MULTICHANNEL RETAILERS' MOBILE APPLICATIONS: EVIDENCE FROM COLOMBO DISTRICT, SRI LANKA

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## ABSTRACT

The retail industry's rapid digitisation and the growing use of mobile apps as self-service tools have changed consumer expectations and purchasing behaviour. However, retail apps' post-adoption retention remains a significant challenge, with customers frequently uninstalling apps after completing specific tasks or purchases. Therefore, this research aims to fill the gap by examining the hedonic and utilitarian factors influencing consumers' continuous intention to use multichannel retailers' mobile applications in Colombo district, Sri Lanka. The study examines the significance of utilitarian factors; perceived usefulness, ease of use, personalisation and hedonic factors; perceived enjoyment and escapism, drawing upon the Expectation-Confirmation Model (ECM). The study used a cross-sectional survey design gathering 375 valid responses from over three months of retailer's mobile application users of two prominent Sri Lankan retailers, ABC and DEF, leading supermarket groups. The results show that consumers' intention to continue using a product are greatly influenced by both hedonic and utilitarian aspects. The most significant factor among these was perceived enjoyment. Positive impacts were also shown by perceived usefulness, ease of use, personalisation, and escapism, highlighting the dual influence of sensory and functional factors on consumer behaviour. This study offers practical insights and advances the theoretical knowledge of post-adoption behaviours in retail mobile applications. Retailers should improve app customisation, guarantee usability, and provide entertaining aspects such as gamification to stimulate pleasure and escapism. By enhancing consumer happiness and retention, these tactics can support the retail industry's long-term growth in Sri Lanka.

**Keywords:** *Continuous intention, Hedonic factors, Mobile applications, Multichannel retailers, Utilitarian factors*

## INTRODUCTION

The rapid penetration of digitalisation has drastically transformed the retail environment into a seamless multichannel service environment, and this seamless integration of multichannel settings has changed customer expectations (Alonso-Garcia et al., 2021). Among them, the emergence of mobile apps, a self-service technology, has changed the focus of mobile marketing from raising brand awareness to improving consumer engagement and communication (McLean et al., 2019). As a result, online grocery shopping has skyrocketed in popularity, and grocery shopping using mobile apps has become a customer expectation over a preference (Snapp, 2024). Researchers have identified that seventy-five per cent of consumers have tested new shopping behaviours, and the majority want to stick with their new digital shopping habits after the crisis (World Economic Forum, 2021). Despite the popularity of retail apps, studies have identified that customers frequently remove the app after they have finished making a purchase or accessing the information or promotion (Molinillo et al., 2021). Therefore, it is uncertain how apps affect retailers' and consumers' interactions (Molinillo et al., 2021). Also, there are some challenges in ensuring a mobile app gets detected on app stores; motivating the user to download the app and engaging with the app actively can be identified as significant issues while using retail apps (Axcell & Ellis., 2023).

According to Statista (2024), in Sri Lanka, traditional brick-and-mortar sellers adopt mobile apps to increase demand. Even though many businesses exist in Sri Lanka's retail sector, large corporations like Cargills, Keells, and Arpico control the whole retail market. However, there is a growing trend of continuous online shopping activities in Western countries even after the COVID-19 pandemic; however, it cannot be seen as such a trend in Sri Lanka. Out of curiosity, Survey Research Lanka (SRL) investigated the probability that consumers would continue to shop online after COVID-19, and the result is clear that not even 1/5th of those who adopted the trend would continue to do so. According to the SRL survey, only 9% of consumers had used online shopping before COVID-19, but with the lockdown, that number rose significantly to 47%. However, although 18% stated that they would continue to purchase online, after interviewing them, it can be identified that the same 9% who purchased online before COVID-19 will continue to purchase online after COVID-19 (Daily News, 2020; Dasanayaka et al., 2024).

Further, as a country, Sri Lanka's e-commerce sector is still immature, ranking poorly on a maturity scale. Hence, online retail penetration is

less than 1%, with the potential for disruption (Daily Mirror, 2023). Additionally, 47% of internet users have 1-10 mobile applications installed on their mobile phones, with 56% using only 1-5 apps frequently (APIDM & DMM, 2022). Most studies on retailer apps have concentrated on why customers download them, their intentions to use them, their frequency, and their intention to purchase. In contrast, few studies have examined customer post-adoption behaviours (Molinillo et al., 2021). Also, less research has been done to determine the connections between perceived value dimensions and post-adoption behaviours, like the desire to continue using mobile apps and the intention to suggest them (Dobre et al., 2023; Rathnasiri & De Silva, 2023).

This study aims to fill the gap by examining the hedonic and utilitarian factors influencing consumers' continuous intention to use multichannel retailers' mobile applications, specifically in the Colombo district, Sri Lanka. By examining these factors, the study adds to the body of knowledge on customer behaviour while offering retailers helpful advice on improving the effective usage of their mobile applications.

## **LITERATURE REVIEW**

### **Theoretical Background**

#### ***Expectation-Confirmation Model of Ongoing Information Technology Usage***

Numerous theoretical frameworks exist to continuously investigate consumers' intention to use technology-related platforms. According to the researchers, the Unified Theory of Acceptance and Use of Technology (UTAUT), Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), and Expectation-Confirmation Model of ongoing IT Usage (ECM-IT) are some prominent examples. Among these, the Expectation-Confirmation Model of Continuing IT Use (ECM-IT) has been predominantly employed by researchers in their studies. This study followed the ECM-IT, initially developed by Bhattacharjee (2001), as a framework to understand consumers' continuous usage of technology platforms, particularly mobile applications in retail outlets (Bhattacharjee, 2001; Al-Nabhani et al., 2022). The ECM-IT incorporated Oliver's (1980) Expectation Confirmation Theory and Davis et al. (1989) Technology Acceptance Model, positing that user satisfaction, shaped by perceived usefulness and confirmation of expectations, significantly influences ongoing technology use (Al-Nabhani et al., 2022). Therefore, the current study employs the ECM-IT to examine hedonic and utilitarian

factors influencing consumers' continuous intention to use multichannel retailers' mobile applications in Colombo district, Sri Lanka.

## **Empirical Background**

### ***Customers' Continuous Usage of Mobile Retail Application***

Branded mobile applications have changed consumer behaviour by aiding buying, information retrieval, social connection, and hedonistic and utilitarian activities. Furthermore, McLean et al. (2022) stated that global downloads would reach 258.2 billion by 2022. Incorporating interactive technology and digital platforms has improved retail profitability and customer engagement (De Canio et al., 2021). In contrast, mobile applications have transformed client interactions by giving individualised experiences (Fang et al., 2017). Despite strong initial acceptance rates, mobile application retention remains difficult, with research showing that 50% of downloaded apps are later deleted (McLean, 2018). According to the Expectation Confirmation Model (ECM), contentment, driven by expectation confirmation, is critical for long-term usage intentions. While perceived usefulness, ease of use, and enjoyment have been shown to influence ongoing usage (Huang & Ren, 2020), the Technology Acceptance Model (TAM) has been criticised for having limited explanatory power for continuous use, with conflicting empirical findings questioning the importance of perceived usefulness and ease of use in predicting technology adoption (Bölen et al., 2021; Zhang et al., 2018). As a result, more studies are needed to understand the individual drivers of long-term application usage outside of the typical TAM framework.

### ***Utilitarian Factors***

Information systems research emphasises the importance of hedonic and utilitarian benefits in shaping customer preferences (Valacich et al., 2007; Van der Heijden, 2003). According to Xu et al. (2012) and Overby and Lee (2006), utilitarian factors refer to a system's practical advantages, such as perceived usefulness, ease of use, and personalisation. These factors are frequently connected to task-specific objectives like purchase consideration, a utilitarian factor in this study.

### ***Perceived Usefulness***

According to Davis (1989), perceived usefulness is "the prospective user's subjective probability that using a specific application system will increase job performance." According to Bhattacharjee (2000), perceived usefulness, or the degree to which a user feels that using new technology

(for example, a chatbot e-service) helps support his or her activities as well as helps perform some specific tasks effectively, is the main factor in determining users' satisfaction and continuous intention for technology (Ashfaq et al., 2020). According to ECM, a user's desire to keep using an information system is strongly influenced by their satisfaction (Li & Fang, 2019). For instance, Zheng et al. (2013) point out that users' satisfaction in virtual communities influences their likelihood of staying involved. Similarly, users' intention to keep using products like smartwatches or branded apps has increased when they are satisfied (Nascimento et al., 2018). Generally, a system or service's perceived usefulness increases satisfaction, reinforcing the intention to continue using it (Ashfaq et al., 2020). Therefore, the following hypothesis was developed accordingly.

H<sub>1</sub>: Perceived usefulness influences consumers' intention to use multichannel retailers' mobile applications in the Colombo district, Sri Lanka.

#### *Perceived Ease of Use*

Perceived ease of use measures how simple a technical information system is for a user and is another technique for increasing user happiness and the intention to continue using technical services (Tung, 2022). Perceived ease of use has a favourable impact on user pleasure, perceived usefulness, and the intention to keep using technology, especially in settings like virtual systems, e-learning, and mobile apps (Tung, 2022; Hamid et al., 2015). Easy-to-use systems improve user satisfaction and decrease anxiety, eventually promoting long-term adoption (Hong et al., 2006; Huang, 2021). Although some contend that in order to affect behavioural intention directly, perceived ease of use must be combined with perceived usefulness (Kabir et al., 2017), most research supports its critical role in influencing user attitudes and encouraging continuing use of technological systems (Thong et al., 2006; Bognot et al., 2022). Therefore, the following hypothesis was developed accordingly.

H<sub>2</sub>: Perceived ease of use influences consumers' intention to use multichannel retailers' mobile applications in the Colombo district, Sri Lanka.

#### *Personalization*

According to Cheng et al. (2020), customised goods, services, and content that meet each user's preferences and requirements is known as personalisation, and it is essential for increasing user satisfaction and encouraging sustained usage of information systems. Personalisation



features in mobile apps and e-commerce enhance service quality, foster client loyalty, and promote repeat customers by utilising data like location or purchasing patterns (Tyrväinen et al., 2020; Wang & Li, 2012). By providing valuable suggestions and flexible interfaces, empirical research shows that personalisation enhances user perceptions, contentment, and return intentions (Park, 2014; Kim & Gambino, 2016). On digital platforms, personalisation is still a significant factor in determining user pleasure and continued use (McLean et al., 2022; Al-Nabhani et al., 2022). Hence, the following hypothesis was developed accordingly.

H<sub>3</sub>: Personalization influences consumers' intention to use multichannel retailers' mobile applications in the Colombo district, Sri Lanka.

### ***Hedonic Factors***

Conversely, hedonic factors emphasise experiencing advantages like enjoyment and escapism, which have been thoroughly examined in in-person and online buying settings (Heijden, 2004). In this study, perceived enjoyment and escapism were considered hedonic factors after a rigorous literature review.

#### ***Perceived Enjoyment***

The degree to which using a system is intrinsically pleasurable is known as enjoyment, and it has a significant effect on user satisfaction and intention to continue with it (Misra et al., 2023; Ashfaq et al., 2020). Previous research highlights the importance of utilitarian and hedonic considerations when creating branded mobile applications, with hedonic motivation—the perception of enjoyment—as a key motivator for technology use (Al-Nabhani et al., 2022; Huang & Ren, 2020). Research in contexts like social media, mobile commerce, and chatbots shows that engaging and fun systems encourage playfulness, emotional pleasure, and user loyalty (Yoon & Rolland, 2015; Kang & Lee, 2010). Even though the majority of research associates enjoyment with sustained technology usage. Therefore, the following hypothesis was developed accordingly.

H<sub>4</sub>: Perceived enjoyment influences consumers' intention to use multichannel retailers' mobile applications in the Colombo district, Sri Lanka.

#### ***Escapism***

Technology use, especially social media, gaming, and mobile apps, is heavily influenced by escapism, which is the desire to escape everyday worries and reduce stress (Laor, 2020; Yee, 2006). According to research,

escapism—which provides users amusement, emotional fulfilment, and stress relief—is the main reason people use social media sites like Facebook and mobile shopping apps (Young et al., 2017; McLean et al., 2022). Escapism increases user happiness and engagement by promoting cognitive restriction and flow states, which may encourage recurring app usage (Kim & Kim, 2005; Al-Nabhani et al., 2022). On the other hand, excessive escapism can result in negative emotions like irritation or information overload, time-consuming habits, and addiction (Masur et al., 2014; Fuentes & Svingstedt, 2017). While some studies highlight its adverse effects on consumer attitudes, most evidence suggests that escapism positively impacts satisfaction and continued use of technology (McLean et al., 2022). Hence, the following hypothesis was developed accordingly.

H<sub>5</sub>: Escapism influences consumers' continuous intention to use multichannel retailers' mobile applications in the Colombo district, Sri Lanka.

The conceptual framework of the study is given below in Figure 1.

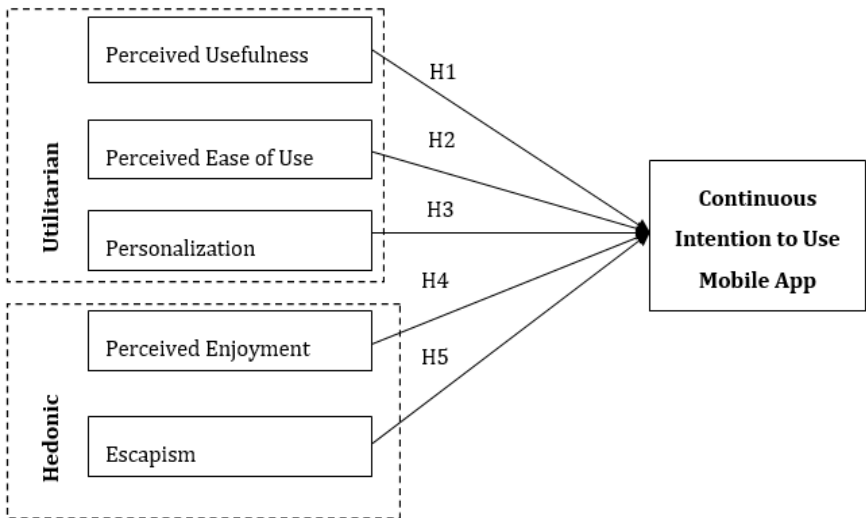


Figure 1: Conceptual Framework

## METHODOLOGY

The conceptual framework in Figure 1 was adapted from Al-Nabhani et al. (2021), and this study employed the deductive approach. This study used a cross-sectional survey to gather primary data from consumers in Colombo District, Sri Lanka. This study examined consumers from ABC and DEF, two prominent brick-and-mortar retailers in Sri Lanka who had physical stores before introducing online or mobile delivery channels. At the time of the study, the retailers' apps included features such as allowing consumers to browse and buy products, find the closest store, pick up or delivery options for purchased goods, add items to their saved carts, save a delivery address or add billing information, and access product catalogues and deals. To rate their responses in a continuous usage context, all consumers who participated in the online questionnaire had to have kept the retailer's smartphone application from one of the selected traditional retailers for over three months. Literature related to the same context was referred to determine the sample size and decided as 400 respondents. The required data was gathered using purposive sampling since the researchers could not find a suitable sampling framework.

A five-point Likert scale, one denoting "strongly disagree" and five denoting "strongly agree," was employed to measure all study constructs. Following the data-gathering process, 384 responses were obtained. A data cleaning method was carried out, which involved flagging the responses of those who did not satisfy the filtering questions and those with missing values to guarantee that only genuine responses were included in the study. Finally, 375 valid responses were obtained, leading to a 94% effective response rate. Descriptive analysis summarises data, particularly with a demographic profile, and multiple regression analysis was used to examine the study's hypotheses. Table 1 provides more details on the demographic profile of the respondents.

## FINDINGS AND DISCUSSION

### Descriptive Statistics

**Table 1: Demographic Profile of the Respondents**

Aspect	Category	Frequency	Percentage (%)
<b>Most Used Mobile Retail App</b>	ABC Online	211	56.3
	DEF Online	164	43.7

**Table 1: Continued.**

Aspect	Category	Frequency	Percentage (%)
<b>Gender</b>	Male	167	44.5
	Female	208	55.5
<b>Age Composition</b>	18–24	21	5.6
	25–34	86	22.9
	35–44	111	29.6
	45–54	83	22.1
	55–64	58	15.5
	65+	16	4.3
<b>Highest Educational Qualification</b>	GCE O/L	34	9.1
	GCE A/L	114	30.4
	Degree	70	18.7
	Postgraduate	77	20.5
	Other	80	21.3
<b>Occupation</b>	Working full-time	164	43.8
	Working part-time	68	18.1
	Looking for work	46	12.3
	Retired	97	25.8
<b>Mobile App Usage Frequency</b>	Never	72	19.2
	Once to a few times a year	60	16.0
	Monthly	102	27.2
	Weekly	115	30.7
	Daily	26	6.9
<b>Purchase Frequency through Mobile App</b>	Never	83	22.1
	Once to a few times a year	38	10.1
	Monthly	146	38.9
	Weekly	96	25.6
	Daily	12	3.2
<b>Most Preferred Shopping Method</b>	Going to the store	183	48.8
	Through the website	48	12.8
	Through the app via the smartphone	144	38.4

Source: Survey Data, 2023

According to Table 1, the survey's findings reveal various demographic and behavioural trends among participants. While women represented the majority of responders (55.5%), "ABC Online" was the most popular

app (56.3%). Furthermore, the most significant presence was in the 35–44 age range (29.6%). Most respondents (30.4%) completed GCE (A/L) as their highest educational qualification. Most users used apps weekly (30.7%), and most were full-time employees (43.8%). 38.9% of monthly purchases were made using apps, while 38.4% of respondents preferred smartphone applications for shopping. These findings highlight the significant trend of using mobile apps for retail engagement in Sri Lanka.

## Reliability Analysis

**Table 2: Reliability Analysis**

Variable	No. of Items	Cronbach's Alpha Value
Perceived Usefulness (PU)	6	0.812
Perceived Ease of Use (PEU)	6	0.861
Personalisation (PL)	5	0.650
Perceived Enjoyment (PE)	3	0.685
Escapism (ES)	3	0.721
Continuous Intention to Use the App (CI)	3	0.531

Source: Survey Data, 2023

Cronbach's Alpha values assess the internal consistency and reliability of research scales, with a threshold of 0.6 recommended for acceptable reliability (Malhotra & Dash, 2010). According to Table 2, Cronbach's alpha values of dependent and independent variables are acceptable above 0.6 except for CI since it has shown low reliability.

## Validity Analysis

With statistically significant results, the KMO values for five independent and dependent variables are more than 0.5. Bartlett's sphericity values are less than 0.05. Furthermore, all variables have AVE values greater than 0.5, and CR values greater than 0.7 (Shrestha, 2021) to ensure convergent validity. According to Table 3, all the variables satisfied the validity requirements. Content validity was ensured through pilot research, industry professionals, and an academic supervisor's expert assessment.

**Table 3: Validity Analysis**

Variable	Kaiser-Meyer-Olkin (KMO)	Bartlett's Test of Sphericity	Average Variance Extracted (AVE)	Composite Reliability (CR)
Perceived Usefulness (PU)	0.746	0.000	0.542	0.874
Perceived Ease of Use (PEU)	0.854	0.000	0.504	0.858
Personalisation (PL)	0.598	0.000	0.521	0.841
Perceived Enjoyment (PE)	0.657	0.000	0.504	0.751
Escapism (ES)	0.651	0.000	0.515	0.760
Continuous Intention to Use the App (CI)	0.525	0.000	0.558	0.789

Source: Survey Data, 2023

**Model Summary**

**Table 4: Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.722 <sup>a</sup>	.521	.515	.64128

Source: Survey Data (2023)

According to Table 4, the R square value is 0.521, indicating that PL, PE, PEU, PU, and ES variables collectively explain 52.1% of the variance in continuance intention to use the App (CI). The p-value for the ANOVA test is shown as 0.000. It is below 0.05. Hence, the researchers can conclude that the regression model is statistically significant at 95% confidence.

## Analysis of Coefficient

**Table 5: Coefficient Table**

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.158	.247		4.678	.000
PU	.146	.047	.165	3.100	.002
PEU	.097	.046	.103	2.116	.035
PL	.190	.047	.209	4.018	.000
PE	.210	.044	.251	4.823	.000
ES	.149	.038	.178	3.883	.000

Source: Survey Data, 2023

The p-value ( $p < 0.05$ ) of Perceived Usefulness (PU) is 0.002, and the corresponding unstandardised beta coefficient value is 0.146. Since the beta coefficient value denotes a positive value, the current research findings showed that PU positively influences continuous intention to use the app. Perceived Ease of Use (PEU), with a beta coefficient of 0.097 and a p-value of 0.035, also positively influences CI, suggesting that ease of use contributes to users' ongoing usage. Personalisation (PL) has a beta coefficient of 0.190 and a p-value of 0.000, highlighting a strong positive effect on CI, with users who enjoy the app for personalisation purposes being more likely to continue using it. Perceived Enjoyment (PE) has the highest impact, with an unstandardised beta coefficient of 0.210 and a p-value of 0.000, emphasising that enjoyment plays a key role in users' continued app usage. Finally, Escapism (ES), with a beta coefficient of 0.149 and a p-value of 0.000, also positively contributes to CI.

## Discussion

This study identified how hedonic and utilitarian factors influence consumers' continuous intention to use multichannel retailers' mobile applications in Colombo district, Sri Lanka, consistent with past literature (Al-Nabhani et al., 2022; Akdim et al., 2022). It has been revealed that hedonic factors, including perceived enjoyment and escapism, have a significant influence on consumers' continuous

intention to use multichannel retailers' mobile applications (Al-Nabhani et al., 2022; Akdim et al., 2022) while perceived enjoyment has been identified as the most influential variable. Also, it reveals that utilitarian factors, including perceived usefulness and personalisation (Akhmedov, 2020; Gupta et al., 2021; Cheng et al., 2020) and perceived ease of use (Gupta et al., 2021) have a substantial influence on consumers' continuous intention to use multichannel retailers' mobile applications in Colombo district, Sri Lanka, while personalisation is the second most influential variable in the study.

## **CONCLUSION**

The roles played by hedonic and utilitarian factors for consumers' continuous intention to use the mobile applications offered by the multichannel retailers of Sri Lanka were explored in this research study. The research findings stated that hedonic factors, which are perceived enjoyment and escapism, and utilitarian factors, which include perceived usefulness, perceived ease of use, and personalisation, play an essential role in consumers' behaviours. Key results demonstrated that personalisation was crucial for engaging and retaining the user base. The conclusions made here underscore the importance of multi-faceted decisions about the design of retail mobile apps, with the established affective–functional interface suggestive of the need for integrated optimisation across functional factors. In tackling these two motivations, the retailers improve the users' satisfaction and engagement over a more extended period and always ensure survival amidst the growing nature of the retail industry in Sri Lanka. The study advances theoretical understanding and presents actionable recommendations for practitioners focusing on their organisation's mobile apps in the retail sector.

## **MANAGERIAL IMPLICATIONS**

This study offers some important managerial implications. It emphasises how continuous usage of retail apps is influenced by the hedonic value of enjoyment and escapism, the utilitarian value of perceived usefulness, ease of use, and personalisation. When it comes to perceived usefulness, in order to increase continued usage, retailers should build a value-added app that stands out from websites. Furthermore, managers should always ensure that customers have control over how they shop. For instance, when it comes to push notifications, customers should have the option to accept or reject them since retailers must interact with



customers via mobile devices in a non-intrusive way. Regarding perceived enjoyment, the results show managers that users appreciate mobile shopping apps that provide a pleasurable experience and are easy to use. In order to improve the hedonic appeal of their app, managers should think about using gamification features and remember user preferences to create more entertaining messaging. More on, to improve the ease of use of retail apps, marketers should prioritise clear content, images, and layout by allowing easy and efficient navigation. The last of profound importance is making the retail app personal, which is always helpful in sustaining users' interest. Here, there is always an indication that the retailer can use the consumer data to ensure that the will is met by offering such information as alerts and offers. Besides, there are elements of entertainment, such as the ability to look at/click on and spend some time shopping or interacting with the information provided, which can help users relax and enhance happiness while using the app for valuable purposes.

## **LIMITATIONS AND FUTURE RESEARCH DIRECTIONS**

Hedonic and utilitarian factors may affect customers' continuous intention to use mobile apps differently in different cultures. Thus, future studies can examine this in other contexts. Since this study only focused on utilitarian and hedonic benefits, future researchers can incorporate social elements like peer recommendations and social interaction in mobile apps that might illuminate the social dynamics that drive app continuous intention. In future studies, augmented and virtual reality could be studied to see how they affect mobile app usage and customer behaviour. Since this is a cross-sectional study, longitudinal studies may reveal continuous mobile app usage. Hence, future researchers are suggested to develop longitudinal studies in this area. Moreover, future researchers can study the same model by adding new variables such as mobile app gamification and security and privacy concerns, which may affect continuous intention to use mobile apps.

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# REALIZING THE FILTER BUBBLE: ALGORITHMIC AWARENESS, IMAGINATION, AND POWER IN INFORMATION FILTERING ON SOCIAL MEDIA

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## ABSTRACT

Although personalization is widely recognized for its positive consequences, recent scholarly discourse has highlighted that personalized algorithms on social media can filter content, leading to filter bubbles—an issue that has not been sufficiently explored in extant literature. This study addresses this void by examining the awareness of personalized algorithms among Sri Lankan higher education students aged 18 to 22 and their responses to these algorithms. Using an interpretive qualitative approach, data collected from twenty-five in-depth interviews were thematically analyzed. The findings indicate that while students are aware of the negative consequences of personalized algorithms, they neither exercise control over them nor fully imagine ways to avoid becoming trapped in filter bubbles.

**Keywords:** *Algorithmic Awareness, Algorithmic Imagination, Algorithmic Power, Filter Bubble, Information Filtering*

## INTRODUCTION

Social media platforms have recently started relying on algorithm-driven personalized recommendation systems, shaping how content appears in users' feeds based on their preferences (Swart, 2021; Voorveld et al., 2024). An algorithm is “any well-defined computational procedure that takes some value, or set of values, as input and produces some value, or set of values, as output. An algorithm is thus a sequence of computational steps that transform the input into the output” (Cormen et al., 2009). Extant literature has widely recognized that personalized algorithms on social media filter content, providing tailored content that aligns with users' interests and opinions (Rhodes, 2022; Shcherbakova & Nikiforchuk, 2022). This process aligns with the “filter bubble theory,” which posits that users are systematically directed toward content that reinforces their existing preferences, increasing their time spent on the platform



while limiting exposure to more diverse perspectives (Chis, 2016; Dahlgren, 2021). This phenomenon, known as “*opinion polarization*,” can further entrench users' existing beliefs (Rodilloso, 2024).

Although filter bubbles and opinion polarization created by personalized algorithms on social media offer several advantages (Dahlgren, 2021; Sargeant & Tagg, 2019), recent literature critiques them for their drawbacks, particularly their role in limiting users' exposure to diverse perspectives (Rodilloso, 2024). Specifically, these algorithms contribute to the growing extremity of differences in views among social media users, primarily by limiting exposure to diverse perspectives and reinforcing content that closely aligns with their interests and opinions (Jones-Jang & Chung, 2024; Park & Park, 2024).

On the other hand, in Sri Lanka, most adolescents and young adults aged 12 to 25 are frequent daily internet users, with approximately over 50% of them engaging on one or more social media platforms (Jayarathne et al., 2024). The increased reliance on online platforms for education, particularly following the COVID-19 pandemic, has further intensified social media use within this age group, making their usage frequency and intensity significantly higher than other age cohorts (Jayarathne et al., 2024).

While recent literature has just begun discussing the negative consequences of personalized algorithms on social media, such as opinion polarization (Jones-Jang & Chung, 2024; Park & Park, 2024), there is a limited exploration of how young adults aged 18 to 22 in higher education understand and navigate these algorithm-driven platforms (Rodilloso, 2024). This study seeks to fill this gap by examining the awareness of personalized algorithms among Sri Lankan higher education students aged 18 to 22 and their responses to such algorithms, including whether they are willing to look beyond the filter bubble.

## **LITERATURE REVIEW**

### **Algorithmic Information Filtering on Social Media**

Incorporating personalized algorithms in social media influences the type of content users see in their feeds and how it is presented (Swart, 2021; Voorveld et al., 2024). These algorithms primarily display content that aligns with users' interests and demographics based on their online behavior and the preferences of others in similar demographic cohorts (Voorveld et al., 2024).

These algorithms operate in various ways, with three of the most common on social media platforms being the “*more of the same*” algorithm, the “*novelty*” algorithm, and the “*wisdom of the crowd*” algorithm. The “*more of the same*” algorithm presents users with content similar to what they have already seen and liked, reinforcing their existing interests and opinions (Dahlgren, 2021). On the other hand, the “*novelty*” algorithm introduces new content to users, often unrelated to their preferences or opinions (Dumitrescu & Santini, 2015). Lastly, the “*wisdom of the crowd*” algorithm recommends content that is deemed popular or interesting among other social media users (Ratner et al., 2023).

### **Consequences of Algorithmic Information Filtering**

Several potential negative consequences are associated with using algorithm-driven personalization on social media platforms. Many scholars (e.g., Jones-Jang & Chung, 2024; Park & Park, 2024; Rodilosso, 2024) argue that algorithm-driven personalization on social media contributes to opinion polarization, where differences in views between users become more extreme. This occurs because users are predominantly exposed to content that aligns with their interests and opinions. Such selective exposure to like-minded information can reinforce and amplify personal beliefs, leading to greater polarization (Xing et al., 2024).

Another consequence is becoming trapped in so-called echo chambers. In echo chambers, where specific, opinion-confirming ideas, information, and beliefs are repeatedly shared, it can limit exposure to diverse perspectives (Rodrigues da Cunha Palmieri, 2024). Like filter bubbles, echo chambers direct users toward content that aligns with their preferences, increasing their time on the platform while limiting exposure to more diverse or opposing viewpoints (Perera & Karunasekera, 2024).

Despite these negative consequences of algorithmic information filtering, users can also perceive algorithm-driven personalization on social media as positive. For instance, due to algorithms, social media platforms offer benefits such as only seeing preferred content, resulting in a limited information overload (Jindal & Gouri, 2024; Rodilosso, 2024). These contradictory yet interconnected positive and negative consequences create a paradoxical tension among users, making it challenging to determine what to believe and how to act (Jindal & Gouri, 2024).

## METHODOLOGY

Given the lack of studies exploring how young adults respond to using personalized algorithms on social media (Rodilosso, 2024), this study adopts an interpretive qualitative approach. A total of twenty-five in-depth interviews were conducted with undergraduate students enrolled in degree programs at state universities in Sri Lanka.

Data collection occurred from October to December 2024 at locations convenient for the respondents, including their universities, homes, or other neutral venues. Conducting interviews in this flexible manner increased participants' willingness to engage. All respondents were 18 years or older as of August 31, 2024. Potential respondents were selected using purposive and snowball sampling techniques. Purposive sampling allowed for identifying initial participants from personal circles who were either directly approached to participate or helped identify other suitable respondents. This approach facilitated the rapid recruitment of participants without requiring significant time or resources. Additionally, snowball sampling enabled access to individuals that were more challenging to reach through direct methods, thus diversifying the composition of the sample.

The data collection methods used in this study were inspired by the work of De Groot et al. (2023) and consisted of two phases: a walk-through (phase 01) followed by a semi-structured interview (phase 02). All respondents completed both phases simultaneously on the same day, lasting approximately 30 to 45 minutes per participant. Phase one involved a "walk-through" of the respondents' most-used social media platform. Participants were first asked to identify the platform they use most frequently, and this platform was then used for the walk-through. This method encouraged respondents to become more aware of their direct interactions with algorithms, aspects they might typically overlook. It allowed them to describe and demonstrate their algorithmic experiences, which was particularly helpful for those who found it challenging to reflect on or articulate these experiences verbally.

During the walk-through, the concepts of algorithmic awareness, algorithmic imagination, and algorithmic power were explored. To address algorithmic awareness and imagination, respondents were asked questions such as, *"Why do you think you see this specific photo, video, or text?"* To examine algorithmic power, respondents were encouraged to navigate through their platform as usual, observing how their actions influenced the content they saw. Questions like *"Why are*

*you doing this?” and “Why are you skipping this?”* were posed during this process. The walk-through lasted approximately 10 minutes.

Following the walk-through, individual semi-structured interviews were conducted, consisting of three parts. The concepts of algorithmic imagination and algorithmic power were explored in the first part. To address algorithmic imagination, questions such as *“How do you think the platform provides personalized content?”* and *“How does a social media platform know what you want or don’t want to see?”* were asked. To examine algorithmic power, respondents were asked, *“If you notice content filtering, how do you respond to it?”* The second part of the interview focused on content filtering and opinion polarization. Sample questions included *“Do you think content filtering influences your purchasing decisions?”* and *“Have you ever used social media to inform your purchase decisions? If so, how?”* The final part addressed the concept of “bursting the bubble”. Respondents were asked, *“Did you think about filter bubbles after purchasing?”* *“Have you ever realized you were in a bubble?”* and *“Would you want to act on filter bubbles?”*

Immediately after the interviews, each was transcribed verbatim and analyzed thematically. During the analysis, text segments related to the themes of algorithmic awareness, algorithmic imagination, algorithmic power, and participants’ views on how algorithms create filter bubbles—along with their responses to these phenomena—were systematically coded.

## **FINDINGS AND DISCUSSION**

### **Algorithmic Awareness**

During the interviews, it became evident that all the respondents were aware of content filtering on social media. For instance, eighteen respondents explicitly used the term *“algorithm”* in their answers (without the interviewer prompting the term), indicating their understanding of its existence. Additionally, regardless of whether they mentioned the word *“algorithm,”* each respondent discussed their perceptions of how content filtering works and how it might have influenced them. It was revealed that all respondents used one or more social media platforms; twelve identified Instagram as their most frequently used platform, while ten referred to Facebook, and three mentioned TikTok. All respondents provided insights into content filtering, demonstrating their awareness of algorithms.

## Algorithmic Imagination

All respondents recognized the effects of algorithmic functioning through their actions on social media. For example, Respondent D said, *“Yes, I do notice that quite often. I like one thing, something specific, and then suddenly I get lots of other things related to that subject.”* Similarly, twelve other respondents observed that liking content influenced the algorithms. Respondent I explained, *“You start liking things you enjoy, clicking on things you like, and following things you like. Then you get more and more content that’s specific to your interests.”*

In addition to liking content, thirteen respondents noted that spending more time on posts also influenced the type of content in their feeds. Respondent M shared, *“If you skip a post quickly and move to the next one, it knows you don’t want that content, and you’ll see more of the other type.”* Ten respondents pointed out that using other online platforms, such as Google, Yahoo, or streaming services, could lead to similar content appearing on their social media feeds. Another factor influencing content was following accounts related to specific interests, as mentioned by eleven respondents. Respondent P said, *“I follow clothing brands and things like that, so I often get clothing-related content on my feed.”*

Moreover, ten respondents indicated that interactions through direct messages—such as sending and receiving posts—also influenced the content they saw. Lastly, eight respondents noted that factors like their city of residence and demographics (i.e., age, gender) influenced the types of content they received, suggesting the algorithms take offline affiliations into account.

When respondents were asked how they became aware of how algorithms work, twelve indicated that they learned about it through their own experiences on social media, observing the effects of their behavior on the content they saw. Eight respondents mentioned encountering content on social media that explained how algorithms function. Additionally, six respondents shared that they found algorithms to be an interesting topic of discussion with friends, from whom they also learned more about how algorithms work.

## Algorithmic Power

To gain further insight into how respondents use their algorithmic imagination to influence algorithmic filtering through algorithmic power, they were asked what actions they take to control the content they see or

avoid. When asked about reasons for quickly scrolling through content or using the “*not interested*” button (actions that reduce the frequency of specific content), it became apparent that respondents were not particularly focused on actively influencing their algorithms. Twelve respondents explained that they scroll past unwanted content quickly. However, they did not view this as a deliberate attempt to influence the algorithm; instead, it was simply a way to avoid content in the moment. Eight respondents admitted they were “*too lazy*” to use the “*not interested*” option. However, five respondents mentioned that, while they occasionally use the “*not interested*” button, they more frequently rely on fast-scrolling to bypass content they are not interested in.

When asked about the reasons for liking, commenting, forwarding, or saving a post (actions that can make content more frequent), none of the respondents indicated that they did so to influence the algorithm. Instead, their actions were driven by personal motivations. Twelve respondents said they liked or commented on posts simply because they genuinely liked the content or knew the person involved. Ten respondents mentioned that they forwarded posts to share with friends or family.

Similarly, according to six respondents, saving posts was not viewed as a strategy to control algorithms but rather as a way to revisit content later. Respondent W explained her behavior: “*I do it somewhat unconsciously: if I find something funny, I like it; if I like something or someone, I like it. If I want to share something with my friends, I forward it. If I want to see something again later, I save it. And if I find something funny, I watch it longer.*”

### **Realizing the Filter Bubble**

It was essential to explore whether respondents felt they were in a bubble due to algorithmic filtering and to understand their reflections on moments when they realized they were in one. When discussing the concept of “filter bubbles” and “bubbles” more generally, it was essential to clarify how respondents interpreted the term to ensure consistency and validity in their responses. Respondents described filter bubbles in similar terms, summarizing them as personalized content filtering, where individuals are exposed primarily to certain types of content, making it difficult to access information outside of that bubble. This definition aligns with the existing literature on filter bubbles (Chis, 2016; Dahlgren, 2021).

To understand how respondents experience and perceive filter bubbles more broadly, they were asked to provide an example of a time, outside of algorithms, when they realized they were in a bubble. Respondents initially took some time to reflect on this question, but 18 were able to provide an answer. Interestingly, ten respondents gave similar responses, describing a stark contrast between their hometowns and their current living and studying environments, often citing the differences between life in a small village and a city. Respondent B, for example, said: *“I’m in a friend group where certain things are much more normal than where I’m from. And when I move from that group to others, I feel like I can behave very differently.”*

Once there was consensus on the concept of filter bubbles, the next step was to explore whether respondents believed they were personally affected by them. Most respondents indicated that they often felt trapped in filter bubbles, particularly realizing this after making purchases, which highlighted the influence of algorithmic filtering on their decisions. As Respondent E emphasized: *“I think it’s time to burst the filter bubble and look beyond it. I’m tired of being constantly recommended the same type of content and feeling limited by the lack of diversity in options, all because personalization algorithms keep suggesting things similar to what I’ve already liked.”*

### **Algorithmic Awareness, Algorithmic Imagination and Algorithmic Power**

The findings reveal that all the students possess some degree of algorithmic awareness and are capable of imagining how algorithms work. According to most respondents, liking content has the most significant impact on their feeds, followed by the amount of time spent viewing content, search behavior, and following specific accounts. These actions on social media, they believe, lead to the repetition of similar content to what they have previously engaged with. This aligns with the *“more of the same”* algorithm (Dahlgren, 2021). Additionally, these students acknowledge that they are exposed to content that is popular within their demographic cohort, aligning with the *“wisdom of the crowd”* algorithm (Ratner et al., 2023).

Interestingly, despite these students’ awareness and understanding of algorithms and how to exert control over them, they choose not to take active steps to modify their content. This indicates a gap between knowledge and action. Since the participants in this study are aware of specific options to influence the algorithm, it is essential to understand

why they refrain from utilizing these tools. Future research could benefit from exploring the motivations and behaviors behind users' engagement with algorithms.

## CONCLUSION

In conclusion, the study findings reveal that higher education students aged 18 to 22 in Sri Lanka are “*aware of the unconscious*”—they strive to avoid being influenced by algorithms yet recognize that they are likely being affected. Despite acknowledging the negative consequences of algorithms, such as polarization and excessive screen time, these students continue to rely on social media for information and expectations. However, they do so without actively exercising control over the algorithm, revealing a gap between awareness and action. These results underscore the need for future research to explore why adolescents, despite being aware of ways to influence algorithms, do not take action to do so. Additionally, it is vital to investigate the factors that lead students to trust social media. Despite the negative consequences, understanding the motivations behind their continued use of algorithm-driven platforms is crucial for developing strategies that promote healthier habits and more informed decision-making.

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# ROLE OF ENTREPRENEURSHIP EDUCATION IN SHAPING ENTREPRENEURIAL BEHAVIOR: INSIGHTS FROM SRI LANKAN ENTREPRENEURS

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## ABSTRACT

The existing literature lacks a comprehensive understanding of how entrepreneurs can be developed. To address this gap, this study explored how successful entrepreneurs can be shaped through Entrepreneurship Education (EE). The research was conducted within an interpretivist research philosophy, following an inductive approach and utilizing a case study strategy. Data collection involved semi-structured interviews with six entrepreneurs who had graduated from entrepreneurship degree programs at universities in Sri Lanka. The findings revealed that the knowledge, skills, and mindset acquired through EE played a pivotal role in their entrepreneurial development. This study contributes to the existing body of knowledge by demonstrating that formal education can significantly influence entrepreneurial behavior. Furthermore, it underscores the need to expand EE across more institutions to foster economic development by producing a greater number of entrepreneurs.

**Keywords:** *Entrepreneurship, Entrepreneurial behaviour, Entrepreneurship education*

## INTRODUCTION

Entrepreneurship is widely regarded as a highly effective means of creating jobs and fostering economic prosperity. Ramirez (2024) stated that an entrepreneur is someone who constantly seeks change, responds to it, and exploits it as an opportunity. There is an ongoing debate about whether entrepreneurs are made or born. Some studies suggest that certain genetic characteristics and personality traits make individuals more likely to become successful entrepreneurs than others (Daley, 2013). Similarly, the Global Entrepreneurship Report (2014) also indicated that entrepreneurs are born. However, other studies argue that environmental factors significantly influence entrepreneurial

success. For example, Heyward (2022) asserted that entrepreneurs are not born but made. Entrepreneurship education (EE) is one such environmental factor that impacts entrepreneurial success (Daley, 2013). Accordingly, this study focuses on the role of EE in shaping entrepreneurs.

Sri Lanka needs more entrepreneurs to develop as a country. Jayasundara (2023), stated that Entrepreneurs should be 10% of the population according to the international norm. Also, Weerasinghe (2023) stated that, Sri Lanka needs more entrepreneurs to progress as a nation. According to Jayasundara (2023), entrepreneurs should constitute 10% of the population to align with international norms. Additionally, Weerasinghe (2023) highlighted that Sri Lanka ranks 101st out of 137 countries in the Global Entrepreneurship Index, underscoring the urgent need to enhance efforts in fostering entrepreneurial development within the country. Recognizing the importance of entrepreneurship education (EE) in building entrepreneurs and increasing the entrepreneurial rate, some Sri Lankan government universities have introduced entrepreneurship degree programs to cultivate more entrepreneurs. However, there is limited evidence to determine whether formal EE effectively influences entrepreneurial behavior. The extant literature includes studies exploring the relationship between EE and entrepreneurial intention (Yousaf et al., 2021; Weerasinghe, 2020; Agarwal et al., 2020; Alharbi et al., 2018; Küttim et al., 2013; Lorz, 2011). However, these studies did not delve deeply into how EE fosters entrepreneurial behavior.

Against this backdrop, this study aimed to explore whether and how entrepreneurial behavior can be shaped through Entrepreneurship Education (EE). Our study holds significant academic and practical value. First, it contributes insights to the ongoing debate on whether entrepreneurs can be created (Heyward, 2022). Additionally, this study provides fresh knowledge on how entrepreneurship education (EE) obtained in higher education institutions serves as a systematic learning approach to becoming an entrepreneur. Our research also aims to offer practical insights to assist higher education institutions by emphasizing the importance of entrepreneurship degree programs in nurturing entrepreneurs.

## **LITERATURE REVIEW**

According to Hussain and Norashidah (2015), entrepreneurship education involves enhancing one's knowledge, skills, attitudes, and

personal character related to entrepreneurship. Research on entrepreneurial education (EE) has primarily focused on examining the relationship between EE and entrepreneurial intention (Yousaf et al., 2021; Weerasinghe, 2020; Agarwal et al., 2020; Alharbi et al., 2018; Küttim et al., 2013; Lorz, 2011). A contextual review reveals that previous studies on EE have been conducted in various countries, including Nigeria, India, Indonesia, Pakistan, Israel, Bangladesh, Saudi Arabia, and the United States. However, there have been very few studies in the Sri Lankan context. Moreover, past research has largely concentrated on university undergraduates, exploring the relationships among EE, entrepreneurial attitude, and entrepreneurial intention.

Our review of the extant studies revealed that existing studies are primarily quantitative, but it lacks an in-depth understanding of how entrepreneurial education (EE) influences actual entrepreneurial behavior. The contextual and methodological divide of EE are summarized in Table 1. As highlighted above, there are empirical, contextual, and methodological gaps in the field of EE. Therefore, this study aims to contribute new knowledge by addressing these gaps in the literature.

**Table 1 - Methodological and Contextual Divide of Previous Studies on EE**

Author & Year	Methodology	Context
Agarwal et al. (2020)	Mixed	India
Hussain et al. (2018)	Quantitative	Pakistan
Astiana et al. (2022)	Quantitative	Indonesia
Hussain et al. (2018)	Quantitative	Pakistan
Alharbi et al. (2018)	Quantitative	Saudi Arabia
Hussain& Norashidah (2015)	Quantitative	Pakistan
Yousaf et al. (2021)	Quantitative	Pakistan
Mateos (2019)	Qualitative	United States, Israel, Nigeria, Spain
Küttim et al.(2014)	Quantitative	Estonia
Ghina(2014)	Qualitative	Indonesia
Ratten & Usmanij(2020)	Qualitative	Australia
Tennakoon et al (2020)	Qualitative	Sri Lanka
Hasan et al (2017)	Quantitative	Bangladesh

Source: Developed based on existing literature

## METHODOLOGY

The purpose of our study was exploratory; therefore, we adopted an inductive approach and a qualitative methodology. We employed a case study research strategy, which involves conducting an empirical inquiry into contemporary phenomena within their real-life contexts (Saunders et al., 2019). Specifically, we utilized multiple case studies as our research strategy. To select participants, we employed purposive sampling, as no clear-cut sampling frame was available (Saunders et al., 2019). For this qualitative study, we conducted semi-structured interviews with six entrepreneurs who hold specialized degrees in entrepreneurship, aiming to gather data on their experiences. We specifically selected participants who are entrepreneurs, not merely individuals running businesses. Additionally, these participants willingly agreed to provide information to support the study's objectives.

The interviews featured open-ended questions designed to capture the participants' thoughts, experiences, and opinions. An interview guide was prepared to ensure the interviews were conducted in a relatively consistent manner. The data collected from these interviews were analyzed using content analysis. The demographic characteristics of the participants are summarized in Table 2, providing an overview of their profiles.

## FINDINGS & DISCUSSION

Our study explored how entrepreneurial education at the university helped the entrepreneurial behaviour, was addressed by the data gathered through interviews from 06 participants. The codes and categories that emerged from the analyses are reported in Table 3.

**Table 2 - Profile of the Participants**

Participant	Gender	Age	Entrepreneurial activity that they involved
P1	Female	26	Natural drink products for cholesterol patients
P2	Male	28	Digital Marketing retailer
P3	Female	26	Gardening and Landscaping Services (Event Plants and Customized Indoor Plants)
P4	Male	28	Restaurant (Hotel Industry)
P5	Male	27	Wedding Planning
P6	Female	26	Gift hampers

Source: Authors own

**Table 3 – Codes and Categories of the study**

Code	Code Name	Category
C1	Concepts	Entrepreneurship Knowledge
C2	Strategies	
C3	Models and frameworks	
C4	Continuous Assessments	Entrepreneurship Skills
C5	Events organizing	
C6	Networking	
C7	Internship	
C8	Motivation	Entrepreneurship Mindset
C9	Confidence	
C10	Thinking Patterns	

Source: Authors Own

### **Category 1 - Entrepreneurship-related knowledge**

The participants indicated that the knowledge they acquired at universities was instrumental in their development as entrepreneurs. They highlighted that the concepts, strategies, models, and frameworks taught in the entrepreneurship curriculum significantly supported their entrepreneurial journeys. These findings are summarized below.

#### *Open code 01 - Concepts*

Our participants highlighted that the diverse range of concepts learned throughout the degree program greatly assisted him in becoming an entrepreneur. Additionally, most participants emphasized the importance of understanding concepts related to entrepreneurship in order to succeed as an entrepreneur.

*Sample Quote - “We had the chance to learn more about concepts like Creativity and innovation, calculated risk, Personality, and leadership that need to be an entrepreneur”. (Participant 01)*

#### *Open code 02 – Strategies*

The participants emphasized that the various entrepreneurship strategies they learned at university helped their success as entrepreneurs. They shared that these strategies enabled them to make informed business decisions, minimize risks, and effectively brand their products.

*Sample Quote - “We learned strategies to take risks and minimize the risk of risk. That I used the knowledge taken from the university. We learned about reactive and proactive risk-taking strategies at the university and I used the proactive strategy in my business with that knowledge even though I had no experience in the market. Similarly, I use the pricing strategies a lot which I also learned in university”. (Participant 04)*

#### *Open code 03 – Models and Frameworks*

Participants reported that the models and frameworks they learned have significantly aided their journey in identifying opportunities, developing effective business plans, understanding the reasons behind their failures, and analyzing their strengths, weaknesses, opportunities, and threats to minimize risks. They believe that these tools, combined with the knowledge gained from their university experience, have contributed to their entrepreneurial success.

*Sample Quote 1- “We learned many models and frameworks. For example, systems thinking. Those things are used in my business. Also, when I lose, I can see why I lose. So here I used the learned root cause analysis for that. We can learn how to make a business plan through education”. (Participant 02)*

*Sample Quote 2- “If we take SWOT analysis, we can identify our strengths and weaknesses, opportunities and, threats and we can already know how to minimize the risk. It was taken from the knowledge taken at the university”. (Participant 04)*

## **Category 2 - Entrepreneurship Skills**

Participants highlighted that, while theoretical knowledge is essential, practical exposure provided by their degree programs is equally valuable. It has inspired participants to enhance their entrepreneurial skills by applying what they learned theoretically and recognizing the differences between theory and real-world experience.

#### *Open code 04 – Continuous Assessment*

Our participants indicated that various continuous assignments and hands-on projects during their studies had a profound effect on their understanding of business. They used these entrepreneurial skills to their business.

*Sample Quote 1 - “An entrepreneur must have creativity, leadership, and personality. If we don't have a good personality, it will be difficult for us to do anything. I think the experiences we gained in assignments that helped*



*us develop and convert those things into a business, that is, a profitable business opportunity". (Participant 01)*

*Sample Quote 2 - "We did a project as an assignment for creativity and innovation subject. There, we produced products such as pudding using pumpkin. It was a big opportunity for me to improve Creativity and innovation skill in myself as an entrepreneur". (Participant 05)*

*Sample Quote 3 - "There was one assignment that asked us to organize a business, do it, and earn three thousand rupees. Here I could improve skills such as planning, organizing, controlling resources to achieve a goal, time management, creativity and innovation and that help to start the business and manage it through strategically thinking and managing scarce resources". (Participant 06)*

#### *Open Code 05 – Participating in Events*

Participants reported engaging in practical activities such as adventures, workshops, and coaching sessions, which helped them develop various skills like risk-taking, communication, and personal growth. These opportunities supported their journey to becoming entrepreneurs. For instance, participant 06 mentioned that she enhanced her communication skills through these events, which she then applied in her business to foster strong customer relationships and promote her offerings.

*Sample Quote - "We had a specific set of workshops for skill development such as leadership skills, communication skills, and networking skills that we should develop as an entrepreneur and it helped me to develop a good network with customers. Also, we were taking some outbound training at Kuda Oya Army Camp. There we got adventure experience and faced challenges". (Participant 06)*

#### *Open Code 06 – Networking*

Many participants mentioned that their programs connected them with industry professionals and offered opportunities to build valuable relationships. These relationships helped them in their entrepreneurial journey.

*Sample Quote - "We were given opportunities to expand networking. So, because of that, I was able to increase the networking skills". Networking is important. It must be there to run a business. We had the opportunity to meet many entrepreneurs on campus. In addition to the knowledge, I got from them, I was able to build good contact with them. Because of that, I could hire a director with good knowledge and experience, who has worked*

*with about 80 clients. It was also an advantage for me to continue my business developing strong customer base". (Participant 02)*

#### *Open Code 07- Internship*

As stated by our participants, the internship included in their curriculum was a significant opportunity to gain practical experience, showcase their skills, and identify weaknesses. It was a valuable chance provided by formal education at universities to gain experience in the field before starting their own ventures.

*Sample Quote - "At the end, we had an internship to improve entrepreneurial skills such as leadership, risk-taking, communication, creative thinking. And the network built with industry helped to get advices in my failures and challenges". (Participant 05)*

### **Category 03 - Empowerment of Entrepreneurial Mind-set**

The last category was the development of entrepreneurial mind-set that appeared under the open codes given below.

#### *Open Code 08 – Motivation*

Our participants highlighted some examples that they were motivated by their educators. According to their view, the motivation helped them to face different kinds of challenges such as lack of capital, and think differently in such a situation. And as they mentioned, they could develop strong mind as an entrepreneur with this kind of motivations.

*Sample Quote - "Our professor always said that there are plenty of businesses in this world that started with zero capital. After that, the brothers and sisters of the batch before us proved it. That means we have a challenge to find the capital. But in the learning process aught the capital is not a challenge. In that way, a mindset was created to overcome that challenge. At the same time, when a business falls, we always want to hold on to it. It was put into our heads through education. Even now, it was more helpful to hold on while falling". (Participant 03)*

#### *Open code 09, 10 – Confidence and Thinking Pattern*

Finally, our participants mentioned that they shaped their thinking patterns as entrepreneurs through the learning experience. Also, they developed self-confidence to take risk. As they believed, they have confidence as an entrepreneur with a degree that received from formal education.

*Sample Quote 1 - "The other thing is that from this degree comes a greater confidence than an average entrepreneur. You can talk to any client without fear". (Participant 02)*

*Sample Quote 2 - "We could think of entrepreneurship as not only producing a new product or service but also it can even do an existing thing differently". (Participant 04)*

These findings indicate that entrepreneurship education goes beyond simply teaching technical skills; it also plays a crucial role in developing the mindset needed for successful entrepreneurship. Our analyses suggest that the development of entrepreneurial knowledge, skills, and mindset during formal entrepreneurship education has significantly contributed to students becoming entrepreneurs.

## **Discussion**

Our study findings align the view that the previous researches that found the importance of Entrepreneurship in achieving the entrepreneurial success (Zafar & Khan 2013; Daley, 2013; Raine & Pandya, 2019). Also, our study indicated the importance of theoretical frameworks, concepts such as SWOT analysis, business planning, and risk management were integral to their entrepreneurial behaviour. This reflects the work of scholars like Lorz (2011) and Alharbi et al. (2018), who argue that theoretical knowledge provides a foundation for understanding complex business environments and aids in more informed decision-making.

Previous studies (e.g., Hasan et al., 2017; Nabi et al., 2017) suggest that practical exposure to entrepreneurial challenges can foster confidence and problem-solving abilities. This was evident in the present study as well. Our findings revealed that entrepreneurship education does more than just impart business skills; it helps shape personal qualities essential for entrepreneurial success. This aligns with studies that show how EE can positively influence entrepreneurial self-efficacy (Yousaf et al., 2021).

## **CONCLUSION**

Our study concludes that the entrepreneurs can be made through formal education. Theoretical knowledge come through the concepts, models and frameworks playing a dominant role in the entrepreneurial journey. Also, practical learning experiences such as real-world assignments, workshops, outbound training, and internships proved critical in the entrepreneurial journey. Finally, our study revealed that

entrepreneurship education plays a significant role in developing an entrepreneurial mindset Overall, this study proves that entrepreneurs can be made through formal education, and the continued improvement and expansion of entrepreneurship degree programs are essential for fostering entrepreneurial growth in Sri Lanka.

This research contributes to the academic discourse on entrepreneurship education by providing empirical evidence that formal education can significantly shape entrepreneurial behavior and success. It adds to the growing body of literature that challenges the "born entrepreneur" theory suggested by some researchers (Nicolaou et al., 2008; Adams 2011). The findings suggest to the practitioners that enhancing entrepreneurship degree programs including more practical learning opportunities, mentorship, and networking can greatly increase the entrepreneurial success of graduates of those programs. Additionally, expanding these programs among more institutions could foster a higher rate of entrepreneurship, which is crucial for Sri Lanka's economic development.

Our study is not free from some limitations. For instance, this study is based on interviews with only six entrepreneurs. Even though these provide rich qualitative data, the small sample size restricts the generalizability of the findings. A larger sample may offer a broader representation of entrepreneurship degree holders and their experiences. Thus, we invite future researchers to expand the present study among wider participants.

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# **UNRAVELING THE CAUSES OF ACADEMIC PROCRASTINATION AMONG UNDERGRADUATES: A CASE STUDY OF THE FACULTY OF MANAGEMENT STUDIES AT SABARAGAMUWA UNIVERSITY OF SRI LANKA**

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## **ABSTRACT**

Procrastination, the act of delaying tasks, is a pervasive issue affecting individuals across various domains, including higher education. Despite its global prevalence, the factors underlying academic procrastination among undergraduates remain underexplored, particularly within specific contexts. This study seeks to bridge the contextual gap by investigating the reasons behind academic procrastination behavior among undergraduates at the Faculty of Management Studies (FMS), Sabaragamuwa University of Sri Lanka (SUSL). By identifying these contributing factors, the research aims to offer valuable insights to academia, administration, and student community while contributing to the broader academic literature. This study adopted an inductive approach and qualitative research methodology under the interpretivism research philosophy. A preliminary study was conducted to identify undergraduates with higher levels of procrastination behavior. Following this, in-depth interviews were carried out with eleven selected undergraduates from the Faculty of Management Studies at Sabaragamuwa University of Sri Lanka by following purposive sampling. The data were then analyzed using thematic analysis to uncover key patterns and themes related to procrastination behavior. The study revealed three key themes contributing to procrastination behavior among undergraduates at FMS, SUSL as interpersonal, personal, and university-related distractions. This investigation addresses existing knowledge and contextual gaps in understanding the reasons for academic procrastination behavior among undergraduates. This study has unique findings such as university subculture, domestic and roommate obligations, and lover invitations as reasons for academic procrastination. The findings provide practical insights for undergraduates, academia, and administration at FMS, SUSL, offering guidance for academic decision-making, curricular designing, and



mentor support to reduce procrastination tendencies and improve student performance.

**Keywords** - *Interpersonal Distractions, Personal Distractions, University Distractions*

## INTRODUCTION

Working on time is a critical element of human responsibility and efficiency, crucial for ensuring smooth workflows, meeting deadlines, and achieving personal and organizational success. In a university context, working on time transcends punctuality, emerging as a vital skill for academic success and personal development. Undergraduate students prioritizing timely work demonstrate commitment to their education and future goals. Timely completion of tasks enables effective workload management, minimizes stress and anxiety, and facilitates revisions, feedback, and overall improvement in academic performance. Conversely, failure to adhere to timelines, often associated with procrastination, can lead to adverse outcomes such as poor academic performance, heightened stress, and missed growth opportunities.

Procrastination, the intentional delay of tasks despite knowing its negative consequences, is a universal human behavior with significant implications (Lay, 1986; Steel, 2007; Klingsieck, 2013). Derived from the Latin words *pro* (forward) and *cratinus* (tomorrow), procrastination involves prioritizing immediate gratification over long-term responsibilities (Klein, 1971). It is a self-regulatory failure characterized by a gap between intention and action, often resulting in stress, anxiety, guilt, and diminished self-esteem (Baumeister & Heatherton, 1996; Steel, 2007).

The prevalence of procrastination varies across contexts, with estimates ranging from 15% to 80% of the population (Steel, 2007). Its adverse effects extend to academic performance, career progression, personal health, and mental well-being (Sirois, 2004; Klingsieck, 2013). Academic procrastination, in particular, has been widely studied, revealing its detrimental impact on student performance, including lower grades, missed deadlines, and heightened pressure (Johnson & Bloom, 1995; Ferrari et al., 1995). Despite its global relevance, studies indicate a significant research gap in exploring procrastination behavior within specific regional and cultural contexts, including Sri Lanka.

The researcher observed procrastination behavior among undergraduates at the Faculty of Management Studies (FMS) at

Sabaragamuwa University of Sri Lanka (SUSL). Discussions with colleagues and subject lecturers highlighted this pervasive issue. Students were observed frequently postponing assignments and engaging in last-minute work, both individually and in groups. To further investigate, a preliminary survey was conducted using a modified version of Yockey's (2016) validated scale. This survey, distributed to all four undergraduate batches at FMS, also revealed a high prevalence of procrastination behavior. This finding underscores a significant performance gap, as the cultural expectation of timely work contrasts sharply with observed student behavior.

While procrastination behavior has been extensively studied in global contexts, the literature lacks indexed journal articles focusing on Sri Lanka, and only five non-indexed studies have examined this phenomenon locally. Moreover, bibliometric analyses identify countries such as the United States, Canada, Turkey, England, and China as leading contributors to procrastination research (Tao et al., 2021), leaving a notable gap in contributions from South Asia. This study aims to address the identified performance and contextual gaps by exploring the reasons behind the procrastination behavior among undergraduates in FMS, SUSL, offering insights into its prevalence and causes. In doing so, it not only enriches the global discourse on procrastination but also provides a foundation for interventions tailored to the unique cultural and institutional dynamics of Sri Lankan universities.

## **LITERATURE REVIEW**

Procrastination is believed to have evolved with human civilization, originating as early as 2.5 million years ago, when individuals began postponing tribal responsibilities (Knaus, 2000). Lay (1986) described procrastination as the intentional delay of essential tasks within a set timeframe, while Schraw et al. (2007) defined it as "intentionally deferring work that must be completed." Procrastination reflects a lack of motivation and intention to accomplish tasks, as noted by Ryan and Deci (2000).

Procrastination affects various domains, including finance, health care, and academics (Abramowski, 2018). It is especially prevalent in academic settings, where students face frequent deadlines (Hooda & Saini, 2016). Research highlights that 80%–95% of college students engage in academic procrastination, with about half identifying as chronic procrastinators (Kim & Seo, 2015; Hen & Goroshit, 2020). Factors such as impulsivity, task aversion, self-belief, and

conscientiousness significantly influence procrastination behavior (Steel, 2007).

As different types of procrastination, Decisional procrastination arises from an inability to make decisions, often driven by perfectionism or a fear of making mistakes, which can result in "optional paralysis" (Taghizadeh & Cherati, 2015). Workplace procrastination is linked to reduced productivity and increased organizational costs (Abbasi & Alghamdi, 2015). Academic procrastination refers to the tendency to delay academic tasks, which negatively affects both academic performance and emotional well-being (Zacks & Hen, 2018; Klassen et al., 2010). Chronic procrastination, characterized by persistent delays, leads to significant distress and reflects a failure in self-regulation (Abbasi & Alghamdi, 2015).

Persistent procrastination, particularly in academic settings, has adverse effects on performance, including lower grades, missed deadlines, and incomplete work (Tian et al., 2021; Suhadianto & Pratitis, 2020). It also leads to heightened stress, anxiety, guilt, and frustration (Domínguez et al., 2014). Beyond academics, it negatively impacts relationships, mental health, and self-esteem (Grunschel et al., 2013).

This review highlights the multifaceted nature of procrastination, its causes, and its far-reaching implications, particularly in academic contexts. Despite extensive research globally, the topic remains underexplored in Sri Lanka, signaling the need for further studies in this region to better understand and address procrastination behavior.

## **METHODOLOGY**

This study adopts an interpretivism research philosophy to explore the subjective and context-specific reasons behind procrastination among undergraduates, as multiple realities exist regarding this behavior (Creswell, 2014; Aydın & Uysal, 2020). An inductive approach is employed to gather fresh insights from participants without relying on pre-existing theories (Grunschel et al., 2013). The research purpose is exploratory, aiming to understand the complex, culturally specific phenomenon of procrastination in the Faculty of Management Studies, Sabaragamuwa University of Sri Lanka (Klingsieck, 2013).

A qualitative methodology was deemed appropriate to investigate the psychological and behavioral dimensions of procrastination and provide a rich, detailed understanding of students' experiences (Hen & Goroshit, 2014). The case study strategy involved in-depth interviews with

undergraduates in the FMS at SUSL, aligning with the qualitative approach to capture real-life experiences (Aydin & Uysal, 2020).

FMS, SUSL was selected as the research setting due to the demonstrated prevalence of procrastination behavior among its undergraduate students. This selection was informed by a preliminary survey that revealed a high mean procrastination value within this population. The target population for this study comprised 1,676 undergraduate students enrolled across all four academic years within the FMS. A purposive sampling method was employed to select 11 participants for in-depth interviews, ensuring both accessibility and the potential for rich, insightful data, aligning with established qualitative research practices (Etikan, 2016). Participants were selected based on their demonstrated high procrastination tendencies, as indicated by the preliminary survey results. Data collection continued until data saturation was reached, a point initially perceived after ten in-depth interviews and subsequently confirmed through an additional interview. Thematic analysis was then utilized to analyze the collected data, facilitating the exploration of the research objectives.

Ethical considerations were paramount in this study, particularly given the use of in-depth interviews. To ensure participant confidentiality, their privacy and the details they shared were protected. Informed consent was obtained before each interview. Participants were assured that their identities would not be disclosed in any publications or reports (Creswell, 2014). Furthermore, explicit permission was obtained to record the interviews, with participants informed that these recordings were solely for transcription and data analysis. The researcher guaranteed that the collected data would be kept strictly confidential and not divulged to any third party beyond the scope of this research

## **FINDINGS & DISCUSSION**

As illustrated in Table 3.1, the researchers identified three themes namely Interpersonal, Personal, and University Distractions as the reasons for the high academic procrastination among the undergraduates of FMS, SUSL.

**Table 3.1 Coding table for Reasons behind Procrastination Behavior among Undergraduates in the FMS, SUSL**

Open code	Sub-code	Theme
Domestic responsibilities	Family-Related Obligations	Interpersonal Distractions
Family interruptions		
Caring for family		
Room-Mate invitations	Room-Mate Obligations	
Care for Room-Mate		
Lover's invitations	Lover Obligations	
Care for Lover		
Extra-curricular works	Fun orientation	Personal Distractions
Social media usage		
Personal values	Personal attributes	
Subject-Specific Disinterest		
Overloaded assignments and lectures	Academic Stressors	University Distractions
Unrealistic deadlines		
Improper course structure		
Un-engaging teaching methods	Instructor-Related Motivational Barriers	
Lecturer's Lack of Punctuality		
Ragging	University Sub Culture	
Norms		

Source: Data Collection, 2024

### Interpersonal Distractions

Students often struggle with balancing household work, interruptions getting through family, and care for family members which leads to procrastination in their academics.

Students highlighted that they lack time to balance their work related to the house because they have to engage in such work while doing academics, which leads to postponing academics. Also, when they are engaging in academics in the home, they are interrupted and distracted by family discussions, distractions, and disruptions. The visitation of relatives or neighbors to the home also further intensifies the interruptions, leading them to postpone their academic engagement at that moment and join family members. As one participant mentioned:

“When I am doing some academic work at home, and if the family members are having a discussion, then I stop my work and join the discussion. In addition, it is difficult to work when many people gather at home. Therefore, I used not to do my academics on time.”

Participants highlighted that caring for their family members more than their academics leads to delays in their work. This may happen if there is trouble or they need help from their family members; they tend to give priority to that party.

The tendency of students to fulfill their roommate obligations is also significant for academic procrastination. This includes the invitations received from the roommate and care for the roommate that either distract from or discourage timely completion of academic tasks.

Invitations from roommates have both direct and indirect effects on academic procrastination. This often occurs when undergraduates are invited by their roommates to join activities like trips or workouts. In these situations, students tend to delay academic tasks. Some participants mentioned that when their roommates face illnesses or personal problems, they often prioritize caring for them over academic responsibilities. Since these roommates also care for their friends, participants see supporting their roommates as a personal responsibility. Ultimately, fulfilling this responsibility leads to procrastination in their academic activities.

Undergraduates mentioned that most of the time they are often distracted by their lover. Basically, this happens when giving priority to a lover's invitations and caring for him or her leads to undergraduates postponing academics.

As one participant [9] noted, "Sometimes I think having a boyfriend is one reason to delay my academics because every weekend we meet and either we travel or walk. In such days I have to put my academic away and have to go with him because I can't ignore his invitations." According to the experiences of undergraduates they have to meet their lover in the evenings after lectures or on weekends when their lover invites them to spend time with him or her by flirting, traveling, or watching movies. In such a moment they have to postpone their academics and go with the lover by accepting their invitation.

Additionally, Undergraduates tend to postpone their academics for the care of their lover. When their lover suffers from some illness, they have to take care of him or her by going to doctors with them and preparing meals for them and if the lover is unable to attend the lectures, they have to make notes for them. In such moments undergraduates have to procrastinate their academics.

## Personal Distractions

Undergraduates are often distracted by themselves by prioritizing fun and their personal attribution which tends them to delay academic activities. Participants automatically tend to spend more time on activities that provide some fun or happiness to their minds or lives. Engaging in extra activities at the university and spending time on social media for fun are impacted on missing their academic away.

Personal values, and perfectionism have become a significant contributor to their academic procrastination. When the participants feel they cannot fulfill their academic obligations perfectly they tend to postpone examinations and assignments, leading to academic procrastination. Lack of interest due to the nature of subjects also has a direct impact on procrastinating academic-related activities. As one participant explained:

“I followed the art stream and entered this University. Therefore, I am not interested in quantitative subjects. Therefore, I tend to procrastinate work in subjects like Mathematics, Accounting, and Statistics.” (P6)

## University Distractions

Undergraduates are facing difficulties arising from the university domain including Academic stressors, issues regarding lecturers, and university subculture that may influence their level of postponing academics.

Assignments and lectures that exceed the maximum capacity level of undergraduates, unrealistic deadlines, and the decencies in the course structure led to undergraduates putting off academics. As the study found, participants are willing to attend lectures for three or five hours per day. If there are more lectures beyond that they feel fatigued after reaching hostels and they do not engage with academics. Additionally, when there are times when most of the assignments come together, in such a situation they prioritize assignments with the most recent deadlines and other things such as attending lectures and studying are procrastinated.

Some deadlines set by the lecturers are difficult to manage at a given time. According to the experience of undergraduates, deadlines tend to procrastinate assignments because due dates of such falling under the study leave period or dates very close to the end semester examination. In such situations, students ask for extended deadlines after examinations leading to academic procrastination.

Deficiencies in the university course structure tend to cause undergraduates to lose their enthusiasm to learn due to stopping their study program from time to time. Also, the time duration of the degree exceeding four years of time also is a reason for decreasing the energy to be with studies.

Unengaging teaching styles and lecturers' lack of punctuality as instructor related motivational barriers also intensify the procrastination tendency of the students in the selected research context. According to the perspective of participants, some lecturers do not conduct lectures in an interesting way. They just talk, and read the slides, no any examples given and no opportunities are given for the students to interact. Then students feel bored and because of that, their level of interest in the subject is deceased. In such situations, students procrastinate academic work on such subjects. The timely providing course-related materials such as assignment guidelines also impact procrastination among undergraduates. Study revealed that sometimes assignment is given but guidelines are provided very close to the deadline, in such moments they procrastinate work.

Further, as the study identified undergraduates face difficulties dealing with university subcultures in different ways. Especially being ragged and adhering to the norms embedded with culture leads them to postpone their academics. Some norms are coming from the university sub-culture; "Batch Fit" is one concept of them. According to this norm, when one member is not done with his/her assignments, all other members do not submit their completed assignments. Also, if there is a funeral of the parent of one member all other batch-mates attend the funeral without attending lectures or academic-related activities. These things lead to postponing academics to valuing university sub-culture.

## DISCUSSION

The present study aims to explore the reasons behind procrastination behavior among undergraduates in the FMS, SUSL. Focusing on the previous studies, there are a number of studies in the existing literature that study the reasons behind procrastination behavior. The present study contributes to the literature by identifying some unique findings under three major themes such as interpersonal distractions, personal distractions, and university distractions. Furthermore, there are some special factors relatable to Sri Lankan and university contexts.

Comparing similar findings with the existing literature, fear of failure, academic overload, peer pressure, social media usage, and feeling bored are mentioned under the reasons behind procrastination among



undergraduates (Yanez et al., 2023) which is common for the FMS, SULS also. A study conducted on first-year undergraduates mentioned perfectionism is a reason for procrastination which belongs to an internal factor (Lee & Hall, 2020). This study also identified perfectionism as one reason for procrastinating under personal distraction which is also a similar finding. Zhang et al., 2018 mentioned that romantic relationship also leads to procrastination in undergraduates by putting them away from academics parallel to this study's findings. Also, undergraduates who spend more time on extra-curricular work (Corkin et al., 2014; Yanez et al., 2023) and the lack of interest in a particular subject leads to postponing of academic work (Corkin et al., 2014) coincide with this research endeavor. Due to the inflexible deadlines, students who cannot manage limited time tend to procrastinate (Yanez et al., 2023) is also aligned with this investigation. Comparing conflicting findings, Codina et al., 2018 and Yáñez et al., 2023 mentioned that teaching style is also a contributing factor to procrastination. However, they identified the teaching style of the teacher as supporting work independent to the undergraduates, which leads to less procrastination and the rigid and controllable teaching style is a cause for increased procrastination. When compared with this study, there is a similarity which is teaching style is a reason for procrastination but according to the undergraduate's explanations they tend to less procrastination of academic when the lecturer is strict and if the lecturer is teaching in a friendly manner, they tend to procrastinate more. Other unique findings under interpersonal distractions, such as family-related obligations, domestic responsibilities, family interruption, and caring for the family are identified. Additionally, under the roommate obligations, roommate invitations and care for a roommate are also revealed. Furthermore, under the university distraction category improper course structure can also be a unique finding which relatable to our research context. Under the instructor-related barriers, lecturers' lack of punctuality, university subculture, ragging, and norms are also unique reasons for procrastination behavior among undergraduates of FMS, SUSL.

## CONCLUSION

Procrastination is a common human behavior that negatively impacts individuals' activities and productivity. This study represents a significant step in exploring the reasons behind academic procrastination among undergraduates at the FMS, SUSL, an under-researched area, particularly in the Sri Lankan context. Through the

findings of the preliminary survey and the identification of gaps in the literature, the study examines procrastination behavior under three main themes: interpersonal distractions, personal distractions, and university-related distractions.

The findings contribute to the existing body of knowledge by offering context-specific insights and addressing the contextual gap identified in previous research. Understanding the prevalence and underlying causes of academic procrastination among undergraduates, as key stakeholders of SUSL, can help students devise strategies to minimize or overcome this detrimental behavior. Furthermore, lecturers can play a vital role by implementing flexible deadlines, motivating students to meet timelines, and scheduling lectures and assignments in alignment with students' capacities to mitigate procrastination. Decision-makers can also contribute by introducing support systems and designing engaging, interactive curricula to reduce academic procrastination.

A key limitation of this study lies in its cross-sectional design, which limits the ability to capture changes or variations in procrastination behavior over time. Future research could address this limitation by employing time-lagged or longitudinal data collection methods to better understand the dynamics of procrastination behavior. Additionally, expanding the scope to include diverse samples from different faculties and universities across Sri Lanka would further enrich the understanding of academic procrastination and its contributing factors.

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# WHY DO EMPLOYEES STAY? JOB EMBEDDEDNESS IN THE APPAREL MANUFACTURING INDUSTRY IN SRI LANKA

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## ABSTRACT

The apparel industry is characterized by a consistently high employee turnover rate, making it crucial to understand not only the reasons for turnover but also the factors that contribute to employee retention. Job Embeddedness (JE) provides a framework for analyzing how employees become attached to and embedded within their roles. JE encompasses six dimensions across on-the-job and off-the-job factors: links, fit, and sacrifice, which collectively assess an employee's intention to stay. The main objective of this study was to examine the nature of Job Embeddedness and the differences in job embeddedness based on demographic factors (age, gender, marital status, and skill level). Employing the quantitative research methodology, data were collected from 272 sewing machine operators in the apparel manufacturing industry using the survey strategy. Descriptive statistics and independent sample t-tests were used to analyze the data. The findings of the study revealed that machine operators are highly embedded with on-the-job fit compared to the other dimensions. Significant variations in JE levels were identified across demographic factors based on age, gender, marital status, and skill level of the employees. Older workers have a higher level of JE compared to their younger counterparts. Gender differences were observed, with organization-related sacrifice. The community-related job link shows a significant difference between married and unmarried employees. Skill level differences were evident across most JE dimensions, except for organization-related sacrifice. Identifying these differences and specific dimensions in which people are more embedded in the organization facilitates managers in making result-oriented strategies to retain employees as a counter-response to employee turnover.

**Keywords:** *Demographic factors, Job Embeddedness, Off the job, On the job, Link, Fit, Sacrifice, Apparel Manufacturing*

## INTRODUCTION

Attracting and retaining employees is vital for organizational success (Liyanage & Galhena, 2014; Barney & Wright, 1998). Labour turnover becomes the central challenge for organizations when retaining employees (Brown et al., 2009). Labour turnover refers to a situation where an employee leaves an organization, and the job has to be replaced and is caused by a lack of satisfaction with the job (Mathis, 2006; Holtom et al., 2008; Nawaz et al., 2009). Cost associated with turnover impacts organizations to reduce profitability (Mathis, 2006; Abbasi & Hollaman, 2000).

Job Embeddedness (JE) was proposed by Mitchell et al. (2001), theorizing why employees continue to stay in organizations rather than why they leave. This was a turning for the turnover literature. JE represents a broad collection of induces that keep a person from resigning from his or her job. Also, it helps managers understand why employees stay (Yao et al., 2004). JE proposed to consist of six dimensions for JE: link, fit, and sacrifice associated with the workplace (On the job) and with the community (Off the job, family obligations and community involvement) by a three-by-two matrix (Mitchell et al., 2001; Felps et al., 2009). It shows that employees reside in at least two spheres: at work and home; thus, JE has two main domains (Mitchell et al., 2001).

JE has been examined in different contexts, such as tourism, technology (Akgunduz & Cin, 2015; Ryan & Harden, 2014) and migrant employees (Halvorsen et al., 2015). It was suggested that further investigations are required to understand how JE influences retention and what differences exist within different demographic groups (Halvorsen et al., 2015). However, the limited research regarding JE in the Sri Lankan context calls to explore the nature of JE in the Sri Lankan context.

The apparel manufacturing industry in Sri Lanka is still labour intensive creating many operational level jobs. Turnover is not a novel phenomenon, but it is often in the apparel manufacturing industry, making it interesting. Turnover intention and turnover used to be a prevailing problem in the apparel manufacturing industry compared to other industries in Sri Lanka (Central Bank Report, 2019). Also, sewing machine operators are among the top three occupations in which the most number of employees quit in past years (Department of Census and Statistics, 2023).

According to JE theory, highly embedded employees will be the least likely to leave (Halvorsen et al., 2015; Ghaffar & Khan, 2017). Therefore,

it is important to determine the levels of three dimensions of JE of apparel manufacturing employees in Sri Lanka. Past literature provides contradictory evidence on the differences in JE based on demographic factors. JE can vary according to the demographic differences that prevail within the employees, such as age (Halvorsen et al., 2015; Giosan, 2003), gender (Ryan & Harden, 2014), marital status (Cotton & Tuttle, 1986; Birsal et al., 2012), skill level (Halvorsen et al., 2015). However, contradictory findings exist for some cases (Birsal et al., (2012).

Understanding the nature of JE will facilitate organizations to address the turnover from a different perspective rather than finding out why employees left, instead finding why employees stay and how it can be dealt with. Hence, it is vital to explore the nature of JE in the Sri Lankan apparel manufacturing industry.

Unpacking the research problem, two study objectives were established,

(1) To find out the level of dimensions of JE (link, fit, sacrifice)

(2) To find out whether there is any difference in the level of JE based on age, gender, marital status, and skill level of the employees

## **LITERATURE REVIEW**

Organizations increasingly face challenges with employee retention (Ghansah, 2011). Job Embeddedness (JE) serves as a retention strategy, helping managers understand why employees stay (Lee et al., 2004). It is defined as the extent of individuals' interactions with people, teams, and groups (Mitchell et al., 2001) and encompasses social, financial, and psychological factors influencing employees' decisions to remain in their jobs (Zhang et al., 2012). Additionally, JE represents the combined forces preventing individuals from leaving their roles (Yao et al., 2004).

Mitchell et al. (2001) introduced a three-by-two matrix with six dimensions—link, fit, and sacrifice—related to an individual's organization and community. Among the six dimensions of JE, the link is related to “relations (formal and informal) between the individual and the organization or other people”. Fit includes “employees’ perceived comfort with an organization and with his or her environment”. Sacrifice refers to the “perceived cost of material or psychological benefits that may be foregone by leaving a job” (Mitchell et al., 2001; Crossley et al., 2007). The overall measurement of JE involved link, fit and sacrifice dimensions in two main domains of JE (Lee et al., 2004; Zhang et al., 2012).



Job Embeddedness theory suggests people become embedded both on the job (organizational embeddedness) and off the job (community embeddedness) (Felps et al., 2009), reflecting their dual presence at work and home (Mitchell et al., 2001). Organizational embeddedness refers to how enmeshed individuals are within their workplace, while community embeddedness involves ties to their living environment, which may limit mobility due to relocation constraints (Feldman et al., 2012). The three sub-dimensions—link, fit, and sacrifice—help explain why embedded employees are likelier to stay than less embedded peers (Zhang et al., 2012).

JE produce several positive outcomes for organizations at the individual level, such as reduced turnover, create a commitment, performance improvements, higher perceived organizational support, including supervisory support, etc. (Mitchell et al., 2001; Giosan et al., 2005; Holtom et al., 2008; Sekiguchi et al., 2008; Felps et al., 2009). Thus, JE has been verified as a strong predictor in retaining employees in the literature (Felps et al., 2009; Jiang et al., 2012; Lee et al., 2004; Coetzer et al., 2019). Wheeler et al. (2012) linked HR practices and high LMX to greater Embeddedness, while Dechawatanapaisal (2018) highlighted career development and rewards as key drivers of Embeddedness and retention.

While the relationship between Job Embeddedness and demographic factors is understudied, some research provides insights: Giosan (2003) found that age significantly predicts link dimensions, as older employees have more time to form organizational and community attachments than younger employees. However, Birsal et al. (2012) found no significant differences between age and Job Embeddedness. Ryan & Harden (2014) showed gender differences in Job Embeddedness dimensions among IT workers. Females reported higher perceived sacrifices when leaving their organization, while no gender differences were observed for organizational fit or interactions. Birsal et al. (2012) found that male employees experience higher organizational-related sacrifice than females. Birsal et al. (2012) revealed that single employees showed higher community fit and sacrifice compared to married employees, indicating significant differences in Job Embeddedness based on marital status.

Halvorsen et al. (2015) found that skilled migrant employees embedded themselves through fit and link dimensions but did not perceive sacrifices as significant attachment factors. They suggest future research on semi-skilled and unskilled workers. Birsal et al. (2012) found no significant relationship between skill level and Job Embeddedness.

While Job Embeddedness has been studied internationally to address turnover issues in industries like tourism and technology, its application within organizations remains underexplored. Halvorsen et al. (2015) highlighted the need for further research on how Job Embeddedness dimensions (fit, links, sacrifice) vary across demographic groups. In the Sri Lankan context, studies on Job Embeddedness are scarce. Exploring its nature in garment manufacturing organizations is particularly important, as this sector experiences higher turnover than other industries. Understanding Job Embeddedness in this context can provide valuable insights into retention strategies.

## **METHODOLOGY**

### **Respondents of the Study**

Data were collected from sewing machine operators in the apparel manufacturing industry in Sri Lanka. Using the convenience sampling method, 272 responses were collected and were in usable form to consider for data analysis. The majority (89.3%) of machine operators are younger workers (<45). At the same time, a high proportion of machine operators were female (63.6%), which is par with industry statistics as the majority of the apparel manufacturing industry represents female workers. Married employees were 54% of the sample. Even though most of the sample was semi-skilled, the percentage difference between skilled and semi-skilled was negligible, that 52.6% of the total sample is semi-skilled employees, and 47.4% are skilled employees.

### **Method of Data Collection and Instrument**

The survey method was used to collect data through a self-administered questionnaire. The questionnaire was translated into Sinhala language for the easiness to understand for the respondents. The questionnaire consists of questions to collect demographic factors of the respondents such as age, gender, marital status, and skill level of the employees, which was required to examine the differences of JE based on demographic factors and statements to measure the JE with 12 items which were adopted using a standard scale developed by Clinton et al. (2012). JE was measured using a 5 points Likert scale rated as 1= strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. The study used 3x2 dimensional scales (links, fit, and sacrifice dimensions of that place separate organizational and community aspects) of Clinton et al. (2012). This scale was chosen because it

considers all dimensions of JE and is free from validity and reliability issues. Also, it indicates that it is formative of the original scale of JE (Mitchell et al., 2001). Table 1 presents the indicator used to measure the JE.

**Table 1: Operationalization of the Variable, including dimensions of JE with relevant indicators and items of the questionnaire**

Variable	Dimension	Indicator	Item in the questionnaire
Job Embeddedness  Five-point Likert scale (1= Strongly Disagree 5=Strongly Agree)	On-the-job Fit	Good match with the organization based on the skill and talents	The organization provides me with a way of life that suits me  Overall, I fit very well in the organization
		Friendship	My closest friends are in the organization
	On-the-job Link	A strong relationship with the people in the organization	Overall, I have strong ties with people throughout the organization
		Perceived losses due to leaving the organization	I would miss the excitement that this job brings if I left There would be many things about organizational life that I would be sad to lose if I left
	Off-the-job Fit	Perceived match with the community	The area where I am based right now is suitable for my family and friends There is plenty to keep me happy off duty around here
	Off-the-job Link	Close interaction with the community	Even if I decide to leave the organization, I would still live in the area where I am based at the moment My family/partner has strong ties around the community where I am currently based

**Table 1: Continued.**

Variable	Dimension	Indicator	Item in the questionnaire
Job Embeddedness			Leaving the area where I am currently based would mean many personal and/or family sacrifices
Five-point Likert scale (1= Strongly Disagree 5=Strongly Agree)	Off-the-job Sacrifice	Perceived loss of community relations	I would be very sad to leave the general community where I am based right now

Source: Authors developed based on Clinton et al., 2012

### **Data Analysis**

The current study used both descriptive statistics and inferential statistical techniques to analyze the data. Descriptive statistics are used to describe the level of JE among employees. Each demographic factor was divided into two meaningful groups: age (Younger/Older), gender (Male/Female), marital status (Married/Unmarried), and skill level (Skilled/Semi-skilled) to examine the possible variations of JE based on the demographic factors. Two-Sample t-Test was employed to compare the means of two groups and understand the possible variations that exist in JE levels of machine operators in the apparel manufacturing industry. SPSS Version 21 was used to analyze the data.

## **FINDINGS & DISCUSSION**

### **Level of Job Embeddedness of Employees**

Descriptive statistics help to get a good idea of how the respondents have reacted to the items in the questionnaire, how good the items are and how to measure used by them. (Sekaran, 2003). The present study used the mean and standard deviation (Table 2) to compute the current level of each dimension of JE.

**Table 2: Descriptive Statistics**

Variable	N	Mean	Standard Deviation
On the job fit	272	4.17	0.59
On the job Link	272	3.67	0.86
On the job sacrifice	272	3.97	0.78
Off the job fit	272	3.57	0.79
Off the job link	272	3.69	0.79
Off the job sacrifice	272	3.83	0.81

According to Table 2, on-the-job fit has the highest mean value of 4.17. Since it lies in the range of agree, it indicates that the machine operators of apparel manufacturing organizations have highly embedded with an organization related job fit (on-the-job fit) compared to other dimensions of JE. Moreover, the standard deviation of the job fit is 0.59. In addition, the mean value of the job link is 3.67, and it has a 0.86 deviation. On the job, sacrifice has the second highest mean value (3.97), indicating that organization related sacrifice (on-the-job sacrifice) is the second reason for machine operators of apparel manufacturing organizations to stay in their jobs. Furthermore, the mean value of off the job fit (0.78), off the job link (3.69), off the job sacrifice (3.83) lies in the average level on a five-point likert scale and those are deviating within the range of 0.79, 0.79, and 0.81 respectively.

### **Testing the significance of differences in the level of JE through an Independent Sample t-test**

The independent two-sample t-test is probably the most widely used test in statistics for the comparison of the mean values between two samples. The study used an independent sample t-test to analyze the data collected from the survey to achieve the objectives of the study and to test the significance. The decision rule is that if the output p-values of the dimensions of JE are less than the critical p-value (0.05), the mean difference will be considered significant.

#### *Age and Job Embeddedness*

Table 3 shows the t-test results of the two groups of age: young (below 45 years) and old (above 45 years) for six dimensions of JE. As per Table 3, there is a significant mean difference between young workers and old workers at the JE level relevant to on-the-job fit, on-the-job link, on-the-job sacrifice, off-the-job fit, off-the-job link, off-the-jobsacrifice. When considering old workers, they have higher organization related job link

(mean<sub>young</sub> = 3.5658, mean<sub>old</sub> = 4.5172), organization related job sacrifice (mean<sub>young</sub> = 3.9012, mean<sub>old</sub> = 4.5172), community-related job fit (mean<sub>young</sub> = 3.4774, mean<sub>old</sub> = 4.3103), community-related job link (mean<sub>young</sub> = 3.6152, mean<sub>old</sub> = 4.3621) and community-related job sacrifice (mean<sub>young</sub> = 3.7551, mean<sub>old</sub> = 4.4310) scores than young workers.

**Table 3: t-Test result based on age group (Young and old)**

Variable	Age	Mean	T-value	P-value
On the job fit	Young	4.1008	-6.781	0.000
	Old	4.7241		
On the job link	Young	3.5658	-8.149	0.000
	Old	4.5172		
On the job sacrifice	Young	3.9012	-4.917	0.000
	Old	4.5172		
Off the job fit	Young	3.4774	-7.255	0.000
	Old	4.3103		
Off the job link	Young	3.6152	-5.922	0.000
	Old	4.3621		
Off the job sacrifice	Young	3.7551	-5.342	0.000
	Old	4.4310		

#### *Gender and Job Embeddedness*

Table 4 below presents the t-test results for the gender: male and female for the six dimensions of JE.

**Table 4: T-test result based on gender (Male and Female)**

Variable	Gender	Mean	T-value	P-value
On the job fit	Male	4.0808	-1.879	0.062
	Female	4.2168		
On the job link	Male	3.6010	-1.018	0.310
	Female	3.7052		
On the job sacrifice	Male	3.7980	-2.779	0.006
	Female	4.0636		
Off the job fit	Male	3.4949	-1.180	0.239
	Female	3.6069		
Off the job link	Male	3.6162	-1.243	0.215
	Female	3.7399		
Off the job sacrifice	Male	3.7475	-1.185	0.237
	Female	3.8728		

According to Table 4, there is a significant mean difference between male and female workers with the dimensions of on-the-job sacrifice, and female employees have higher organization related sacrifice (mean<sub>male</sub> = 3.7980, mean<sub>female</sub> = 4.0636) scores than male workers. Moreover, other dimensions of JE (organization related job fit, organization related job link, community-related job fit, community-related job link, and community-related job sacrifice) did not show statistically significant differences.

#### *Marital Status and Job Embeddedness*

Table 5 depicts the t-test results of the two groups divided for the marital status: married and unmarried for the six dimensions of JE.

**Table 5: T-test result based on Marital Status (Married and Unmarried)**

Variable	Marital Status	Mean	T-value	P-value
On the job fit	Married	4.1871	0.609	0.543
	Unmarried	4.1440		
On the job link	Married	3.6327	-0.731	0.465
	Unmarried	3.7080		
On the job sacrifice	Married	4.0102	1.001	0.318
	Unmarried	3.9160		
Off the job fit	Married	3.6361	1.583	0.115
	Unmarried	3.4840		
Off the job link	Married	3.7823	2.001	0.046
	Unmarried	3.5920		
Off the job sacrifice	Married	3.9014	1.626	0.105
	Unmarried	3.7400		

Community-related job link shows a significant mean difference between married and unmarried employees. However, interestingly, married employees show higher community-related links than unmarried employees (mean<sub>married</sub> = 3.7823, mean<sub>unmarried</sub> = 3.5920). Other dimensions of JE (on-the-job fit, on-the-job link, on-the-job sacrifice, off-the-job fit, off-the-job sacrifice) did not show statistically significant differences (Table 5).

#### *Skill level and Job Embeddedness*

Table 6 shows the t-test results of the skill level, skilled and semi-skilled, for the six dimensions of JE.

**Table 6: T-test result based on the skill level (Skilled and Semi-skilled)**

Variable	Level of Skill	Mean	T- value	P-value
On the job fit	Skilled	4.2791	3.022	0.003
	Semi-skilled	4.0664		
On the job link	Skilled	3.7752	1.968	0.050
	Semi-skilled	3.5699		
On the job sacrifice	Skilled	4.0155	0.970	0.333
	Semi-skilled	3.9231		
Off the job fit	Skilled	3.7093	2.837	0.005
	Semi-skilled	3.4371		
Off the job link	Skilled	3.8953	4.117	0.000
	Semi-skilled	3.5140		
Off the job sacrifice	Skilled	4.0194	3.809	0.000
	Semi-skilled	3.6538		

According to Table 6, there is a significant mean difference between skilled and semi-skilled employees concerning the JE dimensions of organization related job fit, community-related job fit, community-related job link, and community-related job sacrifice. However, there is no significant mean difference between skilled and semi-skilled concerning organization related job links and organization related sacrifice. In accordance with the result of Table 6, skilled employees show higher organization related job fit (mean<sub>skilled</sub> = 4.2791, mean<sub>semi-skilled</sub> = 4.0664), community related job fit (mean<sub>skilled</sub> = 3.7093, mean<sub>semi-skilled</sub> = 3.4371), community related job link (mean<sub>skilled</sub> = 3.8953, mean<sub>semi-skilled</sub> = 3.5140), community related job sacrifice (mean<sub>skilled</sub> = 4.0194, mean<sub>semi-skilled</sub> = 3.6538) scores than semi-skilled employees.

## Discussion

The main objectives of the study were (1) To find out the level of dimensions of JE (link, fit, sacrifice) and (2) To find out whether there is any difference in the level of JE based on demographic variances (age, gender, marital status, skill level) of the machine operators in apparel manufacturing organizations in Sri Lanka. Following the findings, the first result indicates that machine operators in apparel manufacturing organizations are highly embedded with the dimension of organizational related job fit ( on-the-job fit) (mean<sub>OJF</sub> = 4.17) compared to other dimensions of JE. Similarly, previous research by Ghaffar & Khan (2017) found that a high mean score on organization related job fit (on-the-job fit) and community-related job fit ( off-the-job fit) compared to the other



dimensions of JE. Consequently, the present study shows other dimensions of JE except the job fit is on an average level of JE. Employees perceived that the organization provides them with a way of life that suits them, and they fit more well in the organization than anything else, such as staying with their current employer. Organizations can increase employee job fit by conducting induction programs to help new employees become more familiar with the role that has to play in the organization, and this will help novice employees identify the skills required to perform their jobs successfully. Moreover, conducting ongoing on-the-job training will be more important to increase employee job fit within the organization.

Also, findings concluded that the level of JE varies according to demographic factors (age, gender, marital status, and skill level). The first result of the independent sample t-test revealed that the level of JE (for all dimensions) varies according to age, and older workers have a higher level of on-the-job fit, on-the-job link, on the job sacrifice, off-the-job fit, off-the-job link and off the job sacrifice than younger workers. Giosan (2003) found that age was a significant predictor of the dimension of organization related job links (on-the-job link) and community-related job links (off-the-job link) only because when people are getting older, they would have had more opportunities to create attachments with various organizational factors. Similarly, past research findings show older workers are more embedded, and they are more likely to remain employed in their current organization (Kim, et al. 2008). Older workers may work a long time compared to young employees, providing them opportunities to be familiar with the organization and create a good fit and link with the organizational atmosphere. Investing much time in the organizations left with a great loss if they leave. At the same time, getting older may generate the feeling of staying in the comfort zone which is familiar to the person in the organizational and community setting in which he/she works and lives.

Then, findings confirm that organization related sacrifice has a significant difference and other dimensions of JE (on the job fit, on the job link, off the job fit, off the job link, off the job sacrifice) does not show a significant difference between males and females. Female employees have higher organization related sacrifice than male employees in this context. Confirming the findings, Ryan and Harden (2014) highlighted that females have more organization related sacrifice than males and females who feel that if they leave the company they will lose more than their males. On the contrary, a study shows that organization-related sacrifice differs significantly by gender; here, male employees have

higher organization-related sacrifice than female employees (Kim et al. 2008). However, the present study indicates that female employees believe that sacrifice is the most important thing for embedding more to the job compared to the other dimensions of JE than males and females credence that they would lose more than their male employees if they left the organization. Holtom and Inderrieden (2006) highlighted that providing financial incentives and paying above market salaries are effective ways to increase employee sacrifice. Moreover, the organization can provide meals and transport facilities to its employees for free or by deducting a small proportion of the employee's salary. Implementation of good practices for work-life balance would also increase on the job sacrifice for females more than their male counterparts. According to the findings of Halvorsen et al. (2015), organizations can increase the sacrifice level of their employees indirectly by increasing the link and fit of their employees. Therefore, organizations can create things that are helping to develop a strong fit and links among the employees. This finding will be significant for apparel manufacturing organizations in Sri Lanka as most machine operators are females in the industry. Developing practical strategies addressing this aspect would help the organizations to manage high turnover rates successfully.

Community-related job link shows a significant difference between married and unmarried employees except in other dimensions of JE. Married employees have higher community-related job links than unmarried employees. This finding was contradictory to the findings that unmarried employees were more fitted to community and community-related sacrifice than married employees. (Birsal et al., 2012). Moreover, another research states that community-related job fit and community-related sacrifice differ with marital status with single employees having higher scores than married employees (Kim, et al. 2008). This may be because of the employees' lifestyles and when the number of close friends and relatives who lived nearby in the same community had a significant effect on them.

Finally, the dimensions of JE vary according to the skill level of employees. In this context, organization-related sacrifice (0.333) does not vary among the skilled and semi-skilled employees. According to the mean value of dimensions, skilled employees have higher JE than semi-skilled employees. More elaborately, the previous research of Halvorsen et al., (2015) highlighted that employees are more fit and linked with the organization and community, but did not find any evidence that the dimension of sacrifice attached employees to their organization or their

community. It revealed that sacrifice is not an essential factor for an employee to retain their current job when they are more attached to the organization and community link and fit dimensions of JE. At the same time, being a skilled employee would give more opportunities for employees elsewhere, which may be caused to make the employee less embedded in the current organization in terms of sacrifice dimension. The loss may be negligible compared to the gains they could have from leaving the organizations, hence organization-related sacrifice does not show a significant difference in the context.

## CONCLUSION

Machine operators are highly embedded in the organization related job fit (on-the-job fit) compared to the other dimensions of JE. Employees are not leaving their jobs because of the high level of on-the-job-fit dimensions. Moreover, the sacrifice dimension shows a second reason why employees stay for their jobs. Significant differences exist in JE for some dimensions, and they vary according to age, gender, marital status, and skill level of employees. Hence, identifying the dimensions in which people are more embedded in the organization helps the management to make strategies to retain their valuable employees as a counter-response to employee turnover.

## FUTURE RESEARCH DIRECTIONS

The current study was limited to only one industry in Sri Lanka. Therefore, future researchers can expand the study to include a mix of industries and compare them as well. Also, a longitudinal study would help in understanding the variations of JE before and after implementing strategies to enhance JE for retaining employees in organizations.

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# **FELICITATION E-VOLUME**

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