



PROCEEDINGS

The 18th International Research Conference on
Management and Finance (IRCMF – 2023):
Management in turbulent times: The way forward



17th November 2023

Faculty of Management and Finance
University of Colombo
Sri Lanka

PROCEEDINGS OF THE 18TH INTERNATIONAL
RESEARCH CONFERENCE ON MANAGEMENT AND
FINANCE – 2023

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MESSAGE FROM THE VICE CHANCELLOR

It gives me great pleasure to write this message of felicitation on the occasion of the 18th International Research Conference on Management and Finance (IRCMF, 2023) organized by the Faculty of Management and Finance, University of Colombo.



I am delighted to extend my heartfelt compliments to all of you on the occasion of this remarkable gathering focused on the theme, "Management in Turbulent Times: The Way Forward." Your participation in this important discourse underscores your commitment to advancing knowledge and fostering resilience in the face of challenges. In today's dynamic and unpredictable world, the principles of effective management have never been more crucial. The ability to steer organizations through turbulent waters demands a profound understanding of contemporary trends and an unwavering dedication to innovative strategies.

Amidst this, the acquisition of Information Technology skills has become non-negotiable in the landscape of modern management. Technology, once a facilitator, has now become the cornerstone of operational efficiency, strategic decision-making, and competitive advantage. Proficiency in data analytics, digital transformation, and emerging technologies equips us with the tools necessary to not only survive, but to thrive, in an ever-evolving business environment.

As we contemplate the way forward, let us bear in mind that it is not only a question of adapting to change, but of leading it. Innovation and adaptability must be at the heart of our approach. By championing interdisciplinary collaboration and a spirit of experimentation, we unlock new avenues of progress and discover novel solutions to the multifaceted challenges before us.

In closing, I extend my gratitude to the Dean and Faculty for your dedication to the pursuit of knowledge and excellence in management. Together, we shape not only the future of our institutions but also the trajectory of our global society. May this conference be a beacon of inspiration and a catalyst for transformative action.

Wishing you all an enriching and fruitful conference.

Senior Professor (Chair) H. D. Karunarathna

Vice-chancellor

University of Colombo

Sri Lanka.

MESSAGE FROM THE DEAN

I am delighted to send this message regarding the Annual International Research Conference on Management and Finance (IRCMF) 2023 and the Doctoral Colloquium of the Faculty of Management and Finance at the University of Colombo.



The Faculty of Management and Finance at the University of Colombo is hosting IRCMF 2023, the annual research conference of the Faculty. This conference, which will be held for the 18th consecutive year on November 17th, 2023, will take place in virtual mode. A growing body of research is vital for management practices and improving organizational outcomes. Certainly, conferences and colloquiums of this nature bring all researchers to one platform and instill a research culture among the academic community, thereby contributing to the nation's development. In this light, IRCMF aims to foster a research culture among academics and serves as a platform for them to discuss and debate scholarly dilemmas from different theoretical, methodological, and practical perspectives. It brings together different ideologies under one roof to provide opportunities for face-to-face idea exchange and the establishment of research relationships. The abstracts submitted here align with the overarching objective of our conference and colloquium and have undergone a peer-review process to maintain the quality of the abstracts.

I am confident that conferences and colloquiums of this nature will cultivate the much-needed research culture among academics and researchers, fostering interactions among them to exchange ideas about recent advances in management. I take this opportunity to express my gratitude to the conference and colloquium chairs, staff, reviewers, and the organizing committee for their contributions to the successful organization and management of this event.

I wish the Annual International Research Conference on Management and Finance (IRCMF) 2023 and the doctoral colloquium a grand success.

Professor M.P.P. Dharmadasa

Dean, Faculty of Management & Finance

University of Colombo

Sri Lanka

MESSAGE FROM IRCMF CO-CHAIRS – 2023

Dr. Ruwangi Chandrasekara
Department of Marketing



Dr. H.M.S. Amanda N. Herath
Department of Business Economics



It is our pleasure to warmly welcome you to the 18th International Research Conference on Management and Finance – 2023 (IRCMF 2023), organized by the Faculty of Management and Finance, University of Colombo, Sri Lanka.

This year's theme for the conference is 'Management in turbulent times: The way forward'. Indeed, in today's fast-paced world, organizations face unprecedented disruptions, uncertainties, and complexities. Effective management in such turbulent times is not just a necessity but a critical skill that can shape the future of businesses, industries, and economies. This conference brings together thought leaders, researchers, and practitioners to share their expertise, experiences, and innovative solutions.

We are happy to announce that 23 local and international papers have been carefully reviewed and selected to be presented under five tracks: Accounting and Management Information Systems, Business Economics and Finance, Human Resources Management, Marketing, International Business, and Hospitality Management and Organization Studies, and Interdisciplinary Research. We encourage you to engage in lively discussions, exchange ideas, and network with fellow attendees, with the hope that the collective wisdom and collaboration that emerge will inspire new perspectives and approaches to management in turbulent times.

While we congratulate all local and international authors representing various faculties, universities and countries on being selected to be a part of our conference, we would like to extend our sincere gratitude to all those involved in making IRCMF 2023 a success: the Vice Chancellor, University of Colombo, Dean, Faculty of Management and Finance, Deputy Registrar, Deputy Bursar, the chairpersons, track chairs, coordinators, secretaries, members of the academic staff and non-academic staff, for extending your support in making this event a success. We also thank the Keynote Speaker, Dr. Jannine Poletti Hughes, for accepting our invitation despite her busy schedule. Thank you for being a part of this exciting journey. We hope you find the conference proceedings both enlightening and enriching as we collectively explore "The Way Forward" in the realm of management.

MESSAGE FROM DOCTORAL COLLOQUIUM CO-CHAIRS

Dr. Sujeewa Damayanthi
Department of Accounting



Dr. Gimhani Ekanayake
Department of Accounting



It is our pleasure to warmly welcome you to the Doctoral Colloquium 2023 organized in parallel with the 18th International Research Conference on Management and Finance (IRCMF 2023).

The key purpose of the 6th Doctoral Colloquium is to provide a unique interactive platform for PhD, DBA, and MPhil students to present their work-in-progress to a wider audience of academics and receive expert comments from a scholarly panel. The event will also provide an opportunity for the doctoral students to network with each other and academics.

The keynote speech will be delivered by Emeritus Professor Tudor Silva from the University of Peradeniya, Sri Lanka, which will provide participants with useful insights to succeed in their Ph.D./DBA journey.

While we congratulate the doctoral candidates representing various universities for being selected to be a part of our conference, we would like to extend our sincere gratitude to all those involved in making this colloquium a success: the Vice Chancellor, University of Colombo, Dean, Faculty of Management and Finance, Senior Assistant Registrar, Faculty of Management and Finance, scholarly members of the reviewing panels and all other members of the academic staff, for extending their support in making this event a success. We are also grateful to the Keynote Speaker for accepting our invitation to the inaugural session despite his busy schedule. We hope you will have a fruitful experience in the IRCMF Doctoral Colloquium – 2023 and wish all participants success in their research journeys!

INDUSTRY DIALOGUE 2023

The Industry Dialogue is a key feature of the IRCMF. The purpose of organizing a segment of this nature is to link the industry and academia, where this year's theme 'Management in Turbulent Times: The Way Forward' will be taken on by a pool of academics, industry practitioners, and policymakers. In today's dynamic and unpredictable world, the principles of effective management have never been more crucial. The ability to steer organizations through turbulent waters demands a profound understanding of contemporary trends and an unwavering dedication to innovative strategies.

To discuss the issues presented by this year's conference theme, four experienced professionals and practitioners representing diverse corporate sectors, viz, Accounting & Finance, Regional Development, and Higher Education, will address the audience through a lively panel discussion, moderated by Senior Lecturer, Dr. Dananja Wanninayake. This year, we are honoured to have Dr. Jannine Polletti Hughes, Associate Professor in Accounting & Finance, University of Liverpool, U.K., Mr. Mewan Dissanayake, Executive Director, Finance & Corporate Services, Benalla Health, Australia, Ms. S.D. Nilanka Chamindani, Deputy Director, Regional Development Department, Central Bank of Sri Lanka and Ms. Sajindu Perera, Deputy General Manager, Finance, MAS Holdings, as our panelists with the hope of engaging in a lively and valuable panel discussion.

INTRODUCTION TO KEYNOTE SPEAKER

Dr. Jannine Poletti-Hughes

PhD (York), MSc (York), BA (Universidad Intercontinental, Mexico)

*Associate Professor in Accounting and Finance
Management School*

University of Liverpool, UK



Dr. Jannine Poletti-Hughes is an Associate Professor and Chair of the Equality, Diversity and Inclusion committee at the University of Liverpool Management School. She worked as a Financial Analyst at the National Banking and Securities Commission in Mexico before joining the academic sector having obtained a PhD in Corporate Finance from the University of York in the United Kingdom. Her expertise is in corporate governance, diversity on boards of directors, corporate fraud and performance. Jannine's research has been highly commended and prize-winning by the Mexican Institute of Executives in Finance and Ernst & Young (IMEF-EY), as well as for the UDEM Adalberto Viesca Sada Award. She is currently an executive member of the Business Association of Latin American Studies and the treasurer the Society of Latin American Studies (SLAS) and has provided consultancy services on the fairness of drug-pricing to the Markets and Consumer Authority in the Netherlands. Dr. Jannine Poletti-Hughes has been a board director for Fideres (multinational company) and an adviser to Mexican parliamentarians on the business case for gender diversity on boards of directors on private companies. She has published widely in leading academic journals including the British Journal of Management, International Journal of Finance and Economics, International Review of Financial Analysis, The European Journal of Finance, Management Accounting Research, among others.

ABSTRACT OF THE KEYNOTE ADDRESS**Forging Resilience: Embracing Diversity in Human Capital and
Minimizing Default Risk****Dr Jannine Poletti Hughes**

In today's dynamic and uncertain business environment, effective management strategies are imperative, especially in emerging markets with heightened uncertainties. For corporations, gender diversity on boards of directors plays a pivotal role in mitigating default risk, but its significance extends beyond symbolism, particularly in cultures where traditional gender stereotypes persist. Embracing external female directors broadens the talent pool for leadership positions, offering fresh insights, diverse perspectives, and valuable skills that enhance risk management and corporate governance. By strategically including independent female directors, organizations in emerging markets can not only bolster their overall performance but also increase their resilience amidst uncertainty, making gender diversity a crucial element for businesses forging a path forward in turbulent times.

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Accounting & Management Information Systems

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Accounting Profession – Navigating the Future Landscape

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Abstract

With the increasing prevalence of digital technologies in modern business operations, their importance in facilitating efficient and sustainable business practices cannot be overstated. However, technology's impact on the accounting profession remains uncertain, as it threatens to disrupt traditional job roles. This study examines how the rise of computerised accounting, auditing, and tax systems may change future accountants' roles, as indicated by interviews with members of the Institute of Chartered Accountants (Managerial Level) of Sri Lanka covering the top 5 firms which are KPMG, Deloitte, EY, BDO & PWC. Using NVivo and thematic analysis, the study concludes that the accounting profession must integrate with information technology to remain relevant and effective but cannot operate fully automated without human intervention. This research offers valuable insights for those working in the accounting profession, including accountants, graduates, undergraduates, and employees.

Keywords: Information Technology, Accountants' Job Roles, Accounting Automation, Future of Accounting

1. Introduction

Digitization has dramatically influenced the day-to-day accounting profession since the beginning of the use of computers. As we navigate the current digital landscape, technology has become an indispensable tool that allows businesses to streamline their operations, ensure flawless functionality, and meet obligations with greater efficiency and sustainability. Computers and machines are instrumental in achieving these objectives. To survive, it is imperative for many accounting-related businesses to get familiar with the rapidly evolving digital systems and to participate in digitalization (Holtzman, 2004; Korhonen et al., 2020). The consequences of Information Technology (IT) and Accounting Automation (AA) on employment opportunities are significant concern in the emerging global economy. Due to this, most jobs will inevitably disappear and/or be replaced by new IT advancements. Over the next five years, 85 million jobs are predicted to be lost due to the workforce's faster-than-expected automation. For workers, digitalization and the COVID-19-induced recession are causing a "double disruption." By 2025, businesses will embrace technology, transforming tasks, jobs, and skills in the process. According to the survey conducted through the World Economic Forum in 2020, 43% of organisations expect to reduce their employees because of technology integration, 41% expect to increase the use of contractors for task-specific labour, and 34% expect to increase their employment due

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to the integration of technology. Employers will balance work relatively between humans and machines in five years. The accounting industry faces a paradigm shift as technological advancements transform the field. The survey further elaborates that accounting, bookkeeping, payroll clerks, accountants, and auditors are expected to experience a decline in demand in the future, ranking 3rd and 4th on the list of decreasing jobs (Tornqvist & Forss, 2018).

Figure 1

'ins' & 'outs'- The demand for job roles over the coming years

Increasing demand	Decreasing demand
1. Data analysts and scientists	Data entry clerks
2. AI and machine learning specialists	Administrative and executive secretaries
3. Big data specialists	Accounting, bookkeeping, and payroll clerks
4. Digital marketing and strategy specialists	Accountants and auditors
5. Process automation specialists	Assembly and factory workers
6. Business development professionals	Business services and administrative managers
7. Digital transformation specialists	Client information and customer service workers
8. Information security analysts	General and operations managers
9. Software and applications developers	Mechanics and machinery repairers
10. Internet of things specialists	Material- recording and stock- keeping clerks
11. Project managers	Financial analysts

Source: World Economic Forum (2020)

This study is dedicated to investigating the impact of the rapid evolution of accounting software and emerging technologies on the job roles of accounting professionals, hence addressing the research question of “*how future accountants’ job roles might change with the invasion of AA as indicated by the sentiments of the accountants?*” “The novelty of this research is that it represents data collected from professionals at five prominent companies, providing a cohort that accurately represents the community of chartered accountants. Furthermore, their sentiments were carefully examined to effectively address the core research question. This paper elucidates a rundown of the main five sections: introduction, review of literature, methodology, analysis, and the discussion, subsequently, the conclusion.

2. Literature Review

The foremost areas of this study pay attention to the accounting profession's evolutionary journey, as technology continues to transform the industry at a rapid pace. To achieve this, the researchers have meticulously curated relevant research studies from recent years, all centred around the search domain. These studies have been systematically chosen for their valuable insights into the step-by-step evolution of the accounting profession in response to technological advancements.

2.1 Technology, Trends, and Transformation

According to Wessels (2005), the employment of bookkeeping, accounting, and auditing clerks are expected to decline by 5% between 2021 and 2031. Despite this, the accounting and auditing industry is projected to grow by 6% during the same period, relatively slower than the average for all occupations. The Bureau of Labour Statistics attributes this slow growth rate to the increasing automation of traditional accounting and auditing tasks, such as bookkeeping, data entry, and financial statement preparation, resulting from technological advances, including cloud computing and Artificial Intelligence (AI). However, the Bureau of Labour Statistics emphasizes that there will still be a need for skilled accountants and auditors who can analyse financial data, identify trends, and provide strategic financial advice. Therefore, while there may be a decline in demand for some traditional accounting and auditing roles, individuals with specialized skills and expertise may still find opportunities in more advisory or niche roles. Moreover, according to Williams et al. (2021) who states that 159 United Nations countries have digitalized their tax management systems. Furthermore, according to the previous literature, researchers found that in many countries, most of the tax activities are digitalized and done through electronic tax systems.

Calderón and Stratopoulos (2020), explain it further and show that computerization has a probability of 0.98 of endangering accounting, bookkeeping, and auditing clerkship. Before the advent of computer technology, accounting was primarily focused on transaction processing, such as keeping track of financial transactions and filing taxes. Clients only received limited financial data, much of which was historical. With accounting information stored on paper, it was often challenging and time-consuming for accountants to create the analyses and forecasts that clients required. However, with the advent of computer systems, accounting professionals are no longer heavily burdened by routine transaction processing. Tracy (2010) points out that because transaction data can be linked to physical processes and some basic reconciliations can be automated, these processes may require fewer accountants than the manual accounting process.

The study conducted by Qasim and Kharbat (2019), explained that technology has affected the traditional role of accountants. Moreover, Zahidi (2020) found that the accounting industry has a proven track record of recognizing and seizing new business possibilities and circumstances. According to Harris (2017), the function of accountants may diminish or be forced to change if blockchain technology successfully permeates corporate culture as the new system of record inside organizations and record-keeping subsequently becomes distributed and peer-to-peer. As well as in the study authors have also examined the potential for blockchain-based accounting techniques to transform commercial information systems in the future. Blockchain accounting applications could be triple-entry ledgers which include three respondents (the buyer, the seller, and the blockchain network) and three entries (the debit, credit, and cryptographic signature of the transaction), while early accounting systems used single-entry ledgers (profit/loss statement), contemporary accounting systems employ double-entry ledgers (many categories of financial reporting). Gustafsson and Jerking (2022) demonstrated that the use of blockchain, according to reports from professional organizations such as the American Institute of Certified Public Accountants, Certified Public Accountants in Canada, and the Institute of Chartered Accountants of England and Wales, is anticipated to lessen the requirement for record-keeping tasks and transfer the

accounting focus to higher-level operations. In addition to what above mentioned publications claim, blockchain presents a chance for the accounting industry as it can lower the cost of keeping and reconciling ledgers and offer a high level of certainty regarding asset ownership and history.

According to Mascagni et al. (2021), IT has had the biggest influence on accounting. Paper ledgers, guide spreadsheets, and handwritten financial statements were supplanted by computer systems that could quickly present character transactions into financial reports. However, the accounting system has become largely automated with rapidly advancing technology. Along with that, it has been possible to see an increase in the accuracy and reliability of the accounting system (Greenman, 2016). Jordan (1999), conveyed points of view on the simulation of AI, Machine Learning, and different segments in accounting, highlighting the growing need for and significance of these applications and investigating the changing landscape of accounting and the accountants' job role of emerging advancement in the accounting environment. The author also argued that notwithstanding the potential opportunities of technology, digitalization, and AI-based processes could not replace an accountant's aptitude to use professional judgment and analyse financial data, two of their most crucial functions. Higher efficiency, strong transparency, superior quality, and better outcomes in accounting can be accomplished when AI and human intelligence are integrated. Consequently, the demand for human accountants and auditors won't diminish in the foreseeable future, at least not immediately. Hence, these systems are substantially allied in the accounting procedures when it comes to a business's accounting with IT facts.

2.2 Impact of Technological Advances on Accountancy Education and Profession

According to the World Bank Group (2016), higher education institutions aim to produce employable graduates who learn to overcome problems due to this rapid shift in the corporate environment. Literature has critiqued the accounting curriculum for being unresponsive to change. However, the accounting profession is adapting quickly to changes in corporate operations due to technology. The quality of accounting graduates and their employability will suffer because of the profession's and academia's unbalanced response. If this conundrum persists in the future, there is a possibility that the accounting industry may start to hire IT graduates with technical expertise in blockchain, data analytics, and AI rather than accounting degrees. Proving the above statement, Supriadi et al. (2019), stated that, due to AI, new tasks and roles will emerge in the future. Moreover, they observed that AI might not replace accountants, but they need high skills to meet future requirements. Accordingly, some of the effects that technological advances have had on accountants include changing hiring trends, increased educational requirements, and the rise of the accounting consulting sector (Bierstaker et al., 2006). Bierstaker et al. (2001), stated that, in response to the external environment, accountants' functions do alter with time, expanding beyond their traditional responsibilities. In addition, researchers have mentioned that accountants have skills and expertise beyond their traditional skill set that could be used by management and this is increasingly being seen through their involvement in reporting teams. In essence, Gulin et al. (2019), stated that technology has changed management accounting's function. As mentioned, technology's early influence is overestimated, resulting in an outdated IT curriculum that was announced in the 1970s and 1980s. As well as it illustrates that management accounting graduates must comprehend how

Enterprise Resource Planning systems process transactions, how different subsystems work together, and where the pertinent data is stored to the existence of their job role.

In the study conducted by Liu et al. (2019), the authors found that advisory and assurance services appear to have less experience with Robotic Process Automation (RPA), according to interview replies, even though RPA use is rising across the board in the public accounting sector as a result of the substantial benefits in both effectiveness and efficiency brought about by RPA. According to responders, RPA has not reduced the number of employees as some have feared but rather moved labour to greater valuable tasks. Employee retention and satisfaction are said to have improved as a result. Respondents highlighted that although third-party software applications enable accountants to construct bots without a deep understanding of and experience in coding, the change in labour tasks will necessitate a different skill set for accountants in the future. Accordingly, the profession of an accountant has changed with the development of IT. Further another study revealed that blockchain has the potential to profoundly alter the landscape of the accounting profession and the business environment by providing a radically new mechanism to record, process, and store financial transactions and information (McNeill, 2019). Moreover, some of the authors Stancu and Duțescu (2021) highlighted several important potential advantages for integrating blockchain technology into the accounting and auditing fields which is the greatest of these advantages is the possibility for improved data dependability. Through that authors can assume some arguments will come in the way of computerised systems; computers cannot take the position of humans, or else the accounting profession will vanish in the future thus connecting with AA.

3. Methodology

This segment explicates the specific activities, methods, and techniques used to recognize, select, and analyse the research process to gain accurate and unbiased findings and conclusions in the study. The purpose of this research is to investigate how future accountants' job roles might change with the invasion of AA as indicated by the accountants' sentiments.

A. Data Collection

The targeted population for this study comprised accounting professionals employed at prominent firms in Sri Lanka, specifically Ernst & Young, Klynveld Peat Marwick Goerdeler, Deloitte, BDO Partners, and Price Water House Coopers. The study employed a data collection approach based on in-depth interviews conducted with a carefully chosen group of 10 respondents who are members of the Institute of Chartered Accountants of Sri Lanka. These 10 chartered accountants were deliberately selected using the purposive sampling method with the following criteria.

- i. Respondent should be a registered CA on ICASL
- ii. Respondent should have more than 5 years of work experience
- ii. Respondent should be currently practising the accounting profession

This approach was instrumental in ensuring that the study included a precise and relevant cohort of respondents, aligning perfectly with the study's objectives and requirements.

B. Data Pre – Processing

C. Every interview was conducted with the respondent's consent and approval. The authors commenced the process by transcribing the rich data shared by the respondents and subsequently honed in on significant elements. From there, the researchers meticulously compiled a list of initial codes, marking the initial step towards a thorough analysis of the collected data. *Feature Extraction*

D. After initiating the code using data pre-processing, the third stage involved the researchers in refining the previously analysed (or analysed), wider levels of themes and organizing them again by reviewing each code in detail. Researchers read and recorded each of the collected extracts for each theme throughout the reviewing themes step. After completing all the analytical processes, the process then moved on to the themes' refining and determining the final names for the examined themes by evaluating the quality of conciseness and the degree to which the name elicits an appropriate sense of concern in the reader *Model Implementation*

Based on the thematic analysis, eight main themes under thirty-two codes shared by interviewed respondents have been identified as changes to future accountants' job roles with the AA.

Table 1*Initial Themes Generated Through Thematic Analysis*

Category	Theme name	How many participant respondent s/ respondents mentioned the theme
Changes to the future accountant job role with the AA	Benefits of using automated processes	10
	Future Compliments for the Accounting Profession	6
	Future of Accounting with AI	8
	Hindrances in the adoption of IT	5
	Invasion of IT	5
	IT Capabilities on Young vs. Old Generation	4
	IT Drawbacks	7
	Skill Competencies	10

The researcher entered the phase of the second cycle of coding to develop pattern codes. Pattern coding is a way of grouping the summaries of the first cycle codes into a smaller number of categories, themes, or constructs (Miles et al., 2014). The sentiments of the accountants about the future accounting profession were then discussed under three main themes, namely, (i) compliments for the profession with the amalgamation of AI (ii) skill requirements for future accountants (iii) the future of accounting with AI.

E. Trustworthiness of the Study

In the study conducted, researchers assessed the trustworthiness of a qualitative research study, focusing on four key dimensions: credibility, transferability, dependability, and confirmability. Credibility pertained to the accurate representation of Respondent's' views and experiences, and to enhance this aspect, rigorous data

collection methods like semi-structured interviews were employed. Moreover, Respondents with relevant experiences in the accounting profession were engaged, and member checking was encouraged to validate the findings. Transferability, which concerns the applicability of study findings to other contexts, was another dimension researchers addressed. This was accomplished by providing a comprehensive description of the research context and Respondent backgrounds, enabling readers to assess the relevance of the findings to their situations. Dependability, the dimension focused on the consistency and stability of research findings, was bolstered through meticulous documentation of the research process, transparent reporting, and clear descriptions of data collection and analysis methods, making it possible for other researchers to replicate the study. Lastly, confirmability, the dimension related to the prevention of researcher bias, was addressed by transparently acknowledging researchers' own biases and assumptions. Additionally, multiple data sources and methods were employed to triangulate the findings, ensuring that they were free from undue researcher influence. Overall, by attending to these dimensions in the study on accountants' sentiments regarding the future of the accounting profession, researchers aimed to enhance its trustworthiness and provide valuable insights into accountants' perceptions and expectations for their field's future.

F. Ethical Consideration

The respondents were selected based on their managerial- level positions and from the membership of ICASL. The research team reached out to potential respondents via email, and only those who expressed an interest in participating were included in the study. The respondents were informed about the study's purpose, the research procedures, and their rights as research respondents. All respondents provided their consent verbally before participating in the study. The research team obtained personal consent from the respondents, which included the right to withdraw at any time. Data collection involved one-on-one interviews with each respondent. The respondents were informed that the interviews would be recorded for accuracy purposes and that only the research team would have access to the recordings. The research team also informed the respondents that their anonymity would be maintained and that their responses would be kept confidential.

5. Analysis and Discussion

A. Data analysis was done using thematic analysis through NVivo software. Accordingly, apart from the primary data, some additional data has been collected by reviewing the literature and several sources related to the study subject, *i.e.*, Research papers, journal articles, and books. According to the interviews conducted to this study, the following conclusions were reached according to the compliments presented by the respondents under three categories: **future compliments for the profession, future of accounting with AI and skills requirements for future accountants.** The subsequent section emphasizes the findings of the study.

B. Future Compliments for the Accounting Profession

A study conducted by Fuller and Markelevich (2019), has shown that repetitive tasks can seriously threaten compliant jobs. Therefore, such repetitive activities like bookkeeping can also be seen in the accounting profession and they can be lost in the future.

Further confirming it, one of the respondents pointed out that it is essential to recognize that an accountant is a broader role than a bookkeeper.

“This bookkeeping is no longer in manually, right? We can even the record, this recording system, then passing journal entries automatically these things have been automated..... what we do is more than that” (Respondent 4)

In fact, with the development of technology, arguments can be made that the validity of the accounting profession has decreased compared to the past. Nevertheless, entry-level jobs are affected by this consequence. For example, bookkeeping and general ledger accounting can be declared. Therefore, it will be imperative that the accounting profession's content expands along with IT advancement. The respondents agree that the IT systems and AI have indeed supported and have lessened the complexities often faced with manual systems.

“I have been very much engaged in automated or computerised accounting systems. So, starting from MS Office, Internet, and e-mail, I have dealt with clients' accounting packages like QuickBooks, ERP, etc. And for most of the places where I have been working, there were computerised internal systems, especially at PwC, everything is systemized....” (Respondent 10)

“Like the computerized system will normally be the basic packages like Microsoft packages like Excel, Word, and like PowerPoints we normally use. Other than that, we have specific software developed by the Inland Revenue Department that's called the RAMIS system. So normally it's like introduce in 2014 and also IRD point of view, the RAMIS system is easy to capture the data, they can easily pick your data from like RAMIS system and do the better evaluation...” (Respondent 1)

As well as, in their view, the curiosity of how to add value to the accounting profession will rise in the minds of all of us. Indeed, the claim that an accounting profession exists in isolation from the manipulation of technological tools without human intervention is debatable. In addition, it is not foreseeable that consultancy or advisory jobs, which may be defined as higher-stage jobs rather than entry-level jobs due to working in a business environment based on strategic decisions, may, however, become obsolete with the advancement of technology. This was highlighted in the statement made by respondent 2.

“Most of this bookkeeping part and the certain companies had the bank reconciliation the certain the executive level people were there for the accounting departments. So, that role was a little less nowadays, or if they had three or four people to do that one now, they had only one person to do that. So that kind of stuff is mainly on the bookkeeping, the bank reconciliations...” (Respondent 2)

After embedding the data in the technical tools, the data pattern is identified through those tools and the way to deal with the related situations is decided in the future. But in job roles like consulting, crises can be approached by concluding only from observing past events. However, by blending human intervention with technology, it will be possible to secure job roles in the future. The introduction of business analytics

can be pointed out as proof that everyone's eyes are focused on it. It can be pointed out that organizations are offering to pay high salaries for jobs related to business analytics, expressing the need for it nowadays. The respondents often highlighted that even though entry-level jobs might be easily replaced in the future, high-level jobs in the accounting profession will remain unchanged, but will be more powerful with the amalgamation of technology.

"I'm telling the ability to lose the job depends on the level of your job. So, if you are the bookkeeper, then definitely there's the possibility of losing your job. But if the job like finance managers, risk advisors, or consultants, then they are not totally dependent on historical data. They are dealing with consultancy and advisory. And then that point of view they have like a good opportunity to wrap them up....." (Respondent 1)

"The accountant job is not going to go away, so I think you need to qualify. You need to get your certification. So that you are seen as more of a value addition seen as adding value rather than a data entry specialist....." (Respondent 3)

"I don't think the auditor's role will vanish in the future. But to sustain in a market, the auditors might need new skills. For example, familiarizing ourselves with these innovative systems definitely people if we need to make an audit, we have to do the audit about the systems. That's why the IT auditors are coming in and the auditors have to know about IT. So that's to sustain in the market, there is skill is required, but I don't think that just role will vanish in the future...." (Respondent 2)

According to Ghasemi et al. (2011), the accountant's role has been explained as a job with more emphasis on data analysis, forecasting, and consulting aspects that are somewhat complicated in the future. Moreover, accounting will be closely related to technology in the future, and it will be difficult to introduce it as an isolated profession separated from technology.

Another respondent further explained that AI is the future of the accounting profession. Indeed, potential accountants need to know about **ABCD & E** which refers to AI, Blockchain, Cloud computing, Data analytics, and Ethics. Accordingly, it seems difficult for an accountant to maintain a successful career without technical knowledge. Accordingly, accountants must comply with technical tools to maintain the job's stability. Further confirming it, Frey and Osborne (2017) point out that by using the AI technology mentioned first in the ABCDE theory, the accountant can ensure the future existence of his job. Another aspect of the accountant's work, the auditor's role, will also be greatly influenced by technology in the future. Although IT advancement has affected audit work for a long time, those processes have not yet been fully automated. Even so, Kommunuri (2022) asserted that paperless auditing will become the norm in the future as audit clients are increasingly interested in moving towards a paperless system. Therefore, automation is undoubtedly a factor that cannot be avoided in audit activities. However, some activities performed by auditors have not yet caught on to automation.

In addition, respondents' comments explained that the observations and recommendations of the auditors are still prepared manually. Moreover, they believe that efficiency, productivity, and utilization calculations required for certain analyses

will be very convenient in the future if they are done automatically. Accordingly, authors believe that automation should be the focus even for these types of processes while moving towards the final destination of the paperless audit process chain. Because then it is easier for the audit clients to get the final audit reports as a soft copy and to maintain them effectively. Furthermore, when paying attention to the existence of the auditor's job with a paperless system, it is felt that it will enhance rather than disappear. It is better to adopt the new skills demanded by the updated technology instead of avoiding them. Various IT tools will have to be used on the way to a paperless system. Errors and fraud in almost every sector will be extremely common. However, the auditor needs to be smart in avoiding such actions. But if he/she is not strong enough to face such situations, the trust and value in his/her profession will fade.

Furthermore, another respondent highlighted how the future auditor should act to sustain in the market, which shows that the definition of a potential auditor will be quite broader. It is also important to consider whether tax calculation, a key process in accounting, will change with technology in the future. Although technology has revolutionized the fields, attention has not yet been paid to the calculation of taxes and the collection of taxes under the online system. As well as respondents conclude that the calculation of taxes as well as the collection of taxes will be done through technological methods in the future. Thus, having a clear understanding of technology for tax accountants will help them perform their duties well in the future. Indeed, a country's main source of income is tax income. But to increase the tax revenue, it is more useful if the government goes to a systematic program rather than increasing the tax rate. Therefore, instead of taxing a small number of people, the government can be directed to adopt a policy of collecting taxes from the majority who are hiding from paying taxes. Some believe taxpayers can be easily identified by adapting business practices to a more technical face with the ever-improving technology. In fact, there is much scope to resort to processes of this kind to make future economic policies more effective. Sharpening the technical knowledge of tax accountants in such a chain of actions will contribute to their future work's effectiveness.

C. Skills Requirements for Future Accountants

Skills are the specific, learned abilities required to successfully do a certain task whereas competencies refer to the knowledge and behaviours of a person that allows individuals to thrive at work (Leitner-Hanetseder et al., 2021).

Many of the empirical findings suggested that to secure the accountant's job in the future, accountants must master different skills and competencies. According to Duffy (2017), accountants can be more connected with their clients and give them advisory services. Since this automation will eliminate the repetitive tasks of the accountants, they will have more time for creative thinking and can focus on non-repetitive tasks that need more thinking skills and other skills. Furthermore, Moisescu and Moisei (2021) reveal that AI can bring major changes to the accounting profession and new skills required for new jobs arising from AI. Further, the researcher has stated AI would not replace the accountants' jobs, but reducing time will ease the repetitive tasks of the accountants. Moreover, the researcher has stated the skills that are needed to accountants such as professional skills, analytical skills, management skills and analytical skills. The study conducted by the U.S. Bureau of Labour Statistics (2018) also stated that improving the auditor's skills in using IT will positively affect the success of the new faces of the audit that emerged with technology such as the e-audit

system. It explained that companies are looking to hire top talent with abilities in science, technology, engineering, and mathematics, who could work with large amounts of data and have strong analytical skills.

In addition, as revealed by respondents public accounting is no longer the exclusive option for graduates in accounting. As indicated by respondents;

"People need to have more analytical skills and people had to learn how to deal with big data and people should have this technical skill about the new standards and all coming in. So those things are the major key things that attributes required by the future accountants..." (Respondent 2)

"There's more of a personality as there will be a demanding, more high-level work than low-level work. High-level and analytical thinking work is demanded then" (Respondent 3)

It may be possible to teach a more universal skill set that was previously thought necessary across the accounting curriculum. The public's faith may be restored through new regulations and auditing requirements. Communication, interpersonal, analytical, critical thinking, general business knowledge, accounting knowledge, problem-solving skills, information technology, personal attitudes and capacities, and computer proficiency are among the knowledge, skills, and abilities required by entry-level accountants.

It was also revealed that automation and software have revolutionized traditional accounting tasks including bookkeeping and data entry. Nevertheless, this has also created strategic positions that demand accountants to use their expertise to analyse data and provide insights that add value to their clients.

"They applied for this small or this manual approach to auditing, and even some of our small-scale clients had manual-based bookkeeping systems...." (Respondent 2)

Furthermore, the use of IT has made the profession more adaptable and efficient, enabling accountants to work remotely and collaborate with colleagues and clients in real time. The future of accounting will require accountants to learn new skills such as data analysis and interpretation, as well as the ability to adapt to new technologies. As indicated by the respondents:

"As technology advances, the role of accountants is evolving. The future demands accountants to embrace data analysis and interpretation, skills crucial for making informed decisions in a data-driven world." (Respondent 6)

"Accountants need to be proactive in learning and adapting to new technologies. This adaptability is vital for their professional growth and to stay relevant in a rapidly changing industry." (Respondent 1)

As companies continue to expand globally, accountants will need to collaborate with diverse teams and navigate complex accounting laws and regulations. The future of accounting job roles will demand a combination of technical skills and business acumen, along with the ability to adjust to a rapidly changing technological landscape. The role of IT in accounting is becoming increasingly intertwined, and technological

advancements such as artificial intelligence and machine learning have enhanced the accuracy of data and automation of certain tasks. Nevertheless, the human factor is still crucial, and accountants play a vital role in interpreting data and providing valuable insights. As such, the future of the accounting profession will necessitate accountants to possess both technical and analytical skills and be capable of incorporating new technologies into their work.

D. Future of Accounting with AI

It is a challenge to state in which direction the future of accounting is going clearly. However, this study has endowed enough evidence to believe that AI will give a new face to accounting in the future with the advancing technology. The future accounting process will rely on AI and change (Cooper et al., 2019; Frizzo-Barker et al., 2019). Nevertheless, Moisescu and Moisei (2021) stated that new skills will be required for job opportunities introduced with AI, but it will not replace the accounting profession. Also, Supriadi et al. (2019) state that there is no reason to believe that the accounting profession's role will disappear. Although new tasks and roles emerging with AI technology will require special skills that there is no reason to believe that the accounting profession's role will disappear, although new tasks and roles emerging with AI technology will require special skills. However, Jordan (1999) states that AI technology has zero potential to create a threatening environment for accounting professionals due to accountants' ability to make professional judgments and analyse financial data. Further Ezenwa and Helen Nkem (2021) have introduced AI as a challenge born with technology.

Thus, some respondent has attempted to explain that there is a risk of AI technology becoming a threat to the accounting profession in the future.

“With AI advancing rapidly, there’s concern that it could automate routine accounting tasks, reducing the need for human accountants in handling basic transactions.” (Respondent 3)

The integration of AI in accounting systems may enhance accuracy and speed, but it also poses a risk of reducing the demand for human accountants, especially in tasks that AI can perform efficiently.” (Respondent 5)

After some in-depth observation of these ideas, we understand that future rejection of AI technology or avoidance of compliance with technology may be causal in creating a harsh response to the existence of the future accounting profession. However, by keeping up to date with AI technology and focusing on the new skills demanded by the technology, it can be concluded that the accounting profession can use the influence of AI to create better opportunities rather than a challenge.

AI technology has both dark and bright sides. It can become a powerful weapon if misused. Therefore, the respondents mentioned that it is essential to have a governing body when using AI in accounting. Because accounting, which is considered to be the main milestone of an organization, can lead to giving wrong data to their stakeholders. This can give a strong blow to their decision-making process. It will lead to a lot of mistrust in accounting profession. Therefore, accounting professionals may be afraid to seek AI technology support in the future. Accordingly, all the effective results we can achieve technically will fade away. Thus, establishing a governing body can improve

the ability to engage in an effective process by integrating future accounting functions with AI technology.

6. Conclusion

Before the controversial changes in technology, both strategic-level jobs and entry-level jobs of accountants were considered valued professionals. Even so, with the revolutionary technological advancements, entry-level jobs such as bookkeeping and general ledger accounting have declined or been replaced. Nevertheless, strategic-level jobs such as consulting or advisory jobs that intertwine with human intervention and IT will not disappear in accounting. However, in 2020, the World Economic Forum said that bookkeeping, payroll clerks, accountants, and auditors related to entry-level and strategic job roles will disappear. This effort launched to investigate this revealed that it is not 100% true. Thus, in summary revealed that it is not completely true. It was proved that the accounting profession has no existence without the integration of technology and human intervention. Further, technology alone is not able to handle the accounting profession. Thus, the accounting profession cannot stand alone without blending with advancements in IT. Therefore, accountants will have to acquire a set of specialized skills instead of the conventional skill set to ensure their job security and to thrive in a modern IT-infused accounting environment.

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Firm-specific Determinants of Integrated Reporting Quality: Evidence from Listed Companies in Sri Lanka

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Abstract

This paper aims to examine the firm-specific determinants of Integrated Reporting (IR) quality in listed companies in Sri Lanka. Integrated reports of 141 listed companies in Sri Lanka covering the period of 2018/19 to 2020/21 are analysed using the Integrated Reporting (IR) scoreboard and the coding framework to find out the firm-specific determinants of IR quality. The various determinants and their impacts are examined using a regression analysis. The results indicate that only firm size has a significant positive impact on the level of IR quality in Sri Lanka and profitability, financial leverage, size and independence of the audit committee do not significantly impact the IR quality. This study has considerable implications for policymakers in identifying which type of listed companies' regulations need to be changed for better-integrated reporting and recognizing the characteristics of companies that prepare quality integrated reports to enhance investment decisions. Even though several studies have been conducted to examine the determinants of IR quality in a few European countries and the countries where the adoption of IR is mandatory, so far, limited studies have partially explored the determinants of IR quality in emerging economies where the adoption of IR is voluntary. Therefore, this paper has attempted to address this gap, testing the strength of various firm-specific determinants of IR quality using listed companies in Sri Lanka. Further, the IR scoreboard has the originality in assessing the quality of integrated reports in Sri Lanka.

Keywords: Integrated Reporting, Integrated Reporting Quality, Firm-Specific Determinants, Listed Companies, Sri Lanka

1. Introduction

IR has been introduced as an efficient and collective reporting mechanism by implementing integrated thinking within internal procedures while expanding the quality of information used by capital providers for better decision-making (Cooray et al., 2020). IR quality is a new notion that emerged recently, and its definition is yet to emerge. Pistoni et al. (2018) identified IR quality as, to an extent, integrated reports describing the strategic element that drives entity performance and value creation. The quality integrated reports disclose complete and accurate information with enough comprehensiveness which will lead to minimising the agency problem and tend to align the interests of shareholders with those of managers (Chouaibi et al., 2022). Since critical issues were captured concerning the IR implementation such as difficulty in the full adoption of the IR framework, still the diffusion of IR is limited (Songini et al., 2020). Moreover, the risk of disclosure redundancy is another issue that may lead to decreased competitive advantage and specificity of the company because, through the

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integrated reports, competitors are getting known confidential information about the organisation (Graham et al., 2005).

Considering the dearth of studies regarding IR quality globally, some studies have examined how board characteristics affect IR quality (Chouaibi et al., 2022; Cooray et al., 2020; Songini et al., 2021; Vitolla et al., 2019a) while other studies have investigated financial attributes and audit committee attributes that affect the IR quality in other regions (Buitendag et al., 2017; Erin & Adegboye, 2021; Vitolla et al., 2020). Almost all studies mentioned above focus on the determinants of IR quality in European countries (see Chouaibi et al., 2022) and countries where the adoption of IR is mandatory (see Buitendag et al., 2017; Erin & Adegboye, 2021; Vitolla et al., 2020). Even though a few more studies have examined the adoption and diffusion of IR in Sri Lanka (see for example Cooray et al., 2021; Gunarathne & Senaratne, 2017), there is a dearth of studies examining IR quality and its various determinants especially in emerging countries where the adoption of IR is voluntary. To the best of our knowledge, Cooray et al. (2020) have examined how governance mechanism affects the quality and dimensions of the IR based on listed companies in Sri Lanka. However, the governance mechanism as a determinant of IR quality represents only one aspect and there could be various firm-specific determinants that have not been explored yet in Sri Lanka. Therefore, this study has attempted to fill this gap by examining several firm-specific factors influencing IR quality by specifically referring to financial factors such as profitability, company size, leverage, and audit committee attributes such as the size and the independence of the audit committee.

To examine the above, the present study has selected Sri Lanka as the research context due to several reasons. Firstly, adopting IR as a reporting mechanism is growing in Sri Lanka because the vital accounting profession, and values and belief systems in Sri Lanka have created a climate conducive to integrated thinking (Cooray et al., 2021). Secondly, several corporate failures have occurred in Sri Lanka in recent decades due to top management's frauds and manipulations which they had demonstrated in annual reports by creating information asymmetry for the stakeholders. Finally, Kılıç and Kuzey (2018) have observed that an adequate assurance of integrated reports would enhance the validity of the revealed forward-looking disclosures. However, companies have adopted IR as a voluntary practice in Sri Lanka, and hence, auditors do not assure non-financial particulars in annual reports. Therefore, there is a critical concern about the quality of integrated reports prepared in Sri Lanka.

The rest of the paper is organised as follows. After the introduction, Section two reviews the existing literature on the determinants of IR quality with theoretical concerns, and accordingly, develops research hypotheses. Section three outlines our research methodology and data sample. The following sections present the operationalisation and describe the dependent and independent variables used in the regression analysis. The empirical findings of the study are presented in Section four. Finally, Section five concludes the study with implications and directions for future research.

2. Review of Literature and Hypotheses Development

This section reviews the existing literature in terms of determinants of IR quality with the theoretical composition and hypotheses development.

2.1 Determinants of Integrated Reporting Quality

Previous authors have investigated several determinants of IR quality, such as board characteristics and country-level factors. Vitolla et al. (2019a) have identified that a large board size improves management monitoring, prefers higher-quality disclosures, and mitigates agency costs. Furthermore, a large board's varying skills, experience, and knowledge make it easy to perform the monitoring function. Cooray et al. (2020) also make this point by explaining that a higher number of board members provides more expertise, knowledge, and monitoring which tends to high-quality reporting. Following this interest, Iredele (2019) has investigated that when a large board exists, a diversity of the board is required to produce high-quality integrated reports which is beneficial in eliminating inefficiency and reducing information asymmetry.

As Chouaibi et al. (2022) state, companies that report the environmental, social, and governance (ESG) aspects in their annual reports, can benefit from better information transparency through their board's independence. The existence of a higher independent member on the board reduces hiding comprehensive information beneficial for all stakeholders and grows levels of monitoring, encouraging managers to improve the quality of IR (Vitolla et al., 2019a). Similarly, higher board independence tends to high-quality reports as independent directors investigate the managers' and executive managers' excesses to align with the business objective and defend stakeholders' interests (Erin & Adegboye, 2021). On the contrary, Cooray et al. (2020) mentioned independent board does not materially affect IR quality due to the independent directors' ineffective role in Sri Lanka.

Besides, past researchers have analysed country-level factors which affect IR quality. Civil law countries tend to prepare quality integrated reports since a greater focus on stakeholders; civil law countries encourage the entity to reveal quality information that meets the demand of corporate interlocutors (Songini et al., 2020; Vitolla et al., 2020). On the other hand, the IR quality is positively related to the degree of uncertainty avoidance and collectivism and adversely related to individualism, masculinity, and indulgence (Vitolla et al., 2019b). Additionally, Pistoni et al. (2018) argue that firms located in countries where the adoption of IR is a regulatory requirement prepare high-quality integrated reports. However, Dilling and Caykoylu (2019) have specified that the company's location did not support the quality of integrated reports. Considering the above arguments, most researchers have focused on board characteristics and country-level determinants impacting IR quality and some of them are not still conclusive. This study analyses specifically firm-specific attributes influencing IR quality by excluding country-level determinants because one country (Sri Lanka) is selected as the research setting.

This study has developed five hypotheses considering the theoretical concerns and the empirical findings based on several areas in the literature including corporate social responsibility, IR, and IR quality. The use of this combination is due to the dearth of research regarding firm-specific determinants of IR quality in the relevant literature.

2.2 Theoretical Composition and Hypotheses Development

From the frame of reference of agency theory, a vital assumption is that corporate reports disclose information used for decision-making by stakeholders for the

assessment of management decisions. Following agency theory, voluntary disclosure is used as a tool for lowering information asymmetry. When the company becomes extensive, it requires more external capital funds to exist in the competitive environment, creating a conflict of interest among all stakeholders, especially shareholders and managers, leading to higher agency costs. Hence, companies use voluntary disclosure as a tool to lower agency cost. Hassanein and Hussainey (2015) pointed out that forward-looking disclosures mitigate information asymmetry and diminish agency cost based on this theory. Incidentally, organisations are trying to report a greater level of forward-looking information with the aim of minimising information asymmetry and agency cost, which will endure a more reasonable assessment of the companies' future performance (Kılıç & Kuzey, 2018). With the high quality of voluntary disclosures in the integrated report, stakeholders can depend on a comprehensive and trustworthy financial and non-financial disclosure of the organisation. Hence, it will reduce information asymmetry and agency cost to a greater extent. High-quality information manages the interests of shareholders by reducing the information asymmetry which demonstrates that IR quality mitigates the agency problem to a considerable level (Chouaibi et al., 2022). In this regard, the quality of IR disclosure can be used as an effective solution for companies to mitigate the agency problem to the maximum possible extent.

Legitimacy theory is a fundamental theory that encourages IR disclosure. The assumptions and generalised perceptions that explain an entity's activity inside a created social system of values, norms, and beliefs are referred to as legitimacy (Chouaibi et al., 2022; Erin & Adegboye, 2021). The legitimacy theory asserts that organisations are bound by the social environment in which they operate by committing to various socially valued tasks, ultimately securing their long-term sustainability (Chouaibi et al., 2022). The concept of the "social contract" is always combined with the social environment of the organisation and is at the core of the legitimacy theory (Deegan, 2002). Kilian and Hennigs (2014) have investigated how firms establish and maintain their legitimacy by disclosing social and environmental information. As a result, organisations, specifically multinationals, promote IR from the perspective of organisational legitimacy. From the legitimacy theory perspective, companies adopt IR to manage external pressures originating from rules, beliefs, and routines in Sri Lanka (Cooray et al., 2021). Different normative pressure on corporate reporting has influenced the improvement of overall and trend coverage of multiple components of IR in Sri Lanka (Gunarathne & Senaratne, 2017). According to the relevant research, IR disclosures seem to be an effective remedy for organisations aiming to become competitive. It is a prospect to decrease conflicts of interest of stakeholders, increase information user confidence, and strengthen the company's social legitimacy (Chouaibi et al., 2022).

In this regard, IR can be viewed as an exceptional instrument for increasing the company's legitimate rights and the interests of its stakeholders while generating a realistic view of what is going on within it. IR disclosure is an effective solution for organisations seeking to become more competitive, and it is a prospect to lower conflicts of interest, increase information user confidence, and strengthen the company's social legitimacy.

Highly profitable companies are interested in revealing more information to spread a positive perception of their performance among stakeholders (Hassanein & Hussainey,

2015; Sharif & Rashid, 2014), which can be explained by signalling theory (Quet al., 2015). Khlif and Souissi (2010) also observed that managers will use the entity's high performance as a technique to persuade shareholders regarding their superior management capabilities. Hence, managers can gain greater investor confidence by revealing more information. Following this interest, Vitolla et al. (2020) demonstrate that financial institutions that are financially solid and viable lead to prepare high-quality integrated reports because the pleasure of the achievements motivates them to reveal more information to develop their reputation. Similarly, Buitendag et al. (2017) argue that more profitable businesses prepare integrated reports to show their progress and that cash flows are required for committing resources in the IR preparation process. As a further extension, García-Sánchez et al. (2013) reveal that high-performing companies use more resources to produce quality information and internal control mechanisms. Furthermore, managers may separate themselves and their companies in the labour and stock markets by improving their performance (Khlif & Souissi, 2010). Hence, Frias-Aceituno et al. (2014) reveal that highly profitable companies publish superior quality integrated reports to distinguish from less performed companies. As per the aforementioned arguments, we build hypothesis one as follows.

H₁. IR quality is positively affected by the profitability of listed companies in Sri Lanka.

Previous authors have recognised that large firms receive more attention and pressure from stakeholders because those entities significantly impact society by undertaking various activities (see Kansalet al., 2014; Sharif & Rashid, 2014). Frías-Aceituno, et al. (2013) argue that integration of disclosed information is more important to large entities for interacting with various stakeholders because they widely use capital markets than small entities. Following the legitimacy theory, large firms will provide voluntary disclosures to ensure social interaction with stakeholders, and those firms have the financial stability to deploy resources to meet IR requirements (Erin & Adegboye, 2021). Similarly, large entities can afford better resources for producing information than small firms (Aljifri & Hussainey, 2007; Buitendag et al., 2017), and therefore they tend to prepare quality reports.

In addition, Celik et al. (2006) have observed that large firms appear to have high agency costs by having a higher level of information asymmetry than small firms. Following that interest, large companies tend to disclose more voluntary information through the annual report to reduce information asymmetry (Kılıç & Kuzey, 2018). Therefore, voluntary disclosures are used as an effective tool for reducing agency costs. In this sense, large companies probably select IR as a reporting strategy (Frias-Aceituno et al., 2014). Similarly, Iredele (2019) points out that small firms are less concerned about the integrated report's quality than large firms because small firms with few stakeholders have lower agency problems. Another argument supporting this relationship is that large financial institutions with high political interest should develop integrated reports to gain concession by responding to many stakeholders and closing the legitimization gap (Vitolla et al., 2020). Hence, the above arguments led to the formulation of our second hypothesis as follows.

H₂: IR quality is positively affected by the size of listed companies in Sri Lanka.

Aljifri and Hussainey (2007) have observed that organisations with higher leverage are motivated to reveal more non-financial information in order to reduce risk premiums in required rates of return on equity to fulfil the creditors' information needs ensuring the repayment ability (Wang & Hussainey, 2013), and to console their shareholders (Aljifri & Hussainey, 2007). Moreover, a positive debt-equity ratio indicates a company is in a better position to negotiate its liabilities, and those companies can save part of its resources and allowing to allocate it to disclosure requirements (Sharif & Rashid, 2014). Similarly, the high level of leverage would lead to a greater level of environmental reporting because the higher amount of debt has higher agency cost, and by disclosing information, agency cost will be reduced while minimising information asymmetry and maintaining creditors' trust following the agency theory (Ortas et al., 2014). Following this interest, Vitolla et al. (2020) point out that financial institutions with high financial leverage tend to produce more quality integrated reports as stakeholders request more information due to the higher financial risk. In addition, they further explained that financial institutions with the widespread use of leverage will disclose quality information to reduce the loss of reputation by not concerning the environment and society to a greater extent. Another argument supporting this relationship from the demand side is that companies with high-quality integrated reports have experienced pressure from lenders to enhance their disclosure due to the considerable risk of using a high amount of debt (Mans-Kemp & Van der Lugt, 2020). Considering the arguments, our third hypothesis is built as follows.

H₃: IR quality is positively affected by the financial leverage of listed companies in Sri Lanka.

Be'Dard et al. (2004) have revealed that the large audit committee creates the necessary diversity, including the strength of skills and viewpoints on strengthening the supervision and monitoring function, which may resolve many difficulties aligned with the reporting process. This argument exhibits that the audit committee size is considered as a fundamental element in whether or not a company would provide high-quality corporate reports. Erin and Adegboye (2021) have stated that a powerful audit committee will operate an influential direction role in achieving that management adheres to statutory requirements for IR. As a result, the size of the audit committee has a considerable impact on the quality of the IR. Similarly, Raimo et al. (2020) scrutinised that the existence of a substantial number of members in the audit committee enhances the quality of the integrated reports by ensuring better utilisation of human capital resources and expanding the possibility of having diverse perspectives and abilities. Therefore, it improves the capability of the audit committee to manage the information collecting and representation procedures, subsequently resulting in high-quality integrated reports. Based on these arguments, we formulate our fourth hypothesis as follows.

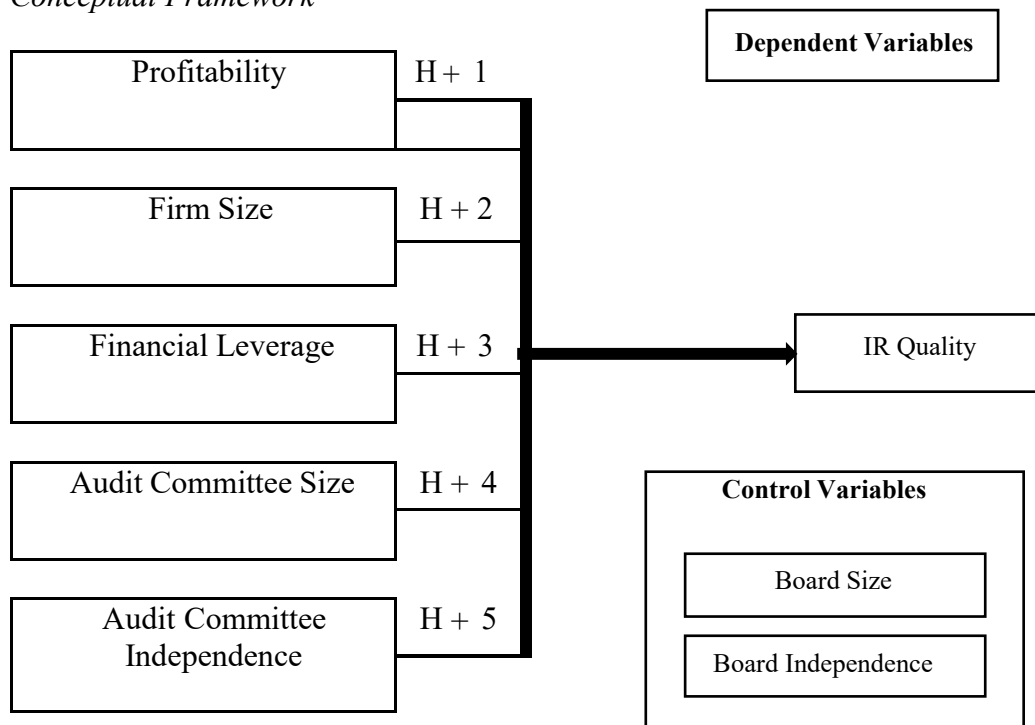
H₄: IR quality is positively affected by the size of the audit committee of listed companies in Sri Lanka.

Members of the audit committee should impartially perform their duties and judgment. It is necessary when they are trying to control the areas pertaining to reporting procedure, conflict of interest of stakeholders, internal environment, and audit process whether it is internal or external (Kibiya et al., 2016). When it comes to disclosure

processes, following the agency theory, it is revealed that audit committees with high levels of independence identify and mitigate fraudulent activities in the information gathering and representation procedures (Be'dard et al., 2004). Similarly, audit committee independence will enhance more forward-looking disclosures (Al-Najjar & Abed, 2014) and sustainability reporting (Injeni et al., 2022) as it minimises agency costs by monitoring managers more objectively. In line with the agency theory, as a further extension, Arif et al. (2021) reveals that a higher number of independent directors in audit committees improves the quality of ESG reporting as they perform effective management control and subsequently it helps them to improve the legitimacy of their operations, especially in sensitive industry firms. In the same way, considering the IR quality, Raimo et al. (2020) have argued that the audit committee's independence allows for an enhancement of the quality of the integrated reports because independent members do not have a bond with management, and they may impartially perform their duties. As a result, they are better able to identify and correct improper and unethical behaviours and perform their role of overseeing and monitoring the information collecting and representation procedures in general. Accordingly, we build our fifth hypothesis as given below.

H₅: IR quality is positively affected by the audit committee independence of listed companies in Sri Lanka

Figure 3.1
Conceptual Framework



Source: Authors constructed based on Cooray et al. (2020), Raimo et al. (2020) and Vitolla et al. (2020).

3. Methodology

3.1 Data Set and Sample Selection

The present study first framed the population for the research context in selecting the sample. Following the global industry classification standard (GICS) classification, all the listed companies registered on the CSE in Sri Lanka that had prepared integrated reports for the financial years ranging from 2018/2019 to 2020/2021 were comprised of the study population.

From the process mentioned above of sample selection, the study has identified 194 integrated reports within the financial years from 2018/2019 to 2020/2021. According to Table 1 below, to maintain consistency and comparability, the companies that had prepared an integrated report complying with the IR framework introduced by the International Integrated Reporting Council (IIRC) in 2013 throughout the three years were selected for the analysis. Hence, some companies have not followed the IR framework issued by the IIRC in 2013 (started preparing integrated reports during 2019/20 or 2020/21) continuously during the financial years from 2018/2019 to 2020/2021, 53 integrated reports were excluded from the sample. Therefore, finally, 141 integrated reports of 47 companies covering three consecutive financial years from 2018/2019 to 2020/2021 were selected for analysis.

Table 1*Sample selection*

Particular	2018	2019	2020	Pooled
Total listed companies had prepared integrated reports	6 5	57	72	194
Less: Companies do not follow IR framework issued by IIRC	(3)	(3)	(3)	(9)
Less: Duplication of data	(4)	(4)	(4)	(12)
Less: Companies have not prepared integrated reports in 2019	(10)	-	(10)	(20)
Less: Companies newly adopted IR framework in 2020	-	-	(6)	(6)
Less: Companies newly adopted the IR framework in 2019		(2)	(2)	(4)
Less: Missing data	(1)	(1)	-	(2)
Final Sample	47	47	47	141

Source: Developed by the author based on the annual reports published in CSE from 2018-2020

Table 2 presents the entities selected for the analysis, which were categorised according to the GICS sector classification of the CSE.

Table 2*The sample based on the GICS sector classification*

Sector	Population			Sample
	2018	2019	2020	
Energy	2	2	2	2
Materials	4	2	5	2
Financials				
Banks	11	11	11	8
Insurance	4	4	5	4
Diversified financials	13	13	16	9
Healthcare	2	2	2	2
Communication services	1	1	1	1
Utilities	1	2	3	1
Consumer discretionary				
Consumer durables and apparels	3	2	3	1
Consumer services	3	2	3	2
Retailing	2	2	2	2
Consumer staples				
Food and staples retailing	1	1	1	1
Food beverages and tobacco	8	4	8	4
Industrial				
Capital goods	9	8	9	8
Transportation	1	0	1	0

Total	65	57	72	47
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Source: Developed by the author through integrated reports published in CSE from 2018/19 to 2020/21

3.2 Dependent, Independent, and Control Variables

IR quality is the dependent variable of the study that is measured through a combination of “the framework for quality assessment of integrated reports” developed by Pistoni et al. (2018) and the coding framework designed by Zhou et al. (2017). Accordingly, Pistoni et al. (2018) have developed a scoreboard (Table 3), based on “elements of the quality of CSR disclosure” suggested by Hammond and Miles (2004) to assess the quality of integrated reports which comprise four main elements such as background, assurance, and reliability, content, and form. Accordingly, this study uses the framework developed by Pistoni et al. (2018) for the quality assessment of integrated reports.

To eliminate the several limitations associated with the content element (subjective nature measurement) of the quality assessment framework developed by Pistoni et al. (2018), this study has measured only the content element applying the coding framework (Table 4) which includes 31 components designed by Zhou et al. (2017). To measure the content, the integrated reports prepared by the sample companies were graded on a scale of zero to one for each of the 31 components across eight dimensions (Table 4). As a result, a content element’s greatest possible total score is 31.

Table 3

The relation between the IR scoreboard and the attributes of quality assessment

Areas of the Integrated Reporting Scoreboard	Variables of the Integrated Reporting Scoreboard	Attributes of quality assessment (Hammond and Miles, 2004)
Background	<ul style="list-style-type: none"> • Motivations underlying the choice of adopting IR • Objectives pursued by the IR. • Beneficiaries of the document • Manager in charge of the IR process • CEO’s commitment. • Title of the report • Consistency of IR with generally applied disclosure standards 	<ul style="list-style-type: none"> • Adoption of reporting guidelines and standards • Clear statement of vision from the CEO
Assurance and reliability	<ul style="list-style-type: none"> • Internal audit • Third-party verification • Acknowledgements and awards for IR 	<ul style="list-style-type: none"> • Third party verification. • Achievement of awards/ accolades.
Content	<ul style="list-style-type: none"> • Organizational overview and external environment • Business model 	<ul style="list-style-type: none"> • Quantitative disclosure

	<ul style="list-style-type: none"> • Risks and opportunities • Strategy and resource allocation. • Governance • Performance • Outlook • Basis of presentation. • Capitals • Value creation process 	<ul style="list-style-type: none"> • Establishment of, and reporting against (appropriate) targets • Warts and all' reporting • Ability to accurately assess performance from disclosure • Good coverage of significant issues • Reporting of normalized data
Form	<ul style="list-style-type: none"> • Readability and clarity. • Conciseness. • Accessibility. 	<ul style="list-style-type: none"> • Wide access of the document

Source: Pistoni et al. (2018)

According to Table 3, the background element is measured through the following sub-elements: (1) motivations underlying the choice of adopting IR; (2) objectives pursued by IR; (3) beneficiaries of the document; (4) the manager in charge of the IR process; (5) the CEO's commitment; (6) the title of the report; and (7) consistency of IR with generally applied disclosure standards. In the case of the presence of each above item, a score of 1 is awarded while a score of 0 is given in the absence of each item and, thus 7 is the maximum score for the background element.

Moreover, Assurance and reliability elements are evaluated through the following sub-elements: (1) an internal audit and/or (2) a third-party verification has been carried out, and (3) the company has received acknowledgements and awards for IR. In case of the presence of each item above, a score of 1 is awarded while a score of 0 is given in the absence of each item and 3 is the maximum score for the Assurance and reliability element.

The next element is the form which is measured through (1) readability and clarity of the document (Table 5), (2) conciseness (number of pages of the document) (Table 6); and (3) accessibility of the document (hard-copy documents versus website accessibility) (Table 7). The maximum score for the form element is 15.

Table 4

Scoring of content element- 31 components included

Dimensions	Components	Scoring schemes	
		Minimum score	Maximum score
1 Organizational overview and operating context	1.1 Reporting boundary	0	1
	1.2 Mission and value	0	1
	1.3 Business overview	0	1
	1.4 Operation context	0	1
	1.5 Summary statistics	0	1
2. Governance	2.1 Governance structure	0	1

	2.2 Governance and strategy	0	1
	2.3 Remuneration and performance	0	1
	2.4 Governance and others	0	1
3. Opportunities and risks	3.1 Risks	0	1
	3.2 Opportunities	0	1
4. Strategy and resource allocation plans	4.1 Strategic objectives	0	1
	4.2 Links between strategy and other elements	0	1
	4.3 Competitive advantage	0	1
	4.4 Stakeholder consultations	0	1
5. Business model	5.1 Business model description	0	1
	5.2 Links between business model and others	0	1
	5.3 Stakeholder dependencies	0	1
6. Performance and outcomes	6.1 KPIs against strategy	0	1
	6.2 Explanation of KPIs	0	1
	6.3 Stakeholder relationship	0	1
	6.4 Past, current, and future performance	0	1
	6.5 Financial implications of other capitals	0	1
	6.6 Supply chain performance	0	1
	6.7 The quality of quantitative indicators	0	1
7. Outlook	7.1 Anticipated changes	0	1
	7.2 Potential implications	0	1
	7.3 Estimates	0	1
8. Other elements	8.1 Conciseness and links	0	1
	8.2 Materiality determination process	0	1
	8.3 The board sign-off	0	1

Source: Zhou et al. (2017)

Table 5

Scoring system of the form element: readability and clarity of the document

Score	Readability and clarity of the document
0	The report quite not clear; absence of any element that can facilitate reading and comprehension of the document (i.e., graphs, tables, etc.)
1	Description mainly qualitative; scarce use of graphs and tables, that are not connected; absence of an index of the document, a glossary, or a table with abbreviations
2	Adequate presence of graphs and tables; index with only a few details

3	Graphs and tables facilitate the comprehension of the document; equilibrium between narrative flow and graphs/tables; references to other sections of the document avoid information redundancy
4	Very good use of graphs and tables; detailed index with hyperlinks; hyperlinks to external sources, to firm website or the other documents
5	Very good layout: index, graphs and tables clearly connected with the narrative qualitative flow

Source: Pistoni et al. (2018)

Table 6*Scoring system for the form element: conciseness*

Score	Conciseness: n. of pages of the document
0	Not applicable
1	More than 200 pages
2	From 151 to 200 pages
3	From 101 to 150 pages
4	From 51 to 100 pages
5	Up to 50 pages

*Source: Pistoni et al. (2018)***Table 7***Scoring system of the form element: accessibility of the document*

Score	Accessibility of the document
0	Not applicable
1	Only hard copy document
2	Report available on the firm's website only as a pdf file
3	Report available on the firm website, but not only as a pdf file: it is possible to access the contents directly from the firm website
4	The report can be browsed online, by surfing the firm web site, thanks to a highly interactive platform
5	Report contents are highly accessible; the user can select issues and create a personalized report; highly interactive web platform; possibility to access the report by LinkedIn, Twitter, Facebook

Source: Pistoni et al. (2018)

Accordingly, the IR quality of the listed companies is measured through 56 of the total scores (Background=7, Assurance and Reliability =3, Content=31, and Form=15).

Table 8 presents the operationalisation of independent and control variables of the study.

Table 8*Operationalization*

Variables	Measurement	Source
Dependent Variable IR Quality	IR Scoreboard framework & coding framework	(Pistoni et al., 2018; Zhou et al., 2017)

Independent Variables		
Profitability (ROE)	Return on equity (Net income/equity)	(Erin & Adegboye, 2021; Vitolla et al., 2020)
Firm size (FSIZE)	Natural logarithm of the total assets	(Chouaibi et al., 2022; Erin & Adegboye, 2021; Vitolla et al., 2020)
Financial leverage (LEV)	The ratio of the book value of debt over book value of equity	(Iredele, 2019; Vitolla et al., 2020)
Audit committee size (ACSIZE)	Total number of members within the audit committee	(Raimo et al., 2020)
Audit committee independence (ACIND)	The proportion of independent members to the total number of the audit committee members	(Raimo et al., 2020)
Control Variables		
Board size (BOARDSIZE)	Number of directors on the board	(Chouaibi et al., 2022; Cooray et al., 2020; Erin & Adegboye, 2021)
Board independence (BOARDIND)	The proportion of independent directors on the board	(Cooray et al., 2020; Erin & Adegboye, 2021)

3.3 The Regression Model

To measure the strength and direction of the relationship between company-level attributes and IR quality, correlation analysis is performed, and forecasting the impact of independent variables on the dependent variable, a regression analysis is used. The most suitable analysis method is selected after checking the assumptions such as linearity, normality, heteroscedasticity, multicollinearity, and model specification test.

Pairwise correlation and variance inflation factor (VIF) were employed to test multicollinearity. The pairwise correlation indicates that none of the variables correlates above 0.9 and VIF results show that all the centered VIF values for independent variables are below 5. Hence, it can be concluded that the multicollinearity issue does not exist in the present study. The test results are presented in Table 9.

Table 9*Pairwise correlation and variance inflation factor*

Correlation Probability	ROE	FSIZE	LEV	ACSIZE	ACIND	VIF
ROE	1.0000 ----					1.045
FSIZE	-0.0023 0.979	1.0000 ----				1.742
LEV	-0.0837 0.024	0.0859 0.011	1.0000 ----			1.204
ACSIZE	-0.0937 0.269	0.2967 0.000	-0.0195 0.818	1.0000 ----		1.237
ACIND	0.0035 0.967	0.0792 0.351	0.3152 0.001	0.0415 0.626	1.0000 ----	1.185

To test, whether the collected data set has a pattern in the error terms, this study has performed the Durbin-Watson test. As shown in Table 10, the data set was initially autocorrelated since the value of the Durbin-Watson test statistic is equal to 1.790. To overcome this issue, the dependent variable (IR QUALITY) was converted into log form with the use of EViews. Table 11 shows results after making necessary changes to the panel data set and, accordingly, the value of the Durbin Watson statistic has become 1.911 which implies autocorrelation does not exist. As previous literature has explained, when the value of the Durbin-Watson test is 2 or closer to 2, it indicates no evidence of autocorrelation.

Table 10*Test of autocorrelation before the adjustment*

R-squared	0.330	Mean dependent var	34.886
Adjusted R-squared	0.295	S.D. dependent var	6.265
S.E. of regression	5.260	Akaike info criterion	6.213
Sum squared resid	3680.052	Schwarz criterion	6.380
Log likelihood	-430.035	Hannan-Quinn criter.	6.281

F-statistic	9.376	Durbin-Watson stat	1.790
Prob(F-statistic)	0.000		

Table 11*Test of autocorrelation after the adjustment*

R-squared	0.341	Mean dependent var	34.116
Adjusted R-squared	0.320	S.D. dependent var	6.065
S.E. of regression	4.260	Akaike info criterion	6.113
Sum squared resid	2865.277	Schwarz criterion	5.380
Log likelihood	-349.282	Hannan-Quinn criter.	6.181
F-statistic	9.172	Durbin-Watson stat	1.911
Prob(F-statistic)	0.000		

Before deciding which model should be selected to run the final regression equation, the Hausman test was carried out. According to Table 12, Hausman's statistical probability shows more than 5% of the probability which means the random effects model fits better with the data. Thus, to test the hypotheses, random effects of the panel model is used.

Table 12*Hausman test*

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000	7	1.000

Based on the above-mentioned facts, the developed regression equation is as follows,

$$\text{IR QUALITY}_{it} = \beta_0 + \beta_1 \text{ROE}_{it} + \beta_2 \text{FSIZE}_{it} + \beta_3 \text{LEV}_{it} + \beta_4 \text{ACSIZE}_{it} + \beta_5 \text{ACIND}_{it} + \beta_6 \text{BSIZE}_{it} + \beta_7 \text{BINP}_{it} + \beta_1 \varepsilon_{it}$$

Where:

IR QUALITY_{it}=integrated reporting quality; ROE_{it}=return on equity, FSIZE_{it}=firm size; LEV_{it}=financial leverage; ACSIZE_{it}=audit committee size; ACIND_{it}=audit committee independence; BSIZE_{it}=board size; BINP_{it}=board independence.

4. Results and Discussion

According to Table 13 below, this study's regression model has recorded an adjusted R squared value of 32.9% which implies that 32.9% of the variation in the dependent variable (IR QUALITY) can be explained through independent variables (ROE, FSIZE, LEV, ACSIZE, and ACIND). Moreover, the overall trustworthiness of the model fit is measured through the probability value (F-Statistic). The study has a probability value of F-Statistic 0.000. This implies that at a 99% (1-0.000) level of confidence, this regression model is appropriate as an analysis.

Table 13

Panel data regression results using random effects model.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Dependent Variable: IR QUALITY				
C	4.297	8.678	0.495	0.621
ROE	-0.018	0.065	-0.287	0.774
FSIZE	1.942	0.469	4.138	0.000
LEV	-0.003	0.005	-0.645	0.520
ACSIZE	0.265	0.452	0.586	0.558
ACIND	0.023	0.031	0.750	0.454
BSIZE	-0.101	0.227	-0.444	0.657
BIND	-0.095	0.038	-2.488	0.014
Weighted Statistics				
R-squared	0.358	Mean dependent var		8.962
Adjusted R-squared	0.329	S.D. dependent var		2.133
S.E. of regression	2.035	Sum squared resid		356.299
F-statistic	2.312	Durbin-Watson stat		1.921
Prob(F-statistic)	0.000			

When considering the coefficient and probability values of the ROE, the regression results show a negative coefficient of -0.018 with a probability value of 0.774 which implies an insignificant association. Therefore, H_1 is not supported, and it is hard to confirm that the listed companies with high profitability maintain a greater quality in their integrated reports in Sri Lanka. This result is contradictory with Buitendag et al. (2017) and Vitolla et al. (2020) which found a significant positive effect. Following the signalling theory, Mmako and Jansen Van Rensburg (2017) have confirmed that high-performing companies disclose quality information to show their achievement in clear terms and keep their performance over the low-performing companies. The major reason for inconsistent results in the present study could be the impact of covid 19 on the performance of listed companies in Sri Lanka. Mendis (2021) has observed that the pandemic situation caused a 12% decline in the market value of the stock prices in 2020 which is recognised as one of the greatest falls that have occurred in Sri Lanka. With this negative impact on the stock market, most of the listed companies in Sri Lanka reported lower profitability in the 2019/2020 and 2020/2021 periods.

The regression results of FSIZE show a positive coefficient of 1.942 with a probability value of 0.000. Therefore, H_2 is supported, and the size of the companies has a

significant positive effect on IR quality in Sri Lanka. This result is in line with the prior literature which examines the impact of firm size on IR quality (see Erin & Adegboye, 2021; Iredele, 2019; Vitolla et al., 2020). As per the findings of Vitolla et al. (2020), one cause for this significant positive effect is drawn from the large financial institutions' standpoint. As they mention, large financial institutions with high political interests prepare high-quality integrated reports to gain concession by responding to many stakeholders and closing the legitimation gap. Apart from that, large firms will provide more voluntary disclosures because those firms have the financial stability to deploy resources to meet IR requirements (Erin & Adegboye, 2021). Another line of reasoning supporting this impact is that small firms are less concerned about the integrated report's quality than large firms because small firms with few stakeholders have lower agency problems (Iredele, 2019).

Nevertheless, the regression results of LEV indicate a negative coefficient of -0.003 with a probability value of 0.520 which implies an insignificant association. Thus, H₃ is not supported, and it is hard to conclude that the leverage of companies has a positive impact on improving IR quality in Sri Lanka. This result is inconsistent with several past studies which found a positive impact of financial leverage on voluntary reporting and IR quality (see Ortas et al., 2014; Sharif & Rashid, 2014; Vitolla et al., 2020). As a reason, following the signalling theory, Melloni et al. (2017) indicate that voluntary disclosure is being used to show higher performance and support lending purposes. However, Sharif and Rashid (2014) and Vitolla et al. (2020) who found this positive association have limited their investigation only to financial institutions by giving high relevance to the banking industry. Generally, banks show a higher leverage ratio than the other listed companies due to the more deposits of the public. Therefore, it might be the reason for the significant association founded by previous researchers. However, the present study has been carried out by focusing on different sectors to enhance the generalisability of the results in the Sri Lankan context and therefore, it might be the reason for the insignificant effect of financial leverage on IR quality.

The regression results pertaining to ACSIZE denote a positive value of 0.265 for the coefficient with a 0.558 probability value. Hence, H₄ is not supported, and it is hard to confirm that the large size of the audit committee leads to presenting high-quality integrated reports in Sri Lanka. This result is inconsistent with the findings of Raimo et al. (2020) and Erin and Adegboye (2021) who have found that the existence of a more significant number of members on the audit committee enhances the quality of the IR by having the ability of the audit committee to manage and monitor the information collecting and representation procedures. The reason for the incompatible finding of the present study would be the main purpose of the establishment of the audit committee is the oversight of compliance with the financial reporting requirement of the Companies Act in Sri Lanka (Institute of Chartered Accountants of Sri Lanka [ICASL], 2017). Accordingly, even though a considerable number of accounting professionals of Sri Lankan companies are members of ICASL who encourage companies to follow IR (Lakshan, 2018), still the audit committee members tend to mainly focus on conventional reporting and compliance with the accounting standards rather than the quality of IR.

Finally, when considering the coefficient and probability values of ACIND, the regression results show a positive coefficient of 0.023 with a probability value of 0.454

which implies an insignificant association. Therefore, H₅ is not supported, and it is hard to conclude that the higher level of independence of the audit committee induces a greater level of quality in the integrated reports in Sri Lanka. The results of the present study are contradictory to the initial studies conducted by Al-Najjar and Abed (2014), Injeni et al. (2022), and Raimo et al. (2020) which revealed that the audit committee's independence allows for an enhancement of the quality of the integrated reports and forward-looking disclosures. As a reason, they mention that independent members have no bond with management and therefore, they may perform their duties with greater objectivity. The main argument for the inconsistent result of the present study is that, due to a lack of complete independence, standing on multiple boards, a lack of time, and a lack of business expertise, they may not have actively participated in meetings to discuss the various integrated reporting aspects (Ahmed Haji, 2015) which is closely noticed in the sample companies used in the present study. Another supporting argument for an insignificant relationship is the appointment of independent directors for the audit committee is merely for fulfilling the requirements of the corporate governance code due to coercive pressure (Cooray et al., 2020). Accordingly, the finding is not congruent with the argument concluded by the agency theory; audit committee independence will enhance the level of voluntary reporting as it minimises agency costs by monitoring managers more objectively.

5. Conclusion

This study aimed to investigate the determinants of integrated reporting quality in listed companies in Sri Lanka. The sample of 141 listed companies classified according to the GICS sector classification of the CSE was considered for the analysis. The results of the study show evidence that larger companies have significantly considered and reported quality information in their integrated reports than small companies. The regression analysis shows that profitability, financial leverage, audit committee size, and audit committee independence do not have a significant impact on the quality of integrated reports.

The findings of this study have a considerable policy relevance. It can be concluded that larger listed companies tend to disclose higher quality information in their integrated reports in Sri Lanka because stakeholders lead to requests for more information from large companies due to their greater visibility, economic importance, and social impact. Therefore, this study will aid standard-setters and regulators in identifying larger listed institutions that offer high-quality IR and imply how regulations need to be changed for the better reporting of the other institutions. Accordingly, policymakers will be able to control corporate failure to a greater extent and retain the stability of the whole economy. Furthermore, lenders face a greater level of information asymmetry especially in terms of qualitative information because they do not thoroughly convey non-financial information (Raimo et al., 2021). Based on the findings of the study, they can rely on the integrated reports issued by larger listed companies and make their decisions about lending without much confusion.

Finally, the findings provide important insights to investors. Quality integrated reports convey to investors the company's commitment to accomplish non-financial objectives that are significantly required for a firm's survival in a dynamic business environment (Vitolla et al., 2019a). Accordingly, investors can rely on the integrated reports published by the larger listed companies and make better investment decisions using a

better understanding of the complex dynamic environment in which the company operates.

When it comes to the limitations of the study, to maintain consistency and comparability, the companies that had prepared an integrated report consecutively from 2018 to 2020 were selected for the analysis and hence, the sample is limited to only 141 integrated reports. Another main limitation is this study reflects only two audit committee characteristics in relation to IR quality. Apart from that, the present study follows the quantitative approach, it will not afford an in-depth understanding of IR quality and its determinants compared to the extent of qualitative research.

Based on the literature, there is a dearth of studies examining IR quality in the Sri Lankan context. To the best of the author's knowledge, this is the first study that examines the financial and audit committee factors affecting the IR quality in the context of Sri Lanka. Future researchers will be able to cover the various loopholes around IR quality related to the Sri Lankan context as follows. Since the present study focuses on listed companies without reflecting the sectorial differences, forthcoming studies will be able to consider the determinants influencing the quality of integrated reporting in Sri Lanka based on the sectorial nature. Moreover, further investigations could be carried out on determinants of IR quality while applying a different dimension for measuring the IR quality than the framework developed by Pistoni et al. (2018). Furthermore, future researchers could examine what factors lead to low IR quality in quantitative nature as well as how the IIRC and other IR promoters can improve IR quality in qualitative nature. Besides, upcoming investigations could be carried out by focusing on how audit committee characteristics impact IR quality while considering differences in audit committee regulations across countries by expanding the number of observations. Additionally, it is recommended for future studies to consider country-level determinants of IR quality such as civil law countries or common law countries and mandatory or voluntary IR requirements when analysing the determinants of IR quality.

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Impact of Integrated Reporting Disclosure on Firm Performance- Evidence from Listed Companies in Sri Lanka

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Abstract

This paper aims to investigate the impact of integrated reporting disclosures on firm performance measured in the form of return on assets (ROA) in the voluntary disclosure regime of Sri Lanka. This research is quantitative, based on a panel data regression analysis of 50 firms listed in the Colombo Stock Exchange for eleven financial years from 2010 to 2020 with 500 firm-year observations. An integrated reporting disclosure index was employed based on a manual content analysis method to identify the disclosure levels in the corporate annual reports. The research model consists of the independent variable which is denoted by the integrated reporting disclosure index, and the dependent variable ROA. The four control variables used in the model are the debt-to-asset ratio, debt-to-equity ratio, total assets, and asset growth ratio. The findings derived from the empirical results indicate that there is a significant negative relationship between Integrated Reporting (IR) disclosures and firm performance measured by ROA. Further, results show a high level of disclosures of content elements in the integrated annual reports of the sample firms. The findings indicate that governance and performance have a higher level of compliance rate for the IR Content elements and strategy and resource allocation, and risk and opportunity have a lower level of compliance rate for the IR Content elements. Capital market regulators and policymakers can gain valuable insights regarding the suitability of implementing IR in Sri Lanka. As the majority of Sri Lankan listed companies have not fully adopted the integrated reporting framework. This study adds value to the existing limited literature on IR disclosure and firm performance in Sri Lanka by incorporating content analysis and panel data regression to understand IR's impact on companies' financial performance.

Keywords: Integrated Reporting disclosure, IR adoption rate, Firm Performance, Return on Assets, Sri Lanka

1. Introduction

Companies which operate in the competitive and uncertain market environment are not sufficient to concentrate only on financial reports, because investors demand more comprehensive information consisting of performance-related, strategy-related, and business perspective-related information. Traditional financial reporting consists of several issues, namely, focusing only on past-oriented information and no risk interpretation. Lack of non-financial performance determines a company's long-term background (Said & Ghani, 2017). Therefore, traditional financial reporting was questioned with the truth and fairness. As a result, the concept of IR was emerged. Currently, IR is playing a vital role in the global context (Caraianni et al., 2018). International IR framework revealed the linkage between IR and organization's strategy, governance, financial performance, social environment, and economic

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context within which it operates. An integrated report is a concise communication about how an organization's strategy, governance, performance, and prospects, in the context of its external environment lead to the creation of value over the short, medium and long term (International Integrated Reporting Council [IIRC], 2013). Accordingly, this investigation is to identify whether there is an impact of integrated reporting adoption on firm performance.

Research investigations in integrated reporting adoption and firm performance in Sri Lankan context is scarce. In the Sri Lankan context, integrated reporting is in the initial stage and it is not a mandatory requirement for Sri Lankan companies. As a new notion, there are few academic studies on integrated reporting in Sri Lanka (Abeywardana, 2016). Research on integrated reporting is limited, and for the development of integrated reporting, more research is needed as integrated reporting is an emerging area (Lakshan et al., 2018). Under these circumstances, this may be one of the pioneering investigations to identify the impact of adopting IR content elements and their effect on firm performance in the Sri Lankan context. Also, most of the published studies relating to IR provide normative arguments, and fewer number of research provides integrated reporting practices. Academic literature has not yet been covered (John et al., 2016).

Within the organisational corporate reporting environment, integrated reporting with integrated thinking leads to benefits in multiple ways. Accordingly, cost-saving is directly affected by the IR and therefore its impact on the firm performance may imply in a significantly positive way. (Appiagyei et al., 2017). Firms that have higher intellectual capital disclosure, benefit significantly from better performance (Vitolla et al., 2019). Some investigations have found a negative relationship between integrated reporting adoption and firm performance. Accordingly, the performance was worsened after the adoption of IR. It might have been caused by the limitations of the investigation of a five-year limited sample (timing issues), and the adoption happened gradually (Conway, 2019). Several investigations have revealed the relationship between integrated reporting adoption and firm performance (Albetairi et al., 2018; Appiagyei, 2017; Conway, 2019; Matemane & Wentzel, 2019).

The main objective of this investigation is to find out whether there is an impact of integrated reporting disclosures on firm performance using the evidence from listed companies of Sri Lanka. The investigation has been conducted through a sample of 50 listed companies from 2010 to 2020. A developed integrated reporting disclosure index representing a checklist used to measure the integrated reporting disclosures (Akhmetshin et al., 2018; Cooray et al., 2020; Herath et al., 2019; Lipunga, 2019a; Tariq et al., 2018). The second objective of this study is to reveal the disclosure of integrated reporting adoption results regarding each content element by complying with prior studies (Albetairi et al., 2018; Cooray et al., 2020; Heong, 2017).

Abeywardana, et al. (2022) elaborated evidence of relationship between integrated thinking and integrated reporting practice. The investigation Cooray, et al. (2020) justified evidence on coverage of and trends in reporting content elements in the integrated reports of Sri Lankan companies. Under the integrated reporting in Sri Lanka, the investigation explore the motives behind the voluntary adoption of IR using institutional theory (Jayasiri, 2020). Accordingly Prior research found that no

company in Sri Lanka fully complies with the integrated reporting framework. Therefore further investigations is needed to explore how integrated reporting affects financial performance in businesses (Ranaweera & Jayawardhana, 2022). When reviewing the research gap, Limited empirical studies which are available shows that when specifically examining the long-term impact of IR adoption on financial performance in Sri Lanka, covering the period from 2010 to 2020. In considering prior research in Sri Lanka regarding integrated reporting concept, most of the researchers are focused on integrated reporting adoption in Sri Lanka, integrated reporting and financial performance, and factors affecting integrated reporting quality (Cooray et al., 2020). There is a lack of studies available in Sri Lanka to identify the impact of integrated reporting and its effect on company performance. As a result, the purpose of the study is to identify whether there is an effects of IR adoption on firm performance of companies listed in Sri Lanka. As well as this investingation obtained the sample relating to the firms that were published by CA sri lanka. As well as the data analysed in broader period from 2010 to 2020 period.

The sub objective of this study is to find out, the impact of disclosure quality of the 8 content elements which was published by IIRF, (2013) complying with the Prior research findings to reveal the disclosure quality (Albetairi et al., 2018; Cooray et al., 2020; Heong, 2017). Further, only a limited number of researches have been carried out concerning the conformity of Sri Lankan listed companies' integrated annual reports with the guidelines prescribed in the IIRF. Accordingly the paper examines the compliance rates for different content elements within integrated annual reports.

Further this paper review the disclosure level of each of eight content elements published by international IR framework (IIRF). Although a growing number of companies in the developed countries have adopted IR practices, the adoption of IR practices is limited in terms of developing countries, where Sri Lanka is no exception. Further, only a limited number of researches have been carried out concerning the conformity of Sri Lankan listed companies' integrated annual reports with the guidelines prescribed in the IIRF. Therefore, this research identifies the conformity level of Colombo Stock Exchange (CSE) listed companies' integrated annual reports with the content elements of the International Integrated Reporting Framework

2. Literature Review

Future corporate reporting is shaped by financial performance, reliance on the environment, social reputation, human capital skills, and others. Value creation is the backbone of Integrated Reporting (EY, 2014).

Though the asian adaptability rate exists at 2.42%, the Sri Lankan context differs from the 2.42% adaptation rate, as Sri Lanka gradually adapts to an international integrated reporting framework (Primary stage) (Gunarathne & Senaratne, 2016). The investigation conducted by Gunarathne and Senaratne (2016) found that 2011 and 2012 as early adopters because IIRC had not issued full guidance in 2012, and 8 organizations existed in 2012. The diffusion of IR was commenced from 2012 onwards in Sri Lanka and it was increased gradually to 32 firms by 2014. When it was 2014 the IR adoption rate is around 12%. An efficient choice perspective has driven its early adoption. The early adopters of integrated reporting and existing companies experienced several challenges during the integrated reporting implementation period.

These were identified as a lack of experience, research, clarity in IR guidance, and limited knowledge of IR, including implementation and practical requirements by Lakshan (2018).

Camilleri (2018) suggests that stakeholders and other financial stakeholders are the key members of an organisation. Companies need to identify the final recipients of corporate reports. However, the integrated disclosures improve their organisational stewardship and legitimacy with institutions and other societal stakeholders as they include environmental, social, and governing information in their integrated reports. Furthermore, analyzing the integrated reporting implementation process is helpful to policymakers and managers in an organisation that looking to adopt IR. Iacuzzi et al. (2019) revealed that IR plays a transformative function in an organisation. Reviewing the disclosure level of IR adoption, out of eight content elements, governance, performance, organisational overview, and external environment has been shown to have a higher level of IR adoption in the international context (Albetairi et al., 2018; Herath et al., 2019)

There are opportunities, benefits, challenges, and disadvantages to the implementation of integrated reporting. Sri Lankan accounting experts confirmed that there are more opportunities and advantages than challenges and disadvantages in implementing integrated reporting in Sri Lanka (Anojan, 2019). The integrated report should explain the story of reaching the organisation's vision, mainly connected to its values, management, governance, monitoring and using resources relating to financial, intellectual, social, and environmental capital. Integrated reporting should make accountability and performance in an organisation transparent but depends on ethical qualities such as honesty and fairness to retain the organisation (Abeysekera, 2013). Moreover, out of eight content elements, risk and opportunities, and performance elements are negatively but significantly related to return on assets (ROA) (Albetairi et al., 2018).

Furthermore, some studies have concluded that altering a firm's business practice into more socially responsible one will diminish its financial performance (Griffin & Mahon, 1997). However, some investigations revealed a positive impact on adopting the IR framework on firm performance. The business model and strategy and resource allocation have a positive and significant relationship with return on assets (ROA) (Albetairi et al., 2018). However, some studies revealed no relationship between integrated reporting disclosure and firm performance (Matemane & Wentzel, 2019). There is a cost to the firm that produces integrated reporting, but benefits to society may outweigh these costs. This may go beyond the benefits to shareholders as they make investment decisions. Integrated reports, which include content describing all of a firm's socially responsible actions, may benefit society in a way not captured in market prices (Akisik & Gal, 2019). Furthermore, lower-level performing companies should carefully review their integrated reports and try to more comply with IR framework and content elements (Pathiraja & Priyadarshanie, 2019).

When considering prior research in Sri Lanka regarding with integrated reporting concept, most of the researchers are focused on integrated reporting adoption in Sri Lanka, integrated reporting and financial performance and factors affecting integrated reporting quality (Cooray et al., 2020). So the main objective of the study is

to find out whether there is an impact of IR adoption of firm performance evidence from listed companies in Sri Lanka.

3. Methodology

3.1 Study Sample

The paper aims to identify the impact of integrated reporting disclosures on firm performance and uses quantitative research methodology to answer the research questions of the study. A disclosure checklist based on the integrated reporting framework representing three fundamental concepts, seven guiding principles, and eight content elements were used to identify the IR disclosures. As per the integrated reporting framework, the checklist covers eight topics: organisational overview and external environment, governance, business model, risk and opportunities, strategy and resource allocation, performance, outlook and basis of preparation and presentation. Sample of fifty companies were selected through a list published by the Institute of Chartered Accountants of Sri Lanka (ICASL) in 2018. Accordingly, this study reviewed integrated annual reports published 50 companies from 2010 to 2020 for eleven years period. The data collection started from 2010 onwards since IR framework was published in 2013. According to the Gunarathne and Senaratne (2016), research on “Diffusion of integrated reporting in an emerging South Asian (SAARC) nation”, deployed that the period from 2010 to 2012 as the primary stage and from 2013 to present is identified as diffusion stage in integrated reporting. So this investigation focus on 2010 to 2020 to measure the impact of the IR adoption on firm performance.

These companies were selected based on 2018 published integrated annual reporting medal winner list by the ICASL (Institute of Chartered Accountants of Sri Lanka). The disclosure level of corporate integrated annual reports was measured through Integrated Reporting Disclosure Index Score (IRS). This IRS was prepared for each content element.

3.2 Study Model

Technically a performance measure is a quantitative expression of the activity or product outcome that shows how much, how well, and to what extent a product or service will be delivered to customers over a period of time (Office of Financial Management, 2009). Therefore, the researchers measure the performance with ROA that prior studies justified as the most frequent performance measures (Wet & Toit, 2007). The performance measurement system should be integrated with the overall strategy of an organisation (Elger, 2019; Harvey, 2008).

The level of IR adoption was measured via integrated reporting disclosure index, and the scoring methodology is consistent with other related annual report disclosure studies (Albetairi et al., 2018; Gunarathne & Senaratne, 2016; Heong, 2017; Lipunga, 2019b; Stent & Dowler, 2014). The Integrated reporting index below is used to examine the adoption level: (Lipunga, 2019b)

$$IRI = \sum_{i=1}^n di/n = \frac{TS}{MS}$$

IRI= Integrated Reporting Index
 $D_i = 1$ if item i is disclosed; 0 if item i is not disclosed
 n = number of items
 TS = Total Score
 MS= Expected Maximum Score

The study used four control variables namely: debt to asset ratio, debt to equity ratio, firm size, and asset growth rate. The rationale behind the use of control variables is that a researcher can statistically eliminate any distortion associated with external variables, either legally or otherwise, by refining the results and revealing real relationships (Bernerth et al., 2018). Most frequently used control variables are justified by prior investigations as Debt to asset ratio, Debt to equity ratio, firm size measured through Total assets and asset growth rate (Bui, 2017; Khedkar, 2015; Khurramshabbir, 2018; Magli et al., 2018; Rajkumar, 2014; Rehman, 2013; Wabwile et al., 2014).

As detailed in the equation below, we aim to comprehensively analyze the impact of Integrated Quality Index (IRQI), Debt to Asset Ratio (DAR), Debt to Equity Ratio (DER), Total Asset Ratio (TAR), and Total Asset Growth Rate (TAGR) on Return on Assets (ROA) within the context of Sri Lankan listed companies over time.

$$ROA_{it} = B1RQI_{it} + B2DAR_{it} + B3DER_{it} + B4TAR_{it} + B5TAGR_{it} + \epsilon_{it}$$

ROA = Return on Asset
 i = Firm
 B = Beta
 IRQI = Integrated Quality Index
 DAR= Debt to Asset Ratio
 DER = Debt to Equity Ratio
 TAR= Total Assest Ratio
 TAGR= Total Asset Growth Rate
 ϵ_{it} = Error Term
 T = Time

The researchers use eight content elements representing 37 characteristics checklist to measure the integrated reporting index. Through that, researchers analyze the second objective of the investigation, the disclosure level of IR adoption representing each content element.

3.3 Hypotheses Development

Based on the literature review ,the study's main hypothesis is developed as follows: (Akisik & Gal, 2019; Albetairi et al., 2018; Appiagyei, 2017; Appiagyei et al., 2016; Conway, 2019; Heong, 2017; Matemane & Wentzel, 2019; Samy, 2019; Systems, 2019) consistent with the prior researches

H_1 : There is a significant relationship between IR disclosures and firm performance measured through ROA.

4 Results, Analysis and Discussion

A score to each firm is allocated based on developed checklist used to analyses the integrated reporting disclosures of the selected companies listed in the Colombo Stock Exchange. The following model was developed to test the hypothesese of the study.

$$ROA_{it} = B1RQLit + B2DARit + B3DERit + B4TARit + B5TAGRit + \epsilon_{it}$$

ROA = Return on Asset

i = Firm

B = Beta

IRQI = Integrated Quality Index

DAR= Debt to Asset Ratio

DER = Debt to Equity Ratio

TAR= Total Assest Ratio

TAGR= Total Asset Growth Rate

Uf = Error Term

T = Time

The significance of the relationship and the difference was measured at the 95% confidence level ($p < 0.05$). The impact of integrated reporting dislosures on firm performance measured through ROA using E-View 8.0 statistical software.

4.1 Descriptive Statistics

Following table illustrates the summery of descriptive statistics for the variables of independent and dependent in the sample.

Table 4.1

Descriptive statistics for the sample from 2010-2020 period

	Observations	Maximum	Minimum	Mean	Std. Dev.
POST Return On Assets (ROA)	250	0.230	-0.042	0.049	0.045
PRE Return On Assets (ROA)	250	14.201	-0.217	0.165	1.081
Integ. Rep. Qua. Index	250	0.987	0.011	0.876	0.105
Organiza. Over & Ext	250	1.000	0.000	0.898	0.102
Governance	250	1.000	0.076	0.957	0.100
Business Model	250	1.000	0.000	0.856	0.250
Risk & Opportu.	250	1.000	0.000	0.828	0.146
Strategy & Resou.	250	1.000	0.000	0.786	0.176
Performance	250	1.000	0.000	0.917	0.124
Outlook	250	1.000	0.000	0.846	0.154
Basis for Prepar	250	1.090	0.000	0.825	0.165
Post Debt Asset	250	2.516	0.052	0.575	0.262
Pre Debt Asset	250	5.717	0.000	0.517	0.464
Post Debt Equity	250	49.391	0.004	2.858	4.504
Pre Debt Equity	250	11.983	0.000	1.820	2.359

Post Total Asset	250	12.148	7.481	10.379	0.758
Pre Total Asset	250	12.199	0.000	9.852	1.022
Post Growth Rate	250	0.389	-0.281	0.005	0.044
Pre Growth Rate	250	0.446	-0.308	0.006	0.041
Valid N(list wise)	500				

As presented in the table 4.1 the number of observations are 500 for 50 firms in 11 years in 2010-2020 period with two dependent variables with return on asset.

The minimum value of each content element indicated the lowest value for the variable from 2010 to 2020 among all 500 of the selected integrated annual reports. And the maximum value of each content element indicated the highest value of the variable from 2010 to 2020 of the selected integrated annual reports and accordingly Maximum value if IR quality index represent 98.7% and lowest value indicate as 1.175%. Mean value represents the average value or the central location for any variable during this period since the first integrated annual report has published by DIMO Lanka in 2011 (Gunarathne & Senaratne, 2016).

Mean value of eight independent variables representing Organisational overview and external environment, governance, business model, risk and opportunities, strategy and resource allocation, Performance, Outlook, basis for preparation and presentation exist as 0.899, 0.958, 0.856, 0.828, 0.787, 0.918, 0.846 and 0.825091 respectively. It explains that Sri Lankan firms are more focused on disclosing integrated reporting content elements through their integrated annual reports.

4.2 Regression Analysis Results for the ROA Model

According to the results interpretation regarding Hausman test and then redundant fixed effects- likelihood ratio test ROE model required to analyze the regression analysis via fixed effect model, As P- value of chi square static of ROE regarding Hausman test and redundant fixed effects- likelihood ratio test were significant at 5% significant level.

Table 4.2

Regression analysis results for the model performance measured via ROA(E view output)

Dependent Variable: ROA

Method: Panel Least Squares

Sample: 2010 2020

Periods included: 11

Cross-sections included: 50

Total panel observations: 500

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.168429	0.247749	0.679838	0.4970
Iri	-0.076070	0.035786	-2.125712	0.0341
Debt_to_Asset	2.153646	0.049158	43.81087	0.0000
Debt_To_Equity	-0.037458	0.005769	-6.492905	0.0000

Total_Asset	-0.110367	0.024828	-4.445232	0.0000
Growr	0.658101	0.344683	1.909292	0.0569

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.849779	Mean dependent var	0.1076 51
Adjusted R-squared	0.831752	S.D. dependent var	0.7645 65
S.E. of regression	0.313610	Akaike info criterion	0.6211 75
Sum squared resid	44.25792	Schwarz criterion	1.0812 75
Log likelihood	-101.8466	Hannan-Quinn criter.	0.8016 41
F-statistic	47.14035	Durbin-Watson stat	1.6038 25
Prob(F-statistic)	0.000000		

According to the results obtained from fixed effect regression model to analyze integrated reporting index impact on firm performance, adjusted R squared of 0.8497 which means that the explanatory variables of integrated reporting index, debt to equity ratio (control variable), debt to asset ratio (control variable), and total assets representing the firm size (control variable) and asset growth rate (control variable) explain 84% of the variation of the dependent variable (ROA).

Overall model is statistically significant as the p value of F statistic value is less than 1% implying that the model fits the data well. according to the good ness of fit of the model, it indicates that 84% .

When considering about the individual significance of the variables, integrated reporting disclosure index is significant at 5% significant level as p - value is 0.0341 and less than 0.05. So as per the results interpreted in **Table 4.2**, when the increase of integrated reporting disclosure index by 1 unit cause to decrease the performance measured through ROA by 0.07 units (negative relationship)

The results further show that debt to asset ratio, debt to equity ratio and total asset used as control variable for the model significant at 1% significant level. But asset growth rate is not significant at 1% and 5% significant level. - $p = 0.0569$) implying that this variable has no impact on performance measured through ROA.

4.3 Hypothesis Testing

The relationship between integrated reporting disclosure index and firm performance measured through ROA, according to the results (**Table 4.2**) obtained from ROA regression model, it can be identified that there is a negative relationship between integrated reporting index and firm performance. The results can be identified that ROA model coefficient as -0.076 that is not statistically significant at 1% significant level. But it is significant at 5% significant level.

H₀: There is no statistical significant relationship between integrated reporting disclosure index and firm performance measured through ROA

H₁: There is a statistical significant relationship between of integrated reporting disclosure index and firm performance measured through ROA

According to the hypothesis testing, reject the null hypothesis and accept the alternative hypothesis that IRQ index and firm performance have statistically negative significant relationship. Based on the above results, the researcher can conclude that, there is a negative and significant relationship between IR adoption and firm performance.

Table 4.3

Summery of the regression analysis relating to control variables

Variable	P- Value	Acceptance
Debt to asset ratio	0.0000	Accepted at p value < 0.05
Debt to equity ratio	0.0000	Accepted at p value < 0.05
Total asset ratio	0.0000	Accepted at p value < 0.05
Asset growth rate	0.0569	Rejected at p value > 0.05

4.4 Discussion

The first objective of the investigation is to assess whether there is an impact of IR adoption on financial performance measured through ROA of listed companies in Sri Lanaka. For that the researcher assessed through IR disclosure index and four control variables (Debt to asset ratio, Debt to equity ratio, Firm size and Asset growth ratio) with firm performance.

Table 4.4

Summery of Regression analysis Results(E view output)

Variable		ROA
Constant	Beta	0.168
	Sig.	0.497
Integrated reporting disclosure index	Beta	-0.076*
	Sig.	0.034
Debt to Asset Ratio	Beta	2.153
	Sig.	0.00**
Debt to Equity Ratio	Beta	-0.037
	Sig.	0.00**
Total Assets(Firm Size)	Beta	-0.110
	Sig.	0.00**
Asset Growth Rate Ratio	Beta	0.658
	Sig.	0.056
Adj. R2 (%)		83%
Prob (F-statistic)		0.000**
N		500

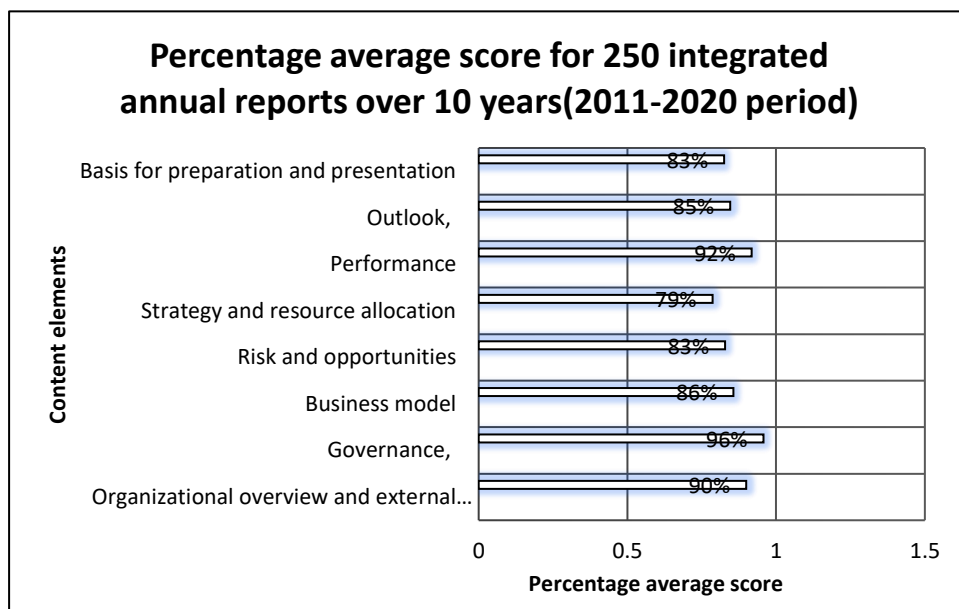
The investigation adopted the ordinary least square for the analysis of relationship between IR adoption on firm performance. The results expressed in **Table 4.4** that there is a significant negative relationship between IR and firm performance measured through ROA. (Asein et al., 2020; Conway, 2019; Higgins et al., 2014; Samy, 2019).

This may cause due to integrated reporting consist of risk and opportunities and also the disclosure of performance implying that most of the well performing firms revealing their main prospective strategies cause to decrease the performance, as it was confirmed by the investigation (Albetairi et al., 2018). And also, the risk detection has the potential to empower competitors through risk leakage. Furthermore, in a highly competitive market, disclosed information through their integrated reports can be used as a marketing campaign against as an organisation that exposes larger and more successful competitors, or as a way to gain market share, through that the risk situation may deteriorate further due to high competition. Another view is that opportunity disclosure via integrated annual reports may also lead an aggressive organisation to launch its products before the company has disclosed its products, in other terms disclosure of opportunities and other future strategy based important information via integrated annual reports, may cause to provide competitors to launch their products early. Therefore the cost associated with the increased disclosure of integrated reporting content elements outweigh the benefits, and thus explain the negative relationship between integrated reporting disclosure index and firm performance (Albetairi et al., 2018)

The table given below shows the results additional findings of IR content element-wise disclosure level.

Figure 01

The disclosure of integrated reporting adoption, element-wise disclosure level



In the Sri Lankan context, there are no legal or other mandatory requirements to adopt integrated reporting practices (Jayasiri, 2020; Lakshan, 2018). The findings suggest that according to the table 4.1 descriptive statistics, in practice, companies have

library to decide what to disclose as there is no mandatory requirements, and they are disclosing beyond the content elements

However according to the analysis, there is a difference in each content element disclosure in terms of the compliance with the disclosure requirements of the IR (Albetairi et al., 2018).

According to figure 01, indication the improved level of disclosing appearing content elements can be stated as governance, performance and Organisational overview and external environment. These findings are more complying with the investigations Herath et al. (2019) and Albetairi (2018) reveals the level of disclosure regarding content elements on selected integrated annual reports. In the Sri Lankan context, we can see a decreasing level of disclosure in strategy and resource allocation. This may be a cause due to institutional pressures that force organisations to comply with protecting their internal policies and strategies from its competitors at the competitive market (Albetairi et al., 2018). When discussing on the next lowest disclosure which is risk and opportunities, that indicates 83% disclosure of adoption. This may occur because risk exposure prompts major stakeholders to withdraw from an organisation that cause to accelerate representing company's decline.

5. Conclusion and Implication

The findings of the study provide evidence that there was a negative significant relationship between integrated reporting disclosure index and financial performance in Sri Lanka. These results are complying with Conway (2019). The goal of the investigation is to identify whether IR adoption influence the firm performance measured through return on asset (. The results of the panel data analysis with fixed effect regression model, show the IR has significant negative impact of firm performance, as the IRI coefficient indicate -0.076070 at 5% significant level.

Limited number of researches existed regarding the influence of integrated reporting on the performance of companies listed in Sri Lanka. Limited research has been conducted regarding the influence of integrated reporting on the performance of companies listed in Sri Lanka. The findings of the research indicate that IR has indicated adverse effect on firm performance measured through ROA with the panel data analysis result from 2010 to 2020. It is important to note that the majority of Sri Lankan listed companies have not fully adopted the integrated reporting framework, primarily due to local contextual factors as in the Sri Lankan context, there are no legal or other mandatory requirements to adopt integrated reporting practices (Jayasiri, 2020; Lakshan, 2018).

The results provide useful insights to policy makers and regulators to assess the cost and benefits of integrated reporting and in the reporting process, specific elements of IR that would require and improvement in line with IIRF. Furthermore, the findings of the study will enable the companies to gain an understanding on integrated reporting contribution to the financial performance. Policymakers and regulators have an important role in guiding firms to adopt Integrated Reporting (IR) frameworks effectively with developing and publishing clear and comprehensive guidelines and standards for IR adoption, offer incentives and recognition to firms that excel in implementing IR effectively, collaborate with industry associations and professional bodies to promote IR adoption.

According to the results there were negative impact on IR adoption on firm performance as P-Value is less than 0.05 in the Table 4.2. Samy and Deeb (2019) also indicated that integrated reporting has a negative and significant relationship with firm performance as measured by return on asset. Furthermore Adegboyegun (2020) stated that there is no significant relationship in the short term between IR adoption and corporate performance. . Moreover, Matemane and Wentzel (2019) found that there is a positive relationship between Integrated reporting quality and firm performance, measured through earning per share. However, there is no significant relationship between IRQ and Tobin's q (Q-Ratio).

When reviewing the disclosure level of IR adoption representing each content element, in conclusion, according to the **Figure 01** the improved level of disclosing appearing content elements can be stated as governance, performance and Organisational overview and external environment and they are showing 96%, 92% and 90% adoption rates respectively The improved level of disclosing appearing content elements can be stated as governance, performance and Organisational overview and external environment. The findings of the research are more complying with following investigation Herath et al. (2019) and Albetairi (2018). Furthermore strategy and resource allocation as well as risk and opportunities showed the lower level of IR adoption out of eight content elements, complying with the result of Albetairi (2018). The paper Lakshan (2018) revealed that employee challenges and internal challenges mainly cause on this inadequate complying with integrated reporting content elements.

When reviewing the limitations existing in the study, the sample was selected as the 50 integrated annual reports published by CA Sri Lanka in 2018. However, more than 50 firms have adopted integrated reporting according to the justification provided by the CMA Sri Lanka. Therefore, the researcher recommends obtaining all firms that have adopted the IR framework in order to measure performance. Additionally, measuring the IR quality depends on the post-adoption firm years, which have been identified as 250. This is also a major limitation in this investigation. Moreover, the checklist is prepared by taking into account only the content elements of the IR framework. However, IR has not only published eight content elements but also six types of capital and a business model, which need to be taken into account.

As integrated reporting is not limited to its shareholders, it is recommended for future research to measure the impact of financial and non-financial measures on firm performance. Integrated reporting provides information to all stakeholders to fulfill their information requirements. This investigation focuses solely on return on assets to measure firm performance, so the researcher recommends using Return on Equity (ROE), Earnings per Share ratio (EPS), and Tobin's Q ratio to measure financial performance in future researches.

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The Role of Internal Auditor in Corporate Governance: Case Evidence From a Government-Owned Bank in Sri Lanka

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Abstract

The recent corporate collapses and the financial scandals upfront capture the vital role of internal auditors (IA) and corporate governance (CG) in companies. Banks, as one of the key institutions in the economy must establish an effective internal audit function aiming to achieve corporate governance. Hence, this study explored the role of internal auditors in corporate governance cascading down to a state-owned bank in Sri Lanka. Following qualitative methodology and case study approach, the study adopted agency theory as the lens to explore an in-depth view of the content. The data collection process involved both semi-structured and unstructured interviews, along with documentary analysis. Face-to-face interviews were employed as the primary method to gather data. The collected information was later analysed using thematic analysis. As per the findings, internal auditing has been recognised as a value adding function, which is designed to improve organisational efficiency and effectiveness through detailed internal processes, policies, and procedures. Further, the role of the internal auditor positively contributes towards creating an effective corporate governance establishing effective policies and guidelines. As researchers have identified maintaining objectivity has been recognised as the main challenge. Since every function has started to evolve with information technology, it has become necessary for internal auditing functions to adopt digital solutions including big data, artificial intelligence, and integrated auditing were highlighted. This study contributes to the prevailing literature providing evidence on the role of internal auditor towards effective corporate governance and the bank can integrate the findings to develop the effective function of internal audit towards CG integrating information technology further.

Keywords: Internal Audit, Corporate Governance, State-owned Banks, Agency theory

1. Introduction

Since the beginning of the 21st century, the corporate world has witnessed a series of failures (Enron, WorldCom, RBS, Northern Rock; Oceanic Bank, Intercontinental Bank), which brought about a heightened public awareness of corporate governance issues (Omolaye & Jacob, 2017). The global economic crunch which began in 2007 added further strands to corporate governance practices and policies. Corporate governance can be defined as the structure where businesses and organisations are directed and controlled (Mbiha, 2019). According to Outa et al. (2016), corporate governance is considered a basic requirement for companies in the present day.

Internal auditing, one of the important mechanisms under the corporate governance has been increasingly become more important in terms of creating good corporate governance structures (Allegrini et al., 2006; Carcello et al., 2005). Internal auditing is identified as an independent, unbiased assurance and advisory function with the goal of

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increasing and adding value to operations (Mbiha, 2019). According to Abdullah et al. (2018), in order to achieve good corporate governance and ensure the ethical behaviour of the company, the internal auditors should collaborate with audit committees, the board of directors, and the management of the company. As Muda et al. (2018) explain all types of economic activities are recognised under the relationship between internal auditing and corporate governance.

However, internal auditing remains a less explored area of research (Gendron & Bédard, 2006; Roussy, 2018), despite its rise as an integral component of corporate governance fabric of contemporary organizations. Studies on the internal auditing's theoretical framework, its changing roles, improved status, and how it can be strengthened in response to its rising and challenging roles within corporate governance have been explored (Boyle et al., 2007; Dominic & Nonna, 2011; Hermanson, 2002), little has been reported on internal auditor's role to play active in promoting corporate governance (Abiola, 2012; Sarens et al., 2012). Further, limited studies on corporate governance have been attempted to establish empirically, how capable the IA is as a cornerstone of corporate governance in financial sectors, particularly in developing economies (Ahmad et al., 2009; Al-Twajiry et al., 2003; Alzeban & Gwilliam, 2014; Sakour & Laila, 2015). The financial sector contributes to the country's gross domestic product (GDP) by a significant percentage. As emphasised above, especially since the financial crisis influenced the banking sector, it upfront captures the importance of adopting IA and CG in those contexts. According to Monks and Minow (2011), from the perspective of banks, corporate governance has been defined as the way that the board of directors and senior management handle the business activities in the banks. This will include how the banks set their corporative objectives, how they operate the day-to-day business of the banks, how the banks meet the obligation of accountability to their shareholders, and how the banks will operate in a safe and sound manner.

Therefore, covering the above gaps, this study aims to explore the integration of the internal auditor's role on the good corporate governance with relevance to a state sector owned bank in Sri Lanka. Following this problem statement, the research questions explored are;

1. What are the roles and strategies performed by internal auditors within the corporate governance mechanism at ABC Bank?
2. How have the internal auditors contributed towards enhancing effective corporate governance at ABC Bank?

The aforementioned research questions lead to achieving the objectives: Explore the roles and strategies of internal auditors on the corporate governance in ABC Bank and investigate the contribution of the internal auditor towards achieving CG in the bank effectively.

The study contributes to the current internal auditing literature by providing an in-depth analysis of how the role of the internal auditor is used to accomplish a good corporate governance system in government-owned banks. Further, this will be useful for practicing managers and the board of directors in terms of developing policies, frameworks, and functions that will enhance the effectiveness of IA and CG. Through the study's findings, the internal auditors will gain insights that enable them to

effectively advocate for and promote the optimal allocation of resources in decision-making processes for instance, improvements in internal control systems.

2. Literature Review

2.1. Internal Auditing and Role of the Internal Auditor

Traditionally in the past internal auditing has been viewed as only a monitoring function. Since the recent financial scandals have highlighted the failures of accountability, internal auditing mechanisms which were developed to secure accountability have gained much importance (Morgan, 1979, p. 161). Internal auditing is used by both private and public organisations (Eden, 1996, p. 263). Also, internal auditing enables the auditors to identify the weaknesses in management operations and rectify those weaknesses before these become uncontrollable or become exposed to external auditors. According to Omalaye and Jacob (2017, p. 8) the primary purpose of internal auditing is considered to improve organisational efficiency and effectiveness through detailed internal processes, policies, and procedures. In addition, the Chartered Institute of Internal Auditors, a respected organisation in the field, has globally emphasised internal auditing as a value-generating activity for organisations (Chartered Institute of Internal Auditors, 2020). For the success of internal audit effectiveness, researchers have underscored the importance of receiving adequate support from both management and the audit committee (Smith, 2018).

In the 1980s even though, internal auditors seemed to perform traditional financial audits (Watt & Schwartz, 2018, the focus of internal auditing was shifted to the monitoring of enforcement and internal controls from 2000 onwards (Fairchild et al., 2019). When considering internal auditing, the standards of internal auditing in developed countries are much stronger while the standards of internal auditing in developing countries are poor (Holt, 2019). As an example, in Nigeria, the poor institutional framework has become the reason to impede the promotion of corporate governance. According to the IIA Framework for Professional Auditing (2016), an internal audit is considered an independent, objective assurance and advisory operation in order to create value for the organisation.

According to Omalaye and Jacob (2017, p. 4), the Central Bank of Nigeria's (CBN) Code of Corporate Governance explicates the role of the internal auditor. Internal auditors should demonstrate independence, high competence, and integrity. Additionally, the head of the internal audit department should hold a position not below the rank of Assistant General Manager (AGM) and should also be a member of a relevant professional body. In addition, the internal auditors should directly report to the audit committee and forward a copy of the report to the Chief Executive Officer (CEO). The auditors should provide the quarterly reports to the audit committee and make them available to examiners on field visits. Most importantly the internal auditors should ensure that the audit unit is well staffed with a sufficient number of employees in order to carry out tasks effectively. The Internal auditors play an important role in monitoring the risk profile of the organisation and identifying the areas that need to be improved in risk management (Reynolds, 2000, p. 116). Since the internal auditor monitors the risk for the board, management, and the audit committee, the International Institute of Auditors has placed the internal auditor in a significant role in relation to corporate governance (Omalaye & Jacob 2017, p. 5).

Roussy (2013) states that internal auditors perform various roles such as risk management and mitigating strategies, maintaining the internal control system, safeguarding the assets, and supporting the audit committee. The researchers have identified technological improvements, segregation of duties, and proper procedures and documentation as the factors that contribute to the successful operation of the internal auditor. Dianita (2015, p. 176) has explained the role of an independent auditor is crucial in the process of implementing good CG in a company. Mainly an independent auditor is responsible for ensuring the compliance of company activities with the principles of good CG. However according to the findings, the researcher has identified that the role of internal auditor does not positively influence the financial performance, only the corporate governance has positively influenced the financial performance of the company.

2.2. Corporate Governance

According to Adejumo (2019), Corporate governance refers to the structures, mechanisms, rules, and practices that are implemented for the management of corporate entities with the goal of upholding and guaranteeing equity for all parties involved in the pursuit of those entities' goals. However, the degree of corporate governance practices varies throughout countries due to differences in their legal, economic, political, historical, and cultural contexts. (Aguilera & Jackson, 2003). Corporate governance can be identified as the system where companies are directed and controlled (Cadbury, 2000). Simply corporate governance is the relationship between the management of the company, the board of directors, shareholders, and stakeholders. Also, CG will explain the framework where suppliers of finance can be assured about getting a return on their investment (Shleifer & Vishny, 1997). It has identified CG as an essential factor in ensuring sound financial reporting and in reducing the misappropriations of capital in the organisation. Therefore, CG concerns internal aspects, which are board structure and internal control as well as the external aspects, which is the relationship among the stakeholders.

“A company will be able to achieve several benefits by maintaining a sound corporate governance system, such as being able to prevent the dominance of self-interest chief executive officers, being able to eliminate the risk of misleading financial reporting, being able to develop confidence within the company management, being able to achieve a higher success since good governance and good leadership are connected together and being able to reduce the likelihood of exposure to reputational risk” (Classens, 2006, p. 91). Firstly, such a system acts as a crucial safeguard against the dominance of self-interested chief executive officers, ensuring that decision-making remains aligned with the broader interests of the company and its stakeholders. Secondly, the establishment of effective corporate governance significantly reduces the risk of misleading financial reporting, thereby fostering transparency and accountability in the company's financial disclosures. Moreover, a robust corporate governance framework instills confidence within the company's management. This confidence is pivotal for promoting effective collaboration, strategic decision-making, and a culture of ethical responsibility. In contrast to affluent nations, developing nations—like Sri Lanka—are rife with high rates of corruption, shoddy legal and regulatory systems, and an underdeveloped capital market as a result (Adejumo, 2019). As a result, our research has the potential to significantly improve corporate governance in these areas.

2.3. Internal and External Corporate Governance Mechanisms

The board of directors and audit committees will be responsible for maintaining the internal control framework through the help of an internal auditor (Omalaye & Jacob, 2017, p. 3). Chong-En Bai (2013) has introduced two types of mechanisms in order to promote good governance by reducing conflicts between owners and managers and between controlling shareholders and minority shareholders. The four internal governance mechanisms include the board of directors, executive compensation, ownership structure, and financial transparency. The board of directors represents the interests of shareholders. It hires, monitors, and compensates management and tries to maximise shareholder value. The ownership structure is an important element of CG. Greater overlap between ownership and control reduces conflicts of interest and ensures higher firm value. Since equity ownership, gives the largest shareholders more discretionary power to use the firm's resources in a way that serves their own interests at the expense of shareholders, concentrated on that can distort CG of the firm (Chong-En Bai et al., 2004). The third internal CG mechanism is executive compensation. Chong-En Bai et al. (2004) argued that stock valuation and accounting-based performance can be linked with executive compensation. Also, he states that there is a positive relationship between executive pay and performance. Transparency and information disclosure are important in all countries. Managers also should provide sufficient, timely, and accurate information about the financial position and operations of the organisation (Chong-En Bai et al., 2004).

2.4. Internal Auditing as a Mechanism of Corporate Governance

Key corporate governance mechanisms, including the Board of Directors, Management, Internal Auditing, and External Auditing, are identified and explored in the majority of internal auditing literature (Adejumo, 2019; Gramling et al., 2004). Since the IIA redefined internal auditing in 2009, research on the relationship between internal auditing and corporate governance, specifically, how the aforementioned mechanisms interact and how they relate to it has become increasingly prominent (Gramling et al., 2004; Gras-Gil et al., 2012). The relationship between internal auditing and corporate governance has recently been added to the discussion of the importance of corporate governance practices in businesses, especially within the Accounting and Internal Auditing community. Studies examining the relationship of these various mechanisms on the soundness of corporate governance are varied and tenuous. This has been further interested by the academia due to the pressures from global regulatory bodies of internal auditing (the IIA), therefore promoting internal auditing as a pillar of corporate governance (Adejumo, 2019; Chambers et al., 2004).

According to Sarens (2009), the effectiveness of the Internal Audit Function (IAF) is discussed in terms of the positive impact it has on corporate governance. The effectiveness of internal control and the impact of corporate governance on companies listed on the Bucharest Stock Exchange was examined by Mihaela and Iulian (2012). Furthermore, a study conducted by Yassin et al. (2012) investigated the connection between corporate governance and internal audit in a number of Lebanon's commercial banks. The hypothesis that internal auditing enhances corporate governance quality is supported by multiple significant tests, as indicated by the statistical analysis.

Hence, it is noted that internal auditing in creating good corporate governance structures becomes a worthwhile area to be explored further.

2.5 Corporate Governance in Banks

For banks to continue as a going concern, credence must be given to internal audit functions at all times (Omalaye & Jacob, 2017, p. 6). The main reason is that the internal audit function ensures that activities under this area are done correctly and contribute in increasing efficiency. Good governance is an important concept for banks because of the unique characteristics of banks and their regulated condition. One of the major causes of bank collapses is the failure of boards of directors and management of banks. If banks are governed better, it will be helpful in preventing bank failures and in decreasing the costs derived from bank failures (Busta, 2004).

According to (Basel Committee on Banking Supervision, 1999) banks play a vital role in the economy contributing to economic growth, by providing financing and basic financial services for the economy, by providing access to payment systems, and making liquidity available in economic recessions. On the other hand, crises that occur in the banking system destabilise both the economic and social situations of countries. As a result, CG of banks has become an important issue. As Levine (2002) argues, banks that are properly governed will be more efficient compared to other banks. As per the findings of (Otoo et al., 2023), it can be identified that not only the interests of shareholders developed in banks, but the risk management and internal controls mechanisms of banks also should be strengthened.

Limited studies have been focused on IA in CG cascaded down to banks. For instance, the study by Omalaye and Jacob (2017, p. 4) has analysed the role of internal auditors in developing good corporate governance practices in the banking sector in Nigeria. According to the findings, it was revealed that complying with the corporate governance principles has resulted in better organisational performance in the banking sector of Nigeria. The banks have achieved better performance in terms of operational efficiency, organisational growth, higher profitability, solvency, and continuity in the business. These achievements were possible due to good corporate governance practices, such as providing independent assurance services, improved risk management, and better control and governance processes. Hence, it is worthwhile to explore how IA has been influenced on CG in the banking sector.

3. Research Site: ABC State Bank

ABC bank was established in 1939 and it was nationalised in 1961 under the Finance Act No 65 of 1961. It is a fully state-owned bank, and the country's leading licensed commercial bank, with 23% of the industry's loans and advances and 23% of deposits in 2022. Being a Domestic Systemically Important Bank (D-SIB), ABC State Bank is deeply ingrained in the socio-economic landscape of Sri Lanka and has played a pivotal role in driving financial empowerment and economic growth of the Country for more than 80 years. It has an extensive presence throughout Sri Lanka, while also operating three branches in India, the Maldives and Seychelles, a limited-service branch in Hulhumalé, and a fully-owned subsidiary in London, United Kingdom. The bank mainly operates on three business lines. Namely retail banking, corporate and offshore banking and International, Treasury, Investment and Overseas Operations. Presently more than 8000 workers employ in the bank (ABC state bank annual report, 2022).

Considering the corporate governance mechanism in the bank, a sound corporate governance framework undergirds all of the bank's actions. It ensures ethical and

responsible behaviour across operations, and alignment with the bank's core values and principles. The bank's stringent systems and processes comply with the protocols required of a state bank and are in line with regulatory requirements and best practices. They also reflect the bank's values and are geared toward meeting the short and long-term strategic goals of the bank, while upholding the needs of our stakeholders. The governance framework enabled the Bank to function with agility and responsibility in the dynamic and disruptive business environment that Sri Lanka experienced in the last year (ABC state bank annual report, 2022).

The CG structure of the selected bank consists of several layers. The board provides oversight and deliberates with the executive management about the bank's strategic direction, financial goals, resource allocation, and risk appetite. The management is responsible to execute the policies of the Board to create shared value for all its stakeholders (ABC bank annual report 2020). Further, latest annual report of this bank states that, they maintain an effective CG mechanism and a zero-tolerance policy for corruption, as well as ensuring the highest standards of CG in alignment with government policies. Since the selected bank is one of the largest banks in Sri Lanka, the bank tends to focus more on CG. It has a separate internal audit department, which contributes to effective corporate governance. Since the internal audit function and corporate governance mechanisms were transparent and continually upgraded, ABC State bank becomes the suitable context to be studied.

4. Methodology

This study has adopted the qualitative methodology and single-site case study approach. Qualitative research allows the researcher to investigate phenomena and is said to be the best approach when studying things in their natural settings. The qualitative approach was much more suitable for this study since the research questions of the study can be addressed realistically through a qualitative approach. Yin (2009) notes that a single-site case study strategy offers an in-depth and context-specific understanding and is particularly suitable for exploring "how" and "why" questions. As this study explores the roles and strategies played by the internal auditor and how the role of internal auditors contributes toward effective corporate governance this approach was deemed the most suitable option.

The data was collected using semi-structured and unstructured interviews and documentary analysis. Six interviews were conducted in total; one in the pilot study and others in the main study (see Table 1). In the pilot study, the interview was conducted with a senior officer of internal audit to acknowledge the company profile, reporting structure, regulatory framework, overview of internal audit function, and how it connects to corporate governance. Under the main study in detail, discussions were conducted aiming at the strategies, roles, and functions of internal auditing, the roles and responsibilities of internal auditor, corporate governance mechanism in the bank, integration of IA and CG, what control mechanisms and review mechanisms available in the bank etc. Additionally, secondary data sources such as internal documents and reports of the case study firm were referred to confirm the data gathered through interviews. Bruwer (2009) states that face-to-face, voice-to-voice, or screen-to-screen interviews can be undertaken. This study employed a face-to-face method as it allowed to build up a good rapport, observe the expressions, etc. In all the time, the freedom to ask additional questions to clarify questions.

Table 1*Interviewee details*

Designation of the participant	Responsibilities	Interviewed duration
Chief Internal Auditor	Conduct unbiased, and trustworthy evaluations of a bank's internal control environment, compliance with applicable rules, and effectiveness of risk management operations. As well as involves conducting a complete evaluation of the efficacy of the bank's control, risk management, and governance systems to enhance the bank's operations and ensure compliance with key requirements.	50 min each 2 interviews
Senior Manager in Internal Audit	Conduct audits of the bank's financial and information systems to see if they conform to all applicable rules and recommendations and whether their internal controls are adequate.	40 min and 20 minutes 2 interviews
Branch Manager	Oversee the bank operations	35 min
Team member of the external audit team	Conduct audit procedures, calculate bank reconciliations, inventory count, sampling etc.	15 min

The gathered information has been analysed according to the thematic analysis, where the researcher has used a collection of information from various written, oral and visual sources. Under the thematic analysis after transcribing, all the interviews were analysed separately. Then the transcripts were organised according to the research questions to identify the interviewees' different perspectives. The thematic analysis was conducted with references to the aspects mentioned below concerning the role of the internal auditor in corporate governance.

5. Theoretical Framework

Originating from the seminal works of Jensen and Meckling (1976), agency theory is one of the most prevalent theories employed in the realms of both Internal Auditing and Corporate Governance. The foundational premise of agency theory delves into the intricate relationship between two pivotal parties: agents (typically managers) and owners (principals). Within this framework, the owners delegate authority to agents to execute services on their behalf, giving rise to a dynamic characterised by agency conflicts and the pursuit of aligned interests (Abdullah et al., 2022). As agency theory took root, it became instrumental in explicating the intricate dynamics between business owners and management, shedding light on the governance mechanisms that mitigate conflicts and optimise organisational performance

It is noted that the framework is mostly adopted to elucidate how management and business owners interact. managers, who act as agents, are given authority by owners (shareholders) to manage their business and make decisions on their behalf. Owners anticipate large returns on their investment, while management expects high compensation and fulfillment of their psychological demands (Muda et al., 2018). Two

agency problems result from conflicts of interest between directors and shareholders, per CG studies. The first happens when management's objectives conflict with those of the board of directors, which is composed of individuals who decide in the best interests of the shareholders. When the board of directors is composed of members who serve the CEO but do not have the same interests as the shareholders, there is a second agency problem (Kachouri & Jarboui, 2017). Al-Matari (2019) argues that a suitable degree of control is necessary to safeguard the interests of shareholders against the self-interest of management. The agency handles issues that are lessened by CG mechanisms, which encourage information transparency, protect the interests of shareholders, and deter greedy management decisions. Among these mechanisms is the IA (Bushman & Smith, 2001; Shleifer & Vishny, 1997). Agency theory states that managers and agents can mitigate conflicts of interest and information asymmetry by implementing the CG's information asymmetry (IA) control mechanism (Goodwin-Stewart & Kent, 2006; Sarens & Abdolmohammadi, 2011). To reassure the board that the risk management procedure and internal control system are operating as intended, senior management funds the IAF.

As the study mainly explores on the IA's role on CG, this becomes the suitable theory to be adopted to the study.

6. Findings

6.1. Roles of Internal Auditors in ABC State Bank

The internal auditing function within ABC Bank holds a significant role as an independent and objective assurance of the bank's internal controls, encompassing corporate governance and accounting processes. Insights garnered from interviews with key participants, particularly the senior manager in the internal audit department, shed light on the vital role of internal auditors.

“Objective of the Internal audit department is to express and to provide independent and objective assurance to all stakeholders and add value in basically three perspectives, controls, governance, and risk management.”

In addition, it can be identified that the internal auditing process is a value-adding function. For ABC Bank, internal audit serves as a catalyst for enhancing the bank's overall performance and credibility across three crucial areas: controls, governance, and risk management. Internal auditors bring value by offering suggestions and advice that make things work better in practical ways. These suggestions cover a wide range of aspects, such as improving how the bank operates, reducing business risks, strengthening controls over business processes, enhancing efficiency, minimising waste, and ensuring effective corporate governance practices.

Moreover, the value that internal audit brings isn't limited to the bank's internal operations alone. It extends to how the bank is perceived by those outside of it. The Chief Internal Auditor's statement underscores this significance. By maintaining accurate and credible financial records, internal audit assures external stakeholders such as investors and regulators that the bank's financial information is trustworthy. This credibility enhances the bank's reputation and fosters trust among those who rely on its financial statements.

When diving into the main responsibilities of internal auditors, find a trio of crucial roles. At the forefront is the role of ensuring that the bank's internal control systems are well-designed and effectively put into action. This is the backbone of the bank's operations, ensuring everything is in order. But their duties go further. Internal auditors also play a critical role in ensuring that the bank's governance practices align with established standards. This involves overseeing how the bank's management follows the rules and makes decisions that are in line with responsible governance.

Another pivotal role is checking how the bank handles risks. Risk management is about anticipating and managing potential problems that could arise. Internal auditors keep a watchful eye to ensure that the bank is effectively dealing with these risks, safeguarding the bank's interests and ensuring its stability.

6.2. Corporate Governance Strategies in ABC State Bank

As the chief internal auditor explained;

“Corporate governance can be defined as the mechanism that is used to control the directors through shareholders. It is done through the Board of committees. So, whether the internal controls are effective on making a good governance will be ensured by shareholders through this corporate governance”

Corporate governance acts as a framework of principles and practices that ABC State Bank employs to ensure effective management and responsible operation. Our discussions with experts shed light on how this governance system works in practice. One way to think about corporate governance is as a set of guidelines that help the bank's directors the people in charge make decisions that benefit the bank and its shareholders. These guidelines are upheld through specialised groups called board committees. These committees oversee various aspects of the bank's operations to ensure compliance with rules and responsible decision-making.

Further insights reveal that corporate governance plays a crucial role in balancing power and responsibilities. The senior manager in the internal audit department emphasises this balance by describing it as a clear distinction between the decision-making authority of the board and the daily management of the bank. This separation minimises conflicts and helps maintain operational efficiency.

When we look at the rules that steer corporate governance, we find a blend of external and internal influences. External regulations, such as ABC Bank Ordinance No. 53 of 1983 and Banking Act No. 30 of 1988, lay the foundation for responsible banking practices. Additionally, Banking Act Direction No.11 of 2007 outlines specific directives for corporate governance in licensed commercial banks. Government-issued circulars offer supplementary guidance, ensuring that the bank stays in line with regulatory expectations. The bank also adheres to requirements from the Colombo Stock Exchange, and guidance from the Chartered Accountants of Sri Lanka plays a vital role in maintaining ethical governance standards. Within the bank itself, corporate governance strategies are reinforced by a set of internal mechanisms. These include instruments like board charters, which define the roles of the board, codes of business conduct and ethics that outline proper behavior, and comprehensive policies and procedures that provide a structured framework for decision-making. Committees

within the bank, dedicated to areas such as finance, risk management, human resources, and technology, actively contribute to upholding responsible governance practices.

In essence, corporate governance at ABC State Bank involves a well-coordinated system of external regulations, internal policies, and dedicated committees. This system ensures that the bank operates transparently, responsibly, and in the best interest of its stakeholders. By adhering to these principles, the bank builds trust, maintains its credibility, and strives for sustainable success.

“Each committee has a charter”

When concerning the governance structure of ABC Bank, the Board of Directors is supported by five board sub-committees, which are the audit committee, integrated risk management committee, human resource and remuneration committee, nomination and corporate governance committee, and information and communication technology committee (see Figure 2). The branch manager explained the responsibilities and procedures of each committee. For instance;

“Audit committee reviews the bank’s financial reporting process including internal controls. Then integrated risk management committee is responsible for risk management in credit, market, cyber, and IT. Then human resource and remuneration committee is responsible for making the remuneration policy and employee performance. Through nomination and corporate governance committees, procedures relating to appointing senior management persons are developed. The final committee will oversight the IT products and practices”.

6.3 The Contribution of the Role of Internal Auditor towards an Effective Corporate Governance

In their statements, the chief internal auditor, senior manager in internal audit, and the branch manager altogether agreed that the role of internal auditor positively contributes towards effective corporate governance. In order to ensure effective corporate governance, the internal auditor should make sure of the corporate governance structure with a strong emphasis on ethical values such as objectivity and integrity. During his interview, the chief internal auditor highlighted the necessity of a correct corporate governance policy. With respect to corporate governance, there are two policies, which are the Banking Act Direction No.11 of 2007 on Corporate Governance for Licensed Commercial Banks and the Code of Best Practices on Corporate Governance issued by Chartered Accountants of Sri Lanka.

The major figure responsible for corporate governance in an organization is the chief internal auditor and the audit committee will initiate the corporate governance policy. The corporate audit department will fulfill its roles through the internal audit department. Therefore, the internal audit department is liable to highlight any breach in corporate governance. Apart from the corporate governance, the internal auditor should also ensure the internal controls and risk management.

“The key person in an organisation towards the corporate governance is the Chief Internal Auditor... The audit committee is the key initiator with CG. The corporate audit committee fulfills their roles through the internal audit

department. Any CG-related issue board refers to the internal audit. Even any breach in CG will be highlighted by the internal audit department. The internal auditor has three roles as I explained earlier. He should provide assurance on controls risk management and the governance”.

Internal auditor will be able to be involved in corporate governance only through the audit committee. In addition, it can be highlighted that if the internal auditor can ensure effective corporate governance, the company can increase its profitability. Based on the grade of the branch, there are different types of branches of ABC bank. The head office will audit the super branches and the branches with below C grade, will be audited by the provincial audit team. After an audit, the internal audit team will hold a meeting with the branch manager in order to discuss what has happened and the corrective measures that need to be taken. As per the chief internal auditor;

“Apart from that internal audit go to branches to do audit. For each provincial office, there is an audit team too. After an audit we hold a meeting with managers as to such a thing has happened in the branch and all”

7. Discussion and Conclusion

Reflecting upon the findings, it is evident that ABC State Bank has purposefully embraced internal auditing not just as a function, but as a value-added strategy intricately linked to achieving effective corporate governance. This strategic alignment is not merely a theoretical assertion but is substantiated by insights gained directly from our interviews. This is further supported by Omalaye and Jacob (2017); where the researchers have considered internal auditing as a process to improve organisational efficiency and effectiveness through detailed internal processes, policies, and procedures which is identified as a value-generating activity. Morgan (1979, p. 161) has viewed IA as only a monitoring function. Further, it was identified that the main responsibility of an internal auditor is to check whether the internal controls are effectively designed, ensuring corporate governance and risk governance. This is supported by Fairchild et al. (2019); Omalaye and Jacob (2017, p. 6) who have stated that internal auditors perform various roles such as risk management and mitigating strategies, maintaining the internal control system, safeguarding the assets and supporting the audit committee.

Drawing on qualitative insights obtained from the interviews, it becomes evident that the role of the internal auditor is effectively contributed towards establishing corporate governance mechanism. Gramling et al. (2004); HBilal et al. (2018); Omalaye and Jacob (2017, p. 1) further provide evidence on this. According to the study Omalaye and Jacob (2017, p. 1) the growth of corporate governance has helped the internal audit function to reach a professional level since it provides independent judgment and objectivity in reporting. Another key finding of the research is the need for internal auditing for monitoring purposes. Due to an effective IA mechanism, the bank has been able to achieve better performance in terms of achieving operational efficiency, organisational growth, higher profitability, solvency, and continuity in the business. These achievements were possible due to good corporate governance practices such as the provision of independent assurance services, improved risk management, and better control and governance processes.

As per the findings, the profit-based reward system can be recognised as the main factor that prevents achieving good corporate governance. This can be proved through the agency theory. As Omalaye and Jacob (2017, p. 1) have explained the separation of ownership from control creates a condition, where the interests of the shareholders can be different from the interests of the management. This will create a risk for shareholders since there is a possibility for the management to misuse the resources of the company and act according to their own self-interest (Mitnick, 2015, p. 2). Building upon the insights discussed in section 6.3, it is apparent that objectivity and integrity stand out as the foremost ethical values advocated for internal auditors. As highlighted by objectivity and integrity, these values are consistently upheld as crucial principles guiding the ethical conduct of internal auditors. Internal auditors make a balanced assessment of all the relevant circumstances and are not unduly influenced by their own interests or by others in forming judgments. As for the competency internal auditors apply the knowledge, skills, and experience needed in the performance of internal audit services (O’Leary & Stewart 2007). Even though fraud identification is a part of the internal audit, it is not considered as the main responsibility of the internal auditor.

The adoption of agile auditing practices holds the potential to enhance the detection of conflicts of interest and moral issues within both private and government companies, including the context of the ABC State Bank (Johnson & Brown, 2019; Smith et al., 2020). Agile auditing's inherent flexibility allows auditors to accommodate changes effectively, aligning with the dynamic nature of the banking sector and the specific conditions of ABC State Bank. By leveraging agile auditing, organisations can facilitate the realisation of good governance principles (Jones & White, 2021). The adaptable nature of agile auditing ensures that governance strategies remain current and responsive, thereby contributing to the minimisation of conflicts of interest (Davis & Miller, 2018). The application of agile auditing within the banking industry can be particularly pertinent, given the industry's need for swift adaptation to changing regulatory landscapes and operational demands (Williams et al., 2019).

Interestingly, even amid challenges such as the Covid-19 pandemic, companies, including banking institutions, have demonstrated the adoption of agile auditing alongside remote auditing approaches (Brown & Wilson, 2020). This showcases the relevance and practicality of agile auditing principles, as they enable auditors to remain effective and thorough in their assessments even in remote work scenarios. In the context of the ABC State Bank, while agile auditing offers notable benefits, its successful implementation would require a comprehensive assessment of the bank's operational structure, technological readiness, and the willingness of stakeholders to embrace a more dynamic auditing approach (Lee & Turner, 2017). Further research and strategic considerations would be essential to determine the bank's capacity to effectively adopt agile auditing practices.

In addition, in light of the ongoing concern over security in the modern banking landscape, the need for robust cybersecurity assessments has emerged as pivotal to enhancing the effectiveness of internal auditing functions. As financial institutions, including the ABC State Bank, grapple with evolving cyber threats, incorporating cybersecurity evaluations within the purview of internal audits can bolster risk mitigation strategies and fortify governance frameworks.

The incorporation of big data analytics and integrated auditing represents an ambitious shift in auditing methodologies, one that could potentially yield transformative outcomes for auditing practices in the context of ABC State Bank. The feasibility of this shift depends on several factors, including the bank's technological readiness, data handling capabilities, and the availability of resources to facilitate the transition.

To underpin the rationale for these proposed changes, it is imperative to consider the substantial benefits they offer. Big data analytics can furnish auditors with unprecedented insights into transactional trends, irregularities, and potential vulnerabilities, thereby augmenting risk assessments and detection capabilities (Johnson et al., 2022). Additionally, integrated auditing, by amalgamating various audit disciplines, presents the prospect of more comprehensive evaluations of internal controls, risk management, and compliance (Smith & Brown, 2021). These potential advantages advocate for a strategic alignment between the proposed changes and the overarching objectives of enhancing auditing effectiveness and corporate governance. This study explored the role of the internal auditor in corporate governance at ABC State Bank. The researchers attempt to support the prevailing literature on the selected area by providing evidence that there is a relationship between the role of the internal auditor and effective corporate governance. As per the findings, internal auditing has been recognised as a value-adding function and it positively contributes toward creating effective corporate governance in terms of developing policies, review of CG appliances etc. The study findings will add value addition to the extant literature in terms of the application of IA in financial institutions aligning with the CG framework and regulatory framework. Further, in-depth analysis will contribute to exploring the contextual findings that help the bank improve its IA adoption of IT and new methods. Future research could be conducted by adopting multi case study approach based on different industries and using quantitative analysis as those were not presented in this study.

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Appendix 1

Interview Guide – Internal Auditor

1. Can you explain the key roles and responsibilities of an internal auditor?
2. How do you define the concept of corporate governance?
3. In your perspective, how the role of an internal auditor would contribute towards an effective corporate governance in a bank?
4. What are the challenges that you face when implementing the internal auditing functions?
5. In your perspective as an internal auditor what aspects will prevent from achieving good governance?
6. What are the ethical values that should be followed by an internal auditor to ensure effective corporate governance?
7. What type of fraud activities in internal auditing will hinder the effective corporate governance?
8. What are the risk management strategies that you follow as an internal auditor?
9. Are there any changes that you desire to see in the policies and practices of the Internal Audit Function that could further enhance Good Corporate Governance in your organization?

The Role of Accounting Information in Public Sector Accountability: A Case of a Sri Lankan State University

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Abstract

In the complex world of public sector governance, accountability is a fundamental pillar, with accounting information at its core. This research unfolds the intricate tapestry of public sector accountability, with a specific focus on a Sri Lankan state university, which operates as a public agency. Employing qualitative research methods, this study explores the role of accounting information in facilitating the accountability needs of the diverse stakeholder groups, drawing from Stakeholder Agency Theory (SAT). Findings of the study underscore the multifaceted nature of public sector accountability, illuminating the fact that one size does not fit all. The provided accounting information, particularly in the form of accrual-based financial statements, has its limitations, especially when catering to the information needs of regulators. This reinforces the necessity for complementary reporting mechanisms, even in the face of significant efforts invested in preparing accrual-based financial statements. It is imperative to understand that the landscape of accountability varies considerably among different stakeholder groups, shaped by their unique interests and information needs. This research lays a foundation for future explorations into the dynamic relationship between accounting information and accountability within the public sector. It provides a compelling case for the need to tailor reporting mechanisms to the distinct requirements of various stakeholders, ultimately enhancing transparency and governance in the public sector.

Keywords: Public sector, Accountability, Financial reporting, Stakeholders, Accounting information

1. Introduction

Accountability, a cornerstone of modern governance, extends its reach across both the public and private sectors, representing the fundamental expectation that organizations and institutions justify their actions, decisions, and resource utilization to stakeholders with vested interests in their activities. In the context of the public sector, accountability takes on heightened significance as it directly relates to the responsible management of taxpayer funds, efficient public service delivery, and the overall well-being of citizens.

Recent literature underscores that public sector accountability is a multifaceted construct, encompassing various dimensions that extend beyond mere financial transparency. It includes political accountability, social accountability, managerial accountability, professional accountability, and financial accountability (Bracci & Sicoli, 2019; Christensen & Parker, 2010; Power, 2007). Our focus in this research is primarily on financial accountability and the role of accounting information in facilitating this dimension of accountability.

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Financial accountability within the public sector revolves around the obligation to account for the use of public resources entrusted to government agencies and institutions to fulfill their missions and serve the public interest (Christensen & Ege, 2011). It extends to the responsible stewardship of funds allocated for specific purposes, the prevention of misuse or misallocation of resources, and the demonstration of fiscal prudence (Lapsley & Pallot, 2000). Financial accountability plays a pivotal role in ensuring the efficient allocation of resources, enabling policymakers and stakeholders to make informed decisions about the allocation of public funds (Aziz et al., 2015; van Helden & Gildenhuis, 2015).

Under New Public Management (NPM) reforms, the adoption of accrual-based accounting systems and international public sector accounting standards (IPSAS) in many countries, have transformed the preparation and presentation of public sector financial information, ushering in a more comprehensive and transparent approach to financial reporting, aiming to enhance the credibility and reliability of financial information provided to stakeholders (Lapsley & Pallot, 2015; Lüder, 2018). Accounting information serves as the linchpin of financial accountability within the public sector, playing a pivotal role in communicating financial performance (Gray, 2010; Mard, 2019) and promoting transparency and accountability (Christiaens & Van den Berghe, 2013; Reiter & Williams, 2002). Sri Lanka, like many other nations, has undergone a significant transformation in public sector financial reporting practices, transitioning from traditional cash-based accounting to accrual-based accounting in response to global trends and the pressures exerted domestically to refine the existing public management for greater transparency and accountability (Laswad, 2003). This transition attempted to align Sri Lankan public sector accounting practice with international best practices (Samarasinghe, 2013). Adhikari and Jayasinghe, (2022) studied especially in the Less Developed Countries (LDCs) and revealed issues in the process of adopting such international practices. According to them, Sri Lankan public sector institutions successfully localized the international reporting practices such as accrual basis of accounting. However, no attention has been drawn on assessing their outcomes towards the institutional accountability.

Recent researches primarily focus on macro-level themes, such as Public sector Financial Management (NPFM) reforms and the adoption of accounting standards (Fernando & Nimal, 2017; Wickramarachchi & Wickramarachchi, 2016). However, there is a notable gap in understanding how these reforms translate into practice. This research aims to bridge this gap by exploring how accounting information generated through accrual based financial reporting facilitates the accountability demands of the stakeholders of a specific Sri Lankan state university; the role of accounting information in serving the accountability needs of the stakeholders of the University of Alpha.

This study contributes to enhance the understanding of public sector reporting practices and accountability dynamics within Sri Lankan public sector institutions. It highlights the need for tailored financial reporting that aligns with the diverse requirements of stakeholders, thereby enhancing transparency and responsible resource management. The findings emphasize the importance of a stakeholder-centric approach, recognizing that different groups have varied interests. It not only benefits future research in this field but also offers practical insights for policymakers

and practitioners, supporting more effective and responsive governance within the public sector. Ultimately, this research advocates for transparent, efficient, and accountable public sector institutions, making it relevant at both a local and global level.

The remainder of the paper is organized as follows: Section 1 introduces the importance and role of financial accountability. Section 2 explores relevant literature, including accountability concepts, the evolution of public sector financial reporting, and the stakeholders. Section 3 outlines the research methodology. Section 4 presents findings, including the analysis of accounting information, the identification of stakeholder groups, and role of accounting information in meeting their needs. Section 5 offers discussion and finally, section 6 presents the conclusion.

2. Literature Review

Accountability simply refers to explanation of the conduct towards the expectations of another party who have the legitimate right to know it. According to Christie (2017), accountability is the central concept of good governance in relation to the public administration and service delivery. In democratic states like Sri Lanka, the elected political representatives hold direct accountability to the citizens of the country. A government is made up of a political executive and an administrative executive and the administrative executive is accountable to the political executive, which in turn is accountable to the parliament (Emami, et al., 2012). These two-way accountability mechanisms constitute government accountability (Mulgan, 2000, p.556). The rationale for being accountable is to prevent the abuse of power and showcase how of the political interest of the government is served (Sajeetha & Kaneshalingam, 2020).

The core purpose of financial reporting is to communicate the financial outcomes to the fund providers. Financial reporting in public entities serves as a weapon for public managers to show off how they utilize the resources entrusted to them in most efficient manner to achieve the goals of the government. According to Akinbuli (2010), the purpose of financial reporting is to enable the transparency of public institutions in managing public resources. Transparency relies on the basis of accounting used for reporting. In the past, public sector institutions were used to adopt cash basis for financial reporting where lower level of transparency was experienced (Bovens, 2007). However, the transformation of public sector management practices started from the mid-1980s, responding to deficiencies in traditional public management practices (Hughes, 2003). Sri Lanka, due to pressures exerted by transnational bodies such as the World Bank and the IMF, had to adopt New Public Management (NPM) reforms, leading to a shift from cash basis reporting to accrual basis (Adhikari & Jayasinghe, 2022). Prior to the NPM reforms, financial reporting in the public sector was only intended to comply with various administrative and legal requirements (Redmayne & Laswad, 2013). But with the adoption of NPM, financial reporting intention moved toward result based reporting. With that, the government entities had to adopt International Public Sector Accounting Standards (IPSAS) in preparing financial statements. Adoption of IPSAS in developing countries like Sri Lanka had the intentions that government entities will provide relevant, faithfully represented, understandable, reliable, and comparable information through financial statements to all their stakeholders and improve public financial accountability, governance and decision making (Bovens, 2007).

Freeman, (2010) posits that stakeholders are those groups or individuals who can significantly impacted on or are impacted by an organization's activities. Organizations in both public and private sector must recognize the multifaceted nature of their stakeholders and acknowledge their legitimate concerns and expectations in reporting .In today's dynamic and interconnected environment, organizations are increasingly recognizing that they cannot operate in isolation from their stakeholders. Mitchell et al. (2017) argue that organizations that actively engage with and prioritize the interests of their stakeholders are better positioned to build trust, maintain their social license to operate, and adapt to changing circumstances. Failing to do so may lead to reputational damage, legal and regulatory challenges, and ultimately, threaten an organization's survival (Mitchell et al., 2017). Moreover, institutional theories highlight the critical role of accountability and transparency in maintaining an organizational legitimacy (Meyer & Rowan, 1977). Organizations that are perceived as transparent and accountable to their stakeholders are more likely to garner support and resources, which are essential for their continued existence (Suchman, 1995). Recent empirical studies further validate the positive correlation between stakeholder engagement, accountability, and organizational performance (Lee et al., 2021).

In the context of the public sector, accountability to stakeholders, including taxpayers and citizens, becomes even more pronounced. Hood (2010) argues that public organizations must navigate the delicate balance between serving the public interest, ensuring efficient resource allocation, and meeting the expectations of various stakeholders. The adoption of modern accounting practices and the provision of relevant accounting information are integral components of this accountability framework in the public sector (Hood, 2010). Therefore, this research aligns with the prevailing literature, considering the vital role of accounting information in addressing stakeholder information needs in ensuring the accountability of public sector organizations.

3. Methodology

This study is anchored in a subjectivist ontology and epistemology, positioning itself within the interpretive paradigm, which recognizes the existence of multiple realities (Guba & Lincoln, 1994). Consequently, the research is structured as a qualitative study based on a single case. A qualitative approach is particularly suited to investigate how financial reporting of the case organization aligns with the related accountability needs (Denzin & Lincoln, 2018).

Two distinct methods of data collection were employed: interviews to gather primary data and content analysis of documents for secondary data. Data collection unfolded in two stages. The first stage sought to explore the accounting information provided by the case organization, primarily through the analysis of its published annual reports, which constitute the secondary data. This analysis was intended to examine the nature of the accounting information presented in these reports. It provided a foundational understanding of the organization's financial reporting practices. In the second stage, primary data was collected through in-depth face to face interviews with identified stakeholder groups. These groups included financial report preparers and selected direct and indirect stakeholders. The objective of these interviews was

twofold: to gain insights into what drives the preparation of financial reports, which represents primary data, and to understand the specific information needs of the users. The rationale behind the selected data collection methods was to comprehensively investigate how financial reporting meets accountability needs. Interviews (primary data) are employed to understand stakeholder perspectives and information needs, while content analysis of annual reports (secondary data) provides reporting mechanisms and reported accounting information and complements the interviews, ensuring a well-rounded examination of the research subject.

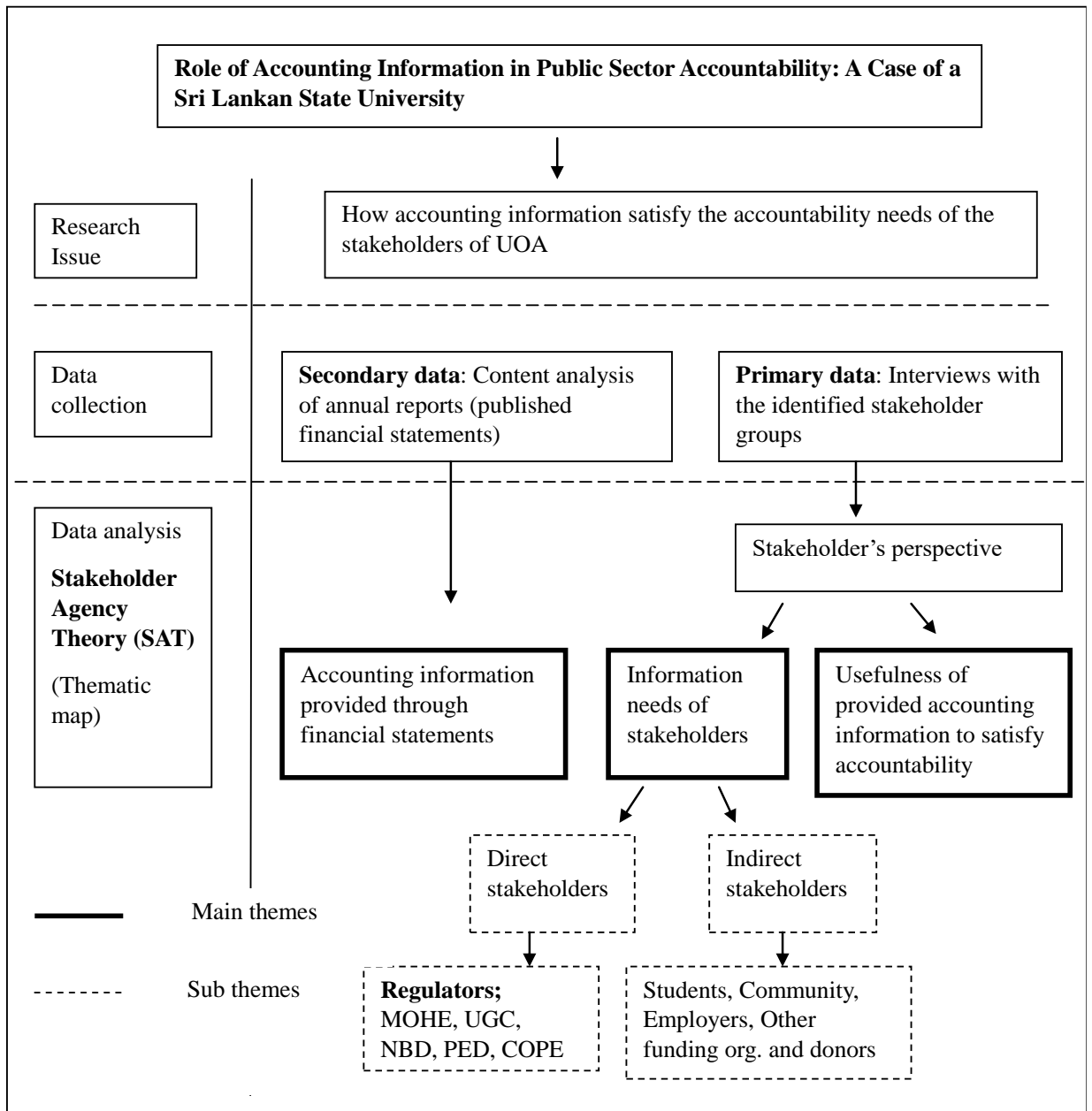
Table 1

Stakeholder categorization table with interview details

	Stakeholders	Designation of interviewees	Duration
Preparers	Staff (Managerial)	Bursar	30 minutes
		Assistance Bursar	30 minutes
Direct stakeholders	Regulators	Assistance secretary, UGC	40 minutes
		Chief accountant, Higher education	1 hour
		Accountant, Ministry of higher education	1 hour and 15 minutes
	Direct stakeholders	Director General, Department of public enterprises	30 minutes
		Director General, Department of National budget	45 minutes
		Member of COPE	20 minutes
		Students	Current student of UOA
Indirect stakeholders	Alumni	A graduate of UOA	10 minutes
	Employer	MAS holdings	15 minutes
	Supplier	Construction material supplier	7 minutes
		Stationary suppliers	5 minutes
	Community	A citizen	10 minutes
	Other funding organization	Donor	15 minutes

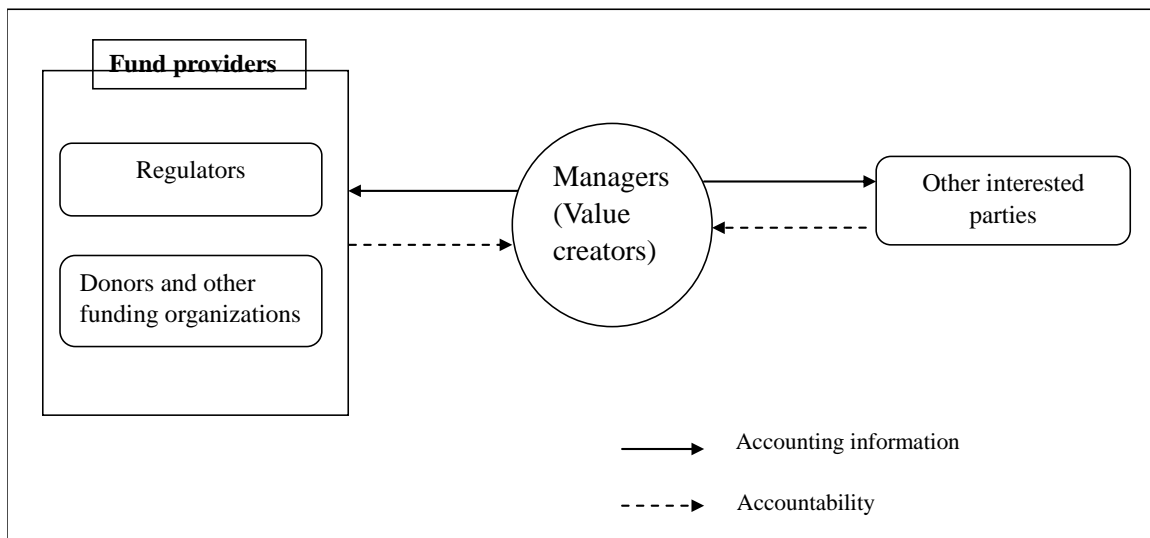
The data analysis process in this study employed thematic analysis to examine how financial reporting meets accountability needs. Data was collected through interviews and content analysis of annual reports, and all interviews were meticulously transcribed. The process involved coding the data, identifying key themes, and cross-referencing them between the interview data and annual report analysis. Themes were developed to represent central ideas; information provided through reporting mechanisms, information needs and stakeholder perspectives. Thematic mapping was used to visually represent the relationships between these themes. The authors validated their findings using the Stakeholder Agency Theory proposed by Hill and Jones. The final step involved reporting the findings, linking them to the research objectives and theoretical framework. This approach allowed for a comprehensive exploration of role of accounting information in meeting accountability needs while contextualizing the findings within the Stakeholder Agency Theory framework.

Figure 1
Thematic mapping



According to this theory, every stakeholder, regardless of the magnitude of their interest, plays a role within a network that maintains implicit or explicit contracts with the organization. However, it is the managers who hold a distinctive position at the heart of this contractual network. This distinctiveness arises from their role as the architects of contractual relationships with other stakeholder groups. Furthermore, managers are the sole stakeholder group endowed with direct control over strategic decision-making and resource allocation. This unique managerial role implies their function as agents serving the interests of other stakeholders (Hill & Jones, 1992).

Figure 2
Conceptual framework developed by the authors



In this conceptual framework, Authors have visualized the dynamic relationship between key stakeholders involved in the public sector financial accountability. Managers are at the center, who is responsible for creating value within the organization, using the resources provided by the fund providers. There are two types of fund providers to the university; Regulators and Donors and other funding organizations. The regulators establish the rules and guidelines governing financial reporting in the public sector. Regulators set the standards and frameworks that managers must adhere to, ensuring transparency and accountability. Donors and Other Funding Organizations are the external bodies that provide financial resources to the public sector. They expect accountability regarding how their funds are utilized, and they often have specific reporting requirements. Other interested parties are the minor stakeholder who interested in the operations of the university. Managers provide accounting information and they must adhere to regulatory standards while presenting this information.

In this framework, the flow of information is bi-directional. Managers provide accounting information to satisfy the information needs of both regulators and other interested parties. At the same time, these stakeholders request information from managers to ensure transparency, accountability, and effective resource utilization within the public sector.

4. Findings

The findings chapter delves into a comprehensive analysis of the research results, uncovering various aspects of accounting information and its role in meeting the diverse accountability needs of stakeholders within a Sri Lankan state university.

4.1 Accounting Information Provided through the Annual Report of the University

The university prepares both general purpose and specific purpose financial statements. General purpose financial statements address the specific needs of stakeholders and are made available in UOA's annual reports, ensuring accessibility to

all interested parties. Specific purpose financial reports are prepared responding to special requests of state authorities.

The Bursar of the University explained;

“We are obliged to prepare all the financial reports; general purpose and specific purpose which is mandated by the public sector accounting standards and bound to provide any report requested by the regulators.”

The scope of this research is limited to General-Purpose financial statements published in the annual reports of UOA and they are prepared regularly in compliance with Public Sector Accounting Standards (PSASs) and state regulations. Those include; Statement of financial performance revealing the deficit or surplus of income for the reporting period; Statement of financial position, revealing assets, liabilities and net equity as at the reporting date; Statement of Changes in funds and reserves revealing Changes occurred in the net equity during the year; Statement of Cash flow revealing Cash inflows and outflows during the period, and Notes to the financial statements providing further clarifications as per the generally accepted accounting practices.

In addition to the financial statements, the annual reports include other significant financial information that deemed to be useful for stakeholders in their decision-making. Such information encompasses cost trends, efficiency data, and other performance-related information structured into sections of the report. The source of such information appears to be outputs of accounting. This other information contained in Annual Report is identifiable into three categories namely, information, performance mainly relating to the efficiency of using funds; projections of prospective financial inflows and outflows; and comprehensive analyses of the distribution of financial resource among faculties, units, students, and operations.

4.2 Identification of Key Stakeholders and their Information Needs

The examination of annual reports and internal documents has been instrumental in identifying key stakeholders associated with the university under study. Key stakeholders are individuals or groups that hold the capacity to directly influence the ongoing operations of the organization. For the purpose of this analysis, stakeholders have been categorized into two main groups: direct stakeholders and indirect stakeholders. Direct stakeholders include the university's staff, students, and regulatory bodies such as the Ministry of Education, Ministry of Finance, University Grants Commission (UGC), and the Committee of Public Enterprises (COPE) of the Sri Lankan Parliament. Indirect stakeholders encompass alumni, industry employers, strategic partners such as foreign universities, non-governmental organizations, funding organizations like the World Bank and other donors, and community organizations.

4.3 Direct Stakeholders

Among the direct stakeholder groups identified based on their involvement in university operations, not all wield substantial influence over the content of financial reports. The study discerned five types of direct stakeholder groups based on their potential to impact financial reporting: the university's relevant financial staff, including the Bursar (Accounting officer) and the Assistant Bursar (Accounts);

governmental bodies such as the Ministry of Higher Education (MOHE) and University Grants Commission (UGC); fiscal management entities like the National Budget Department (NBD) and the Department of Public Enterprise (PED) under the Ministry of Finance; and the Committee on Public Enterprise (COPE) of the Sri Lankan Parliament.

Interviews with the Bursar and Assistant Bursar underscored the pivotal role of cost and expenditure information in decision-making. They emphasized the significance of comprehending periodic expenses and the variance in expenses over time. With the adoption of accrual basis reporting and the consequent availability of complete data, the university's management could make informed allocations for upcoming periods. The Bursar explained,

"Of course, we use financial information for decision-making purposes. Most of the time, we are referring to periodic expenses; we examine how expenses vary over time and impose controls on some of them. These controls are facilitated by the accrual basis used for financial reporting. We can ascertain the cost for the period and allocate resources for the upcoming period."

University management is mandated to disclose the utilization of government grants during the reporting period. As a public sector entity operating with a public purpose, universities must allocate their funds and manage expenses in alignment with the interests of state. Conversely, revenue elements are overlooked as the university operates without profit-oriented intentions.

Ministry of Higher Education (MOHE) and University Grants Commission (UGC)

UGC, under the Ministry of Higher Education, prepares the final appropriation account for all universities. Appropriation account is prepared with the purpose of identifying how the granted funds are allocated among the universities. The account contains categories of annual expenditures for capital and recurrent purposes. An assistant secretary of the accounting division of the UGC explained:

"Appropriation account should be prepared by all entities operating with government fund provisions. We use the appropriate account to allocate the funds received from the Government for higher education among the state universities"

Appropriation account is another general purpose report but not publicly available and it contains the categories of information shown in the format shown in Table 2.

Table 2

Format of the appropriate account

Item/ Description	Provision from the budget	Supplementary provisions	Net provision for the year	Expenditure	Saving of the provision	Provision the utilization progress
Capital						
Recurrent						

The UGC sends all the reports to the ministry and they analyze expenditure data to draft annual expenditure analysis reports, indicating capital and recurrent expenses. These reports are supposed to contribute to budgeting and decision-making for higher education. The Universities receive funds by way of donations or grants from outside institutions to carry out projects, workshops and research studies. The universities need to follow a separate reporting process to report how the grant and donations have been spent. The MOHE, reports project expenditures of the University and prepares performance reports for cabinet and parliamentary discussions. Final appropriation account is the key consideration in drafting the annual performance reports.

The Accountant of the MOHE stated,

“We need to prepare annual expenditure analysis report, for that purpose we use all expenditure information of the universities, capital, recurrent expenditure, funds and grants utilization information also taken into consideration.”

The Chief Accountant stated,

“Universities need to maintain separate financial statements for each project implemented with the donations and grants. We monitor the progress of the project and assess how the university uses the funds. We prepare separate reports for each project and all projects, performance, fund utilization, income and expenditures and report aggregately to the cabinet.”

According to the insights of Chief accountant and accountant of MOHE, they rely on the information contained in the appropriation accounts and other specific purpose reports and also refer to the expenditure information given in the published Financial Statements.

National Budget Department (NBD)

NBD of the Ministry of Finance is dedicated to handle the national budget. They prepare the annual government budget and monitor revisions needed during the fiscal year. It uses the Financial Statements of the University and relevant appropriation account information to facilitate budget preparation. They rely on historical expenditure data to allocate funds, identify over-allocations and under-allocations reportedly to ensure efficient resource utilization.

Director General, NBD said:

“We always rely on the financial information because it is the benchmark for control purposes and an important instrument in our decision-making especially in budgeting. Therefore, there is fully utilization yearly expenditure information at the maximum level because when we want to prepare the budget we must do the budget review based on accounting information of the previous years, and look into which heads have spent more and which have less. Then we get a clear picture of over allocation and under allocations. Without accounting figures we cannot prepare the budget.”

The Director General further explained the use of accounting information for the purpose of budgeting:

“For example, let’s assume that last year we allocated 10 million for recurrent expenditure but by middle of the year, the university had already used up to the whole amount. They requested more funds. Therefore, by using that information, we make changes to our current budget preparation by changing the allocation to reflect the reality.”

However, the key consideration of NBD is on the appropriation accounts because they contain information on the usage of fund. The appropriation account is prepared on cash basis and no. accrual accounting information is reflected in.

Department of Public Enterprise (PED)

The PED of the Ministry of Finance is engaged in monitoring the use of funds by the institutions operating as public enterprises, which includes state corporations, authorities, boards, universities and business undertakings. The PED’s role includes overseeing financial performance and the maintenance of expenditure within the budget. PED receives action plans, corporate plans, and annual reports from public enterprises, aiming at analyzing financial variations and investigating causes. Where necessary, it reports information of PED performance and other matters to the Cabinet of Ministers. It also receives audit reports from the Auditor General on operations of public enterprises. Apart from such reporting responsibilities, the PED is assigned with assessing creditworthiness and repayment capabilities of some public enterprises to issue guarantee assistance for financing purposes.

Director General, PED stated,

“We analyze the increase and decrease of revenue and cost of sales to find out the cause of those variations and write to the cabinet”

“We will look into the auditor’s opinion and ask public enterprises to rectify it.”

“We analyze the performance of the enterprises over the last five years and provide an immediate description of them. We submit it to the parliament figure wise”

“We provide guarantees for gap financing of enterprises. For that, we analyze their annual reports to know how their repayment history is.”

However, the study revealed that while universities are categorized as public enterprises, they are currently not under the supervision of PED. Accordingly, it was found that PED was not using the accounting information presented in final accounts nor appropriation accounts. However, it was previously monitored by the PED, and but now the UGC and universities are under the scrutiny of the national budget department.

Committee on Public Enterprises (COPE)

The Parliamentary Committee on Public Enterprises (COPE) plays a crucial role in reviewing the annual accounts and performance of public enterprises, including universities. COPE assesses the achievement of performance targets and fulfillment of social responsibilities by the public enterprises under its consideration. COPE

inquiries are based on the Auditor General's report, focusing on matters highlighted therein.

COPE member stated,

"In our commitment to ensure transparency, accountability, and the effective utilization of public funds, COPE diligently examines the accounting information of state universities in Sri Lanka. By scrutinizing financial reports and audit findings, we aim to promote responsible financial management within these institutions, thereby fostering an environment conducive to the pursuit of quality education and research"

"In our role at COPE, we diligently review the performance and social responsibilities of public enterprises, including universities. We rely on the Auditor General's report as our primary guide, focusing on the matters highlighted therein. While financial information is essential, our emphasis lies more on broader aspects, such as student intake, degree programs, and the overall impact of these institutions on our society. Our goal is to ensure public enterprises have performed and fulfill their missions effectively, beyond just the numbers."

"By ensuring sound financial management, committee supports an environment where institutions can focus on their primary mission of providing high-quality education and fostering innovation"

Accordingly, the committee evaluates university progress, including student intake, degree programs, academic and non-academic staffing, and related issues rather than the profit and loss figures presented in university Financial Statements. COPE's role transcends mere financial scrutiny; it extends to ensuring the holistic performance of state universities in Sri Lanka. While examining financial statements is essential, the committee also acknowledges that the true measure of a university's success lies in its commitment to quality education, cutting-edge research, and the intake and development of talented students. COPE recognizes that the effective utilization of financial resources is crucial in facilitating a university's pursuit of excellence in these areas, ultimately contributing to the national educational and research advancement.

4.4 Indirect Stakeholders

Some interviews were conducted with indirect stakeholders; student, alumni, employer, other funding organization, a supplier, and community member, who do not have influence the operations of the university. Except for other funding organizations, all other stakeholders are not much interested the accounting information of the university. Suppliers and the community are not even aware of the annual reports of the university.

A Student Representative stated,

"While students like me are more focused on our academic journey, we understand the importance of the university's financial stability. However, accounting information is not something we typically delve into. Our primary

concern is the quality of education and the resources available for our studies.”

A Community Member said,

“Honestly, I wasn’t even aware of the university’s annual reports or accounting information until now. My interactions with the university have been limited to some occasional events held by the university.”

An Employer stated,

“Certainly, I rely on the graduates that the university produces. While I may not actively seek out their financial reports, I do appreciate a well-rounded education that prepares students for the workforce. The university’s reputation matters more to me.”

The Student Representative's statement emphasizes that the primary focus of students is their academic journey. While they acknowledge the importance of the university financial stability, accounting information is not a central concern. Their priorities are centered on the quality of education and the resources available to support their studies. This perspective highlights the inherent priority students place on their educational experience and suggests that accounting information is not a critical aspect of them. The community member's statement reveals a lack of awareness about the university's annual reports and financial information. Their interactions with the university are limited to occasional events. The employer acknowledges the importance of the graduates produced by the university, but they do not actively seek out financial reports. Instead, the reputation of the university and the quality of education it provides hold more weight in their decision-making process. Their viewpoint underscores the significance of the university overall standing and the employability of its graduates over the specifics of its financial statements for employers. According to the insights taken from the indirect stakeholders, they exhibit varying levels of interest in the university beyond its financial information.

But other funding organizations, including donors and local and foreign institutions that grant funds for the university to carry out projects and programs have some interest in the accounting information. Before granting funds for the university to implement projects, they consider the current performance and financial position of the university to confirm whether it has the capacity to undertake the project. They also request performance reports of the previously undertaken projects to assess how well they performed.

Accountant, MOHE stated,

“Before offering foreign grants and funds to the university, the foreign institutions analyze the financial statements of the university to identify the capacity of the university to carry out the project.”

Based on the findings, the researchers identified three stakeholder groups with significant interest on the accounting information; internal actors (UOA managers), Regulators and Other funding organizations. Out of those stakeholder groups,

managers and regulators place a higher emphasis on accounting information, whereas other funding organizations have a lesser stake in accounting information. Meanwhile the interests of regulators are centered on the purpose of monitoring.

4.5 Usefulness of Accounting Information in meeting the Accountability needs

The study found that, the accountability needs vary with the stakeholder groups as shown in Table 3.

Table 3

Accountability needs of stakeholder groups

Stakeholder group	Interested accounting information
UGC, MOHE, NBD	How the allocated funds have been utilized by the university
COPE	Current performance
Other funding org.	Financial results and performance of the university

The accountability needs of the stakeholder groups who are in charge of assessing the conduct of the managers regarding the use of public resources are interested in the fund utilization information are satisfied through the appropriation account. The Accountant, MOHE commented:

“In final accounts, the information is limited to surplus/deficit calculation, financial position, and cash flows. But important aspects of information like fund appropriation and utilization are not included in the statements. Final Statements include just some figures, not much essential information for our purposes.”

To respondents, any misbehavior of public managers in fund utilization can be tracked through the appropriation account. The UGC assesses the progress of utilization of the funds provided to the university. Based on this information, the MOHE prepares annual performance reports with a very similar structure to the appropriation account and table them in parliament. NBD uses information on the utilization of funds in preparing the annual government budget.

Conversely, while the COPE and other funding agencies place a strong emphasis on the performance of the Sri Lankan state university, their focus extends beyond the traditional financial metrics found in financial statements. Instead, these stakeholders are keenly interested in non-financial performance indicators that offer a more comprehensive view of the effectiveness of the university.

The COPE, for instance, prioritizes non-financial aspects such as student intake, the introduction of new degree programs, the quality of the curriculum, the volume of academic publications, and the availability of academic and non-academic staff. This approach reflects a nuanced understanding of the role of university in society, as the committee recognizes that the true measure of the success of university that goes beyond monetary figures.

A committee member stated,

“We are mainly looking for the intake of students during the year. Compare the capacity of the university with the number of students admitted to the university. When the number of students taken to the university is higher than that of the previous year’s intake, it signals that the university is performing well”.

However, the authors found that the accountability needs of the COPE are not fully satisfied through the information provided in the published financial statements. Instead, the committee relies on observations and insights from the Auditor General to assess accountability. They consider both financial and non-financial information in assessing the accountability of the university. Accounting information alone is not sufficient to meet the information needs of the COPE.

The findings underscore the pressing need for the development of a novel reporting approach that goes beyond traditional accounting information. In the public sector, performance is not solely or even primarily measured by profit margins. Instead, it is gauged by how well a university contributes to the betterment of society. This encompasses a broader spectrum of indicators, ranging from the impact of university on the community to the quality of education it provides, its ability to innovate, and its role in fostering research and intellectual growth. Such multifaceted performance evaluation demands a reporting mechanism that can capture the full breadth of the contribution of the university to society, transcending the limitations of traditional financial data.

Other funding organizations that operate like investors take a more traditional approach, primarily seeking information related to financial performance before granting funds. While they too have a stake in the university performance, they represent a comparatively smaller group of stakeholders, and their interests align more closely with financial outcomes.

5. Discussion

In this section, we delve into a comprehensive discussion of the findings from our research, framed within the context of Stakeholder Agency Theory (SAT). Our objective was to explore the role of accounting information in facilitating accountability within the public sector, with a specific focus on a Sri Lankan state university. The exploration of this objective allowed us to uncover nuances in the information needs of various stakeholders and their implications for accountability practices. Our study revealed a diverse array of stakeholders within the public sector context, consistent with prior research (Dhanani & Connors, 2018; Smith et al., 2020). These stakeholders encompassed internal actors, regulatory bodies, and external funding organizations. Notably, each stakeholder group exhibited distinct preferences for specific types of accounting information. Aligning with Smith et al. (2020), university managers displayed a pronounced interest in cost and expenditure information, emphasizing its significance in decision-making processes and resource allocation within the university (Jones & Smith, 2017). Regulatory bodies, as demonstrated by Dhanani and Connors (2018), placed substantial importance on understanding how allocated funds were utilized by the university, relying on

appropriation accounts and specific-purpose reports for their assessments. This mirrors the findings of Smith et al. (2020), who also emphasized the relevance of such reports in the context of governmental accountability. Further, our study scrutinized the adequacy of the accounting information provided in meeting the accountability needs of these stakeholders, revealing intriguing contrasts in their responses. It was evident from our findings that the provided accounting information, particularly in the form of accrual-based financial statements, had limitations in fully satisfying the accountability needs of regulators, similar to the challenges noted by Brown and Jones (2016) in accommodating diverse stakeholder information needs within standard financial statements. Regulators often had to rely on appropriation accounts and specific-purpose reports to bridge critical information gaps, and this observation corroborates the findings of Martinez et al. (2019), who noted the prevalence of cash-based reporting in governmental entities. Conversely, our research indicated that university managers found accrual-based financial statements valuable for decision-making processes, providing essential insights into periodic expenses. This transition to accrual-based reporting aligns with the trajectory observed by Dhanani and Connors (2018), signifying it as a positive step towards enhancing transparency and accountability within the university (Smith & Johnson, 2020). However, the limitations of accrual-based financial statements in fully addressing the information needs of key stakeholders, particularly regulators, underscore the need for complementary reporting mechanisms, despite of significant efforts invested in preparing accrual-based financial statements.

Moreover, our research underscores the inherent variation in accountability requirements among different stakeholder groups. This aligns with Stakeholder Agency Theory (SAT) (Donaldson & Preston, 1995), which posits that stakeholders with varying interests and information needs exert influence on accountability practices. In our case, the dynamic interplay between stakeholder interests and accounting information availability underscores the multifaceted nature of public sector accountability. While prior research often treated accountability as a monolithic concept (Bovens, 2007; Pollitt & Bouckaert, 2017), our findings underscore that accountability varies based on stakeholders' information interests (Mulgan, 2000). In essence, accountability is not an inherent quality of financial statements, but a relational construct dependent on the alignment between the information provided and the information sought by stakeholders (Christensen et al., 2016). Comparatively, our research resonates with the stakeholder agency theory, which posits that stakeholders play a pivotal role in shaping accountability practices (Crane et al., 2019). While prior studies have frequently examined the agency relationship between government and stakeholders (Pallot et al., 2020), we extend this perspective by emphasizing that accountability is not solely an outcome of agency dynamics but is also influenced by the level of congruence between the information disseminated and the stakeholders' preferences (Boland & Schultze, 2019). The findings align with previous research by Hood (2016), which contended that accountability should be viewed as a multifaceted concept rather than a one-size-fits-all solution. In our context, this implies that accrual-based financial statements, while valuable for some stakeholders, may fall short in addressing the diverse information needs of regulators.

6. Conclusion

Our research objective was to examine the role of accounting information in facilitating accountability within the public sector and how it fulfills the accountability needs of various stakeholders. Through qualitative research methods and stakeholder agency theory, we have unveiled the multifaceted nature of accountability, highlighting the varying information needs of stakeholders. Our findings demonstrate that accounting information, while crucial for decision-making within public sector entities, does not uniformly satisfy the diverse accountability needs of stakeholders. Further, our findings call for a more context-specific and tailored approach to financial reporting within the public sector. This research paper not only advances the understanding of public sector accountability but also offers practical insights for policymakers, practitioners, and academics involved in public sector accounting. This study, while informative, has limitations. The study focused on the aspect of financial accountability which is only a one type of accountability among broad range of accountabilities. Further, the study attempted to capture stakeholder perspectives but variations within stakeholder groups may exist. The research has a specific three-year temporal scope, potentially missing evolving stakeholder views. The reliance on a single theoretical lens, Stakeholder Agency Theory, may not encompass all perspectives. The study mainly emphasized financial statements, leaving room for exploring other reporting mechanisms. Nevertheless, this research provides a valuable foundation for future investigations into public sector accountability and the role of accounting information. Moving forward, the future research can continue to explore the multifaceted nature of accountability and its implications for accounting information, thus contributing to more effective and responsive governance in the public sector.

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Business Economics

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Perspective of Banking Professionals on the Low Demand for Loans during an Economic Uncertainty: A Study on Financial Literacy and Conservative Behavior of Corporate Clients

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Abstract

This research investigates the impact of low financial literacy and conservative corporate behavior on the demand for loans and advances, especially during economic uncertainties. The findings offer insights for enhancing strategies among banks, policymakers, and socio-economic sectors to effectively stimulate loan demand in response to these challenges. The literature review revealed that the conservative behavior of corporate clients and the low financial literacy and knowledge result in a low demand for business loans. Empirical studies which address the impact of economic uncertainties on banks identify that the living standards of the citizens affect the ability of individuals and corporate clients to obtain loans from banks because as a financial intermediary, banks are more likely to retain excess liquidity instead of giving out loans due to the risks in the uncertain environment. Literature also suggests that the demand for loans decreases, it creates non-remunerative excess liquidity in banks where the banks would not receive a return from the liquid assets held at the bank. It was identified that during times of economic uncertainty, the demand for loans and advances of banks is drastically low when compared to the demand during stable periods of time. A qualitative study was conducted in Sri Lanka, involving interviews with bankers. The subsequent thematic analysis highlighted several key findings. First, it revealed that low levels of financial literacy are linked to a lack of knowledge and training in financial matters. Second, it indicated a preference among individuals for informal credit sources, rather than formal ones. Additionally, the study found a pressing need for professional financial services. Furthermore, the analysis showed that conservative behavior during periods of economic uncertainty tends to discourage investment decisions, create uncertainty in working capital requirements, and introduce volatility in hiring employees. Consequently, these factors collectively contribute to a reduced demand for loans and advances. This comprehensive analysis explores how low financial literacy and the conservative financial behavior of corporate clients determine the demand for loans. This examination not only provides a deeper understanding of the challenges but also offers valuable insights into areas where banks can enhance their strategies. By improving their approach, banks can effectively stimulate greater demand for loans and advances. These findings hold significant implications not only for financial institutions but also for policymakers and various socio-economic sectors.

Keywords: Economic Uncertainty, Bank Loans and Advances, Financial Literacy, Conservative Behavior

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1. Introduction

The banks of Sri Lanka have been treading murky waters for a long period of time due to the instability and significant ups and downs of the economy. Since obtaining independence from colonialization in 1948, the Sri Lankan economy has had an eventful past with the struggle to survive during the civil war, post-civil war boom, political upheavals, the Easter bombing, and the Covid-19 period. Though at a global scale, countries are struggling to overcome the challenges and changes of the Covid-19 pandemic, Sri Lankans faced a complete economic downturn, a civil uprising, and a shift in the governing party within the span of two years since the pandemic. During this period, Sri Lanka declared bankruptcy (Athas et al., 2022), defaulted on foreign debt earned, an RD status (Long Term Issuer Default Rating) in Fitch Ratings (FitchRatings, 2023) and opted towards debt restructuring as well as obtain the assistance of the International Monetary Fund. Hence, due to the high uncertainty level of the economy as well as the evident collapse of the economy all economic actors including households, business firms, and the government are exerting practices and policies for survival.

Despite the gravity of the economic concerns, practitioners nor scholars possess a mapped process towards salvation. The literature identifies an economic crisis to be a situation where the economy faces considerable contradictions which result in negative economic outcomes such as inflation and unemployment (Loukis et al, 2020). Such outcomes combined with the escalating uncertainty of the economy lead towards changes in the financial and economic transactions to accommodate the aforementioned economic shifts (Balagobei & Prashanthan, 2021; Shibly et al. 2013). Hence, in consideration of the banking sector as a principal player in the financial institutions of an economy, it was identified that commercial banks are struggling to maintain their revenue from interest payments received through loans and advances extended for the banks' customers as more and more customers are refusing to obtain bank loan facilities due to the dire economic outlook.

In addressing this problem, literature presents an understanding of the consequences of low growth in loans and advances. When the demand for loans decreases, it creates non-remunerative excess liquidity in banks where the banks would not receive a return from the money held at the bank (Khemraj, 2007). Excess liquidity refers to the high number of deposits held by the bank, and it is non-remunerative because the bank is unable to create an income through holding deposits unless they convert them to loans and charge an interest to earn a revenue (Ehrmann & Fratzscher, 2005). This creates a credit crisis and the asset value of banks declines which in turn affects their operations and profitability which can lead to excess liquidity that would push the banks to take on reckless lending strategies that can jeopardize the whole economy (Ezeoha, 2011). Since the bank holds on to the deposits made by customers without circulating the money and creating loans through them, excess liquidity is created due to the lack of loan creation by commercial banks (Khemraj, 2007). Researchers identify that this is a risk for the bank as well as a threat to its earnings because one main source of income of a bank is from the interest charges for loans (Boumediene, 2015; Khemraj, 2007). Hence, despite being the primary source of revenue for the bank, loans, and advances have proven to be a matter of survival for the banking sector.

As such, in addressing the problem of low demand for loans and advances during the economic crisis, this research takes into consideration a leading commercial bank in Sri Lanka. The bank under consideration is a leading privately owned commercial bank in Sri Lanka which has a customer base of over 3.4 million, which represents approximately 15% of the population in the country whereas the remainder of clients may be included within the consumer base of other privately owned commercial banks, publicly owned commercial banks, rural banks, other financial institutions or not involved in transactions considered within the scope of this research. The category of customers considered involves only the corporate clients of commercial banks who are targeted by the business loan schemes offered by commercial banks. These corporate clients may be large-scale business operations in any industry in Sri Lanka or small and medium-scale business operations. Hence, the findings of this study are more suitably applicable to privately owned commercial banks in Sri Lanka.

Therefore, in addressing the problem of low demand for loans and advances, this paper considers two aspects of corporate clients identified through literature. Initially, this study aims to answer the question of how the low financial literacy and knowledge of corporate clients affect their demand for loans and advances. Subsequently, this study addresses the question of how the conservative behavior of businesses affects the demand for loans and advances generated through corporate clients.

The context in which this study is conducted is through the analysis of ABC Bank, which is a leading commercial bank in Sri Lanka and is among the top three commercial banks in the country. In studying the performance of the bank during times of economic uncertainty, it was highlighted that ABC Bank faces issues with non-remunerative excess liquidity which affects the bank's income because the main source of revenue for the bank is through the loans and advances offered by the bank to the corporate clients and individual customers. The low demand for loans and advances during economic uncertainty is the main factor contributing to the low credit creation and excess liquidity at ABC Bank. As shown in Appendix A, during the economic uncertainties faced in 2008/2009 due to the civil war, 2014/15 due to the presidential election, and 2019/20 due to Covid-19 ABC Bank has uncustomary high levels of liquidity and debilitated growth in net loans and advances. Hence, in general practice, ABC Bank maintains a growth in deposits below 30%. However, during an economic uncertainty, it amounts up to 55-80%. Also, typically the bank has a growth above 20% for loans and advances, but during an economic uncertainty, the level of growth is between 4-16%. Finally, the ideal rate of liquidity is maintained below 25% even though during economic uncertainty the rate of liquidity reaches as high as 35%. Hence, a significant gap between the growth targets for loans and advances set by ABC Bank and the actual growth of loans and advances during the years identified to have faced an economic uncertainty.

The findings of this research are of considerable importance to the practitioners of the banking sectors as well as policymakers in strategizing the path of revival through the current economic crisis. The subsequent sections of this paper are structured as follows. Following a review of literature, conceptualization, and development of propositions for the study are demonstrated. Thereafter, a brief description of the methodology followed in data collection and analysis of the qualitative study is provided. Subsequently, the findings and discussion are presented as well as the managerial

implications and the socio-economic implications. Finally, the conclusion of the paper is presented.

2. Literature Review

2.1 Economic Uncertainty

The economic crisis in Sri Lanka in the current context was brought forward through years of mismanagement of the country's debt and resources, along with governmental policies which were frequently renewed due to the traditions followed through with political instability (Deepak et al., 2022). Even though the economic crisis was brought forward through the economic shock of the Covid-19 pandemic, it has been brewing throughout the years with various fatalistic events in both political and civil constituents (International Monetary Fund [IMF], 2022).

An economic uncertainty is a situation where the outlook of an economy is deemed to be unpredictable, and it negatively affects the economic agents as their expectations are unclear, and are not able to foresee the consequences of any action they take (Ezeoha, 2011). The main drivers of economic uncertainty include supply-side shocks that increase the cost of production, demand-side shocks that decrease the aggregate demand and thereby the output of the economy, and financial instability where the confidence in the banking system tends to decline (Akinwunmi, 2012). Higher economic uncertainty drives up the default probability of loans taken by corporate clients and transmits higher risk to commercial banks (Saha et al., 2022). In addition, increased economic uncertainty hinders the ability to accurately forecast the returns of investment projects, therefore diminishing banks' earnings. Economic uncertainty makes economic activity fall and affects the balanced growth of the real economy (Nguyen et al., 2022).

Three forces may theoretically account for economic uncertainty and bank performance and their levels of risk-taking. Firstly, adverse economic shock channels, the recessionary effect of uncertainty on aggregate demand will worsen corporate profitability, decrease collateral values, and increase the default probability, which is likely to deteriorate banks' risk profile (Zhang & Deng, 2020). Secondly, economic uncertainty may also encourage banks' incentive to take higher risks to "search for yield". Finally, economic uncertainty worsens the information asymmetry faced by banks since an increased uncertainty makes it more difficult to accurately forecast the future returns of invested projects (Zhang & Deng., 2020).

2.2 Impact on the Demand for Loans by Businesses

Bank loans have been one of the primary sources of external finance for businesses, especially for smaller businesses that lack access to public debt and equity through capital markets. (Mills & McCathy, 2014). Further, it has also been stated that such loans help businesses to maintain their cash flow, hire new employees, purchase inventory and equipment, and grow their business.

Low financial literacy and knowledge

Financial literacy refers to the ability to comprehend essential financial concepts and terms which are applied during financial transactions (Anshika & Singla, 2022; Wise, 2013). As per the report published by the OCED (2009), financial knowledge (Ability to compare financial products when making decisions), financial behavior (Spending

and saving behaviours), and financial attitude (Attitude towards monetary planning) are determinants of financial literacy. Hence, financial literacy includes the ability of an individual to analyze the risks and rewards of the transaction and thereby decide the attitude towards the transaction.

The period of an economic uncertainty, a businessman would require the ability to proceed through business operations with caution and therefore the ability to assess risks is considered an essential skill which is developed through financial literacy and knowledge (Demertzis et al., 2020). Moreover, financial literacy is recognized to vary among age, gender, education level, and other sociodemographic factors (Lotto, 2020). Thereby, the literature identifies individuals with low financial literacy to be reluctant to be involved with financial transactions such as investments in novel ventures (Lotto, 2020; Nieddu & Pandolfi, 2021). Hence, if business owners or corporate practitioners lack the ability to assess the information available during economic uncertainty, then they are more likely to refrain from expanding their financial portfolios (Erdem & Rojahn, 2022). Therefore, the need to obtain loans and advances would also be hindered.

Literature suggests that financial literacy is not a compulsory requirement for the performance of firms, however, it is recognized that financial literacy does affect the decision-making of business owners (Eniola & Entebang, 2017). This is further emphasized by Menike (2019), as it is identified that the financial knowledge, financial attitude, and as well as financial awareness of managers are deciding factors of financial literacy and such factors decide the managers' ability to strategize against competition and ensure a sustainable growth in their businesses. Hence, if the corporate clients have low financial literacy, their ability to analyze the business requirements, economic environment, and investment opportunities would be subsided, resulting in risk-averse behaviors that do not encourage the acquisition of loans and advances (Talwar et al., 2021).

Furthermore, the availability of financial services and funds ensures that the firms are capable of improving their performance, whereas a lack of funds would also lead to disruption of the survival of firms and the access to formal finance and the ease of doing business with such institutions are also determinants of the survival of firms which function under low financial literacy (Anshika & Singla, 2022). According to Prijadi et al. (2020), small businesses prefer to obtain loans from non-formal institutions rather than formal institutions such as banks. This is mainly because managers cannot prepare loan applications due to the lack of knowledge and training on financial matters, and also the processing time is relatively high (Stella et al., 2022). During times of economic uncertainty, the situation is severe as such businesses opt for more non-formal institution loans reducing the demand for bank loans by businesses (Susan, 2020).

Conservative behavior of corporate clients

Due to economic uncertainty, as the country's situation worsens thereby affecting the living standards of its citizens and limiting the ability for businesses to expand to merely survive, it is likely to result in a brain drain (Ighoshemu & Ogidiagba, 2022). Even prior to the economic crisis, literature identifies that brain drain is a prominent issue in developing countries such as Sri Lanka (Docquier et al., 2007). Subsequent to the negative impact on the tourism sector resulting from the Easter bombing in 2019, the

Covid-19 pandemic led the tourism industry to its downfall, while the policies towards organic agriculture resulted in the blight in the agricultural output therefore weakening two significant pillars of the Sri Lankan economy (Madurapperuma, 2022; Tripathi et al., 2022). Finally, the combination of the impact of the Covid-19 pandemic along with the policies implemented to limit imports affected the textile and garment industry which was the major export earner of the country (Khandre, 2022). Therefore, a majority of the businesses which were involved in the tourism, agricultural, or garment sectors faced difficulty and significant risk of failure which led to the adoption of conservative behaviors so as to ensure their survival during the period of economic uncertainty (Jayasinghe et al., 2022).

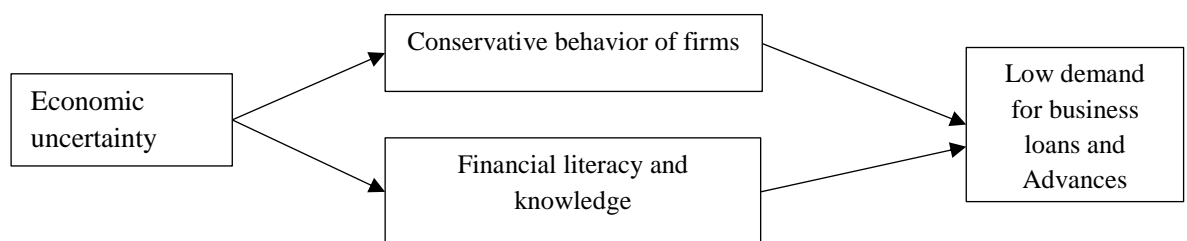
As per empirical studies, during times of economic uncertainty, corporate clients tend to invest less in expansion, thus cutting down on their budgets and hiring fewer employees according to Berger et al. (2017). Berger et al. (2017) further describe that during times of economic uncertainty, the banks experience a decrease in their asset side and off-balance sheet liquidity creation (loans) while there is an increase in the liability side liquidity creation (deposits) by a small amount, which results in a reduction in the total liquidity creation. Economic uncertainty adversely affects investments by corporate clients, reduces the levels of hiring and the amount of output produced, and further leads to a postponement of consumption activities (Bloom, 2014). Berger et al. (2017) further state that policymakers have to take into account the adverse consequences of leaving the public uncertain of their actions, which adversely affect the economy and thus policymakers should consider creating policies that ensure that banks can continue to create liquidity during times of uncertainty. In brief, economic uncertainty negatively influences the relationship between loan demand and the bank's profitability when credit creation is derived through savings (Khalfaoui & Derbali, 2021).

2.2 Conceptualization and Proposition Development

The relationship illustration was designed based on the findings from the literature review which is also related to the research objectives of this study. Accordingly, multiple factors that have an impact on demand for loans during times of economic uncertainty were identified from previous literature as illustrated in Figure 3.

Figure 3

Conceptualization of Research



Source: By Authors. (2023)

Proposition Development

Managers and employees in small businesses prefer non-formal institution loans rather than bank loans due to the low financial literacy and knowledge they possess (Prijadi

& Wulandari, 2020). Filling bank loan applications, the need for collateral, and its processes are deemed to be complex. During times of economic uncertainty, this situation is much more severe, and these employees prefer informal loans compared to formal bank loans, reducing the demand for bank loans.

Proposition 1 – Economic uncertainty combined with low financial literacy and knowledge leads to low demand for business loans.

Corporate clients tend to divert their attention from expansion, and thus cut down on their budgets and hire fewer employees during times of economic uncertainty due to the difficulty in properly predicting what could happen in the future (Berger et al., 2017). As a result of this, the need for funding decreases during times of economic uncertainty, which in turn decreases the demand for business loans.

Proposition 2 – Economic uncertainty causes conservative behavior of corporate clients while leading to a low demand for business loans.

3. Methodology

This research was conducted under the interpretivist philosophy as a qualitative study. Considering the banking professionals as the population due to the importance of their industry expertise and the ability to comprehend the economic crisis situations under consideration and their knowledge of customer behavior, a sample of managers was selected from a leading privately-owned commercial bank in Sri Lanka. Hence an interview guide was prepared based on available empirical literature as denoted in Table 1, and eight interviews were conducted with banking personnel with varying degrees of experience and expertise. The interviews were conducted in English language and were recorded and transcribed accordingly. Thereafter, the data was analyzed through a thematic analysis based on the recommendations by Braun and Clarke (2006).

As per Braun and Clerk (2006), how the conservative behavior of corporate clients reduces their demand for business loans and advances as well as the low demand for loans and advances created through low financial literacy were initially analyzed through literature to identify the dimensions that need to be considered when developing the interview guide. In this paper, the scope of the study was on corporate clients as the demand for loans from the government is determined through state-specific factors which do not fall within the league of the banks unlike factors related to corporate and household clients.

As such, it was identified that conservative behavior affects the demand for loans and advances through their changes in investment decisions, working capital requirements, and policies for hiring employees (Burger et al., 2017; Khalfoui & Derhali, 2021; Priadi & Wulandari, 2020). Subsequently, it was identified that low financial literacy was decided through the lack of financial training (Priadi & Wulandari, 2020; Swain, 2007). Hence, the interview guide presented in Appendix B was prepared and applied through the interview sessions.

Table 1*Personnel Interviewed and Interview Details*

Designation and Affiliated Department		Interview Duration	Level of Experience in the Field of Credit – Banking Industry
Manager 1	Senior Manager – Department of Economic Research and Strategy	1 hour 30 minutes	10 Years
Manager 2	Department Head – Department of Economic Research and Strategy	1 hour 15 minutes	14 Years
Manager 3	Manager - Department of Economic Research and Strategy	1 hour 08 minutes	8 Years
Manager 4	Senior Manager – Loans Department	1 hour 25 minutes	7 Years
Manager 5	Senior Manager – Loans Department	1 hour 35 minutes	12 Years
Manager 6	Department Head – Department of Credit Risk Management	1 hour	26 Years
Manager 7	Senior Manager – Department of Credit Risk Management	1 hour 15 minutes	10 Years
Manager 8	Senior Manager – Department of Credit Risk Management	1 hour 20 minutes	13 Years

Source: By Authors. (2023).

The bank personnel were selected for the interviews as they are more knowledgeable of the economic jargon, situation, and behavior of the loan market than the customers. The ABC Bank was selected for data collection because this bank is considered to be a leading commercial bank in Sri Lanka with 3.4 million customers. Moreover, for the year 2022, this bank has had a market share of over 3.4 million customers, whereas other commercial banks hold customers within the range of 2.6 million to 0.2 million as per the published annual reports. The interview guide presented in Appendix B was applied as a guide when conducting the interviews. The details of personnel interviewed for the research are presented in Table 1. The collected data was analyzed through a thematic analysis (Braun & Clarke, 2006), for financial literacy and conservative behavior of businesses.

4. Findings and Discussion

Proposition 1 - Economic uncertainty combined with low financial literacy knowledge leads to low demand for business loans

Financial literacy is a determining factor of peoples' ability to understand transactions related to saving, investment, and spending which are crucial to the functioning of the economy. Financial literacy includes the ability to understand financial concepts such

as interest rates, and risk management as well as economic concepts such as inflation and expenditure.

Hence, financial literacy is considered to be of paramount importance for the growth and development of a country. However, financial literacy in Sri Lanka is at 35%, while in more developed countries such as Norway, it is up to 71% (Klapper et al., 2018).

Lack of knowledge and training in financial matters

When people are not knowledgeable regarding financial concepts, it makes them reluctant to be involved in financial transactions with institutions as they are unable to understand extensive terms and conditions and also it is difficult to gauge the explanations on the financial planning which include details of the future payments and installments to be fulfilled (Prijadi & Wulandari, 2020; Stella, 2022).

Manager 3 agreed with this view while stating the following:

“Usually, this problem is seen with small businesses. They don’t prefer coming to us because we have a lot of processes. It is seen in places like Pettah people mostly take loans from these loan sharks at very high-interest rates” (Manager 3)

However, the lack of financial literacy is not seen as an issue that came up due to the lack of education, as Sri Lankans have a literacy rate of 92.9% (Dunuthilake, 2022) which shows that the education levels as well as the literary understanding of people are at a very favorable rate. This establishes the difference between reading literacy and financial literacy, while elaborating that financial literacy needs to be improved (Susan, 2020). For instance, even though a customer is capable of understanding the terms and conditions of a loan scheme, the financial jargon which is used to set out the interest, maturity periods, and installments is difficult to grasp.

“It’s not really an issue with education per se, it’s more regarding the financial knowledge. For example, there are doctors who may not know about interest rates, the favorable times to get loans, which bank to go to, etc.” (Manager 5)

“There are highly educated people who don’t know about bank functions. So they don’t want to go through the hassle of submitting financial documents and applying for loans with banks” (Manager 1)

Preference for informal credit sources

Furthermore, the low financial literacy reduces the level of feasibility that a customer has when applying for a loan. A majority of SMEs do not maintain financial accounts as per required standards and their transactions are not pre-planned or budgeted. Hence, such businesses tend to keep away from banks because banks require formal documentation to suit their credit criteria.

“Some of the standard documentation needed for a business loan include business registration documents, 3-5 years audited accounts, bank account history, and CRIB records. For retail or self-employed, the bank statements, income flows, and business financial accounts.

The problem is that most of the SME customers don't have approved and audited accounts. Then it is difficult to gauge their potential and it is difficult to grant loans for them" (Manager 2)

"Yes, a lot of SME customers want to come to banks because the interest rates are a lot lower, and it is a cleaner process. However, their requirements are different because they don't have bank accounts or formal records and also ask for loans to be granted quickly due to their lack of planning. However, banks are reluctant to grant loans within a short period, unless the banks are familiar with these customers" (Manager 5)

"Mostly in the rural areas, you can easily find the needed funds from within that society. There are rich people in the village who lend and then the families also give money. So these customers can quickly and easily get a loan without having to submit any documents" (Manager 8)

The lack of planning and documentation among SME customers leads them to follow more informal methods of obtaining loans because such sources of credit have less scrutiny than banks. Especially during economic uncertainty, the terms and conditions as well as the credit screening processes are made more stringent and therefore discourage businesses from applying for credit facilities (Stella et al., 2020).

"The SME prefer the informal sector because they can get the loans quickly and there won't be any formal screening or requirement to present documentation. Also, the SME can get small amounts from informal sources for very short periods of time, which is not possible with banks" (Manager 7)

"It depends on the person. Some people used to and prefer to use informal credit sources. People with sufficient knowledge prefer to come to banks. Usually, during turbulent times people prefer to go to these informal credit sources and get it rather than going through the entire process in a bank. If they are so sure about the surplus of profit they can generate, then for a quick realization they basically exercise this option and try and settle it early. But people with proper literacy know they can get it done from a bank as long as they have a proper track record." (Manager 2)

Availability of professional financial services

In banks, the role of the advisor is played by the manager and therefore the managers provide explanations, details, and the breakdown of the structure of loan schemes and also suggest suitable schemes to match the requirements of the customers. During economic uncertainties, this is a difficult role for the managers as they cannot provide solid advice and predict the future state reliably. The Manager 3 stated that:

"So, if you have a financial advisor, that's pretty much the role of the manager of the bank. If these customers get such advice, they will definitely go for the loans.

During economic uncertainties, the customers are advised not to take loans, because it would be difficult due to practical reasons. Even if the customers

have a good income, it is likely that when building a house, they will not be able to do it within the estimated cost or timelines” (Manager 3)

External advisory services are also available for customers, and they have the ability and the expertise to guide customers through economic uncertainties as these advisors are specialized in the field of credit.

“Basically, these outside firms provide consultancy services to this business. It does not have a very big impact but to some extent, these corporate clients ask them to take a step back and wait until the situation gets better and then take a loan” (Manager 8)

“Normally because the advisors don’t know what will happen either, they don’t tell others to take loans right away, but they have a better chance at telling customers if they should wait to take the loans now because they are educated about the financial systems and experienced most of the time.” (Manager 3)

Proposition 2 - Economic uncertainty causes conservative behavior of corporate clients while it leads to a low demand for business loans

During uncertain times in the economy business corporate clients display a high degree of conservative behaviour. This is usually because corporate clients are unsure of the future direction of the economy and prefer to hold back their investment decisions (Berger et al., 2017). There is a significant impact on the investment decisions made by these corporate clients and the working capital requirement tends to change to a major extent (Berger et al., 2017; Bloom, 2014). In this section, such changes in investment decisions, working capital requirements, and hiring decisions are further examined and their impact on the demand for business loans is discussed.

Investment decisions

Corporate clients’ investment decisions mainly revolve around expansion decisions, acquiring fixed capital, and technological innovations. However, during such times of economic uncertainty, mainly during the current economic crisis the country is facing in 2022, businesses display a high tendency to remain conservative and cut down on such expenditures.

One main reason behind such conservative behaviour is the increase in the cost of production for many corporate clients (Berger et al., 2017). During times of economic uncertainty, the inflation rates of the country increase, while the exchange rate depreciates to a certain extent making the corporate clients incur high costs for their inputs which are either sourced domestically or imported from foreign countries. The increased costs forces an increase in price and a reduction in the demand from customers which negatively affects the firm. Thus, in such a situation of increasing costs during times of economic uncertainty, the firm’s main objective remains to survive in the market while minimizing the losses it makes rather than expanding in a very volatile environment.

This notion was further supported by Manager 02 who stated:

“If we take a restaurant for example, it has been affected severely, people do not want to come, they don’t have sufficient fuel to come, vegetable prices are high, gas is short, and all of this leads to an increase in the cost of production and the cost of production is affected. All the business costs have gone up and the ordinary person’s spending capacity has not gone up to that level. So, the demand for these businesses has fallen sharply.” (Manager 2)

Secondly, the corporate clients prefer not to invest during such times due to the high cost of capital which makes the Net Present Value (NPV) of their investments negative, thus making it not feasible to go ahead with the project (Caballero & Pindyck, 1996; Gaspars-Wieloch, 2019). The current interest rates for business loans of ABC Bank range from 23% to 28% and it is less likely that a firm could generate an annual return much greater than these rates to make it feasible to borrow and invest. Further, these interest rates in the market are highly volatile and the corporate clients would be losing if they borrow at a fixed interest rate and the rates go down in the future. Due to these reasons corporate clients patiently wait until the situation gets better to make their investment decisions without taking much risk during such uncertain times. Manager 04 stated that:

“In general, the investments go down during uncertain times, because of the negative relationship between the interest rates and investments as well. For example, in NPV the value goes down when the interest rates rise as it happens during uncertainties, then the projects become unviable.” (Manager 4)

Working capital requirements

The working capital requirements depend on the type of economic uncertainty that the country is undergoing. If the uncertainty causes a recessionary impact on the economy such as during periods of COVID-19, the corporate clients will face a decrease in demand for their goods which leads to a lesser need for stock during such a period. Such a decrease in demand and the need for lesser stock reduces the amount of cash being tied up in stocks reducing the amount of working capital investment of each firm (Tandoh, 2020). As a result of such a decrease in working capital requirements the demand for loans decrease. This notion was evident when Manager 01 stated that:

“It depends on the type of uncertainty. If the inflation decreases in a recessionary scenario the working capital should drop. It drops because the businesses order less inventory, hire fewer people, or retrench people. As a result, during a recessionary period the demand for loans drop.” (Manager 1)

However, such a decrease in working capital requirements does not apply to all economic uncertainty periods the country has faced (Hofman et al., 2022). During the current economic crisis faced by the country in 2022, due to high levels of inflation and many credit transactions now being converted into cash transactions the working capital requirements have risen and will require additional investment by the corporate clients resulting in an increase in demand for loans to some extent. Banks too would be willing to support these businesses by lending to them and helping them survive during such turbulent times. However, whether such a loan will be granted by the bank during uncertain times depends on the industry and the risk associated. This was identified when Manager 02 was interviewed as he stated that:

“Working capital cycles have been adversely affected, most credit transactions have now moved into cash. So, working capital requirements have actually increased. Banks try to support these corporate clients by helping them figure out their working capital needs, so these businesses do not run out of businesses. But we look into many other factors like the industry which the business is in and what type of risk is involved when we lend to them” (Manager 2)

Hiring few employees

A common feature identified during times of economic uncertainty is that corporate clients tend to lay off employees and halt the hiring of new employees into the firm (Kandoussi & Langot, 2020; Schaal, 2017). Such a layoff and halt in hiring reduces the cash outflow in terms of salaries to employees. Most corporate clients tend to obtain temporary overdraft loans towards the end of each month in order to make such salary payments to employees and during these times the number of overdrafts taken by businesses decreases to some extent as clearly mentioned by Manager 03:

“Corporate clients are operating with a bare minimum amount of labour. This reduces the need for higher salary outflows and to some extent, the needs for overdrafts have been reduced to some extent.” (Manager 3)

From the above discussion, it is evident that during times of economic uncertainty corporate clients behave conservatively and this results in a decrease in investments made by the corporate clients, a decrease in working capital requirements in certain instances, and the hiring of few employees which overall leads to a lesser demand for business loans.

5. Implications and Recommendations

As per the findings, the following segment includes several methods by which the banks would be able to overlook the issues faced in raising the demand for loans and advances during economic uncertainty.

5.1 Managerial Implications

In this research study, we investigated how banks can enhance loan demand during economic uncertainty. There is a chance that ABC bank management can detect and resolve hazards in loans using the insights provided through this study as the risks involved as well as other crucial factors have been identified.

There are various types of requirements that are unique to businesses, and banks can investigate those requirements and take action to meet those requirements. Throughout the research findings, it was identified that the customers' requirements need to be addressed by taking into consideration the unique scenarios that come up during economic uncertainties.

Finally, management has the option of collecting data during those periods of economic uncertainty and doing a prior study on how loan demand was changing in those situations, and designing a loan scheme that suits uncertain time periods.

In order to analyze the creditworthiness of clients, the bank could make use of big data and fintech and go beyond just a credit rating issued by the Credit Information Bureau

of Sri Lanka which only considers past income and settlement patterns. This also saves time to evaluate a consumer from scratch whenever they apply for a loan. The use of such big data and fintech to improve the loan granting process is practiced in many developed countries, especially in the United States.

During times of economic uncertainty, corporate clients are reluctant to borrow for long periods of time due to the uncertainty in relation to interest rates and the impact any policy measure could have on business operations. On the same note, banks are unwilling to lend for longer periods due to higher risk, mainly due to the fact that any unfavorable impact on the business could lead to delays in loan repayments and also could lead to the loan being defaulted. As a measure to mitigate this, it is recommended that banks focus on overdrafts and also come up with newer types of short-term loans where they could channel their excess liquidity.

It was also identified that during certain periods of economic uncertainty when price levels increase it leads to an increase in the working capital requirements of corporate clients and corporate clients are more willing to borrow for these purposes rather than for long-term investments. In terms of the bank, such short-term loans could also generate a higher return.

5.2 Implications for Policy Makers

As policymakers are profoundly focusing on the economic aspects which need to be improved in order to develop the economy of the country, one major branch considered by policy-makers is the advancement of business investments. As a main source of finance for conducting business operations and for business expansions, bank loans are given priority by policymakers. Furthermore, as a key player in an economy, the survival and stability of banks are vital to maintaining economic stability. Hence, as the main source of revenue from banks is generated through interest income, it is important that the banks are able to conserve a healthy portfolio of loans and advances.

In this light, an aspect that policymakers would be able to associate with is the improvement of the level of financial literacy among the businesses in the country, especially small and medium-scale businesses which are based in rural areas. Low financial literacy is a major issue in Sri Lanka. When it comes to rural areas, it affects them quite hard since they lack basic education, which leads to a decrease in financial literacy. Even if people have a good education, they may not be financially literate. Whether there is economic uncertainty or not, this financial literacy has a negative impact on lending. It may not reduce the total quantity of loans, but it does reduce the number of high-quality loans. When it comes to economic uncertainty, low financial literacy has had a considerable impact which was also discovered in our findings. Thus, the bank could take measures to improve the financial literacy of individuals especially those in rural areas through educational marketing, awareness campaigns, etc.

5.3 Socio-Economic Implications

This section explains how the solution generates positive externalities for society and how it contributes to changing the socioeconomic characteristics of society. When banks handle the issue of low loan demand and encourage customers to take loans while addressing the risks related to uncertain situations, it will boost economic activity in the country and indirectly create new job opportunities for the economy as the economy

expands. It will also help to overcome economic turbulence as economic activities are encouraged through such transactions.

Furthermore, banks can contribute towards improving the financial literacy of their current and potential customers. Then the customers would be able to raise their living standards through sensible financial decision making. Then, with sufficient finance literacy, informal credit generation and concerns associated with informal credit formation can be overcome.

6. Conclusion

Discussions on economic uncertainties are abundant in the current context due to the ripple caused by the Covid-19 pandemic. Even though initially economists and industry specialists predicted a recovery, naming it the new normal, the conditions that developed and the global political scenario led towards a continuation of economic uncertainty, to a point where it is now mundane. Hence, this study focuses on identifying the reasons behind the decrease in demand for loans during economic uncertainty and what the bank could do to improve such demand. Economic uncertainty in Sri Lanka was analyzed using four scenarios, the latter period of the civil war, political elections, the COVID-19 pandemic, and the current ongoing economic crisis in 2022. Out of the four, the study mainly examines the current economic crisis as this is what the readers, the customers, and the bank managers could relate to more closely to understand the real reasons behind the decrease in demand for loans. Applying a qualitative methodology, the researchers interviewed key personnel from a prominent commercial bank in the country to draw conclusions on how the economic uncertainty led towards a low demand for bank loans. Through an extensive literature review, it was identified that the conservative behavior of corporate clients as well as the low financial literacy are leading factors that impact loan demand from businesses, and this was confirmed and explored in depth through the interviews. There are important implications especially for banks and policy makers as well as socio-economic aspects through the findings of this research.

Future Research Areas

Firstly, this research was conducted in consideration of a leading commercial bank in the country as it would represent the majority of the customer base of banks. However, future research could look into extending the interviews to other banks as well, this would improve the generalizability of the findings. Secondly, this research considers the banks' point of view as the bankers tend to have more clarity and understanding of the jargon used throughout this research, even so, future research could consider the customers' point of view as this is likely to provide an in-depth understanding of the factors that affect the loan demand during economic uncertainty. Finally, it is recommended for future research to be conducted in the form of quantitative research through incorporating a profound level of economic theories and concepts which are likely to improve the theoretical background of such a study.

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Appendices

Appendix A

ABC Bank's Loan Performance During 2005 - 2020

Year	Growth in Deposits	Growth in Liquidity Ratio	Growth in Net Loans and Advances	Growth Targets Set for Loans and Advances by ABC Bank
2005	25%	25.30%	24%	30%
2006	11%	31.30%	24%	30%
2007	-76%	29%	25%	35%
2008	35%	29.50%	4%	20%
2009	416%	30.50%	6%	20%
2010	42.17%	26.30%	33%	25%
2011	-7.25%	25%	39%	35%
2012	19.02%	22.40%	23%	30%
2013	1.87%	27.60%	24%	30%
2014	54.51%	24.50%	16%	20%
2015	24.09%	21.80%	25%	25%

2016	3.56%	21.20%	22%	20%
2017	5.13%	22.20%	23%	25%
2018	-7.70%	21.50%	15%	20%
2019	5.97%	21.50%	6%	25%
2020	56%	35%	4%	20%

Source: Developed by the Authors Based on Information from the Bank. (2023).

Appendix B

Interview guide

Section 01 - How does having low financial literacy and knowledge contribute to the decrease in demand for loans?

1. What are the documents and conditions that have to be met to grant a loan?
2. How does the lack of knowledge of businesses impact the demand for business loans?
3. Do businesses prefer informal credit over formal credit during such times?
4. Does the availability of professional and financial advisory services impact the demand for loans?

Section 02 - How does the conservative behavior of firms affect the demand for business loans?

1. How does the change in investment decisions affect the demand for loans?
2. How does the changes in working capital requirements affect the demand for loans?
3. How does the fact that firms hire fewer employees affect the demand for loans?

Financial Literacy: Impact during Crisis on MSMEs in the Northern Province of Sri Lanka

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Abstract

Sri Lanka currently experiencing the economic crisis resulting from the divergent currency rates, adverse economic policies, and economic mismanagement. The current economic crisis in Sri Lanka makes the MSME sector even more vulnerable. This study intends to identify the level of financial literacy among MSME entrepreneurs and understand the impact on the financial decision making of entrepreneurs of the MSME sector in the Northern Province during the current economic crisis. The study is a cross sectional descriptive survey with a sample of 150 MSME businesses operating in manufacturing and industry, trading, and service sectors. The study focuses on the influence of financial literacy on financial performance during crisis. This study contributes to the existing literature on behavioural finance, where it incorporates the level of financial literacy to the Prospect Theory (PT), where relating the two different stages of decision specifically to the MSME sector. Based on study it reveals that the financial literacy rate of these MSME entrepreneurs is below 35% in the Northern province which has an adverse impact in the financial performance during crisis. It was identified that financial literacy is a better predictor of financial behaviour of MSMEs. The factors such as liquidity of the business, debt level, turnover and profit have been negatively affected during the crisis resulting from lack of financial knowledge, poor financial attitude and financial behaviour of the MSMEs. The finding of the study will support the Central Bank of Sri Lanka to draft a national level policy for MSMEs to improve in their financing decision by developing their level of financial literacy.

Keywords: Behavioural Finance, Financial Performance, Financial Literacy, Micro, Small and Medium Enterprises

1. Introduction

Financial literacy or the ability to utilize information and skills to manage financial resources is crucial for the financial success of MSMEs in emerging nations (Bongomin et al., 2020). According to the publication of Department of Census and Statistics, Sri Lanka has notable rate for print literacy. As of 2020, Sri Lanka is the most literate nation in South Asia with the print literacy rate is at 92%. However, it is surprising to see that Sri Lanka's financial literacy rate is only 57.9% according to Financial Literacy Survey Sri Lanka conducted by the Central bank of Sri Lanka in 2021. Further it indicated that the rate varies based on regions and it is at 12.10% among the rural communities. It is interesting to see the disparity between the relatively high print literacy rate and the lower financial literacy rate in the country. This suggests that there is a need for targeted efforts to improve financial literacy among the population, especially in rural areas. This clearly highlights that there is further scope to advance financial literacy among

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Sri Lankans, and despite of the well-developed financial system with financial infrastructure, many investors still struggle to use these advancements effectively.

Mithula (2015) claims that a lack of basic financial literacy, and discipline to achieve financial stability is one of the major problems for a successful, and sustainable firm. In explaining financial behaviour of investors and entrepreneurs, there are two key theories in the literature: standard finance and behavioural finance. Standard finance assumes that people make perfectly rational economic decisions and involves impractical set of assumptions. Whereas behavioural finance focused to identify and understand human psychological phenomena, and it is based on the observed financial behaviour of investors assuming them are normal or irrational (Pompian, 2012).

MSMEs have been recognised as an essential strategic sector for fostering economic and social development in Sri Lanka. It is clear that MSMEs are seen as a significant source for creating employment, generating income, eliminating poverty, and regional development on a global scale. Although there is no specific definition provided for MSMEs in Sri Lanka, there are several definitions have been accepted by various organisations. The importance of figuring out what influences MSMEs' falling into the debt trap needs to be highlighted given the enormous potential for success of MSMEs in Sri Lanka.

This study specifically focuses on the Northern Province of our nation, as MSMEs, foster strength of communities to regain from adversities including civil war and Covid-19 pandemic. Concentrating on the Labour Force Survey results published by the Department of Census and Statistics of 2019 the Northern Province has reported high level of unemployment and poor labour force participation in comparison to all other provinces. The micro finance loans have also significantly challenged the business and families in this community Kadirgamar (2020). According to the poverty indicators published by department of census and statistics, poverty headcount percentage in 2016 is 4.1 in Sri Lanka where the percentage stands at 7.7 in the Northern Province which is the highest among the provinces in Sri Lanka. Thus, it is vital to identify the level of financial literacy among MSME entrepreneurs and understand the impact of that on the financial behaviour of entrepreneurs MSME sector particularly in the Northern Province to achieve an acceptable level of employment opportunities and for the regional and economic development.

The focus of this research is a sample of MSME entrepreneurs, in the Northern Province. The respondents represented various industries located in the North. Based on the regional distribution of MSMEs, the sample was selected from five districts of the Northern Province. Respondents were selected based on convenience, and the ease of access to information. The study was a cross sectional descriptive survey, conducted during a particular time.

This study focuses on how the entrepreneurial finance decisions are made applying the behavioural finance theories and the influence of financial literacy to understand the decision-making process and consequently to help the entrepreneurs and the financial institutions to improve their decision-making process. This finding will support the Central Bank of Sri Lanka (CBSL), and the government at large, to draft a national

level policy for MSMEs to overcome the financial distress due increase of debt in their business.

The paper discusses the key literature related to financial literacy, decision-making and the financial performance of MSMEs, methodology adopted to collect and analyses data and finally presents the key findings of the study.

2. Literature Review

2.1 Micro, Small and Medium Enterprises (MSMEs)

Majumdar (2008) citing the work of Baumol (2004) indicates that, small and medium-sized firms and entrepreneurs are essential to the development of emerging nations like Sri Lanka. According to Fairoz et al. (2010), the main goal of assisting MSMEs is to ensure that these companies utilise resources effectively. By doing so, they help to promote pro-poor growth and the creation of jobs because MSMEs use more labour than capital. These MSMEs compete in narrow markets, where they have flexibility and close customer relationships (Mujumdar, 2008).

MSMEs play a vital role in the modern economy, because the highly developed economies, are led by a network of MSMEs (Mulhern, 1995, as cited by Gou and Huang, 2019). Several studies have recognised the importance of MSMEs because of how they contribute to social and economic development by fostering both urban and rural communities and providing income (Israel et al., 2014). In order to assist this industry, including tax breaks and the progress of innovation, numerous definitions are provided by various authorities and institutions. Any business that employs less than 99 employees meets the World Bank's definition of a MSME. A MSME is defined by the Industrial Development Board (IDB) as an organization, whose investment in machinery, and plant does not exceed Rs. 4 million (US\$42000) (Gamage, 2003). Similar criteria are used by the Department of Census and Statistics to identify small and medium-sized enterprises (SME), with entities with up to 149 employees being classified as medium-sized enterprises.

A MSME is defined by the Task Force for SME Sector Development as an organisation with less than \$50 million in investment and less than 30 employees. The Task Force was established in December 2002. The taskforce's 2002 report revealed that Sri Lanka's SME sector is still underdeveloped and not yet very vibrant, despite the government's various reforms and assistance from donor organisations. It also stated that the MSME's ability to grow is limited by both internal and external causes. Additionally, it is clear that the uncertainty caused by the many definitions of MSMEs that have been adopted by various institutions has prevented MSMEs from being properly identified for a variety of supportive measures (Gamage, 2003).

Numerous studies have documented how various elements of entrepreneurial environments affect entrepreneurial orientation of MSMEs (Fogel, 1994 as cited by Mai and Gan, 2007). Studies demonstrate a strong relationship between experience, education, and religion and an individual's level of entrepreneurship as well as their cultural beliefs (Altinay 2011; Senbet & Wang, 2012). Nooteboom (2002), quoted by Majumdar (2008), made the case that the success or failure of a business is determined not just by the personal traits of the entrepreneur but also by how those traits interact with environmental variables in the context in which the business functions. According

to the research of Gartner (1985), which Mai & Gan (2007) mentioned, socioeconomic characteristics, credit availability, physical amenities, and technological. Socioeconomic variables, financing availability, physical facilities, technical support, and information access are some of the primary infrastructure facilities needed by small businesses, according to a study by Gartner (1985) referenced by Mai & Gan (2007).

2.2 Financial Literacy

According to Bongomin et al. (2020), Financial literacy is the capacity to acquire, understand, and assess the necessary information required to take financial decisions and selections as well as the understanding of the possible financial consequences. This skill is necessary for MSMEs in emerging economies to survive and have access to financial services. The OECD INFE describes financial literacy as the awareness, knowledge, aptitude, attitude, and behaviour required to make informed financial decisions and finally achieve individual financial health. According to Gallery (2011), there are number of definitions of financial literacy, but it is generally used to relate to the ability to conduct thoughtful analyses and make proactive decisions involving financial resources. To maximise opportunities for growth and poverty reduction, it is important to understand how knowledgeable a population is about financial matters, according to the literature that is currently available (Heenkenda, 2014). The ANZ Survey of Adult Financial Literacy in Australia classified financial literacy into four broad categories using the updated UK Adult Financial Capability Framework (2003, 2005, 2008). The following four areas are: 1. financial comprehension; 2. financial competency; 3. financial attitude; and 4. financial responsibility.

Bongomin et al. (2020) found that business owners of all ages frequently make decisions about how to allocate, use, and achieve resources. According to FSA (2006) cited in the work of Gallery (2011), financial competence is said to be made up of three interrelated elements: knowledge, skills, and attitude. Capability is also said to include concepts that go beyond only.

Entrepreneurs must be financially savvy in order for these decisions to be successful because these events are always financially significant. Some studies maintain a more narrowly defined definition of financial literacy, focusing only on the fundamental tools of fund management, such as budgeting, saving, investing, and insurance. Yet, other studies define financial literacy as having a general awareness of economics and how the environment and conditions of the economy affect financial decisions (Worthington, 2006 as cited by Gallery, 2011). Heenkenda (2014) asserts that despite the financial sector's rapid expansion and the creation of sophisticated financial tools and models, financial literacy continues to be a significant barrier to financial inclusion. Financial illiteracy is a significant barrier that keeps impoverished people from receiving financial services, and for those who can, it prohibits them from using those services effectively and appropriately. Academic studies show that MSMEs with financially educated owners are more likely to succeed than those with illiterate owners.

Hypothesis 1 – Financial literacy positively influences financial performance of MSMEs during crisis.

2.3 Financial Performance of MSMEs

Various studies have covered the elements that affect how MSMEs get financed. Constraints on both supply and demand have an impact on MSMEs' access to financing (Cressy and Olofsson 1997; Agbloyor et al. 2014). MSMEs are the main force behind growth, and as such, the expansion and survival of these companies rely heavily on their capacity to invest in successful projects, which in turn depends on their ability to get capital. According to European Commission credit costs and the likelihood that a loan application will be approved have significantly varied among nations, with borrowers in stressed economies experiencing a more severe credit contraction.

Yazdipou (2011) asserts that even for companies with extremely valuable but uncertain growth potential, start-up enterprises usually rely primarily on personal resources and family, with external stock injections being uncommon (Robb et al. 2009; Reynolds and Curtin 2008). Although, they are not the main source of money, for starting a new firm banks are the main basis of finance for small enterprises once they have been established, providing operating capital and funding for investments in machinery or equipment (Berger and Udell, 1998).

The work of Ayadi and Gadi (2013), and Ozturk and Mrkaic (2014) indicates that the biggest barriers to lending availability for MSMEs are the difficulties in supplying high quality guarantee, and lack of creditworthiness. According to Copur (2015), the lack of transparency in accounting information exacerbates the knowledge asymmetry, which is more prominent during economic downturns and leads to credit regulating and suboptimal lending to MSMEs. Elements such as the legal, institutional environment and social capital are essential to raising the level of confidence in the credit market and to develop the relationship between creditors and borrowers, and subsequently lowering the cost of financing.

MSME lending is more expensive from a bank management perspective than working with large firms in terms of capital inclusion and transaction costs because of the lack of transparency (Brogi and Langone 2016). Because of this, MSMEs experience downturns more severely than do larger companies, proving the cyclical nature of SME loans (European Banking Authority, 2015). An important element of the research on MSMEs access to credit is theoretically based on the idea of information opacity and its function in creating an information symmetry between lenders and MSME business owners.

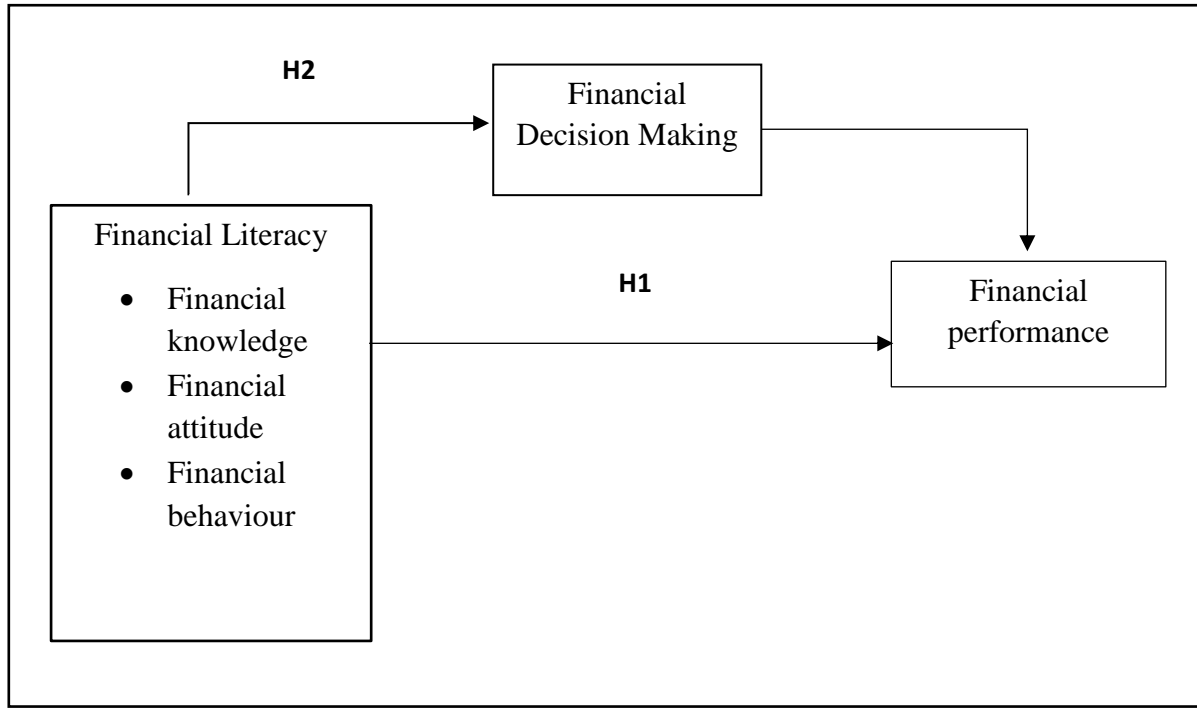
Hypothesis 2 – Financial decision making mediates the relationship between financial literacy and financial performance of MSMEs during crisis.

2.4 Conceptual Framework

Analyzing the previous literature, the below conceptual framework is developed.

Figure 1

Conceptual framework



Source: Author

3. Methodology

The focus of this research is a quantitative study with a sample entrepreneur of MSME sector in the Northern Province of Sri Lanka. The respondents will represent the MSMEs of the various industries located in the Northern Province of Sri Lanka. According to the Department of Census and Statistics, regional distribution of MSMEs the sample was selected from the five districts of the Northern Provincen (Jaffna, Killinochchi, Mannar, Vavuniya, Mullaitivu). Based on the Labour Force Survey Statistics of 2019, the number of own account workers in the Northern Province is 166,575.

The main instrument for data collection is the Questionnaire. The questionnaire would be a self-administered one, as some questions and terminology need further explanation. Respondents in the study will be voluntary and they will be assured of anonymity.

The pilot survey was conducted with 30 respondents to test the reliability and validity of the data collection. Validity is the degree to which the test measures what it is intended to measure. Various examinations were made in order to ensure the validity of the sample data collection using the pilot survey. Initially the questionnaire was distributed to experts in the field in order to obtain their feedback to test the face validity, which refers to the degree to which the questionnaire appears to measure what

it implies to measure. Based on the expert feedback the order of the questions measuring a certain variable was jumbled and four reverse scored questions were also included to ensure the validity of the data. The construct validity, that is the extent to which a test measures a proposed hypothetical construct, was also ensured, as the indicators for the variables were obtained from previously tested studies. Based on the pilot survey the Cronbach alpha was calculated in SPSS to check the reliability, which is the extent to which the test emphasizes consistency of measurement. The Cronbach alpha is the estimate of internal consistency associated with the scores of the scale. The pilot survey resulted in a Cronbach alpha greater than 0.5 for all the variables. Measurements are reliable to the degree to which they are repeatable which was ensured through the Cronbach alpha calculation. Accordingly, after verifying the validity and reliability of the data collection through the pilot survey analysis, the data collection among the sample was commenced.

According to Hair et al. (2006) the margin of error used by survey researchers usually falls between 4% and 8% at the 95% confidence level. Thus, for this study applying a 95% confidence level and 4% of confidence interval or margin of error a sample of 150 MSME entrepreneurs will be selected for the survey using convenience sampling.

As the initial step, the accuracy of the collected data was verified using frequency analysis where the missing values were detected. Any instances where a variable in the analysis has missing values can be dealt with by either replacing the missing value or by merely removing them. Any imputation approach can be used, according to Hair et al. (2006) if the sample's missing values make up less than 10% of the whole sample. The standard method for addressing missing data is to replace the missing data points with the mean of that variable. Since just a small percentage of the study's cases, less than 3% were missing and the missing cases have been substituted with the indicator's mean value. Using a boxplot graph, outliers were consequently found in this experiment. After identifying the outliers through the graph, the z-values of the variables were calculated. With a cutoff value of three only six out of 156 responses were identified as outliers where they were deleted. Thus, after treating for missing values and removing outliers 150 responses were counted for the final analysis. The conceptual framework, of this study only contains two variables, which makes this sample size sound reasonable for the investigation, in contrast to Hair et al. (2006)'s explanation, which suggests that a lowest sample size needs to be 100 for models having five or less constructs or variables. The data were analysed using SPSS and the structural equation modelling (SEM) approach.

4. Results

The data analysed reflects the following demographic characteristics. The total respondents were 150 MSME entrepreneurs with 54 were representing from Jaffna amounting to 36.0% of the total sample, 48 entrepreneurs were from Vavuniya, 23 entrepreneurs from Manner, 14 entrepreneurs from Mullaitivu. and 11 entrepreneurs from Killinochchi,

Referring to the sector classification, based on United Nations, International Standard Industrial Classification of All Economic Activities (ISIC), the MSMEs were categorized. Accordingly, 77 MSMEs are involved in wholesale and retail businesses accounting for 51.3% under the category of trade, 37 business are involved in industry

and construction sector and 24 MSMEs are providing various services including transport accommodation and education.

4.1 Financial Literacy Score

Referring to the OECD/INFE financial literacy survey of adults, the total scores for financial knowledge, financial attitudes, and financial behaviour make up the financial literacy score.

Score for financial knowledge

The score is calculated based on the number of correct answers to the financial knowledge questions including both general financial knowledge questions (dividends and the definition of equity) as well as questions specifically on business finance (inflation, risk and return, interest on loans). The total number of points awarded ranged from 0 to 5.

Score for financial behaviour

The total number of financially smart behaviours is expected to be used to generate the behaviour score. The sum ranged from 0 and 9. Since it can be challenging to distinguish between financially savvy and unsavvy behaviour from other non-optimal traits, they are not used to determine the score. Instead, they will be analysed to learn more about the business owner's financial behaviour.

Score for financial attitudes

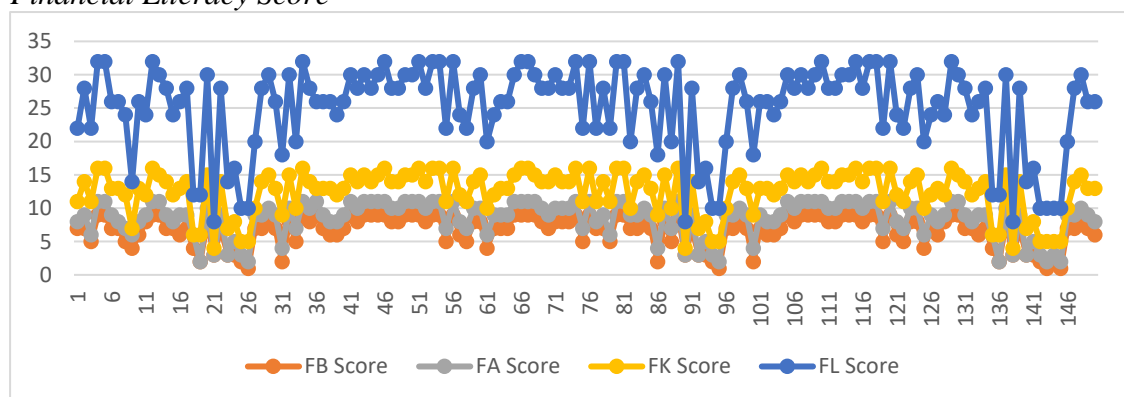
The quantity of financially wise attitudes was used to determine the attitudes score. The sum will range from 0 and 3.

Summary of competencies and overall score

The overall financial literacy (FL) score was calculated by averaging the knowledge (FK), attitude (FA), and behaviour (FB) values. The three factors are expected to add up to a total of 0 to 17 points and the final financial literacy score would be given as a percentage of the greatest score possible (for instance, a final score of 17 points, would be rescaled to 100%).

Figure 2

Financial Literacy Score



Source: Survey data

With reference to figure 2, based on the survey data it reveals that the financial literacy score of most of the Northern Province business owners are in the range on 25 – 32%, which is significantly below than the Sri Lanka's financial literacy rate of 57.9 % according to Financial Literacy Survey Sri Lanka conducted by the Central bank of Sri Lanka in 2021. This clearly indicates that, there is further scope to improve the financial

literacy the Northern Province business owners, and despite of the development of the financial system with financial infrastructure after the postwar context, many investors still struggle to use these advancements effectively and are being adversely affected by the debt trap. It is surprising to see that even though, more than 95.3% of the businessmen are having a qualification above G.C.E Ordinary level completion, only 27.3% of the businessmen have done finance or economics as a subject in their academic programmes at school or higher level.

As at the end of year 2020, prior to the economic crisis the businesses were managing their finances with adequate liquidity where 56.3% of business owners have mentioned the liquidity level of their businesses were adequate or high in the year 2020. The 45.3% businesses were having low level of short-term debt and 42.7% of businesses were maintaining low gearing with lower long term debt financing. It revealed that, 98% of the businesses have agreed that the owners' investment is significant or adequate before crisis. Businesses have also reported a high level of payables and receivable during the year 2020 due to the increase in turnover after relaxing the covid pandemic restrictions.

After the year 2020 with the economic crisis the overall business operations are being significantly affected where the business owners have rated the overall impact as a large decrease in operations which is worse than the Covid pandemic crisis. The 75% of the businesses among the 150 businesses that are been investigated had affected adversely. Ten business owners have indicated an improvement in their business performance despite the economic crisis. The 94% of the business owners have reported that the turnover is unchanged or slightly reduced with the crisis, however the profits of 94.7% of the businesses have decreased. Most of the businesses have tried to maintain the employee numbers as past however 55.3% of the businesses have reduced their employees as a means to reduce the cost. The debt levels have significantly increased for most of the firms while 48.7% of the businesses have reduced their debt through repayments and restructuring of loans. The debt level not only indicates the long-term loans and debt but also any unsettled bills such as supplier payments, electricity, water etc. 58.7% of businesses have reported a decrease in the liquidity due to the increase of their operational expenses.

Analyzing the debt repayments and going for new debt during the crisis, 26% of the businesses have gone into new loans or credits and 11.3% of business owners have applied the loan moratorium facilities to delay and restructure their debt commitment as the business cashflows are affected due to current economic crisis. However, 46.7% of the business owners mentioned that they are repaying the existing loan as the moratoriums can create additional cost and burden in the years to come. Business owners in the Northern Province also stated that they had lack of knowledge and understanding about loan restructuring and debt moratorium that were introduced by the central bank of Sri Lanka during Covid -19 pandemic and the economic crisis. The banks have instructed them to go for moratoriums where the businesses are not required to make loan repayments in the short run. However, the businessmen emphasized that currently they are paying high amounts due to the accumulation of interest during the moratorium period.

Further study illustrates why most of the businessman in Northern province did not go in to systematic borrowing such as bank loans during crisis. Based on the results 28%

of the respondents have identified that the application process is complicated, and they are not capable of meeting the requirements. The 29% of the businessmen said that they think that the loan will not get approved. The 33% of the businessmen have not considered a borrowing from a systematic or regulated institution.

Table 1

Correlation between Financial Literacy and Financial Performance

	Financial Literacy	Financial Performance
Financial Literacy		
Financial Performance	.803**	

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Survey data

Based on the survey results, the correlation between financial literacy and financial performance of MSMEs during crisis are statistically significant at 0.01 level, with a Pearson correlation coefficient of 0.803. This shows there is a strong, positive relationship between the level of financial literacy and the financial performance of the business in the crisis context. Because MSMEs (i) are too small to shrink, (ii) are less diversified in their economic operations, (iii) have smaller capitalization, and (iv) lack a variety of financing choices, MSMEs are more exposed to economic downturns and supply-side shocks than large companies.

Table 2

Regression Results

Regression Weights	β	t	p-value
FL→FP	3.720	37.112	.000
FL→FDM	0.311	5.701	.000
FL→FDM→FP		5.241	.000

Direct Effect

R = 0.803

$R^2 = 0.644$

F (150) = 67.840

Indirect Effect

Test statistic = 5.24045

Std. error = 0.0844

*FL – Financial Literacy, FP –Financial performance, FDM – Financial decision making

Source: Survey data

As the r-square of the model is greater than 0.5 ($R^2 = 0.644$), the model is good enough to establish the relationship where the total variability of the dependent variable could be explained, by the independent variable. If the value is greater than one for F-ratio means, it is an efficient model, where in the above table the value is 67.8, which is good. Therefore, the analysis suggests that the financial literacy of MSME entrepreneurs has a strong, positive relationship with financial performance during crisis.

The indirect effect is statistically significant through bootstrapping. The Sobel test was performed to verify the effect. Sobel Test (1982) is a method used to estimate the statistical significance of indirect effect in median analysis. Based on the test results (5.24045), as the P value is less than 0.05, we can conclude that the indirect effect between the financial literacy and financial performance via decision making is statistically significant. The point estimate of the is 0.4426 of the indirect effect between financial literacy and financial performance at the P value of 0.000006 as per the Sobel test.

5. Conclusion

This study focused on two main objectives. Initially to measure the financial literacy score of the MSME entrepreneurs and secondly to evaluate the impact of that in the performance during the present economic crisis. Based on the findings the financial literacy rate of these MSME entrepreneurs as per the OECD/INFE financial literacy survey, is below 35% which has an adverse impact in the financial decision-making process. Analyzing the impact of financial knowledge, financial attitude, and financial behaviour on financial decision making with reference to the Prospect theory (Daniel Kahneman and Amos Tversky, 1979); The first stage of the theory is known as editing or framing, where the lack of financial knowledge and awareness adversely affects the identification of financial choices of MSMEs. The second stage is known as evaluation phase where financial literacy including the financial attitude and behaviour highly influence the final choice regarding the issues, as options are assessed using the value function. Thus, developing financial literacy is vital in making sound financial decisions particularly during economic crisis. Based on study it reveals that, the financial literacy rate of these MSME entrepreneurs is below 35% in the Northern province which has an adverse impact in the financial decision-making process. It was identified that financial literacy, is a better predictor of adverse financial behaviour of MSMEs. This also agrees with some other studies conducted in Sri Lanka in the recent past. According to Nishantha (2020), the most recent challenge for MSMEs is the disruptions in cash flow cycle and liquidity issues created by COVID 19. The micro finance loans have also significantly challenged the business and families in this community (Kadirgamar, 2020). The factors such as liquidity of the business, debt level, turnover and profit have been negatively affected during the crisis resulting from lack of financial knowledge, poor financial attitude, and poor financial behaviour of the MSMEs.

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Appendix

Table 1
Population for the Sample Selection

District	% of own account workers in the employed population	No. of MSMEs
Jaffna	31.0	78,917
Mannar	39.4	18,006
Vavuniya	34.0	19,962
Mullaitivu	46.7	19,384
Killinochchi	37.9	20,306

Total **166,575**

Source: Labour Force Survey Statistics, 2019 & District Chamber of Commerce business directory

Table 2

Operationalization of the variables

Construct/ Variable	Indicator	Measure	Source
Financial Literacy	Financial Knowledge	Financing the business	OECD. (2020). OECD/INFE Survey Instrument to Measure the financial literacy of MSMEs. 1–42.
		Risk and insurance	
		External influences	
		Planning beyond the short term	
	Financial behaviour	Basic payment and deposit services	
		Keeping records and accounting	
		Risk and insurance	
		Financial protection for MSMEs	
	Financial attitude	Planning beyond the short term	
		Financing the business	
		Risk and insurance	
Financial Decision Making		Separation of bank account	
		Shopping around	
		Keeping a track of financial record	
		Retirement	
		Strategies for theft	
Financial performance		Turnover	
		Profits	
		Debt	
		Liquidity (e.g., cash, very liquid financial	

instruments,
committed
credit lines)

Source: Author

Table 3

Financial Literacy Index - Summary of questions and competencies

Competencies	Knowledge	Attitudes	Behaviour	Total
Basic payment and deposit services			XX	2
Financing the business	XX	X		3
Registration taxes and other legal requirements			X	1
Keeping records and accounting			X	1
Short term financial management			X	1
Planning beyond the short term	X	X		2
Risk and insurance	X	X	XX	4
External influences	X		X	2
Financial protection for MSMEs			X	1
Financial information, education and advice				
Total	5	3	9	17

Source: OECD, 2018

Table 4

ANOVA results of the impact of financial literacy on financial performance, financial literacy on decision making and the indirect effect.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.759	1	41.759	267.840	.000 ^b
	Residual	23.075	148	.156		
	Total	64.833	149			

a. Dependent Variable - Financial Performance

b. Predictors - (Constant), Financial Literacy

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.273	1	6.273	32.506	.000 ^b
	Residual	28.560	148	.193		
	Total	34.833	149			

a. Dependent Variable: Financial Decision Making

b. Predictors: (Constant), Financial Literacy

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	157.746	2	78.873	143.270	.000 ^b
	Residual	80.927	147	.551		
	Total	238.673	149			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Financial Literacy, Financial Decision Making

Source: Survey data (SPSS)

Table 5

Coefficients of the impact of financial literacy on financial performance financial literacy on decision making and the indirect effect

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.720	.100		37.112	.000
	Financial Literacy	.418	.026	.803	-16.366	.000

Dependent Variable: Financial Performance

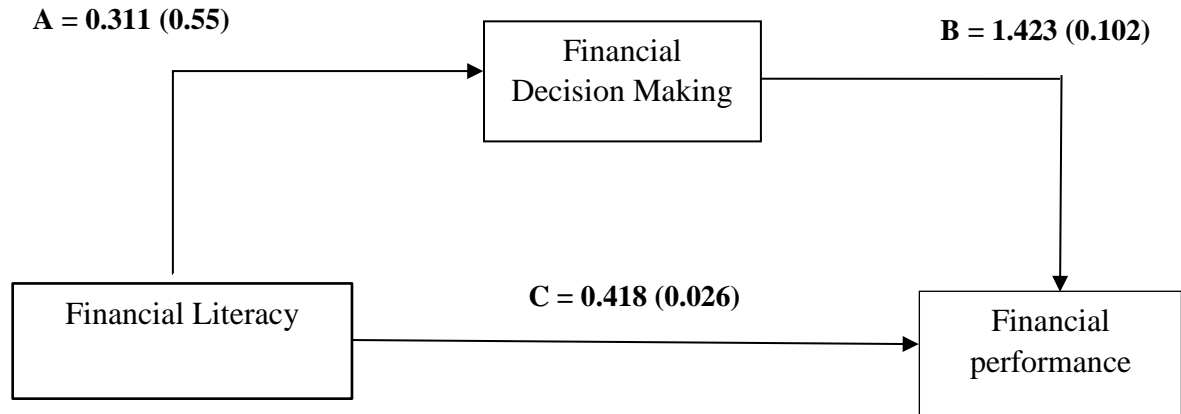
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.041	.124		.329	.000
	Financial Literacy	.311	.055	.424	5.701	.000

a. Dependent Variable: Financial Decision Making

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.034	.209		33.703	.000
	Financial Decision Making	.375	.139	.143	2.702	.000
	Financial Literacy	1.423	.102	.742	13.985	.000

a. Dependent Variable: Financial Performance

Source: Survey data (SPSS)

Table 6*Summary of regression coefficients for median analysis*

Source: Survey data (SPSS)

Effects of the Educational Losses of Marginalized Genders on Labor Supply: The Transgender Experience in Sri Lanka

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Abstract

Not all disadvantaged groups including transgender individuals, a marginalized and vulnerable community in Sri Lanka, shared the benefits of education equally for economic opportunities including labor market entry. This paper investigates the effects of educational losses of transgender individuals on their labor supply within the Sri Lankan context. This qualitative study used snowball sampling to select a sample of 25 transgender participants in early adulthood (20–40 years). In-depth interviews and participatory observation methods were used as the data collection methods, followed by data analysis through the Reflexive Thematic Analysis (RTA) approach facilitated by the NVivo software. Features of critical ethnography were adapted to the research under the participatory research paradigm which is appropriate to study marginalized groups like transgender community. Long-term frictional unemployment due to early-age school leaving, Delays in academic careers due to gender transition lead to labor entry delays, School culture of aggression limits access to leadership roles in the labor market and creates aggressive work behavior, Limitation of labor contribution to self-account works or non-observed economy (NOE) due to “social isolation” grown in school era, Continuation of enclaved cognition and greater rejection rate at recruitment stage due to Educational personality loss, Limitation of access to white collar jobs due to the problem of access to tertiary education are identified as the effects of educational losses of transgender individuals on their labor supply in Sri Lanka. According to further findings, as a result of the under-education and pre-negative school experiences, transgender people tended to prioritize psychological freedom over the financial return when supplying labor and intended to choose transgender friendly working environment instead of a work setting complying with qualifications and passion. This less-paid work behavior and skill mismatch has resulted a substantial under-employment among transgender people. In addition, the glass ceiling effect and poor workplace dominance are found as common challenges faced by transgender people in the labor market due to “weaker leadership” grown at school age.

Keywords: Labor Supply, Educational Losses, Sri Lanka, Transgender Individuals

1. Introduction

1.1 Background

The linkage between one’s education and their economic empowerment is one of the most studied relationships in labor economics. That means education and skill development play a vital role in terms of preparing children for the future world of

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work. And, education is identified as a key dimension in measuring human development. However, not all disadvantaged groups have shared the benefits of education equally. Out of these groups, the transgender community, one of the marginalised and vulnerable communities is seriously lagging behind the human development index including education (Kamalia et al., 2021).

Accordingly, under-educated individuals are recognised as a group unprepared for employment in labour force. Educational losses are typically defined as the loss of any specific or general knowledge and skills or a reversal of academic progress (Great Schools Partnership, 2013). Literature showed that learning loss is a serious problem existing among the transgender community in the global context. According to United Nations definitions, Transgender (sometimes abbreviated to "trans") is an umbrella term used to describe a wide range of gender-differentiated identities including transgender individuals, cross-dressers, and individuals who identify as third gender. The term "Cisgender" is used to address the individuals whose gender identity generally matches that assigned to their biological sex while the term "Transgender" is used for those individuals whose gender identity is not matching with that assigned to their biological sex according to the Johns Hopkins University (2017).

A national probability survey conducted by the Williams Institute in the USA (2022) using a sample of 218,000 transgender individuals aged 18-40 came up with important findings. Two in five transgender individuals indicated that they felt they did not fully belong at school at some point in their lives because they were transgender individuals. More than one in seven transgender individuals do not feel safe at school across the higher education institutions they attend. Only one in five transgender students had "come out" as transgender to their teachers/faculty and program staff through the institutions of higher education they attended. One-third of transgender students reported experiencing some form of mistreatment by teachers or school administrators at the institutions of higher education they attended. More than a third had experienced some form of bullying, harassment, or assault in higher education settings. One-quarter of transgender individuals reported that lifetime school-based mistreatment, bullying, or harassment because of being transgender hindered their academic success (Conron et al., 2022). The above evidence is sufficient to identify barriers available to transgender education in a global context and how they affect on Educational Losses. This poor educational background can be cited as a possible reason for issues in the labour supply of transgender individuals. The unemployment rate is higher for those with no upper secondary education than for those with tertiary education. This means individuals with at least upper secondary education are more likely to be employed than those without that level of education (Organisation of Economic Cooperation and Development [OECD], 2014). A deep analysis of previous literature developed with the community and stakeholders suggests that transgender individuals are more uneducated or under-educated and are reluctant to continue schooling. Transgender School Enrollment is significantly low and dropout rates at primary and secondary educational levels are still reported at very high levels even in neighbouring country of Sri Lanka, India. They are experiencing educational losses because of the lack of social acceptance for the transgender community in Indian society to get a proper education (Dutt & Chandigarh, 2016). Even if they are admitted to an educational institution, they face harassment and bullying daily and are encouraged to leave. This is why they tended to choose earning modes in the informal economy such as begging, sex work etc.

(Kamalia et al., 2021). That means both the Western and Eastern world equally spotlighted the issue of educational losses or barriers to the education of transgender students as a mandatory problem that needed to be addressed by every government.

1.2 Research Problem

The Sri Lankan context seems to be more challenging for transgender individuals to grow academically and economically. A trans-gender-report (2014) issued by a transgender-led Non-Governmental Organization (NGO) named "Equal Grounds" reported the experiences of transphobia at Schools. As per them, more educational barriers are observed with Trans women than Trans men. Furthermore, it mentioned that 69% of male-to-female (MtF) transgender individuals were sexually abused during the school era, but it was only 14% about female-to-male (FtM) transgender children. Equal Grounds identified it as a leading reason that damages the educational path of transgender children (Equal Grounds, 2014). However, the effect of educational losses on transgender individuals is also not a vastly focused area in the context of Sri Lanka.

Transgender individuals have shown difficulties in securing and maintaining employment too. The unemployment rates for transgender individuals are twice as high as those of cisgender individuals globally (Grant et al., 2011). According to that research work, about half of transgender individuals have experienced adverse employment outcomes such as being fired, not hired or denied a promotion solely because of their gender identity or expression. This is greater than the rates of cisgender individuals; for example, 5.6% of transgender individuals reported being fired because of discrimination based on gender identity. Further, 16% of them report not being hired and 12.7% lose their potential promotion because of gender-based discrimination (Kessler et al., 1999). Discrimination on the transgender nature has also impacted badly on their salaries which created considerable working poverty among the transgender population. Schilt and Wiswall (2008) found that transgender women were generally deprived in terms of salaries after the transition. However, transgender men usually do not notice a difference. Sometimes they have also experienced a small increment in salaries after the transition because of social loyalty to masculinity (Schilt & Wiswall, 2008). In terms of skin color, particularly African Americans, manifest poorer employment outcomes than white transgender individuals (Grant et al., 2011).

Even though the international situation appears openly as above, Sri Lanka's background of transgender employment is relatively hidden because of social unacceptability and legal barriers. A study by "Equal Grounds" in Sri Lanka identified 14,500 transgender individuals who have come out publicly between the ages of 18 and 65 in 2021. This is approximately closer to 1% of the total population in Sri Lanka (Equal ground, 2021). However, the actual count must be bigger because of the presence of a large hidden crowd within the country. Transgender individuals, a gender minority of Sri Lanka's population, are often misunderstood by society and such attitudes emerge even in the workplace. Therefore, not all disadvantaged groups including transgender groups, a marginalised and vulnerable community in Sri Lanka, shared the benefits of education and labour force participation equally.

In the global context, transgender individuals are influenced by several issues which affect their workplaces. The lack of workplace procedures to ensure that others in the workplace are aware of how a transgender should be treated is recognised as one of the

serious issues (Whittle et al., 2007). Furthermore, previous literature showed the "coming-out story of a transgender person" as a cause of job loss and harassment within the workplace (Dietert, 2009). Moreover, Dietert (2009) explained that there is less possibility available for transgender individuals to reach authoritative job roles. Further, the "bathroom issue" can be recognised as another serious issue that causes huge privacy problems in workplaces and it acts as a reason for increasing discrimination and sexual abuse as well (Elias et al., 2018). All these issues show a strong need to have a transgender-friendly, more equitable workplace policy in every organisation.

Although Western countries show kind of progressive nature in adapting to such policies, Asian developing countries like Sri Lanka stay far behind this requirement. In addition, the poor educational background of transgender individuals which is a result of school-age social marginalisation appears to significantly impact their labour supply. Transgender individuals are mainly occupying in very specific range of jobs in Sri Lanka. According to the research findings of the Institute for Participatory Interaction in Development (2017), around 1/5th of the sample of transgender individuals remains unemployed, and this is giving red signals for a serious potential issue in terms of labor force participation in Sri Lanka. The rest of the sample is also occupied in jobs such as Commercial sex work, Hospitality field, Beauty culture, NGO sector, etc. Only 2.08% of the sample represented government workers (Institute for Participatory Interaction in Development [IPID], 2017) and it is significantly low.

The above explanation manifests that, there is a visible issue about both the education and labor supply of transgender individuals. Building a bridge between educational and labour participation of transgender individuals is vastly important to understand the effect of educational losses of transgender individuals on their labor supply within the Sri Lankan context to foster equity in the distribution of educational and economic opportunities among different gender categories. Although many studies on transgender individuals have explored labor market issues related to their gender identity, as per the best knowledge, the previous literature was not able to focus on the effect of educational losses on Transgender individuals in Sri Lanka. This research study aims to fill this research gap through an in-depth- qualitative study.

1.3 Objective

This research study aims to achieve the following objective

To investigate the effects of educational losses of transgender individuals on their labor supply in the Sri Lankan context

2. Methodology

The entire research is driven by the participatory/advocacy research paradigm which was widely cited as the ideal research philosophy to employ to raise a voice for marginalised groups. Although this is not purely ethnographic research, it adopted most of the features of critical ethnography because that research approach could complement the participatory research paradigm. Participatory Action Research (PAR) adheres to the ontology that humans are dynamic agents capable of reflexivity and self-change (Kindon et al., 2007). The qualitative research methodology in which researchers and participants collaborate to understand social problems and act to create social change is identified as the methodology of the participatory research paradigm

(Bergold & Thomas, 2012). Further, although this study is not purely ethnographic research; it adopted features of ethnography as the research approach.

This is a qualitative study that used the snowball sampling technique to select 25 participants (*Appendix 1*) belonging to early adulthood (20–40 years) because the target participant group is a bit hidden in the Sri Lankan context due to trans-phobic attitude. The in-depth interview method was used as the dominant data collection method along with participatory observations. The data collection took about three months, from January to July 2022. The entire interviews were recorded (audio-recorded) with the permission of participants. Ethical approval was taken from the Ethics Review Committee for the Research in Humanities and Social Sciences (ERC-HSS) of the Faculty of Graduate Studies at the University of Sri Jayewardenepura and all the ethical practices were conducted according to the information provided in the application form.

In this paper, the data gathered was qualitative and therefore subject to thematic analysis. Thematic analysis can cover all aspects of the full data set and then pick a particularly interesting part of those results to investigate in more depth with the narratives of participants (Morgan, 2022). This research used a widely cited theoretically flexible approach to Thematic Analysis called the reflexive thematic analysis approach, which was introduced by Virginia Braun and Victoria Clarke (Braun & Clarke, 2020). There are six phases in the reflexive thematic analysis. According to (Braun & Clarke, 2020), theoretical thematic analysis and inductive thematic analysis are the two ways available to identify potential themes.

This study has adopted inductive thematic analysis to identify themes because it is driven by data instead of theories (Elo & Kyngäs, 2008). The semantic or explicit level and the latent or interpretative level are the two optional levels of identifying themes. With the semantic approach, the analyst does not see anything beyond what the participants said. However latent approaches guide analysts to go beyond the semantic content (Braun & Clarke, 2020). This involves interpretative work when developing themes. Therefore, this study used the latent level as the level of identifying themes. Data analysis was facilitated by the NVivo analytical tool. The stages of reflexive thematic analysis introduced by Braun and Clarke were modified in 2020, and this study employed the modified technique (Braun & Clarke, 2020).

3. Analysis and Discussion

Thematic Analysis and Findings

Major findings of the thematic analysis of the study address the following research question:

RQ1: What are the effects of educational losses of transgender individuals on their labor supply in the Sri Lankan context?

The results of the thematic analysis related to answers to the above research questions are presented in detail in this section. Extracts from the interviews done with participants and observations collected by the researcher provide supporting evidence of the themes emerging from the data. The findings of this qualitative study are presented under six (6) themes which are presented as the effects of educational losses

of transgender individuals on their labor supply in Sri Lanka. Themes are presented as follows³.

3.1 Effects of educational losses of transgender individuals on their labor supply in Sri Lanka

Theme 1: Long-term frictional unemployment due to early-age school leaving

Many young individuals successfully navigate the school system and move on to further education training or employment opportunities. However, they emerge as a marginalized group in Sri Lanka and transgender youth seem to have been left out of the education system without skills and adequate academic qualifications. Therefore, to make a successful transition from school to the outside world, it is necessary to actively participate in the labor market and today's knowledge-based economy. For example, one of the participants, Rohani (a 40-year-old Trans lady) said:

“I studied only up to grade 8 because I understood that I might have to face many problems if I continued my studies up to grade 11 or 12. I was popular among boys in grades 11 and 12 even when I was in grade 8 because of my feminine nature. I was scared of the disappointments, and I felt that I would have to lead an uncomfortable life, especially in that period. Since I was older than other Transgender women, I had to undergo many challenges during the past era. From the first day I left school, outsiders started insulting me and my family. They all had a disgusting attitude towards me. They always questioned whether I would do a job or not. That is something I am facing right now as well. It takes years and years to find a job in this state. It is difficult even with this appearance (appear to be a male) because my voice and my actions do not correspond with my appearance.” (Rohani, Male-to-Female transgender (MtF) person).

The statement Rohani depicts that one of the possible reasons for school dropouts of transgender individuals is the pre-negative experiences through which they have passed during their childhood in school. Rohani had given up her school studies because she wanted to get rid of the discomfort she felt at school. Early school dropouts usually occur by disconnecting a cumulative process due to multiple reasons. Such reasons may be external or internal to school processes and experiences. In Rohani's case, her school dropout was led by dissatisfaction resulting from internal factors named lack of motivation or "falling into the wrong crowd" and pressure gained from peers and students in higher grades. However, Rohani is currently unemployed even at the age of 40, and she mentioned that finding a job is a struggling effort for her when poor education is mixed with employer prejudicial attitudes against the transgender groups. Ostensibly the difficulty of finding employment for transgender individuals is further exacerbated by their under-educational status. A closer look reveals that a major factor contributing to the long-term frictional unemployment⁴ faced by transgender individuals is this learning loss which results from early-age school leaving.

³When presenting extractions under each theme, fake names are given to participants by the author to protect their identity.

⁴ Frictional unemployment is unemployment that occurs when workers look for new jobs or move from one job to another.

A similar incident was shared by Asini (a 32-year-old Trans lady) She said:

“I stopped schooling when I was in grade 9. I did both O/L and A/L examinations, not as a school applicant, but as a private applicant. Thanks to my courage I could do both examinations. But I was not able to score well in any. However, my behavior was so girlish since my childhood and I could not hide it in front of others. Society noticed a change in my behavior and even the teachers started insulting me in classrooms. They used nicknames for me. My surrounding was always problematic to me. That is why I decided to isolate myself from the school. However, since I missed the latter part of school, I was jobless for four years. At last, I found my first job at a SPA5center”(Asini, Male-to-Female transgender (MtF) Person)

According to the expression of Asini, factors such as bullying, poor academic performance, and poor relationships with teachers are the most proximate causes of early school dropouts among transgender individuals. Although Asini decided to face two critical examinations as a private candidate after missing school education, it became a failure not only in terms of examination results but also in terms of future employment. Now she remains unemployed and earlier she worked as an SPA worker and vegetable seller. Most especially she was jobless for four consecutive years which manifests the long-term frictional unemployment as a dominant result of early-age school leaving.

Participant observation can also be used to confirm these findings. It was observed that the maturity of some participants in terms of knowledge and skills was relatively low as they missed the latter part of school life. For example, when it was asked by the researcher to fill out the Google Form to get the basic information, many of the interview participants refused to say that they had never filled such a Google Form before and that they could not understand the questions if they were given in English. Therefore, the researcher asked the questions from participants and fill out their Google Form on their behalf. This made the researcher feel that their knowledge, (especially the knowledge in English and Information and Communication Technology) has been weakened because of dropping out from the school before the regular end-date. Therefore, the researcher observed that they deliberately tried to skip instances when the said knowledge would be required. According to the researcher's view (etic), this may be a primary factor in facing rejections in the labor market and experiencing long-term frictional unemployment.

This theme of "Early-age school leaving" is supported by a similar finding of Sunny and Deb (2021). As per them, Parent-teacher zero-acceptance of early gender-diverse behaviour in transgender children is recognised as the key factor that leads to early school dropouts (Sunny & Deb, 2021). This notion is further proved in this study.

Theme 2: Delays in academic careers due to gender transition leads to labour entry delays

⁵A commercial establishment offering health and beauty treatment through such means as steam baths, exercise equipment, and massage.

Gender transition, a private and complicated task is still a magical process for Sri Lankan individuals with a traditional mindset. This process usually involves changing someone's gender to the opposite of their birth-assigned sex and gender. However, the Transition process is something beyond that meaning because it includes mental transition, social transition, and physical transition which includes cross-sex hormone therapy and surgery, and legal transition. Physical transition consumes a considerable amount of time, which can delay academic pursuits by alienating transgender individuals from education or reducing academic productivity. The ultimate impact of this is the educational losses of transgender individuals and its negative effect on economic opportunities in the labor force. This idea was supported by one of the participants named Padmawathi (a 33-year-old Trans woman). She said:

*“The sole purpose of going to India at the age of 26 was to complete my Master's Degree. However, I was not able to complete it on time because of the gender Transition process that I started in India.....The population is large in India and hormones are not issued as soon as we go to a doctor. Transition is a big process. It is not a quick task. I came back to Sri Lanka at the age of 33..... Now I am working as a case finder in **** (an NGO established to serve the transgender community) and working for HIV prevention. Now it has been a month since I completed my final surgery.”*
(Padmawathi, Male-to-Female transgender (MtF) person)

Padmavathi, who went to India for her master's degree at the age of 26, lost her chance to complete it within the stipulated time because she decided to undergo gender transition including hormone therapies. Ultimately, she took 6 years to complete two years master's degree. This academic delay caused by the gender transition process deprives her in terms of the work experience she could have gained if she had gone on the regular schedule of her studies. Padmavathi, who came with zero work experience, was unable to find a workplace that matched her academic background in the end. Finally, she got her very first job at the age of 33. Labour entry delays among the transgender community appear to be a result of academic career delay, which originated due to long-time consumption for the gender Transition process.

Moreover, the transition process can suppress the real academic capabilities of transgender students. Danu (a 25-year-old Trans woman) who was good at studies since childhood revealed this aspect through her story. She said:

“I went for the transition when I was reading for CIMA. As there were two hormones activated in our body, it made me stressed. Then, I became short-tempered and didn't concentrate on any.... It's like you⁶ Noh... As I could not concentrate on my studies, I paused studies for a while.” (Danu, Male-to-Female (MtF) transgender person)

Danu's statement proved how difficult it is to focus on studies when two opposing hormones are at work in the body during the Transition period. This has delayed her studies and it is not an issue faced by cisgender individuals. These academic delays

⁶ This is a term in Sri Lankan vocabulary that implies a state of mental confusion in which people cannot focus precisely on what they are doing.

might badly influence on reducing the capacity of transgender individuals to climb the career ladder rapidly in the competitive labor market.

The participant observations obtained by the researcher during a session on gender transition awareness organized by the National Transgender Network (NTN) at its official premises (*Appendix 2*), can be further show that the gender transition process is a time-consuming process that can have adverse effects on education, especially higher studies.

A vast amount of literature has discussed academic and professional career delays of transgender individuals occurring due to stressors at school age (Goldberg et al., 2021). However, as per the researcher's best knowledge, no research was able to find a linkage between the gender transition process and Educational Losses. This study fills this gap in the literature by identifying long-term consumption for the gender transition process and impaired concentration due to hormonal imbalance as the two driving factors that can delay academic careers. The ultimate effect of this learning loss is labor entry delays.

Theme 3: A school culture of aggression limits access to leadership roles in the labour market and creates aggressive work behaviour

School culture can be described as the pattern of shared basic assumptions that the school acquires as it solves its problems of members and which shows the right way to perceive, think and feel (Schein, 2004). It includes indicators such as relationships with teachers and students, parental involvement, classroom climate, school regulations, collective norms, and behavioral and disciplinary rules (Scheerens, 2011). Although past research works have focused on this issue from a general perspective, very few literature sources have focused on the impact of school culture on Transgender students. This literature gap is addressed by the current study. According to the participants, it seems that there is a culture of aggression in schools for transgender pupils. Aggression manifests itself in the school community in many ways, such as being bullied by students, undergoing physical punishments by teachers, or being neglected by parents or family members. Such intrusions may be related to cultural underpinnings or social acceptance. According to the World Health Organisation (WHO), a school culture of aggression can create risk factors at multiple levels. A culture of aggression can affect badly on individual-level focuses like self-esteem, relationship-level focuses like teacher's/parent's supervision, and community-level focuses like socio-economic setting (Hayes et al., 2022). Danu (a 25-year-old Trans woman) expressed how traditional religious culture stressed her and reduced the effectiveness of studying.

*“Mmm probably, even my sister had a problem with why I became Trans. My sister went to ***** and in Galle⁷ ***** and ***** (two leading schools in Galle) are very traditional Buddhist⁸ schools, and with their influence, she just wondered why I wanted to become Trans. She said many times “Please aiya⁹ don't be like this” and I cried at home hundreds of*

⁷ Galle is the capital city of Southern Province in Sri Lanka.

⁸ A Buddhist is someone who believes in Buddhism. Buddhism is the dominant religion in Sri Lanka.

⁹ “Aiya” is the term used for “Brother” in Sri Lankan local language.

times. There was no good time for me to do studies in school with a relaxed mind.” (Danu, Male-to-Female transgender (MtF) person)

Similarly, Ayoma, (a 34-year-old Trans woman) explained the less protectiveness available in the school culture of aggression due to poor relationship levels and focused on its impact on labour supply.

“I went to a boys' school, and the school culture strongly expected stronger personalities from boys. My teachers belittled me in public at the morning assemblies by saying that there could not be two sides and asking me to come to one side quickly if I wanted to continue my studies in this boys' school. They thought that I was staying in a position between the male and female sides. But my heart knew that although I was born as a man, I am a woman in my mind. There was not even a single teacher in the school who could understand that this was not a personality issue. I finally stopped schooling in grade seven when I was a 12-year-old kid. From that point onwards, I started hating cisgender individuals. I lost my first job as a housekeeper because I treated the children in that house aggressively rather than kindly.” (Ayoma, Male-to-Female transgender (MtF) person)

Both above participants provided evidence to show how an aggressive school culture could affect educational losses due to the psychological damage it creates within transgender students. Moreover, it seems that transgender females are more pressurised than transgender males due to a school culture of aggression. That may be due to the hegemonic masculinity explained above. At a glance, this learning loss weakens the social personality they may develop during their school years, thereby limiting their chances of getting leadership roles in the labor market. As per Ayoma's story, her first job was limited to a housekeeping job which was a submissive followership role. Furthermore, transgender workers' aggressive work behaviour appears to be another result of the aggressive school culture in which they grew up. The most important thing is that the stories of 92% of the participants support this ideology at least by one similar experience.

This finding was also proved by participatory observations. On one occasion, the researcher also participated in a friendly cricket tournament (*Appendix 3*) organised by transgender men for their male-to-female (MtF) community. There, two members strongly opposed allowing the researcher to engage in the batting at first and argued that the researcher who was a cisgender member should be allowed to bat only if balling overs remained after the members of their community finished batting. After the incident, the researcher asked the organisers who invited him to the competition why the two opposed. There they pointed out that both those transgender men were educated in the same school and the class teacher (a cisgender man) forced the principal of the school to expel them from the school because they had masculine behaviour in a girls' school. From then onwards they had started hating every cisgender man. In the end, the researcher recognised how aggressive school culture can influence on future behaviors of transgender individuals in society including the workplace.

Theme 4: Limitation of labour contribution to self-account works or non-observed economy (NOE) due to “social isolation” grown in the school era

Peer students are the key stakeholders with the most to gain or lose in their classroom experiences. It can be recognised as a basis for continuous school improvement and attendance (Strom et al., 2019). However, due to poor peer support for academic work, transgender students became a marginalised group in the Sri Lankan school system. Chanu (a 26-year-old Trans woman) expressed how the absence of peer support influenced her to discontinue school education. She said:

“As I said earlier, I stopped schooling when I was in grade 11 because no single friend in our class was supportive. I felt rejected continuously from the end of my classmates. I attended the classes which had only a few students because I felt uncomfortable in front of a huge crowd (Chanu, Male-to-Female transgender (MtF) person)

This implies that the problem of social isolation seems to be a common problem among transgender students. Therefore, instead of getting peer academic support, Chanu has experienced continuous rejections and marginalisation of her gender nature. This affected on keeping transgender students away from usual studies and it also lowers team skills that have to be improved through group work. This social isolation pushes transgender individuals into self-account work or Non-Observed Economy (NOE) work instead of publicly exposed office work in the workforce. It is proven by Chanu because she is now employed as an own-account salon worker in her rented house which is situated too far away from the commercial city. Although the researcher scheduled a daytime physical interview at the participant's salon, she previously preferred to conduct it physically or online at night. When the researcher questioned why she showed such a preference during the initial conversation over the phone, she said that she had trouble sleeping at night since childhood, and therefore wanted to spend the night chatting with someone. After the interview, the researcher identified this sleep disorder as a symptom of social isolation that began to develop during school age. This linkage between social isolation and sleeping disturbances is a growing topic in modern literature (Komada, 2022).

This finding was supported by Madrigal-Borloz and Barry (2019). According to their findings, Transgender students are more likely to feel unsafe at school. Therefore, they avoid school activities, skip classes, drop out of schooling, and achieve lower academic results than their peers while putting themselves in an economically disadvantageous life. Madrigal-Borloz and Barry (2019) reveal that this is mainly due to the social isolation they experience in classes, playgrounds, bathrooms, changing rooms, on the way to school, and via online platforms (Madrigal-Borloz & Barry, 2019). Accordingly, Social isolation due to low peer academic support could be recognized as a reason for the "Educational Loss" problem of the transgender community.

Theme 5: Continuation of enclotted cognition and greater rejection rate at the recruitment stage due to educational personality loss

Personality can play its role in education by influencing classroom social interaction, teacher-student rapport, students' self-esteem, social behaviour, motivation, classroom behavior, and cognitive performance (Fredriksen & Rhodes, 2004). Some transgender individuals are losing their educational personality and it has caused suppression of classroom performances and smooth continuity in academic works. One of the

participants, Aksha (a 37-year-old Trans woman) shared her experience in advance. She said:

“Since I could not perform well in the O/L and A/L exams, I followed some of the professional courses. I did up to NVQ 4¹⁰ in CNC¹¹ Machinist. The experiences here were a bit different than my childhood. I dealt with adults mostly and they recognized me well as a transgender woman with my behavior. So, it was really difficult to concentrate on studies with those incidents there. Unfortunately, I was forced to drop out at the last phase of the NVQ program.” (Aksha, Male-to-Female transgender (MtF) person).

Aksha showed how her educational personality was weakened by damaged social interactions, self-esteem, and motivation because of the mismatch between societal expectations and her gender identity. The ultimate result she experienced was the discontinuity of professional studies at a later stage.

In literature, there is a concept called encloded cognition. Accordingly, what individuals wear describes their behaviour, attitude, personality, mood, confidence, and even the way they interact with others. Scientists concluded that clothing systematically affects the psychological processes of the wearer and their work performance (Sarda-Joshi, 2023). Clothing is often used as a way of defining and expressing oneself (Devine, 2018). This research study added an extension to the "encloded cognition" theory by relating it to the transgender group whose dressing requirements conflict with social acceptance. This study shows that dress incongruity is a serious issue faced by many transgender participants and has contributed to the reduction of educational personality. For example, one of the participants, Nilantha (a 27-year-old Trans man) who was studying in a government university and who is still looking for a job said:

“We had vivas¹² in every semester and it is very uncomfortable to wear sarees¹³ and answer their questions. Although we are clever, we cannot perform well there when we are uncomfortable.” (Nilantha, Female-to-Male Transgender (MtF) Person).

Nilantha, a woman with a masculine personality had felt uncomfortable during viva presentations at the university. Although it was uncomfortable, he had to adapt to it because that is what society expects. However, according to the experience of Nilantha, Transgender individuals tend to underperform in educational platforms due to "encloded cognition". These educational underperformances have resulted the transgender individuals being under-educated. Loss of educational personality during the study period prevents Transgender individuals from being hired, promoted, and perceived as a leader, etc. in the workplace. This issue of personality development that came up during the school era seemed to come up more during the interviews. That is why this graduate (Nilantha) remains unemployed. Therefore, a stereotypical mindset

¹⁰ National Vocational Qualification Certificate – The objective of this course is to gain the knowledge, skills, and competencies of a Machinist.

¹¹ Computerized Numerical Control.

¹² A viva presentation is an oral exam in which a student defends his/her thesis or academic assignments.

¹³ Saree is the traditional dress of Sri Lankan females. It is purely women's clothing.

is set up by employers to judge Transgender nature as a personality problem. This problem appears to be a reason for the high rejection rates of transgender individuals at the job recruitment stage.

Theme 6: Limitation of access to white-collar jobs due to the problem of access to tertiary education

Colleges and universities generally reflect and reinforce societal gender in practices, policies, and norms (Marine & Nicolazzo, 2014). However, the situation in the Sri Lankan university system is quite different. The absence of transgender-inclusive policies in college, the exclusion of gender identity and expression in their nondiscrimination policies, and the lack of acceptance for desired identity such as being addressed by a preferred name on university records and providing options for male/female were identified as the key barriers which discourage university entrance of potential transgender students in previous literature (Goldberg, 2018). A similar finding was reported in this study too. Accordingly, it seems that transgender students with good secondary education are discouraged from enrolling in tertiary education because of the transphobic perception existing in the higher education sector. Danu, (a 26-year-old Trans woman) currently working for low wages at a transgender-oriented NGO, expressed her reasons for missing out on tertiary education. She said:

*“Although I qualified for a state university from the A/L exam, I did not apply for the university because I was afraid that I would be bullied there. I was afraid of university ragging and the news that we heard those days. Once I listened to *****’s (A famous actress in Sri Lanka) story which was very sensitive on campus ragging. Therefore, I had a very negative impression and was bewildered as to what would happen to me if I studied in a university.” (Danu, Male-to-Female transgender (MtF) person).*

Similarly, Kalka (a 29-year-old Trans male), an Army driver, also expressed how he felt.

“I had a dream to be a transgender since my childhood. I dressed up like a boy when I was a child but without proper understanding. I did not have a proper path though I studied hard. I passed both O/L and A/L exams and I even got selected to the University. But I did not go there as I hated wearing sarees. Then I joined the Army as a driver. I wanted to expose myself to society. I worked in a women’s camp, and I was in a relationship with another girl and I was labeled as a lesbian and even I was punished a lot.” (Kalka, Female-to-Male transgender (MtF) person).

Kalka's statement shows that he has rejected the opportunity to get a university education because he has a disinterest in wearing women's clothes and has chosen a driving job that suits his masculine personality. Accordingly, it seems that the absence of an environment for transgender students in Sri Lankan universities to live like themselves is one of the main reasons why Transgender students lose tertiary education.

Both Danu and Kalka are now employed as blue-collar workers who do manual labor. There is a perception in society that is not necessarily true, including that blue-collar workers belong to a lower social class and that white-collar jobs pay more. Therefore,

this research shows that the majority of the participants with good secondary education have missed out on tertiary education due to Trans- phobia. Finally, this under-education in terms of higher studies appears to be another reason why Transgender individuals have fewer opportunities for white-collar jobs. This restricts them to blue-collar jobs.

The causes for the under-education of transgender individuals and its impact on their labor supply can be summarized as follows (*Table 1*).

Table 1

Learning loss of transgender individuals and its effect

Educational Loss	Effect of Educational Loss
Early-age school leaving	Long-term frictional unemployment
Academic career delays due to the gender Transition process	Delaying the labour entry and slowing the career ladder in a competitive labour market
A school culture of aggression	Weakening the opportunity to reach leadership roles in the labour market and aggressive work behavior of transgender workers which results in low labor productivity
Social isolation due to low peer academic support	Rise of the tendency of transgender individuals to choose their account works and non-observed economy (NOE) work instead of publicly exposed office work in the workforce
Educational personality loss	Enclotted cognition continued in labour involvement High rejection rates of transgender individuals at the job recruitment stage
The problem of access to tertiary education	Limits their access to white-collar job opportunities

Source: Created by the author based on findings

4. Conclusion and Implications

4.1 Conclusion

This article examines the causes of low education among transgender individuals and its impact on their future labor supply. Snowball sampling was used to select a working-age transgender sample of 25 participants in this qualitative study. The in-depth interview method was used as the dominant data collection method along with the observations, field notes, web/digital content, and photo/video highlights. This research has used a widely cited reflexive thematic analysis approach and adopted the inductive form of thematic analysis to identify themes because it's the way that is driven by data instead of theories. The data analysis was facilitated by the NVivo analytical tool. Early-age school leaving, academic career delays due to the gender transition process, School culture of aggression, Unsheltered homelessness of transgender children due to parental rejection, social isolation due to low peer academic support, educational personality loss, and the problem of access to tertiary education are recognised as the key educational losses observed among transgender community in Sri Lanka. Moreover, this study identified the economic costs of educational losses of transgender individuals in Sri Lanka. Accordingly, under-education resulting from school dropouts is recognised as a key reason for long-term frictional unemployment faced by transgender individuals and the limitation of their access to white-collar job opportunities. The study further found that educational delays due to the transition process postpone transgender individuals' labor entry and reduce their ability to climb the career ladder in the present competitive labor market. And, pressurised exposure gained from a school culture of aggression limits the opportunity to reach leadership roles in workplaces. Aggressive work behavior of transgender workers is another result of this circumstance. In addition, transgender individuals seem inclined to choose employment opportunities regardless of compatibility to get rid of third-party dependency and unsheltered homelessness that occurred due to family rejection. Social isolation experience gained due to low peer academic support pushes transgender individuals into self-account work or non-observed economy (NOE) work instead of publicly exposed office work in the workforce. Furthermore, Loss of educational personality during the period of the study comes up mostly in the interviews as a reason for the higher rejection rate during the job selection phase. Finally, educational losses in terms of higher studies appear to be another reason why transgender individuals have shown a bigger trend of attraction to blue-collar work instead of white-collar jobs.

4.2 Implication: *Fostering Equity in Education for Transgender Learners*

A pressing issue is the lack of equal education for all genders, and the under-education of transgender individuals compared to cisgender students. Therefore, taking steps to foster equality in education for transgender learners is a timely requirement in Sri Lanka. According to the World Bank (2022), prohibiting discrimination in admissions and schooling for transgender children, ensuring that teaching and learning processes are not only non-discriminatory but actively promote transgender inclusion through group activities, training teachers and other staff members in educational institutions on non-discrimination and transgender inclusion, and actively educating students on reality gender identity to promote transgender inclusion are suggested as immediate steps that every educational institute should execute to foster equity in education for gender minorities. In addition, it is recommended that schools allow students to wear school uniforms or dresses that are compatible with their gender identity, otherwise, it could affect their educational personality badly. Having a friendly environment in

schools, universities, and other educational institutions that could support the gender transition while studying, will help to minimise educational losses that can be created due to the gender transition process and the problem of access to tertiary education. Being flexible in assignment deadlines, allowing leaves for medical appointments, and legal work related to the transition process can be cited as a few such possible supports that an educational institution can provide. Moreover, the government should take care of the education of unsheltered homeless transgender children through a broad social security net. Sri Lanka's adoption of such a mechanism in the prevailing education system would assist the country in addressing the issue of the under-education of transgender students and its negative impact on future labor supply.

Finally, a transgender-inclusive educational environment is recommended to be created in Sri Lanka with a strong national policy framework while strengthening laws for transgender educational rights protection. Protecting transgender students' information through privacy legislation, developing uni-sex uniform and uni-sex bathroom/rest-room policies, incorporating gender identity into curriculum areas such as Personal Development, Health and Physical Education etc., Permitting and facilitating gender transitioning while at school, Enrolment in a single-sex school based on gender-identity, Introduction of trans-inclusive/sensitive counseling and health care centers to schools/universities can be cited as few policy suggestions that should be included in above transgender educational policy framework.

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Appendices

Appendix 1

	Pseudonym	Age (Years)	Transgender Identity	Education (Highest Academic Qualification)	Current Occupation	Previous Occupations
1	Prasad	32	Female-to-Male (FtM)	Senior Secondary Education	NGO worker	Automobile garage worker
2	Kaushi	29	Male-to-Female (MtF)	Tertiary Education ¹⁴	NGO worker	TV Presenter, Journalist

¹⁴ Tertiary education in Sri Lanka is an optional final stage of formal learning after secondary education. Higher education, also known as tertiary education, is often taught at universities or degree-granting institutions.

3	Chanu	26	Male-to-Female (MtF)	Senior Secondary Education ¹⁵	Own-account salon worker	Garment factory worker, Hair dresser in other's salons
4	Nuwan	24	Female-to-Male (FtM)	Collegiate ¹⁶	NGO worker	Cashier at a Super Centre, Juice Bar Keeper
5	Nirodha	23	Female-to-Male (FtM)	Collegiate	Unemployed	None
6	Hemal	27	Female-to-Male (FtM)	Tertiary Education	Officer at a meat shop	None
7	Padmawathi	33	Male-to-Female (MtF)	Tertiary Education	NGO worker	Unemployed
8	Danu	25	Male-to-Female (MtF)	Collegiate	NGO worker	Financial Institute worker
9	Radini	27	Male-to-Female (MtF)	Collegiate	NGO worker	Assistant at a Pharmacy
10	Buwani	25	Male-to-Female (MtF)	Junior Secondary Education	Sex Worker	Professional Dancer
11	Aksha	37	Male-to-Female (MtF)	Collegiate	NGO worker	Computer shop keeper, Hardware worker, Hotel Manager (<i>for short-term</i>)
12	Dhanuka	28	Female-to-Male (FtM)	Collegiate	Social activist, Worker in tourism industry	Hotel Worker (Foods & Beverage Department)

¹⁵ In the context of Sri Lanka, the “Senior secondary” level of education includes 14-16 years of schooling or education up to GCE Ordinary Level Education.

¹⁶ In the context of Sri Lanka, the “Collegiate” level of education includes 16-19 years of schooling or education up to GCE Advanced Level Education.

13	Sanath	33	Female-to-Male (FtM)	Senior Secondary Education	Insurance company officer	Self-employed business rep
14	Nilantha	27	Female-to-Male (FtM)	Tertiary Education	Unemployed	Intern at buying & selling company
15	Shehan	22	Female-to-Male (FtM)	Junior Secondary Education	Own-account worker (Electronic Equipment Repairing Works)	Supermarket assistant
16	Rohani	40	Male-to-Female (MtF)	Junior Secondary Education	Unemployed	Fruit Juice chef, Airline Catering Chef, Hotel chef, Sex worker, Office Cleaner
17	Asini	32	Male-to-Female (MtF)	Junior Secondary Education	Unemployed	Vegetable seller, SPA worker,
18	Ayoma	34	Male-to-Female (MtF)	Junior Secondary Education	Sex Worker	Housemaid worker, Tailor
19	Neela	33	Male-to-Female (MtF)	Junior Secondary Education	Garment factory worker	Self-employed clothes seller, Patient care giver
20	Savindya	24	Male-to-Female (MtF)	Collegiate	Beautician	Pre-school teacher
21	Kalka	29	Female-to-Male (FtM)	Collegiate	Army Driver	Tuition Lecturer, Cab Driver
22	Deshan	31	Female-to-Male (FtM)	Collegiate	Officer at LGBT international organization	Officer at a finance company

23	Raj	22	Female-to-Male (FtM)	Senior Secondary Education	NGO worker	Marketing employee at an online sales company
24	Janaki	35	Male-to-Female (MtF)	Collegiate	Own-account worker (Tailor)	Hotel Chef, Garment factory worker
25	Ramal	32	Female-to-Male (FtM)	Senior Secondary Education	School Rugger Coach	Lady Gym Trainer

Appendix 3

Appendix 4: Themes and Frequency



Research Area	Sub Themes	Frequency (n) (%)
Effect of Educational losses of Marginalized Genders on Labor Supply	Long-term frictional unemployment due to early-age school leaving	11 (44%)
	Delays in academic careers due to gender transition lead to labor entry delays	9 (36%)
	A school culture of aggression limits access to leadership roles in the labor market and creates aggressive work behavior	23 (92%)
	Limitation of labor contribution to self-account works or non-observed economy (NOE) due to “social isolation” grown in school era	4 (16%)
	Continuation of enclotted cognition and greater rejection rate at recruitment stage due to Educational personality loss	14 (56%)
	Limitation of access to white collar jobs due to the problem of access to tertiary education	17 (68%)

Socially Inclusive Renewable Energy Prospects for Alleviating Energy Poverty of Urban Households in Emerging Economies: A Socio-Techno-Economic Analysis

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Abstract

The present socio-techno-economic-feasibility study aimed at appraising renewable energy scenarios for socially inclusive energy poverty alleviation in urban households in the Indian and Chinese contexts representing emerging economies, by adopting a mixed-method research design, strategizing a retrospective study approached with inductive and deductive reasoning. Credible secondary data in the public domain were sourced. A scenario analysis was performed by adopting the Shell Method and Two-by-Two Matrix methods. An impact-uncertainty matrix was generated from fifteen driving forces classified into six clusters and four critical uncertainties and their impacts, and constraints (energy security versus energy consumption). Scenario narratives were considered under three pathways reflecting social inclusion. A sensitivity analysis was conducted. An economic analysis based on net present value, internal rate of return, benefit-cost ratio, and the discounted payback period was performed to assess affordability. The project scale was the urban household level. The scope for economic value was the monthly grid electricity consumption compensated by rooftop solar photovoltaic-thermal hybrid system (Solar PV/T). Solar PV/T purchased through a loan facility was considered as the investment scenario. Interest income for paying electricity bills under the benchmarked national grid's energy mix was the alternative scenario. Technical feasibility was assessed based on reliability (insolation), awareness (technical know-how), local availability of solar PV/T, and technical requirements (i.e. energy performance, capacity factor). Social and environmental implications were evaluated qualitatively. Results revealed that the economic feasibility of Solar PV/T in China is comparatively higher than in India, while technical feasibility is high in the Indian context. Social inclusivity in energy poverty alleviation in the Chinese context is more challenged compared to India given the influence of culture and governance. Sensitivity analysis unveiled that scenario development is highly sensitive to the choice of critical uncertainties. Conclusively, India demonstrates more socially inclusive techno-economic feasibility relative to China. Replicable comprehensive research methodology for interdisciplinary research derivable from the present research is a potential academic implication, whereas practical implications include informed decision-making for energy poverty alleviation, emission reduction, and social well-being in the long-run. Changes in policies on energy transition and energy independence can limit the generalisability of the interpretation of access and affordability stated in the present study.

Keywords: Energy poverty, renewable energy, scenario analysis, social inclusivity, urban households

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1. Introduction

Amidst the rapid urbanisation and growing geopolitical influence on energy transition, national governments across the globe strive to contribute to mitigating climate change impacts through reduced greenhouse gas emissions by adopting United Nations sustainable development goals, and circular economy models, and by devising strategies such as net-zero and decarbonisation (Le Billon & Kristoffersen, 2020; Pastukhova & Westphal, 2020). Representing the emerging economies in Asia, China and India are among the ambitious nations committed to transforming their energy infrastructure into renewable-energy-based systems (Hepburn et al., 2021; Pata & Ertugrul, 2023). For example, India is targeting net-zero status in 2070, whereas China is planning for carbon neutrality standing by 2060 (Bhattacharyya et al., 2022; Zhao et al., 2022).

Household solar-thermal hybrid systems (Solar PV/T) are a popular choice for harnessing alternative energy to meet national renewable energy targets (Cao & Yang, 2023; Kumar et al., 2023). The potential of harvesting solar energy using rooftop Solar PV/T in the Asian context is unarguably high (Molnár et al., 2022). However, the feasibility of alleviating energy poverty through domestic solar PV/T in the urban sector in the Asian context where the urban slum population is reportedly high, can be challenged in terms of accessibility, affordability, social inclusivity, and reliability (Kumar, 2023; Maisanam et al., 2021; Roy, 2023).

Socio-techno-economic feasibility assessments on socially inclusive renewable energy programs for urban households in the Asian context which are seldom available in the literature are indispensable for the growth of the renewable energy sector from academic and practical perspectives (Doshi & Harish, 2022). Therefore, this paper aims to evaluate the social inclusivity in terms of accessibility and affordability of renewable energy (i.e. Solar PV/T) to alleviate energy poverty in urban households in emerging economies in Asia, considering the cases of India and China.

2. Literature Review

This integrated literature review aims at synthesising scholarly arguments to develop an operational definition of social inclusivity for the present study on energy poverty alleviation of urban households in emerging economies in Asia (i.e. India and China) through micro-grid renewable energy programs. In developing the operational definition of social inclusivity, philosophical perspectives, normative definitions and emerging academic debates are considered.

2.1 Normative Definitions

The United Nations (no date) defines social inclusivity as;

“The process of improving the terms of participation in society for people who are disadvantaged on the basis of age, sex, disability, race, ethnicity, origin, religion, or economic or other status, through enhanced opportunities, access to resources, voice and respect for rights.” (United Nations (no date))

Admittedly, the United Nations (UN) definition of social inclusivity articulates multidimensional aspects of social inclusivity. However, from a pragmatic

perspective, the peripheries distinguishing social inclusivity from social exclusivity are underrepresented in the UN's definition. For example, Martin and Cobigo (2011) and maintain that "...it should not be assumed that a person is "more included" if activities are done in one type of residential setting over another." (Martin & Cobigo, 2011)

In agreement with Martin and Cobigo (2011), Armstrong et al. (2011) emphasize the contextualism of social inclusivity. According to Armstrong et al. (2011) "...the meaning of inclusion is significantly framed by different national and international contexts." (Armstrong et al., 2011)

From philosophical perspectives of redistributionist discourse, moral underclass discourse, and social integrationist discourse, Levitas (2005) highlights that defining social exclusion by disregarding the disparities prevailed among the normatively accepted socially inclusive groups is yet disputable. Therefore, what contributes to social inclusion and social exclusion is worth considering, reflecting the global situation and Chinese and Indian contexts.

2.2 Affordability and Accessibility

Pragmatic aspects of social inclusivity reflecting accessibility and affordability are worth consideration in developing an operational definition for social inclusivity. Antoñanzas et al. (2017) argue that the concept of affordability is multidimensional given its spatiotemporal nature in terms of geographic context and timeframe. Extending the argument made by Antoñanzas et al. (2017), Winkler et al. (2011) manifest the contextualism of politicized aspects of inclusivity that are hardly quantifiable. Similarly, in agreement with Antoñanzas et al. (2017) and Winkler et al. (2011), Miniaci (2014) highlights the dynamic nature of the concept of affordability. Notably, Wall et al. (2016) suggest a microeconomics theory-based approach to arrive at a quantitative definition (i.e. affordability index) for affordability, in which uncertain future costs and available alternatives are considered. Wall et al. (2016) also admit the multidimensionality and opportunity cost associated with the concept of affordability as emphasized by Antoñanzas et al. (2017) and Winkler et al. (2011). In that sense, "affordability" is attributed to physical and subjective dimensions. Contrastingly, the concept of "accessibility" is viewed as "physical". For example, Winkler et al. (2011) exemplify access to electricity from a serviceability perspective (e.g. closeness to the national grid or off-grid system to get an electricity connection). Hence, the concept of accessibility can reflect the disparity in the physical setting (Haque, 2016). However, accessibility and affordability can be considered as intertwined concepts in the energy sector (Sharifi & Yamagata, 2016). Therefore, the present study also considers the contextualism represented by subjective and objective indicators of affordability and accessibility.

2.3 Inclusive Governance

Social inclusivity in the energy sector from multiple perspectives of social justice, community empowerment, social welfare, energy justice, energy democracy, energy policy, energy security, energy transition, energy decentralisation, energy poverty, energy vulnerability, climate injustice, environmental justice, and environmental equity are widely debated in the literature. From environmental equity and human development angles, renewable energy contributes to social welfare through emission reduction (Omri & Belaïd, 2021). The environmental policies should focus on raising

awareness of renewable energy to stimulate the energy demand met from renewable energy (Mohsin et al., 2021; Zafar et al., 2020). Adil and Ko (2016) highlight the potential of Solar PV/T micro-grids to decentralize the energy transition in the urban sector. Sareen and Haarstad (2018) argue that energy transition should address social justice implications from social and technical perspectives. Likewise, Cantarero (2020) also contend that energy transition can be facilitated by enhancing affordability, technological reliability, and community participation. Feenstra and Özerol (2021) show that gender can be incorporated into energy justice. Levenda et al. (2021) maintain that environmental justice should be incorporated into renewable energy public policies to improve social well-being. Extending the arguments by Sareen and Haarstad (2018), Yazdanpanah et al. (2015) show that energy transition can be governed by socio-psychological aspects such as attitudes and moral norms. The success of sustainability initiatives is considerably dependent on public acceptance (Martos et al., 2016). Choudhary and Srivastava (2019) also show that social acceptance and capacity building are vital for the renewable energy transition. It is convincing that the influence of social order in energy transition is undeniable. To democratise the energy sector, “resist-reclaim-restructure” based effective policy mixes on energy transition are indispensable (Burke & Stephens, 2017). Lesage and Van de Graaf (2016) also highlight that cooperation of the stakeholders (actors) and effective policy instruments are inevitable for energy governance. Importantly, Child et al. (2018) show that energy transition should address the flexibility of energy systems from both supply and demand sides to ensure energy security. The recognition of priorities is vital for energy governance for improved transparency and legitimacy (Dubash & Florini, 2011).

The promotion of financial inclusion through policy instruments is indispensable for social well-being and improved energy efficiency from a sustainability standpoint (Cai & Wei, 2023; Dai et al., 2022; Murshed et al., 2022). Importantly, Tian and Li (2022) emphasize the role of governments in financial inclusion to promote renewable energy and environmental benefits. Interestingly, Zhao et al. (2023) suggest that income inequality mediates how financial inclusion negatively impacts on carbon inequality. Inclusive green financing can foster emission reduction targets (Zhan et al., 2023). However, financial inclusion in sustainability research is limited (Qin et al., 2021). Nevertheless, the present study appraises financial inclusivity in developing an operational definition of social inclusivity in renewable energy projects in the urban context.

Sovacool and Drupady (2016) articulate that energy poverty can be expressed as inadequate access to electricity. Vulnerability to energy poverty is induced by household income (Dogan et al., 2021; Koomson & Danquah, 2021). Energy poverty can be reduced by enhancing financial inclusivity (Wang et al., 2023). Arguably, Listo (2018) believes that gender inequalities and energy poverty are not causally related. However, Sen et al. (2023) manifest that households headed by females have demonstrated reduced energy poverty compared to male-led households.

Therefore, the inclusivity concept in the energy sector essentially encompasses governance reflecting wider public acceptance, contemplating from a sustainability perspective in energy transition and energy security to alleviate energy poverty in the long run. Hence, the present socio-techno-economic analysis considers the

governance concept with the broader scope outlined above in the operational definition.

2.4 Inclusivity in Chinese and Indian Contexts

The renewable energy sector in Asia is rapidly growing (Xu et al., 2019). Fan et al. (2023) and Jiang et al. (2022) highlight the potential in China for an inclusive green economy. Moreover, Shobande et al. (2023) empirically confirm that social inclusivity in the renewable energy sector in China needs to be improved by reducing costs. Joshi and Yenneti (2020) emphasize technological innovations to support the wider dispersion of community-scale off-grid renewable energy programs in India.

Overall, the concept of social inclusivity should be evaluated by both qualitative and quantitative methods adequately weighing the dynamics (time-bound) and multidimensionality (i.e. political, economic, geographical context), legal, genderial, cultural, and discourses on social exclusion as well. However, socio-techno-economic feasibility studies on energy poverty alleviation in literature seldom consider such a comprehensive approach founded on the above operational definition to assess the social inclusivity in energy poverty alleviation with a particular focus on urban households in emerging economies in Asia, with a particular focus on Indian and Chinese contexts.

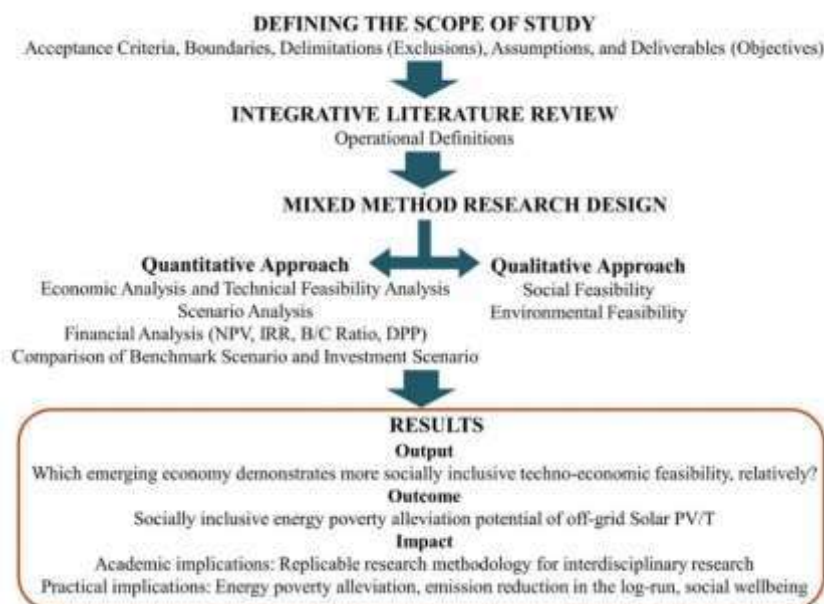
3. Methodology

3.1 Research Design

The present study aims to evaluate the feasibility of renewable energy to alleviate energy poverty in urban households in India and China, in a socially inclusive manner. The research employed a mixed-method research design by strategizing a retrospective study approached with inductive and deductive reasoning (Soiferman, 2010). The conceptual framework of this study is illustrated in Figure 1.

Figure 1

The conceptual framework of the present study



Source: Author's own work

3.2 Hypothesis, Research Question, and Assumption

This research hypothesized that social inclusivity in alleviating energy poverty in urban households can be deduced from the accessibility and affordability of renewable energy technology. The present study raised a research question; “how feasible is renewable energy (i.e. Solar PV/T in this case) to alleviate energy poverty in urban households in Indian and Chinese contexts, in a socially inclusive manner?”. In this study, the national grid’s energy mix was assumed to be 50% solar and 25% wind onshore and 25% wind offshore, which was considered to be the benchmark or alternative scenario.

Positionality (reflexivity) statement

The researcher of the present study adopts the normative belief of previous authors that India is having more liberalized electricity market compared to China (Diamond, 2015; Ho et al., 2022; Pritchett & Summers, 2014), and cultural influence on consumer decision making on renewable energy is high in China compared to India (Dögl et al., 2012; Huang et al., 2021; Sovacool, 2011). The author of the present study also believes that energy security is consistently challenged in a decarbonized economy given the immaturity of the renewable energy sector, and the impact of geopolitical tensions and armed conflicts on supply chain and logistics in terms of energy supply and distribution (Papadis & Tsatsaronis, 2020; Rabbi et al., 2022; Sotnyk et al., 2021).

Quality control in narrative synthesis

The quality control process for the narrative synthesis of the present study to ensure validity (i.e. trustworthiness of the outcome reflecting the appropriateness of method choices) and reliability (i.e. reproducibility in terms of consistency of methods) adopted PRISMA guidelines (Ewe et al., 2022) in searching and screening scholarly articles and maintaining the robustness of the narrative synthesis. In the integrated literature review, grey literature such as dissertations and working papers were also considered to encompass wider perspectives of social inclusion and exclusion. A sensitivity analysis (Christopher & Patil, 2002) was performed by changing the critical uncertainties considered in the ranking of clusters of driving forces to enhance the transparency of the scenario analysis.

3.3 Data Collection

Publicly accessible data were sourced from credible governmental and international organizations (Table 1).

Table 1

Socio-techno-economic Data of India and China for Year 2018, 2019 and 2020

Factor	Country	Measurement	Reference
Retail Electricity Tariff for Domestic	India	4.25 INR/kWh	Reserve Bank of India
Annual Per Capita Consumption (kWh)	India	1208 kWh	Central Electricity Authority
Electricity Energy Sales - Domestic (Annual)	India	273545 GWh	Central Electricity Authority
Renewable Energy Generation Installed Capacity- Solar	India	5085.17 Mw	Central Electricity Authority

Renewable Energy Generation Installed Capacity- Wind	India	11343.60 Mw	Central Electricity Authority
Urban Household Size	India	4.6 Persons	National Informatics Centre of India
Urban Population	India	299.6 Million	National Informatics Centre of India
Number of Urban Households	India	65.13 Million	National Informatics Centre of India
Per Capita Disposable Income of Urban Residents	India	75,266 INR	National Council of Applied Economic Research
Urban Household Expenditure (Monthly)	India	64,935 INR	National Council of Applied Economic Research
Poverty Headcount Ratio at \$2.15/day	India	10% of Population	The World Bank
Slum Population	India	35% of Population	The World Bank
Literacy rate, adult total (% of people ages 15 and above)	India	74% of Population	The World Bank
Retail Electricity Tariff for Domestic	China	0.55 YUAN/kWh	National Energy Administration
Annual Per Capita Consumption (kWh)	China	3905 kWh	The World Bank
Electricity Energy Sales - Domestic (Annual)	China	907200 GWh	China Statistical Year Book
Renewable Energy Generation – Solar	China	326000 GWh	U.S. Energy Information Administration
Renewable Energy Generation – Wind	China	661000 GWh	U.S. Energy Information Administration
Urban Household Size	China	3.1 Persons	National Bureau of Statistics of China
Urban Population	China	831.37 Million	China Statistical Year Book
Number of Urban Households	China	290.96 Million	National Bureau of Statistics of China
Per Capita Disposable Income of Urban Residents	China	47,412 YUAN	National Bureau of Statistics of China
Urban Household Expenditure (Monthly)	China	33,282 YUAN	China Statistical Year Book
Poverty Headcount Ratio at \$2.15/day	China	0.1% of Population	The World Bank
Slum Population	China	25% of Population	The World Bank
Literacy rate, adult total (% of people ages 15 and above)	China	97% of Population	The World Bank

3.4 Data Analysis

Scenario analysis

A scenario analysis was performed. Scenario development approached the Shell Method and the Two-by-Two Matrix Method. Impact-uncertainty matrix was generated from fifteen driving forces (Table 2), four critical uncertainties and their impacts, and two constraints (energy security versus energy consumption).

Table 2

Driving forces of transitioning from grid electricity to residential solar photovoltaic and thermal systems

Driving Force	Perspective (Clusters)	Reference
Economic Saving	From user perspective	Yu and Gibbs (2018); Yu, Z., and Gibbs, D. (2018); Chen and Chen (2021); Zhang et al. (2022)
Awareness	From user perspective	Zhang et al. (2022); Alipour et al. (2020)
Social Acceptance	From user perspective	Zhang et al. (2022); Hansen et al. (2022)
Urban Density	From physical aspects of urban environment perspective	Poruschi and Ambrey (2019)
Dwelling Type	From physical aspects of urban environment perspective	Shi et al. (2020)
Decarbonization	From global environmental perspective	Yang and Meng (2019)
Urban Sustainability	From global environmental perspective	Zhao et al. (2021)
Development of Renewable Energy Technology	From technology innovation perspectives	Chen et al (2019); Chen and Chen (2021); Pouladian-Kari et al. (2022); Huang et al. (2019)
Development of Energy Storage	From technology innovation perspectives	Li et al. (2019)
Utility-scale Factors (e.g. Bureaucracy, utilization factor)	From governance perspective	Rodríguez-Manotas et al. (2018); Wilkinson et al. (2021); Thai and Brouwer (2021)
Economic Growth	From economic perspective	Chen et al (2019)
Urban Growth	From economic perspective	Chang et al. (2020)
Energy Resources	From economic perspective	Xu et al. (2021)
Subsidies and Taxes	From economic perspective	Rataj et al. (2021)

Driving forces of the anticipated change were distinguished from critical uncertainties and predetermined elements (e.g. demographics, policies and politics). Driving forces and unpredictable driving forces (i.e. iceberg analysis by Van der Heijden, cited in Neiner et al., 2004) were classified. Four critical uncertainties of perceived cost, energy security, energy consumption, and risk of investment or capital expenditure, and their impacts were weighed (Table 7) based on literature (Diamond, 2015; Dögl et al., 2012; Ho et al., 2022; Huang et al., 2021; Papadis & Tsatsaronis, 2020; Pritchett & Summers, 2014; Rabbi et al., 2022; Santos; Sovacool, 2011; Sotnyk et al., 2021; UI (Abdin & Rachid, 2021) and the positionality statement of the present study to rank the extreme behaviours (Table 6) of six clusters of driving forces called as factors (Table 3 and Table 4).

Table 3*Critical uncertainties*

Critical Uncertainty	Reference
Perceived energy consumption (PEC)	Chen et al (2019); Zhang et al. (2022)
Perceived cost of living (PCL)	Jabeen et al. (2021)
Perceived risk of investment (PRI)	Jabeen et al. (2021)
Perceived energy security (PES)	Jabeen et al. (2021)

Table 4*Clustering of driving forces*

Cluster	Driving Forces
CLUSTER 1	Economic Saving; Awareness; Social Acceptance
CLUSTER 2	Urban Density; Dwelling Type
CLUSTER 3	Decarbonization; Urban Sustainability
CLUSTER 4	Development of Renewable Energy Technology; Development of Energy Storage
CLUSTER 5	Utility-scale Factors
CLUSTER 6	Economic Growth; Urban Growth; Energy Resources; Subsidies, and Taxes

Table 6*Extreme behaviors of clusters (i.e. factors) under critical uncertainties and two constraints*

Extreme Behaviors	CLUSTER 1		CLUSTER 2		CLUSTER 3		CLUSTER 4		CLUSTER 5		CLUSTER 6	
	IND	CHI	IND	CHI	IND	CHI	IND	CHI	IND	CHI	IND	CHI
Current Cost of Living	+ 9+7	8+8	8+6	6+6					5	5	8+8+8+7+7	5+5+5+8+
	- 8	-7			-6-6	-8-8	-7-4	-4-4				
Current Energy Security	+ 9+7+7	7+8+7			8	7	7+7	5+4	8	6	8+8+8+7+7	5+5+5+8+
	-		-8-8	-5-6	-8	-6						
Sum (Absol.)	31/60	31/60	2/40	1/40	12/40	17/40	3/40	1/40	13/20	12/20	76/100	62/100
In decimal	0.52	0.52	0.05	0.03	0.3	0.43	0.08	0.03	0.65	0.60	0.76	0.62
As a %	52	52	5	3	30	43	8	3	65	60	76	62

Table 7*Impact of clusters (i.e. factors) under critical uncertainties and two constraints*

Impact	CLUSTER 1		CLUSTER 2		CLUSTER 3		CLUSTER 4		CLUSTER 5		CLUSTER 6		
	IND	CHI	IND	CHI	IND	CHI	IND	CHI	IND	CHI	IND	CHI	
Current Cost of Living	+	9+6+8	7+7+6	8+8	8+7					8	7	7+7+7+9+8	8+8+8+7+
	-				-7-7	-5-5	-7-7	-8-8					
Current Energy Security	+	9+7+7	7+8+7					8+7	9+9	7	9	8+7+7+8+8	8+8+9+8
	-			-7-8	-7-7	-8-7	-7-6						
Sum (Absol.)		46/60	42/60	1/40	1/40	29/40	3/40	1/40	2/40	12/20	16/20	76/100	82/100
In decimal		0.77	0.70	0.03	0.03	0.73	0.58	0.03	0.05	0.60	0.80	0.76	0.82
As a %		77	70	3	3	73	58	3	5	60	80	76	82

The impact-uncertainty matrix was developed by using MS Excel software. The top three most uncertain factors which are having the highest impact were selected for the development of scenario narratives (Odame et al., 2012) under three pathways attributed to the level of social inclusion (i.e. business as usual pathway considered the current level of social inclusivity, whereas the optimum pathway reflecting social inclusivity and worse-case pathway to represent social exclusion). In the techno-economic analysis, solar PV/T purchased through a loan facility was considered as the investment scenario, whereas the alternative scenarios were the interest receivable from savings to pay electricity bills and national grid-based electricity having an energy mix of 50% renewable energy. For the benchmark or baseline scenario, the current energy mix of the grid electricity containing a greater proportion of thermal energy was considered.

Economic Analysis

For the cost-benefit analysis, retail market prices were obtained from verified suppliers available on Amazon, Alibaba, and the company's official websites (Wu & Gereffi, 2018). Alternative scenarios in the present analysis were based on the utility-scale cost projections by the International Energy Agency (IEA). Sustainable Development Scenario of IEA for the utility-scale renewable energy as Alternative-2 was considered (Table 5).

Table 5

Utility-scale Levelised Cost of Electricity Generation in USD per MWh for Year 2020

Scenario	India			China		
	Solar PV	Wind On/S	Wind Of/S	Solar PV	Wind On/S	Wind Of/S
Stated Policies Scenario	40	55	135	40	50	100
Sustainable Development Scenario	35	50	135	35	50	100

Note-1: Levelised Cost of Electricity = Overnight Capital + Capacity Factor + Fuel Inputs + Operation & Maintenance (excluding energy storage)

Note-2: Economic lifetime of wind and solar is 25 years

Source: International Energy Agency

Technical feasibility assessment

Technical feasibility was assessed based on insolation, technical know-how, local availability of solar PV/T, and thermal and electrical performance of solar PV/T (e.g. capacity factor) (Souliotis et al., 2018). The amount of sunlight hours was obtained from the databases of the United Nations Statistics Division and the U.S. National Aeronautics and Space Administration (NASA). Average values were considered as a conservative measure. However, the technical and serviceability aspects of the rooftop area (Jayaraman et al., 2017) potentially impacting investment decisions were excluded given the lack of secondary data in the public domain.

Evaluation of social and environmental feasibility

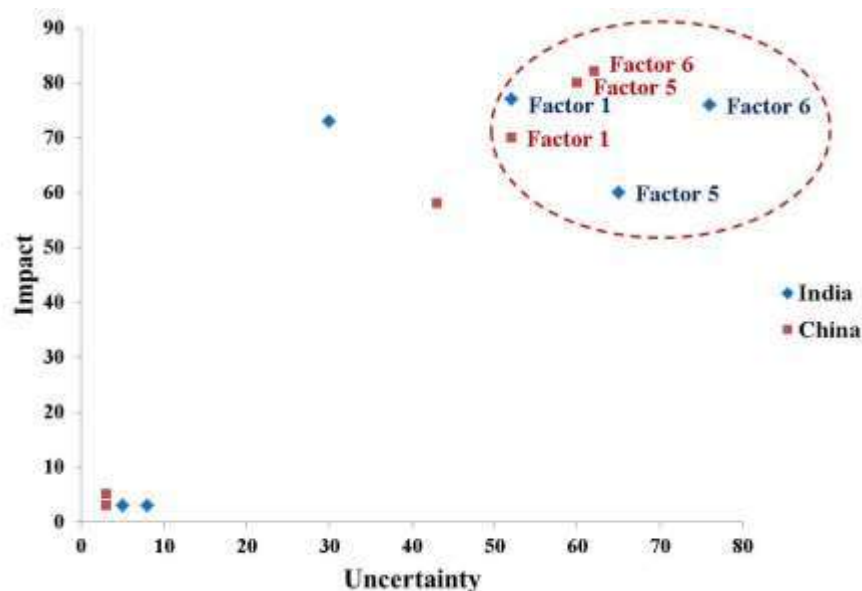
Social inclusivity and environmental implications were evaluated qualitatively (hence, carbon footprint, water footprint and carbon dioxide mitigation potential capacity of solar PV/T were not computed, given the impracticability of estimating the number of potential urban household users willing to transition to solar PV/T).

4. Results and Discussion

The impact-uncertainty matrix (Figure 2) depicts distinguishable highly uncertain and impactful three “Factors” (i.e. ranked clusters), amongst the “Factor 6” being most prominent.

Figure 2

Impact – uncertainty Matrix



Source: Author’s own work

From both theoretical and pragmatic perspectives, it is convincing that the economic growth of emerging economies leading to urban growth, access to energy resources, more subsidies, and reduced taxation can have a significant impact on energy transition (Hafner et al., 2020). Nevertheless, in emerging economies in the Asian context in particular, energy independence attained through renewable energy generation at the urban household level to reduce the impact and uncertainty on energy security is still at a questionable state, despite their ambitious circular economy plans (Modak, 2021; Peidong et al., 2018). Additionally, the “Factor 4” on renewable energy technology development becoming a cluster of low-impact driving forces on the energy transition according to the present study primarily contravenes with scholarly arguments by Liu et al. (2022), however, inconsistent with Elavarasan et al. (2020) given the inadequate awareness of end users.

4.1 Scenario Narration Development

Developed eight scenario narrations are summarized in Table 8. Accordingly, “Scenario 1” can be considered as the ideal future through the “optimum” pathway in

which social inclusivity is accounted for, while “Scenario 7” is the most imperfect anticipated future through the “worst case” pathway attributed to social exclusion. Under the “business as usual” pathway, “Scenario 4” and “Scenario 5” are considered given the importance of highly impactful driving forces representing the economic perspectives of energy transition while alleviating energy poverty among urban households.

Table 8*Development of scenario narratives*

Cluster1	Cluster 5	Cluster 6	Description	Constraints	Scenario Narration
+	+	+	Personal perspectives, governance, and economical aspects all are favorable	Current Energy Consumption Current Energy Security	SCENARIO 1 Personal perspectives, governance, and economical aspects all are favorable , thus reduced energy consumption with enhanced energy security
+	+	-	Personal perspectives and governance are favorable but economic perspectives are unfavorable	Current Energy Consumption Current Energy Security	SCENARIO 2 Personal perspectives and governance are favorable but economic perspectives are unfavorable, thus energy consumption could be slightly reduced however energy security may not be ensured fully
+	-	-	Only personal perspectives are favorable but governance and economic perspectives are unfavorable	Current Energy Consumption Current Energy Security	SCENARIO 3 Only personal perspectives are favorable but governance and economic perspectives are unfavorable, thus energy consumption could be slightly reduced however energy security may not be ensured fully
+	-	+	Personal perspectives and economic perspectives are favorable but governance is unfavorable	Current Energy Consumption Current Energy Security	SCENARIO 4 Personal perspectives and economic perspectives are favorable but governance is unfavorable, thus energy consumption could be reduced energy security may be achieved significantly
-	+	+	Governance and economic perspectives are favorable but personal	Current Energy Consumption Current Energy Security	SCENARIO 5 Governance and economic perspectives are favorable but personal perspectives are unfavorable, thus energy

		perspectives are unfavorable	Security	consumption could be slightly reduced energy security may not be achieved significantly
		Only governance is favorable but personal perspectives and economic perspectives are unfavorable	Current Energy Consumption Current Energy Security	SCENARIO 6 Only governance is favorable but personal perspectives and economic perspectives are unfavorable, thus achieving both energy consumption reduction and energy security may be significantly challenged
-	+	-		
		None of personal perspectives, governance, and economical are favorable	Current Energy Consumption Current Energy Security	SCENARIO 7 None of personal perspectives, governance, and economical are favorable, thus achieving both energy consumption reduction and energy security may be nearly impractical
-	-	-		
		Only economic perspectives are favorable but personal perspectives and governance are unfavorable	Current Energy Consumption Current Energy Security	SCENARIO 8 Only economic perspectives are favorable but personal perspectives and governance are unfavorable, thus achieving energy consumption reduction may be significantly challenged while partially achieving energy security
-	-	+		

4.2 Cost-benefit Analysis

Tables 9, 10, 11, 12, and 13 show the necessary computations in calculating the Net Present Value (NPV), Internal rate of return (IRR), Discounted payback period, and Profitability index or benefit-cost ratio summarized in Tables 14, 15, 16, and 17, respectively. The number of Solar PV/T panels required for average urban household size is higher in China than in India, given the almost double per capita household consumption in kWh/year reported in China. From a demographic perspective, with a particular focus on the per capita disposable income of urban residents (Table 1), the “RT Scenario 2 High Cost” option may be infeasible despite the normative beliefs on product quality. Admittedly, depending on environmental factors such as dust and shading conditions, anticipated solar PV/T performance can be varied as highlighted by Mustafa et al. (2020).

Table 9*Solar PV/T Panel Requirement Calculation Summary*

Country	Per Household Consumption kWh/Year	Daily Usage kWh	Average Sunlight Hours Per Day	AC kW needed per Day	Efficiency	DC Power kW per Day	Array Output kW	No of Panels
RT Scenario 1 Low Cost (HengLong Chinese Model HL-209; \$0.25 per watt; 2094 x 1038 mm; 24kg)								
India	6764	18.53	8.5	2.18	21%	10.4	0.45	23.11 (≈24)
China	14735	40.37	6.6	6.12	21%	29.1	0.45	64.67 (≈65)
RT Scenario 2 High Cost (aHtech Canadian Model aHtech 72SK; \$3.54 per watt; 1981.2 x 1016 mm; 50kg)								
India	6764	18.53	8.5	2.18	17.8%	12.3	0.35	35.14 (≈36)
China	14735	40.37	6.6	6.12	17.8%	29.1	0.35	83.14 (≈84)

Table 10*Solar PV/T Installation Cost (Investment) Calculations*

RT Scenario 1 Low Cost (HengLong Chinese Model HL-209; \$0.25 per watt; 2094 x 1038 mm; 24kg)	
India	\$2700 [Plan A - Savings = \$2700@4.0%] [Plan B – Loan Solar = \$2700@9.32%]
China	\$7315.5 [Plan A - Savings = \$7315.5@1.5%] [Plan B – Loan Solar = \$7315.5@4.65%]
RT Scenario 2 High Cost (aHtech Canadian Model aHtech 72SK; \$3.54 per watt; 1981.2 x 1016 mm; 50kg)	
India	\$42084[Plan A - Savings Scenario = \$42084@4.0%] [Plan B – Loan Solar = \$42084@9.32%]
China	\$98196[Plan A - Savings Scenario = \$98196@1.5%] [Plan B – Loan Solar = \$98196@4.65%]

Table 11*Annual cash flow from interest income (savings)*

RT Scenario 1 Low Cost (HengLong Chinese Model HL-209; \$0.25 per watt; 2094 x 1038 mm; 24kg)

India [Plan A - Savings = \$2700@4.0% = \$108.00]

China [Plan A - Savings = \$7315.5@1.5% = \$109.73]

RT Scenario 2 High Cost (aHtech Canadian Model aHtech 72SK; \$3.54 per watt; 1981.2 x 1016 mm; 50kg)

India [Plan A - Savings Scenario = \$42084@4.0% = \$1683.36]

China [Plan A - Savings Scenario = \$98196@1.5% = \$1472.94]

Table 12*Loan interest payment as cash outflow*

RT Scenario 1 Low Cost (HengLong Chinese Model HL-209; \$0.25 per watt; 2094 x 1038 mm; 24kg)

India [Plan B – Loan Solar = \$2700@9.32% = \$251.64]

China [Plan B – Loan Solar = \$7315.5@4.65% = \$340.15]

RT Scenario 2 High Cost (aHtech Canadian Model aHtech 72SK; \$3.54 per watt; 1981.2 x 1016 mm; 50kg)

India [Plan B – Loan Solar = \$42084@9.32% = \$3922.23]

China [Plan B – Loan Solar = \$98196@4.65% = \$4566.11]

Table 13*Electricity bill payment from solar vs. savings interest (household usage per year is considered)*

RT Scenario 1 Low Cost (HengLong Chinese Model HL-209; \$0.25 per watt; 2094 x 1038 mm; 24kg)

		INDIA	6764 kWh/year			
		CHINA	14735 kWh/year		INR	CNY
3% annual increment					0.012 USD	0.14 USD
Billing Rate		Annual Solar Cash Flow		In USD (August 12, 2023 Exchange Rates)		
Year	INR /kWh	CYN/kWh	INR	CYN	INDIA	CHINA
0					(\$2700.00)	(\$7315.50)
2023	4.25	0.55	28747.00	8104.25	344.96	1134.60
2024	4.38	0.57	29609.41	8347.38	355.31	1168.63
2025	4.51	0.58	30497.69	8597.80	365.97	1203.69

2026	4.64	0.60	31412.62	8855.73	376.95	1239.80
2027	4.78	0.62	32355.00	9121.40	388.26	1277.00
2028	4.93	0.64	33325.65	9395.05	399.91	1315.31
2029	5.07	0.66	34325.42	9676.90	411.91	1354.77
2030	5.23	0.68	35355.18	9967.21	424.26	1395.41
2031	5.38	0.70	36415.84	10266.22	436.99	1437.27
2032	5.55	0.72	37508.31	10574.21	450.10	1480.39
2033	5.71	0.74	38633.56	10891.43	463.60	1524.80
2034	5.88	0.76	39792.57	11218.18	477.51	1570.54
2035	6.06	0.78	40986.35	11554.72	491.84	1617.66
RT Scenario 2 High Cost (aHtech Canadian Model aHtech 72SK; \$3.54 per watt; 1981.2 x 1016 mm; 50kg)						
0					(\$42084.00)	(\$98196.00)
2023	4.25	0.55	28747.00	8104.25	344.96	1134.60
2024	4.38	0.57	29609.41	8347.38	355.31	1168.63
2025	4.51	0.58	30497.69	8597.80	365.97	1203.69
2026	4.64	0.60	31412.62	8855.73	376.95	1239.80
2027	4.78	0.62	32355.00	9121.40	388.26	1277.00
2028	4.93	0.64	33325.65	9395.05	399.91	1315.31
2029	5.07	0.66	34325.42	9676.90	411.91	1354.77
2030	5.23	0.68	35355.18	9967.21	424.26	1395.41
2031	5.38	0.70	36415.84	10266.22	436.99	1437.27
2032	5.55	0.72	37508.31	10574.21	450.10	1480.39
2033	5.71	0.74	38633.56	10891.43	463.60	1524.80
2034	5.88	0.76	39792.57	11218.18	477.51	1570.54
2035	6.06	0.78	40986.35	11554.72	491.84	1617.66

Net present value (NPV)

Net Present Values under “RT Scenario 1 Low Cost” and “RT Scenario 2 High Cost” options separately calculated for India and China as summarised in Table 14 articulate the fact that the “RT Scenario 1 Low Cost” option yields acceptable NPVs for both China and India. Contrastingly, none of the NPVs calculated under the “RT Scenario 2 High Cost” option is financially and technically feasible for China as well as India, given the lack of affordability of the energy transition technology, as over 20% of the urban population in China and India are socially deprived as slum population (Table 1).

Table 14

Net present value (NPV)

YEA	INDIA	CHINA	Discounting Factor		PV of RTS-1		PV of RTS-2	
	INDIA@0.0932	CHINA@0.0465	INDIA	CHINA	INDIA	CHINA	INDIA	CHINA
0			1	1	-2700	-7315.5	-42084	-98196

2023	344.96	1134.60	0.91	0.96	315.55	1084.18	315.55	1084.18
2024	355.31	1168.63	0.84	0.91	297.31	1067.09	297.31	1067.09
2025	365.97	1203.69	0.77	0.87	280.12	1050.26	280.12	1050.26
2026	376.95	1239.80	0.70	0.83	263.93	1033.70	263.93	1033.70
2027	388.26	1277.00	0.64	0.80	248.67	1017.40	248.67	1017.40
2028	399.91	1315.31	0.59	0.76	234.29	1001.36	234.29	1001.36
2029	411.91	1354.77	0.54	0.73	220.75	985.57	220.75	985.57
2030	424.26	1395.41	0.49	0.70	207.99	970.04	207.99	970.04
2031	436.99	1437.27	0.45	0.66	195.96	954.74	195.96	954.74
2032	450.10	1480.39	0.41	0.63	184.63	939.69	184.63	939.69
2033	463.60	1524.80	0.38	0.61	173.96	924.87	173.96	924.87
2034	477.51	1570.54	0.34	0.58	163.90	910.29	163.90	910.29
2035	491.84	1617.66	0.31	0.55	154.43	895.94	154.43	895.94
					241.51	5519.64	-39142.49	-85360.86
					NPV-RTS-1		NPV-RTS-2	

Internal rate of return (IRR)

Internal Rate of Return (IRR) values (Table 15) demonstrate that China has more techno-economic potential with a relatively higher IRR greater than 10% to implement solar PV/T projects for urban households in contrast to India.

Table 15

Internal rate of return (IRR)

	Low Interest Rate	High Interest Rate	NPV@Low Interest Rate	NPV@High Interest Rate	IRR
INDIA	9.32	11.32	241.51	-64.17	10.90014918
CHINA	4.65	14.7	519.64	-12.6	14.46208102

Discounted payback period

Discounted Payback Period in which the time value of financing is considered as depicted in Table 16 shows that an urban household in the Chinese context can recover their capital expenditure in approximately seven years compared to almost 11 years in the case of India.

Table 16***Discounted payback period***

PV of RTS-1		Discounted Payback Period (Years)	
INDIA	CHINA	INDIA	CHINA
-2700	-7315.5	-2700	-7315.5
315.55	1084.18	-2384.45	-6231.32
297.31	1067.09	-2087.13	-5164.23
280.12	1050.26	-1807.01	-4113.97
263.93	1033.70	-1543.08	-3080.27
248.67	1017.40	-1294.41	-2062.86
234.29	1001.36	-1060.12	-1061.50
220.75	985.57	-839.37	-75.93
207.99	970.04	-631.38	894.11
195.96	954.74	-435.42	1848.85
184.63	939.69	-250.78	2788.54
173.96	924.87	-76.82	3713.41
163.90	910.29	87.08	4623.70
154.43	895.94	241.51	5519.64
		Payback Period	
		INDIA	11.08439236
		Payback Period	
		CHINA	7.078271477

Profitability index or benefit-cost ratio

The cost-benefit ratio of Solar PV/T for India and China is tabulated in Table 17, depicting a relatively higher cost-benefit ratio for China, signifying the technoeconomically favourable conditions in China compared to India.

Table 17***Profitability index or benefit-cost ratio***

	Benefit	Cost	B/C Ratio
INDIA	2941.51	2700	1.089448
CHINA	12835.14	7315.5	1.754513

Assessment of environmental implications of solar PV/T

From a qualitative analysis exemplified in Table 18, the environmental significance of using solar PV/T cannot be underrated despite the scale of the project. According to the analysis, of environmental perspectives of Cradle-to-Cradle, Closed-Loop-Material-Cycle, Circular Economy, and End-of-Life; previous authors contend that the environmental risks of large-scale deployment of solar PV/T at urban household scale in China and India (e.g. exploitation of virgin earth resources for manufacturing new solar PV/T to cater growing demand and disposal of used solar PV/T) should not

be underrated, which is complimentary of arguments by Sharma et al. (2023). However, since the timescale of the present techno-economic analysis is 13 years (i.e. 2023 to 2035), the environmental risk of disposal of used solar PV/T can be considered “low risky” environmental aspect, given the lifetime of a typical solar PV/T is 25 to 30 years.

Table 18*Assessment of environmental implications of Solar PV/T*

Environmental Perspective	Scholarly Arguments
Cradle-to-Cradle Perspective (C2C) Closed-Loop-Material-Cycle (CLMC) Circular Economy (CE) End-of-life (EOL)	<p>"...Nevertheless, it is imperative to reduce environmental burdens from the current thermochemical processes used to recycle silicon and to start considering the key role of C2C principles for PV panel design and recycling processes, aiming at the introduction of a CLMC system based on new standards and consistent regulations in order to reduce the environmental impacts of current PV panels, if a sustainable PV technology is desired...We conclude that a CLMC system offers important benefits that can be maximized if PV panels are designed based on C2C principles with the EOL phase in mind from the beginning...." (Contreras Lisperguer et al., 2020)</p>
	<p>"...integrating thermal units with new PV panels during manufacturing, retrofitting the deployed panels, and converting EOL panels can undoubtedly minimize carbon footprints. Such sustainable PV measures can help all solar community stakeholders and lead to effective resource utilization and a circular economy..." (Senthil, 2022)</p>
	<p>"...Modules with 50-year lifetimes can reduce virgin material demand by 3% through reduced deployment. Modules with 15-year lifetimes require an additional 1.2 TW of replacement modules to maintain capacity, increasing virgin material demand and waste unless >90% of module mass is closed-loop recycled. Currently, no PV technology is more than 90% closed-loop recycled..." (Mirletz et al., 2022)</p>
	<p>"...Nations, like China, Japan, USA and the EU have been effectively pursuing the circular economy plans of action. In India, growing middle-class population, rapid economic growth, rise in average income, an expansion in manufacturing and service-related activities and urbanisation is affecting the production and consumption patterns and thus, causing socioeconomic and environmental risks..." (Gill and Verma, 2021)</p>
	<p>"...Transiting to circular economy is therefore very relevant to India to achieve its development goals without compromising on the resource security. The various missions launched by the</p>

Government such as Make in India, Zero Defect India and programmes like Smart Cities and Swachh Bharat Abhiyan (Clean India) resonate with the principles of circular economy..." (Modak, 2021)

"...The adoption of Solar Photovoltaic (PV) systems is considered to be a highly sustainable solution for tackling adverse environmental consequences..." (Prabhu et al., 2022)

Qualitative assessment of social inclusivity

Scholarly views on social inclusivity criteria at present and projected contexts of China and India are exemplified in Table 19.

Table 19

Qualitative assessment of social inclusivity

Social Inclusivity Criterion	Scholarly Arguments in Literature	
	India	China
Gender Equality	"...it can be influenced indirectly through energy policy and infrastructure, and building regulations and housing policy..." (Sunikka-Blank et al., 2019)	"...gender is an important aspect of energy, which has previously been ignored by many researchers; gender does matter in the area of access to, ways of use, opportunities and control over energy..." (Ding et al., 2014)
	"...nevertheless, in the context of South Asia (and especially in rural South Asia) where women's lives are marked by gender inequalities, access to clean and renewable energy services, if also targeted at improving women's access and welfare, can catalyze economic, social and cultural processes that improve gender equality and women's empowerment..." (Mohideen, 2012)	"...gender equality can have a favorable impact on green development..." (Li et al., 2019)
Housing, Planning and Energy Policies	"...there are numerous calls for a more decisive and vigorous type of planning that can 'future-proof' Indian cities. Yet, such efforts are often unsuccessful and many are fiercely challenged by social movements and forms of insurgence..." (Roy, 2009)	"...requires dynamic mechanisms that adaptation of national-level models to specific locations. The resulting experimental governance thus extends from a combination of top-down mechanisms of control, bottom-up responses, and the broader contradictions that emerge from their
	"There is urgent need for policy consistency across sectors in India	

Socio-cultural Influence	<p>to ensure the adoption of the essential principle of a circular economy in the development of "clean" renewable energy." (Sawhney, 2021)</p> <p>"...This paper identified several problems with financing in BRICS countries, including a lack of financing channels, investment shortage for small and medium-sized enterprises and imperfect government policies..." (Zeng et al., 2017)</p> <p>"...It is hard to influence socio-cultural norms in the "...social, cultural, and political structures that shape current situation..." (Sunikka-Blank et al., 2019)</p> <p>"...this paper demonstrates the role of socio-cultural attitudes and practices in affecting social acceptance of domestic solar energy interventions...perceptions of normality and practices of social capital, both of which are connected to collective social influence... in order to understand why low-income urban dwellers reject and accept new energy technology, it is vital to understand the broader social norms and capital of the target group, the socio-political environment and other locally relevant dynamics and the ir socio-political environment..." (Haque et al., 2021)</p>	<p>interactions..." (Lo and Broto, 2019)</p> <p>"...China's solar energy is mainly intended for urban and rural domestic energy use and the power supply..." (Peidong et al., 2018)</p> <p>"...all forms of energy and fuel poverty in developed and developing countries alike are underpinned by a common condition: the inability to attain a socially and materially necessitated level of domestic energy services...." (Bouzarovski and Petrova, 2015)</p> <p>"...social, cultural and political structures that shape energy transitions in China...reveal that pre-existing guanxi networks shape the activities of actors in transition processes..." (Huang et al., 2021)</p> <p>"...it is worth considering some additional socio-cultural aspects of contemporary China and East Asia, as revealed by the World Values Map... The World Values Survey reveals that the cultural values of different countries in the world do not tend to converge, but economic development pushes all countries in common direction: the reinforcement of values such as gender equality, tolerance, good governance and democracy..." (Golden, 2006)</p>
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Accordingly, gender equality in both China and India needs amelioration although India is leading in addressing the gender issue, which is in line with the findings of

Sen (2020). Contrastingly, housing-planning-energy policies reflecting social mix and focusing on renewable energy in both China and India show the preparedness to support social inclusivity likewise Levin et al. (2022) highlighted, however, contravenes Huang and Ren (2022) given institutional barriers and discriminatory housing policies on migrant population in China. Importantly, the potential socio-cultural influence on decision-making to transition from grid to off-grid is apparently high in China given the deeply rooted Guanxi culture in the Confucian sphere, prioritizing interpersonal relationships, compared to secularism practised in India (Shah et al., 2015).

Assessment of technical feasibility of solar PV/T

Table 20 outlines the exemplary scholarly findings used in the assessment of the technical feasibility of solar PV/T by considering harnessable solar power, technical know-how, local availability of solar PV/T, and thermal and electrical performance of solar PV/T. Harnessable solar power (electrical and thermal) in terms of insolation is relatively high in India. Evidence on the potential performance of solar PV/T (capacity factor and standard performance ratio) shows that solar PV/T of a given technology would perform more efficiently in the Indian context superior to the conditions in China. However, local availability of solar PV/T (i.e. basically manufacturing domestically) is seemingly high in China, despite the globalised nature of the solar PV/T industry. Locally available solar PV/T would provide both economic and environmental benefits (e.g. reduced transportation costs resulting in an added advantage of reduced greenhouse gas emissions in value chains). Nevertheless, lack of technical know-how as argued by Kabir et al. (2018) can be a major hurdle for both China and India.

Table 20

Assessment of technical feasibility of solar PV/T

Technical Feasibility Criterion	Scholarly Evidence
Harnessable Solar Power	"... The regular solar incident in India varies with an annual sunlight of 4 to 7 kWh/m ² , which is about 1500 to 2000 hours above the irradiation level gross energy consumption..." (Renoald and Shunmugham, 2021) "...western regions of China (where solar radiation is among the highest in the country) has around 1300 GW electricity generation capacity...." (Kabir et al., 2017)
Performance of Technology	"...under actual operating conditions in Central India. It is observed that the standard performance ratio and the capacity factor of the plant are 80.72% and 19.27% respectively. The average monthly energy produced is highest in April and lowest in July..." (KhareSaxena et al., 2021)
Technical Knowhow	"...a lack of basic technical knowhow on the user's behalf (especially in rural areas of the developing world) with regard to solar power systems can result in irregular usage, overcharging

	the battery, polarity reversal, by-passing the charge controller, etc. which can all lead to system damage....." (Kabir et al., 2017)
Research and Development Facility	"...To promote R&D in the photovoltaics sector, the Government of India had set up the Commission for Additional Sources of Energy in the Department of Science and Technology...." (Raina et al., 2019) "...The domestic manufacturing market has grown courtesy of the Make in India Policy of the Government. This has led to several private sector corporations jumping in to the solar PV market..." (Raina et al., 2019)
Local Availability of Solar PV	"...Amorphous Si solar cells are easily available in Indian market at affordable prices unlike other thin film solar cells. A-Si Cells are used in PV-T hybrid system because of their availability in India market and their sustainability at higher working temperatures...." (Padhy et al., 2021)

4.3 Conclusion, Implications, Limitations, and Recommendation

The present socio-techno-economic feasibility study aimed at evaluating the feasibility of renewable energy to alleviate energy poverty in a socially inclusive manner in urban households in Indian and Chinese contexts representing emerging economies in Asia, by adopting a mixed-method research design. The analysis manifested the socially inclusive energy poverty alleviation potential of off-grid rooftop solar photovoltaic-thermal hybrid system (Solar PV/T). The economic feasibility of Solar PV/T in China is comparatively higher than in India, given a shorter discounted payback period, higher cost-benefit ratio, and internal rate of return in China. Technical feasibility is high in the Indian context owing to the anticipated high energy performance of Solar PV/T under favourable insolation in India. Social inclusivity in energy poverty alleviation in the Chinese context is more challenged compared to India, given the influence of culture and governance. Sensitivity analysis unveiled that scenario development is highly sensitive to the choice of critical uncertainties. Conclusively, India demonstrates more socially inclusive techno-economic feasibility relative to China. Replicable comprehensive research methodology for interdisciplinary research derivable from the present research is a potential academic implication, whereas practical implications include informed decision-making for energy poverty alleviation, emission reduction, and social well-being in the long-run. Changes in policies on energy transition and energy independence can limit the generalizability of the interpretation of access and affordability stated in the present study. Scholarly views of the present study can be used for further research.

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Human Resources Management

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Factors that Impact Employee's Commitment in Hospitality and Tourism Sector, Sri Lanka

Yogarajah, M^{1*}

Abstract

Over the past few decades, Sri Lanka has witnessed an increase in the number of precarious employment. Due to the advantages of precarious labour, many sectors in Sri Lanka tend to rely on precarious workers. The hotel industry in Sri Lanka is one of such sectors that employs seasonal, casual, and temporary workers. These workers fall under the scope of precarious employment. Individuals who work in this insecure employment suffer a variety of repercussions. For organisations, having unstable work brings a lot of challenges in addition to its advantages. Organisations in the hospitality sector to be successful, employees need to be motivated and committed to provide consumers with the best services. Strong commitment will make the employees willing to do whatever it takes to satisfy a customer. Due to the greater detrimental effects precarious work has on individuals, whether these workers will show commitment towards the organisation is being questioned. However, results from earlier research have been inconsistent about the commitment level of these precarious workers compared to permanent employees. Hence, the main aim of this study is to find the factors that impact the commitment level of precarious employees. Accordingly, research was designed to identify the commitment level of precarious employees in comparison to permanent employees; personal factors that impact precariously employed employees' level of commitment; organisational factors that impact precarious employed employees' level of commitment. Taking a quantitative approach in conducting the research, questionnaires were used to investigate the commitment level of precarious and permanent employees from 204 non-managerial workers in the hospitality sector. This study found that the commitment level of precariously employed employees was lower than that of permanent employees, the nature of the job employees perform significantly influences commitment. It identified four factors that positively impact a precarious employee's level of commitment. They are age, supervisor support and fringe benefits. The study identified marital status as having a substantial impact on the commitment level of precarious employees, married precarious employees were more committed than unmarried precarious employees. It was also found that gender did not seem to have an impact on the commitment of precarious employees. Further, the study found total years worked, flexible working hours and working environment did not seem to have a major influence on the commitment level of precariously employed employees in the hospitality industry.

Keywords: Commitment, Precarious employees, Individual and organisational factors, Quantitative research

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1. Introduction

1.1 Background of the Study

Traditional work procedures are most likely an employee worked a complete annual year, mostly to be a full-time job not like a job on a temporary basis and subjected to all the benefits and facilities given by the employer have been changing in many ways (Evans & Gibb, 2009).

A significant transformation has begun to engulf the employment systems of nearly every developed capitalism country in recent years, and it is anticipated to grow in the future (Kalleberg & Vallas, 2018). An increasing number of books, articles, government reports, have been published, focused on the proliferation of precarious work (Edralin, 2014). Precarious work is defined as temporary, non-permanent or casual work (Edralin, 2014).

Sri Lanka has experienced a rise in insecure employments over the past few decades, a trend that has been observed in many other countries (Jayawardena, 2017). Insecure work has numerous consequences for individuals, companies are confronted with a slew of difficulties (Edralin, 2014).

Employers seek individuals who are well-integrated and get along with their coworkers, where soft skills play a significant role (Sackett & Walmsley, 2014). In order, to achieve organisational success, employee's commitment plays a vital part (Meldrum & McCarville, 2010).

Workers who are committed may assure increased job quality (Perera & Madagamage, 2018). Commitment is a crucial factor for both permanent and non-permanent employees in an organisation to ensure its success. (Lee & Chen, 2013). Hence, The negative impact of precarious employment on individuals raises questions about their commitment and positive attitude towards the organisation. (De Gilder, 2003).

The hotel sector is one of such sectors which highly use temporary workers.. The tourism industry is considered to be the "third-largest foreign exchange earner of the country in 2019" (Sri Lanka Tourism Development Authority, Annual statistical Report, 2019, p. 13). As the hospitality and tourism sector, which created many business opportunities and captured a vital part in the economy, has created many employment opportunities. Therefore, the success, improvement, and sustainable development of the sector depend on the service quality offered by the workers in the sector (Crawford & Riscinto-Kozub, 2011). Satisfaction plays a vital part in the service sector (He & Li, 2011). Employees who are trained and skilled will ensure that guests receive high-quality and efficient services.

For the tourism sector to be successful, employees should be motivated towards providing the best services. As the tourism sector is considered to be an important contributor to the country's economy. The employees who work in the tourism sector should possess some qualities and skills Employee commitment is the foundation for delivering quality service mainly in the tourism sector (Lee & Chen, 2013). But whether the temporary employees who are the major proportion of workers who works in the tourism sector and the nature of precariousness in their employment would allow them to show commitment towards their organisation is questionable.

Organisational commitment is also a well-researched area, but little research has been done on the commitment level of temporary workers vs permanent workers mainly in the tourism and hospitality sector, Sri Lanka (Arunatilake, 2013). However, researchers stated that “the advisability of commitment is questionable, in the current age of contingent work transitions” (Galais & Moser, 2009, p. 589).

Therefore, the main objective of this study is to carry out a detailed analysis on temporary worker’s organisational commitment who faces precariousness in their employment in the specific context, hotel industry.

As organisational commitment among workers is important in the industry, every employee in the sector showing commitment towards the organisation is questionable (De Gilder, 2003). Both the permanent employees and temporary employees in the sector need to show a higher level of commitment to ensure the success of the organisation (Lee & Chen, 2013). It can be noted that compared to stable employment, temporary employment appears to be a less desirable work structure (Beard & Edwards, 1995, as cited in Galais & Moser, 2009).

Contingent workers show relatively lesser job performance and turnover rate is higher comparing to the workers recruited on regular basis because of the impact of lower commitment (De Gilder, 2003).

Therefore, from the above evidences that employees who are precariously employed showing a lower level of commitment than that of permanent employees in the organisation. Therefore, this study explored the following research questions.

1. What is the commitment level of precariously employed employees when compared to permanent employees?
2. What are the personal factors that influence commitment among precariously employed employees?
3. What are the organisational factors that influence commitment among precariously employed employees?

2. Literature Review

This aims to review the literature to understand the existing knowledge in the area of Several scholars have proposed many definitions for organisational commitment, each of which has its own set of implications (Meyer & Allen, 1997; Mowday et al., 1979). Meyer and Allen’s three-component model (1997), the organisation’s commitment has been researched in depth.

Organisational commitment is described as the “relative strength of an individual’s identification with, and involvement in, a particular organization” (Porter et al., 1974, p. 604). Following are three basic characteristics which could be used to define commitment:

“a strong belief in and acceptance of the organization’s goals and values”

“a willingness to exert considerable effort on behalf of the organization”

“a definite desire to maintain organizational membership” (Porter et al., 1974, p. 604).

These three specifications demonstrate that commitment is an attitude and a behaviour. Commitment “involves an active relationship with the organization such that individuals are willing to give something of themselves in order to contribute to the organization’s well-being” (Mowday et al., 1979, p. 226). Commitment is also referred as, “if someone becoming bound by his actions or behaviours that exceed formal or normative expectations” (Mowday et al., 1979, p. 225).

Commitment as a psychological condition, comprises of at least three discrete elements, those were “a desire (affective commitment), a need (continuance commitment), and an obligation (normative commitment) to maintain one's employment” (Meyer & Allen, 1991, p. 61). Every element gets its own set of factors as well as consequences on-the-job behaviour. “Common to these three types is the view that commitment is a psychological state that characterizes the employee’s relationship with the organization, and has implications for the decision to continue or discontinue the membership in the organization” (Meyer & Allen, 1991, p. 67). First type of commitment is affective commitment. A worker's emotional connection to their workplace and willingness to stay with it (Meyer & Allen, 1991).

The next type of is continuance commitment. It is defined as the “commitment of an employee refers to his or her perception of the expenses of leaving the company” (Meyer & Allen, 1991, p. 72). The next type of commitment is normative commitment. The term “normative commitment refers to the feeling of obligation that employees feel to remain with the company” (Meyer & Allen, 1990, p. 1). In sum, all three types of commitment reduce the possibility to leave an organisation, and bind a person to an organisation, (Meyer et al., 2012).

Organisational commitment is analysed as well as evaluated in a variety of ways; various constructs and antecedents of organisational commitment have been recognised throughout the decades. (e.g., Allen & Meyer, 1990; Mowday et al., 1979; Mowday et al., 1982). It must be emphasised that a significant number of scholars have investigated the factors that influence organisational commitment (e.g., Meyer & Allen, 1997; Meyer et al., 2012; Mowday et al., 1982;). According to Maxwell and Steele (2003), there are four main categories of antecedents they are considered as important, personal characteristics, work experiences, role or job features (Maxwell & Steele, 2003) and organisation or structural features (Mowday et al., 1982, as cited in Maxwell & Steele, 2003).

Scholars commonly categorize organisational commitment into three main categories: personal variables (age, gender, race, religion, academic background, job tenure, family responsibilities), work and role characteristics (career development opportunities, complexity, role conflict, working hours, autonomy), and organisational variables (management style, organisational culture, leadership style, and open communication).

Precarious Work and its Characteristics

According to the International Labour Organisation (2007, as cited in Edralin, 2014, p. 15), precarious work is generally illustrated through the factors such as “a limited duration or a high likelihood of the worker losing their job; very little opportunity for workers to control their working conditions; the absence of benefits or social security

provisions; and a low income in conjunction with poverty". When concerning the findings relating to precarious workers and their commitment level, findings have evolved from a comparison in between the level of commitment of temporary employees and full-time employees, these findings show contradictory results. (Conway & Briner, 2002).

Theory Related to Organisational Commitment

Several theories have been propounded by various scholars to explain the commitment and the factors determining employee commitment (Mugizi et al., 2015). The Social Exchange theory is considered as the basis for this study.

Homans (1958) and Blau (1964) proposed the Social Exchange Theory (SET), which focuses on the psychological conditions that encourage social behavior. Homans argued that social behavior involves both material and non-material goods exchange. People who offer more strive to acquire more, while those who receive more are under an obligation to impart more.

According to Blau (1964), mutual connections arise as of social interactivity when people get responsibilities to reciprocate. According to Mugizi et al.(2015, the basic principle of Social Exchange Theory is that workers reciprocate by showing favourable behaviours towards the organisation such as employee commitment when they see satisfactory organisation's policies and practices.

3. Conceptual Model and Research Methodology

This study investigates the commitment level of precarious employees in the hospitality sector compared to permanent employees and the factors influencing it. The quantitative/positive approach is used to generalize the findings and examine their impact.

Hypotheses Development

Permanent employees and temporary employees need to show a higher level of commitment to ensure the success of the organisation (Lee & Chen, 2013). Permanent employees are considered to have a higher level of commitment than temporary employees (Lee & Johnson, 1991). According to Doeringer and Piore (1971), "workers in the secondary labour market, which is characterised by non-standard working arrangements (Hudson, 2007), tend to report higher levels of absenteeism, turnover, and counterproductive behaviour due to lower commitment levels" (Ünsal-Akbıyık et al., 2012, p. 16). Based on existing literature, following hypothesis is developed.

H₁: The commitment level of precariously employed employees is lower than that of permanent employees.

The likelihood of leaving the organisation decreases as employee's age rises (Cohen, 1993). Alternative employment options for employees as they get older tends to diminish, which leaves aging workers with little options (Mowday et al., 1982). Youngest age group workers were significantly more burned out as a result of workplace pressures and due to working stress than the older counterparts (Lau et al., 2005, as cited in Qureshi et al., 2012). Based on existing literature, following hypothesis is developed.

H₂: Age relates positively to the commitment level of precariously employed employees.

Societal roles influence professional behavior and career opportunities, with men often being more committed to organisations due to traditional family roles as breadwinners and homemakers. (Marsden et al., 1993). . Thus, the following hypothesis is proposed:
H₃: Male precariously employed employees will be more positively related to the commitment level than female precariously employed employees.

Marital status involves financial burden, family responsibility, overlapping responsibilities at home and work, and dedicating time for children. (Nair, 2007; Sikorska-Simmons, 2005). The unmarried employees are not much obliged to their families. Therefore, they might be less committed to their employers. (Nair, 2007; Tikare, 2015). Based on existing literature, another hypothesis is proposed.

H₄: Married precarious employees will have more commitment level than unmarried precarious employees.

A tenured employee is someone who has been working with a company for a long time. Employees who have worked for a company for a long time are often valued since they have integrated into the culture and have a detailed knowledge of the procedures,. They usually seen as people who are committed to organisation and a reflection of employee satisfaction. (Meyer & Allen, 1997;). Based on existing literature, following hypothesis is developed.

H₅: Tenure relates positively to the commitment level of precariously employed employees.

Supervisor support is “the degree to which supervisors value their employee’s contributions and care about their well-being” (Rhoades & Eisenberger, 2002, p. 700). . In general, the supervisor plays an important part in personal growth of employee. Thus, the following hypothesis is proposed:

H₆: Perceived supervisor support relates positively to the commitment level of precariously employed employees.

Fringe benefits are basically an indirect compensation, they are typically given as a requirement of work and are not based on how well a person performs. (Ayeniyi, 2015). According to the findings of the study, fringe benefits have a positive impact on organisational commitment. Thus, the following hypothesis is proposed:

H₇: Fringe benefits from the organisation relate positively to the commitment level of precariously employed employees.

Flexible working hours can be interpreted in a variety of ways in organisations. In most organisation this term referred as the possibility of not having similar working hours every day, and predetermined start and completion work times. Based on existing literature, another hypothesis was concluded in the following way.

H₈: Flexible working hours relates positively to the commitment level of precariously employed employee.

The setting, physical conditions and social features, in which employees accomplish their job is referred to as a work environment. According to McCoy and Evans, (2005, as cited in Nigatu, 2019), A positive work environment is influenced by supportive, trust-based, and good practices. It comprises three key sub-environments:

organisational, technical, and human. Based on existing literature, following hypothesis is developed.

H₉: A good working environment relates positively to the commitment level of precariously employed employees.

Conceptual Framework

Figure 3.1 depicts the conceptual model that was tested in the study.

Figure 3.1

Conceptual model



Data Collection Method

This study took quantitative approach. This approach used in this study as it looking at the causality, the factors that cause low commitment among the precariously employed employee and trying generalise the findings of this study.

To investigate the factors affecting the organisational commitment of precarious employees, this study used quantitative approach through survey strategy.

Under survey strategy self-administered questionnaires were distributed.. A questionnaire containing 50 items was distributed to a sample of 11 different star hotels, with the purpose of measuring nine primary variables and demographic factors. This study used individual level as the unit of analysis. Cross sectional study suited for this particular study as it can be conducted over a short period of time.

Under non-probability sampling techniques, purposive sampling was used to create the sample in which participants were selected based who will aid the study in achieving its objectives.

The study selected hotels and resorts in Trincomalee district based on their network and purpose for reaching them. 290 questionnaires were distributed, with 222 returned and 204 properly filled, indicating a 70% response rate.

Operationalization

Table 1

Key Concept	Variables	Indicators	Source	Measures
Independent Variable	Age	Old aged people, young aged people	Quinn and Shepard (1974)	Below 21 years 45-54 years 21-29 years 55 years or older 30-44 years
Independent Variable	Gender	Male, Female	Quinn and Shepard (1974)	Male Female
Independent Variable	Marital status	Married, unmarried	Quinn and Shepard (1974)	Married Widowed Separated Divorced Single
Independent Variable	Total years worked	Long tenure, short tenure	Quinn and Shepard (1974)	Less than one year 31-40 years 1-10 years 41 or more years 11-20 years
Independent Variable	Perceived supervisory support	Supervisor's friendliness, handling subordinates, way of problem solving, trustworthiness, communication	Johanson and Cho (2009)	Questionnaire responses measured with a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree).

Independent Variable	Fringe benefits	Performance based pay, equity, Incentives	Rieu and Kamara's (2016)	Questionnaire responses measured with a on a five-point scale (1 = to a very small extent, 5 = to a very large extent).
Independent Variable	Flexible working hours	Flexible hours, shift basis, fixed hours	Davidescu et al. (2020)	Four item flexible working questionnaire respondents were asked to mark 'yes' or 'no' to the questions.
Independent Variable	Working environment	Policies, building space, security and safety measures	Nigatu (2019)	Questionnaire responses measured with a on a five-point scale (1 = to a very small extent, 5 = to a very large extent).
Dependent Variable	Commitment	Affective commitment Normative commitment Continuance commitment Emotional attachment Self esteem	Mowday, Steers, and Porter (1979).	Questionnaire responses measured with a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree).

4. Analysis and Findings

Characteristics of the Sample

The questionnaire requested the participants to provide demographic details in order to describe the sample and to analyse whether these demographic factors predict the dependent variable used for the study. (see Table 2).

Table 2

Frequency Distribution for demographic variables

Variables		Frequency	Percent
Job nature	Temporary	107	52.5
	Permanent	97	47.5

Gender	Female	36	17.6
	Male	168	82.4
Age	Below 21 years	17	8.3
	21-29 years	77	37.7
	30-44 years	50	24.5
	45-54 years	42	20.6
	55 years or older	18	8.8
Marital status	Single	72	35.3
	Married	131	64.2
	Divorced	1	0.5
Total years worked	Less than one year	92	45.1
	1-10 years	89	43.6
	11-20 years	19	9.3
	21-30 years	3	1.5
	41 or more years	1	0.5

Preparing Data for Analysis

Data was entered into an Excel file and imported into SPSS software. Variables were labeled and values assigned. Preliminary analyses were conducted to check entry accuracy, missing values, normality, and multicollinearity.

Normality distribution, skewness and kurtosis analysis provide idea regarding the normal distribution. The study reveals that the skewness and kurtosis values of various factors, including commitment, supervisor support, fringe benefit, and working environment, are all below 3.0 and 8.0, indicating normal distribution of the data. The multicollinearity test can be explained using Variance Inflation Factors (VIF), as the skewness value for all variables is below 3.0, and the kurtosis value for all variables is below 8.0.

Validity Test

Table 3

Correlation coefficient of measures

		COM1	COM2	COM 3 reverse	COM4	COM5	COM6	COM7 Reverse	CO8	COM 9 Reverse
Total	Pearson Correlation	.905**	.892**	.824**	.850**	.813**	.902**	.853**	.838**	.816**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	204	204	204	204	204	204	204	204	204

		COM10	COM 11 Reverse	COM12 Reverse	COM13	COM14	COM 15 Reverse	SUPV1	SUPV2	SUPV3	SUPV4
Total	Pearson Correlation	.653**	.857**	.838**	.915**	.881**	.820**	.754**	.802**	.826**	.782**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	204	204	204	204	204	204	204	204	204	204

		Super 5 Revers	Super 6 Revers	SUPV7	FRING1	FRING2	FRING3	FRING4	FRING5	FRING6	FRING7
Total	Pearson Correlation	.796**	.787**	.817**	.788**	.731**	.323**	.770**	.749**	.646**	.504**

	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	204	204	204	204	204	204	204	204	204	204

		FRING8	FRING9	ENV1	ENV1	ENV3	ENV4	ENV5	ENV6
Total	Pearson Correlation	.553**	.517**	.320**	.381**	.481**	.487**	.459**	.379**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000
	N	204	204	204	204	204	204	204	204

		Age	Sex	Marital status	Tenure	Job position	Job nature	Total
Total	Pearson Correlation	.561**	.155*	.492**	.393**	.155*	.491**	1
	Sig. (2-tailed)	.000	.027	.000	.000	.027	.000	
	N	204	204	204	204	204	204	204

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The output validity test, with a 5% significance level, was applied to the Pearson correlation between the items and the total score. The results showed that item 1 is valid, with a significance value of $0.000 < 0.05$. The count value of $0.905 > r$ table, item 0.1380, also supports this. All questions obtained were highly significant, indicating that all questions are valid.

Reliability Analysis

The reliability coefficients for commitment, supervisor support, fringe benefits, and working environment are all acceptable, with a good level of 0.977, 0.895, and 0.820 respectively. (see Table 4).

Table 4

Reliability coefficients of the measures

Variable	Number of items	Cronbach's alpha
Commitment	21	0.717
Supervisor support	6	0.977
Fringe benefits	9	0.895
Working environment	6	0.820

Correlation Analysis

The strength and relationship's direction between the pair of variables are assessed using bivariate correlation. Table 5 depicts the correlation matrix for all the variables in the study.

Table 5

Descriptive and correlation analyses

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
OC	6.42	0.92									
SS	6.54	1.07	.786*								
FB	3.23	1.09	.714*	.552*							
WE	4.86	0.35	.480*	.524*	.393*						
Age	2.84	1.12	.558*	.431*	.444*	.238*					
Sex	0.83	0.39	.181*	.080	.130	-.044	.063				

MS	1.66	0.53	.479*	.383*	.375*	.209*	.420*	.251*			
TYW	1.69	0.77	.339*	.249*	.401*	.148*	.481*	.174*	.370*		
JN	0.48	0.50	.468*	.347*	.499*	.148*	.235*	.132	.218*	.346*	
FWH	1.04	0.21	-.110	-.137	-.160*	-.116	.053	.031	.002	.055	.034

Notes. OC = organisational commitment, SS = supervisor support, FB = fringe benefits, WE = working environment, MS = marital status, TYW = total years worked, JN = job nature, FWH = flexible working hours.

The commitment and supervisor support show a greater positive correlation (0.786, $p < 0.001$). Commitment positively correlates with fringe benefits (0.714, $p < 0.001$). The correlation between commitment and working environment is moderately positive (0.480, $p < 0.01$). Commitment negatively correlated with flexible working hours (-0.110, $p < 0.05$). The correlation between commitment and age is moderately positive (0.558, $p < 0.01$). Commitment and sex show a positive but weak correlation (0.181, $p < 0.01$). Commitment and marital status show a positive correlation (0.479, $p < 0.01$). The correlation between commitment and total years worked is moderately positive (0.339, $p < 0.01$). Finally, commitment positively correlates with the job nature (0.468, $p < 0.01$).

Testing Hypotheses

Multiple regression was used to test hypotheses 2, 5, 6, 7, 8, and 9 and t-test was used to test hypotheses 1, 3, and 4.

As shown in Table 6, the R^2 is 0.780. The value of standard error is 0.44. Regression analysis results are shown in Table 4.4. The overall model was significant, $F(9, 194) = 76.218$, $p < 0.000$.

Findings of each variable is based on the unstandardized coefficients of multiple regression analysis (see Table 6). The study found that employee commitment in the hospitality industry is 1.531 when all independent variables are considered. A unit increase in supervisor support leads to a 0.389 increase in commitment, while a unit increase in fringe benefits leads to a 0.239 increase. A unit increase in working environment leads to a 0.167 increase, and a unit increase in flexible working hours leads to a 0.033 decrease. Old employees are committed 0.154 more than young employees, while male employees are committed 0.175 more than female, married employees are committed 0.155 more than unmarried ones, and permanent employees are committed 0.203 more than temporary ones. Employee commitment reduces by 0.086 when a unit increase in total working years. Supervisor support and fringe benefits were found to be the most important factors influencing employee commitment in the tourism and hospitality industry. The study found that supervisor support, fringe benefits, sex, age, job nature, and marital status were significant predictors of employees' commitment to an organisation. However, working environment, flexible working hours, and total years worked were not significantly related to commitment.

Therefore, hypotheses 2, 6, 7, and 9 were supported, while hypotheses 5, 8, and 9 were not.

Table 6

Factors that impact commitment level of employees

Variables	B	Std. Error	T	Sig.
(Constant)	1.531	0.490	3.124	.002
Age	0.154	0.035	4.353	.000
Sex	0.175	0.084	2.088	.038
Flexible working hours	-0.033	0.156	-0.213	.831
Supervisor support	0.389	0.040	9.656	.000
Fringe benefit	0.239	0.040	5.933	.000
Working environment	0.167	0.106	1.577	.117
Job nature	0.203	0.074	2.744	.007
Total years worked	-0.086	0.049	-1.735	.084
Marital status	0.155	0.069	2.232	.027
R^2	0.780			
Standard error	0.440			
Adjusted R^2	0.769			
F	76.218			

Note: $n = 204$, $p < 0.05$.

The study uses the independent samples t-test to compare the means of two independent groups on a dependent variable, commitment, to determine statistical evidence.

Tables 7 and 8 show commitment mean differences between permanent and precarious employees. The t-test reveals that permanent employees have a slightly higher commitment level than precarious employees. This suggests that precarious employees have a lower commitment level. The t-test results show a significant difference in commitment levels between the two groups, with a p value of $p < 0.001$, indicating that the variances are significantly different. Therefore, Hypothesis 1 is accepted as the variances are significantly different.

Table 7
Group Statistics

Are you a permanent employee or temporary employee		N	Mean	Std. Deviation	Std. Error Mean
Commitment	Permanent	97	6.87	.406	.041
	Temporary	107	6.01	1.052	.102

Table 8
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference		
Commitment	Equal variances assumed	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
			Equal variances not assumed							
	Equal variances assumed	157.214	.000	7.527	202	.000	.857	.114	.632	1.081
	Equal variances not assumed			7.807	139.454	.000	.857	.110	.640	1.074

Table 9 and Table 10 present the t-test results for commitment mean differences among male and female precarious employees. The results show that male precarious employees have slightly higher commitment levels than female precarious employees, indicating a higher average commitment level. However, the t-test significance value is greater than 0.05, indicating a significant difference between the groups. Although male precarious employees tend to have a higher commitment level, this is not a generalization and cannot be generalized to the population. Hypothesis 3 is tested, which suggests that male precarious employees are more positively related to commitment levels than female precarious employees. However, there is no significant difference in commitment levels between the two groups, indicating that Hypothesis 3 is rejected as the variances are not significantly different.

Table 9
Group Statistics

Sex		N	Mean	Std. Deviation	Std. Error Mean
Commitment	Male	82	6.10	1.073	.119
	Female	25	5.72	.941	.188

Table 10
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Commitment	Equal variance assumed	.803	.372	1.585	105	.116	.378	.239	-.095	.852
	Equal variances not assumed			1.701	44.744	.096	.378	.222	-.070	.826

Table 9 and Table 10 present the t-test results comparing the commitment levels of married and unmarried precarious employees. The results show that married precarious employees have slightly higher commitment levels than unmarried precarious employees. This suggests that married precarious employees tend to have higher commitment levels than single precarious employees. The t-test for equality of means yielded a significant difference ($p < 0.001$), indicating that the variances between the groups are significantly different. Married precarious employees tend to have a higher level of commitment than unmarried precarious employees. Therefore, Hypothesis 4 is accepted, as the variances are significantly different. This suggests that married precarious employees may have higher commitment levels than unmarried precarious employees.

Table 11
Group Statistics

Marital status		N	Mean	Std. Deviation	Std. Error Mean
Commitment	Single	51	5.36	.955	.134
	Married	55	6.61	.745	.100

Table 12
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Commitment	Equal variances assumed	2.310	.132	-7.582	104	.000	-1.256	.166	-1.585	-.928
	Equal variances not assumed			-7.512	94.4	.000	-1.256	.167	-1.588	-.924

Nine hypotheses proposed were tested and the results are summarised in Table 11. Independent sample t-test used in this section to test hypothesis 1, hypothesis 3, and hypothesis 4. Multiple Regression analysis utilised to test hypotheses 2, 5, 6, 7, 8, and 9 presented in this study. Based on the results, hypothesis H₁, H₂, H₄, H₆, and H₇ are accepted while H₃, H₅, H₈, and H₉ are rejected.

5. Discussion

The study aimed to improve comprehension of factors influencing the commitment level of precarious employees.

RQ1. Commitment level of precariously employed employees when compared to permanent employees

As proposed in hypothesis 1, this study identifies that the commitment level of precariously employed employees was lower than that of permanent employees. The

findings are similar to the other studies (e.g., De Gilder, 2003; Galais & Moser, 2009; Lee & Chen, 2013; Lee & Johnson, 1991).

RQ2: Personal factors that influence commitment among precariously employed employees

In relation to the personal factors this study identifies, four factors that considerably impacting the commitment level of precarious employees.

The first personal factor has been which is age has been proposed in hypothesis 2. The study's findings identifies that the age is positively relate to the commitment level of precariously employed employees. The findings of the present study are similar to the other studies (e.g., Mowday et al., 1982; Parasuraman & Nachman, 1987;).

The second personal factor which is gender that has been proposed in hypothesis 3, the male precariously employed employees will be more positively related to the commitment level than female precariously employed employees. The result contradicts the findings of other studies (e.g., Tikare, 2015). The study suggests that women in male-dominated professions may adopt similar beliefs and perspectives to male employees, which could explain why gender did not significantly impact commitment in the hospitality industry (Dodd-McCue & Wright, 1996).

The third personal factor which is marital status that has been proposed in hypothesis 4, the married precarious employees had more commitment level than unmarried precarious employees. Married employees face financial strains, greater family responsibility, and require more security and stability in their employment due to their regular family responsibilities. This study's findings support other studies (e.g., Kalenberg et al., 1995; Nair, 2007; Tikare, 2015).

The fourth personal factor which is tenure that has been proposed in hypothesis 5, The result was contradictory to other the findings (e.g., Meyer & Allen, 1997; Mowday et al., 1982; Parasuraman & Nachman, 1987). Explanation for that could be, the temporary/precarious workers, who got re-assigned to the same position every year, for a particular period, would not increase the level of commitment towards the organisation even they serve for longer years for a particular period of time every year. The tenure did not have a significant relationship with commitment.

RQ3: Organisational factors that influence commitment among precariously employed employees

In relation to the organisational factors this study identifies, four factors that considerably impacting the commitment level of precarious employees.

The commitment level of precariously employed employees is positively influenced by the perceived supervisor support, which is an organisational factor that supports other studies. (e.g., Frederico, 2015; Rhoades & Eisenberger, 2002

The second organisational factor which is fringe benefit that has been proposed in hypothesis 7, that fringe benefits from the organisation will positively relate to the commitment level of precariously employed employees. The findings support and is similar to the studies (Ayeniyo, 2015).

The third organisational factor which is flexible hours that has been proposed in hypothesis 8 that flexible working hours will positively relate to the commitment level of precariously employed employee.. The result contradicts the findings of other studies (e.g., Flexible hours change the time or reduce time employee work. It would lead employers to make some decisions towards the reduced allowances. That will affect the contribution to EPF, ETF and any bonus is likely to be prorated (Poelmans & Beham, 2008). These could have been the reasons why in this study about hospitality industry flexible working hours did not have a significant relationship with commitment.

The fourth organisational factor which is good working environment that has been proposed hypothesis 9, the commitment level of precariously employed employees is positively influenced by a good working environment, but it does not seem to be a significant predictor, contradicting previous studies' findings. (e.g., Daciulyte & Aranauskaite, 2012; Meyer et al., 2002). The explanation for this difference could be that, A good working environment, including physical, human, and organisational environments, positively impacts employee commitment levels, with a human environment being crucial for emotional connection to the organisation, surpassing physical or technical environments.

Theoretical Implication

This study explores the impact of organisational and personal factors on commitment levels among precarious employees in Sri Lanka's hotel industry. It highlights the need for further research on supervisor assistance and fringe benefits, as well as the challenges faced by insecure workers in anonymity.

Practical Implication

Organisations must be concerned about the factors job nature, age and marital status in order to increase the level of commitment of precarious employees. Similarly organisational factors like supervisor support and fringe benefits are also important to be considered.

Limitations of the Study

A sample size of 204 respondents may limit the scope of population-level generalisation of the findings and interpretations based on those results.

Direction for Future Research

Future research can aim at examining the factors that affect precarious employees' affective commitment, normative commitment, and continuance commitment level to have a better knowledge on factors impact different types of commitment on precarious employees. Since there were only 204 respondents in the study's sample, a larger sample should be taken into account to ensure the validity of findings to the target population of the study.

6. Conclusion

The study explores the factors influencing precarious employees' commitment in Sri Lanka's hospitality industry. Results show age, marital status, job nature, supervisor support, and fringe benefits positively impact their commitment. Gender, years worked, flexible working hours, and environment is not significantly related. The study provides

insights into improving precarious workers' commitment and alleviating their difficulties.

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Assessing the Influence of Perceived Usefulness and Ease of Use of HRIS on Employee Attitudes and Turnover Intentions: An Empirical Investigation in a Sri Lankan Tiles Manufacturing Enterprise

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Abstract

This research delves into an exploration of employees' perceived beliefs and attitudes towards HRIS (Human Resource Information Systems) to gain deeper insights into its influence on employee turnover intention. The study constructs a conceptual framework primarily drawing from the Technology Acceptance Model and Reasoned Action Theory, and subsequently puts it to the test. Data was gathered from a tile manufacturing company situated in Sri Lanka. The primary objective of this study was to assess whether employees' beliefs and attitudes regarding HRIS significantly affect their turnover intention. To achieve this, we considered perceived usefulness and perceived ease of use as independent variables, with turnover intention serving as the dependent variable. Additionally, we examined employees' attitudes towards HRIS, considering it as a mediator between the independent variables and the dependent variable. Our sample comprised 148 respondents selected from the aforementioned tile manufacturing company. Our analysis aimed to uncover whether the implementation of HRIS would impact employees' attitudes and subsequently their intention to leave the organization, specifically within ABC Tiles PLC. The results of our study demonstrate that both the perceived usefulness and ease of use of HRIS exert a significant influence on employee turnover intention. Furthermore, we concluded that employees' attitudes towards HRIS play a mediating role between perceived usefulness and turnover intention. These findings provide valuable insights for top management and system administrators, shedding light on the prevailing beliefs concerning HRIS within the company. Such insights can help identify perspectives that either enhance or hinder individual and organizational performance.

Keywords: Attitude towards HRIS, HRIS, Perceived Ease of Use, Perceived Usefulness, Turnover Intention, Sri Lanka.

1. Introduction

Despite the high cost, organizations are adopting HRIS technologies. Employee resistance may occur if they do not see personal benefits. Adopting HRIS requires employees to transition from administrative experts to strategic partners, resulting in changes to their tasks, routines, competencies, and capabilities (Wright et al., 2008). Two important questions arise: Will employees accept these changes, and will unintended consequences arise (Wiblen et al., 2010) Bamberger et al. (2014) highlighted that the workforce has a definite impact when an organization undergoes a digital transformation of e-HRM using HRISs, leading to changes in traditional HR practices, adoption of new technology, and work-related consequences (Wiblen et al.,

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2010). Consequently, questions arise regarding workforce job satisfaction and intention to remain in the organization. This research aims to explore how the workforce adapts to these changes, how it affects their attitudes, and the subsequent impact on their intention to stay or leave the organization. High turnover intention is significantly associated with various HRM practices, including compensation, benefits, training, performance management, career development, and employee relationship management (Long et al., 2012). Employee turnover poses a significant challenge for organizations, as evidenced by multiple studies (Long et al., 2012). Therefore, effective HR strategies are crucial for successful retention management (Beulen, 2009).

The transition of HR staff from administrative professionals to strategic allies necessitates changes in their work routines, tasks, competencies, and capabilities (Bamberger, 2014). This raises two key considerations: the employees' willingness to accept and adapt to these changes, and the potential unintended consequences on their daily work life (Marler, 2013). Examining employees' perceptions and technology acceptance is crucial to evaluate the use of HRIS and its impact on turnover intention. The adoption and effective use of technology significantly affect employees' work, roles, and behaviors, enabling them to become more productive and strategic partners in achieving organizational goals (Gardner et al., 2003; Hendrickson, 2003). As frequent users of HRIS, employees' interactions with the system shape their attitudes, which in turn influence organizational behavior, including intention to remain in the organization. These factors are important indicators of organizational effectiveness and dimensions of information system effectiveness. Hypotheses were developed based on the technology acceptance model and a literature review on technology deployment and its impact on work-related issues, examining how human resource information systems and attitudes affect turnover intention. The theories of reasoned action and planned behavior, which link beliefs and positive attitudes to desirable outcomes, are employed by the technology acceptance model (TAM) to explain and predict the phenomenon (Davis et al., 1989). Perceived ease of use, perceived usefulness, and user attitudes are significant dimensions in the model, reliably explaining user behavior and technology acceptance. Davis and his colleagues evaluate the relationships between these dimensions, assuming that ease of use and perceived usefulness positively influence users' attitudes toward the system, which in turn impact their behavior.

The Problem Statement

The adoption of HRIS alone does not guarantee the realization of its benefits and a competitive advantage for the company (Damanpour, 2006). The varying rates of adoption can be attributed to how individuals perceive the innovative qualities of the system, highlighting the importance of deployment and individual perception for its effectiveness (Rogers, 2003). A research study conducted in Malaysia by Galanaki et al., (2019) revealed that only 33% of surveyed finance professionals were highly engaged or satisfied with the E-HRM system, indicating a significant level of dissatisfaction among the remaining 67%. The quality of the HRIS has a considerable impact on user work performance, and any potential errors or issues, such as server downtime or accessibility problems, can negatively affect employee satisfaction (Omran et al., 2018). Poor employee satisfaction resulting from HRIS issues can have adverse effects on the organization. Moreover, employee attitudes and behaviors influenced by the HRIS can impact job satisfaction, organizational commitment, absenteeism, and intentions to leave (Maier et al., 2013). Given the significance of these

findings, this research aims to explore the impact of HRIS and employees' attitudes on employee turnover intention within the context of ABC Tiles PLC, a large-scale tile manufacturing organization in Sri Lanka. The organization has recently implemented a human resource information system to manage its HR activities, and high employee turnover has raised concerns among the management. Employee turnover poses substantial costs and has the potential to negatively impact the organisation's culture. The researchers aim to investigate the impact of employees' beliefs and attitudes regarding HRIS on their intention to leave the organization. While there have been discussions about the use of information technology and its effects in developed countries, there is a lack of literature on this topic, particularly in Asian countries (Altarawneh & Al-Shqairat, 2010). Conducting research in this area will contribute to a better understanding of technology acceptance and its influence on employee behavior. Previous studies have examined the direct impact of HRIS on employee behavior internationally, but there is a scarcity of research that explores the mediating effects of employee beliefs and attitudes on employee turnover intention. Therefore, this study focuses on examining the impact of HRIS on employee attitudes and turnover intention based on employees' perceptions of its usefulness and ease of use. The study will be conducted within the context of the Sri Lanka. Thus, the problem statement for this study is: "Does the perceived usefulness and ease of use of HRIS have an impact on employee attitudes and turnover intention?"

Research Objectives

The generic objective of the current study is to investigate and examine the impact and relationships between perceived usefulness of HRIS, perceived ease of use of HRIS, employee attitude and employee turnover intention in an organization in the manufacturing industry. As per the generic objective, following specific objectives can be derived.

- To examine the impact of perceived usefulness on ease of use of implemented HRIS
- To investigate the impact of perceived ease of use on the attitude towards applying the HRI system
- To investigate the impact of perceived usefulness on the attitude towards applying the HRI system
- To investigate whether there is an impact from employee attitude on employee turnover intention
- To examine the mediation effect of attitude on the relationship between usefulness of HRIS and turnover intention.
- To examine the mediation effect of attitude on the relationship between ease of use of HRIS and turnover intention
- To investigate the combined impact of ease of use of HRIS and usefulness of HRIS on turnover intention

2. Literature Review

Recent studies have placed a considerable emphasis on the acceptance and adoption of HRIS, examining the factors that influence how employees perceive and embrace this technology, including perceived usefulness, ease of use, and individual attitudes. Significantly, recent research has delved into individual-level outcomes, such as employee satisfaction and turnover intentions, acknowledging the critical role HRIS plays in shaping these facets of the workplace. Moreover, there is a growing body of work exploring the evolving roles of HR professionals due to HRIS, empowering them to shift from administrative functions to strategic contributions. Researchers are increasingly employing mediation models such as the Technology Acceptance Model (TAM) to uncover the intermediate variables that connect HRIS perceptions to employee attitudes and behaviors. These studies also cast a spotlight on user resistance and the unintended consequences of HRIS, shedding light on the challenges faced when employees perceive HRIS as a threat. (Wixom & Todd, 2005) Furthermore, researchers are advocating for a broader definition of HRIS implementation success, one that encompasses not just organizational metrics like efficiency and cost savings but also individual-level outcomes like employee satisfaction and retention. Recent study of Shahreki et al. (2022) highlights the nuanced impact of Human Resource Information System (HRIS) implementation on employee satisfaction and turnover intentions. The research underscores that the introduction of a new HRIS system can yield unanticipated outcomes within an organization. Notably, when HR workers perceive the new HRIS positively, it tends to result in increased employee satisfaction and decreased turnover intentions. Conversely, if the introduction of the HRIS is met with negative perceptions, it can lead to decreased employee satisfaction and increased turnover intentions. The findings underscore the importance of monitoring employee satisfaction post-implementation to prevent declining satisfaction from translating into turnover intentions over time. These insights offer valuable guidance for organizations navigating the complexities of HRIS adoption and management, providing a holistic perspective on its implications for employee attitudes and behaviors within the workplace.

Human Resource Information Systems (HRIS)

According to Aggarwal and Kapoor (2012), HRIS, or Human Resources Information System, is a system that stores employee data and records through interconnected databases. It is recognized as a vital component of the Management Information System (MIS) and enables analysis of organizational information for decision-making. Initially used for day-to-day HR activities and management control, HRIS now leverages new technologies to enhance decision-making. Its adoption aims to transform HR professionals into strategic partners by improving efficiency and providing better information. By utilizing HRIS effectively, administrative tasks can be streamlined, freeing up HR managers to contribute strategically.

Perceived Usefulness of HRIS

Perceived usefulness refers to the extent to which stakeholders believe that using a specific system improves their job performance (Seddon, 1997). This study aims to determine the value employees can derive from using HRIS, as well as explore the impact of perceived usefulness on turnover intention. Perceived benefits are associated with perceived usefulness, often measured in terms of economic profitability, improved performance, productivity, and other advantages (Kassim et al., 2012). A high level of

perceived usefulness indicates a positive relationship between user and performance (Davis, 1989). Satisfaction encompasses a broader range of expected benefits beyond usefulness (Seddon & Kiew, 1996). Automating work processes can lead to more positive attitudes toward technology (Davis, 1989). Tony et al. (2015) identified five dimensions—information completeness, cost reduction, energy savings, time savings, and useful information—for measuring perceived usefulness, which will also be considered in this research.

Perceived Ease of Use of HRIS

Ease of use refers to users' expectations of a system being effortless or requiring minimal effort (Davis et al., 1989). It reflects the understanding that a system can be used to perform tasks without difficulty (Davis et al., 1989). Employees who possess the necessary skills and knowledge to use the system tend to evaluate HRIS positively, while a negative attitude arises if the system is challenging to use. Employee satisfaction and perceived usefulness of HRIS are influenced by their perception of its ease of use. This construct has been recognized as a crucial factor in technology acceptance and its influence on beliefs and attitudes (Taylor & Todd, 1995; Venkatesh et al., 2003). Rogers also highlights its significance in explaining the level of adoption. Perceiving the system as easy to use reduces the effort required, allowing users to allocate their resources more efficiently and potentially enhancing job performance (Davis, 1989; Igarria et al., 1995). Therefore, even in complex systems like HRIS, evaluating ease of use is essential. Tony et al. (2015) identified five dimensions—easy navigation, quick response, good and fit interface, accessibility anywhere, and accessibility anytime—to measure perceived ease of use, which will also be considered in this research.

Attitude of Employees

Attitude, as defined by Chuttur (2009), refers to a person's positive or negative disposition toward carrying out a particular behavior. Schewe (1976) explains that attitudes and behaviors of users can be explained by the theory of reasoned action, where attitudes represent feelings of favorability or inevitability toward an object or entity. Users' perceptions and beliefs about information systems provide insight into issues, shaping their attitudes and subsequent behaviors. Users form attitudes toward systems based on their perceptions of the system and its features. Additionally, the resistance theory can be employed to understand and evaluate user attitudes toward change and information system use. This perspective contrasts with technology acceptance, as resistance hinders acceptance. The resistance theory explains why individuals hold negative attitudes toward technology, resist or reject it, and identifies the factors that discourage its use (Laumer & Eckhardt, 2012).

Turnover Intention

Turnover intentions, in the context of this study, are defined as the mental decision that occurs between an individual's attitudes toward a job and their subsequent behavior to stay or leave (Sager et al., 1998, p. 255). High staff turnover poses a challenge for managers, and HRIS can assist in various HR activities such as recruitment, training, and performance evaluation. Issues such as individual differences, temporary workers, and competition within these HR activities can contribute to turnover or turnover intentions among personnel (Perumal & Ajagbe, 2012). Training, specifically, has been found to have a direct relationship with turnover intentions in the Hong Kong hotel

industry (Perumal & Ajagbe, 2012). A study conducted in San Diego involving 46 hotels revealed that frequent training improves employee performance, influencing their attitude, confidence, and ultimately impacting turnover rates (Perumal & Ajagbe, 2012). Other studies have also established the connection between HRIS and employee retention (Abdullah et al., 2011).

Theoretical Background

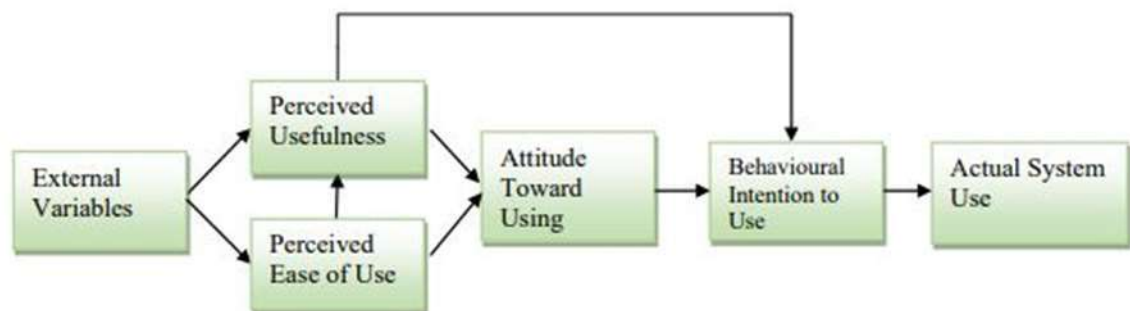
This study relies heavily on the technology acceptance model and theory of reasoned action to establish a comprehensive framework that contributes to identifying HRIS acceptance and the relationship between research variables.

Technology Acceptance Model

In 1989, Davis proposed the Technology Acceptance Model (TAM), which highlights the significance of user acceptance and the impact of beliefs, attitudes, and behavior on the success of a system (Davis & Bostrom, 1993). TAM is built upon the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975), which suggests that an individual's behavioral intention is influenced by their beliefs. According to TAM, perceived usefulness and perceived ease of use shape users' attitudes toward using a system, which, in turn, influences their intention to use the system and ultimately affects actual system usage. Additionally, perceived usefulness is influenced by ease of use, and it, in turn, impacts the behavioral intention to use the system (Davis, 1989; Davis et al., 1989). Unlike TRA, TAM emphasizes the role of beliefs in directly or indirectly influencing behavioral intention to use a system through user attitudes.

Figure 1

The general model of technology acceptance (TAM)



Source: Davis et al. (1989, p. 98)

Ultimately the output of employees' attitude towards HRIS will affect their job satisfaction as well as intention to retain. Therefore, it is very much important that the employees accept the technology that is going to be established in their organizations or otherwise there will be either no use or higher satisfaction in implementing HRIS.

Hypothesis Development

Based on empirical evidence from the existing literature the current study formulates seven hypothesis to be tested with primary data which were collected from staff employees of the ABC tiles PLC.

The Impact of Ease of Use on Perceived Usefulness of Implemented HRI System

When a new technology is introduced in an organization, employees evaluate it based on factors like usefulness and ease of use (Goodhue & Thompson, 1995; Shahreki, 2019). The skills required to effectively use the new technology, particularly for HRIS employees, play a crucial role in its successful implementation (Shahreki & Nakanishi, 2016; Strohmeier, 2007). However, many employees lack the necessary knowledge and skills to operate the system (Shahreki, 2019), resulting in limited utilization of the HRIS and a negative evaluation of the system. Conversely, HR employees who understand how the system works and how it can enhance their job performance tend to have a more positive attitude toward the HRIS. Moreover, when employees perceive an IT system as easy to use, they are more likely to consider it useful (Davis, 1989; Davies, 1993; Goodhue & Thompson, 1995; Venkatesh & Davis, 2000; Venkatesh et al., 2003; Venkatesh et al., 2012). Based on previous studies, the theoretical framework of perceived ease of use of HRIS, and the identification of perceived usefulness, the following hypothesis has been developed.

H₁: There is a significant impact of ease of use on perceived usefulness of implemented HRI system.

The Impact of Perceived Ease of Use on The Attitude Towards Applying the HRI System.

Workers generally rate HRIS as useful when they have sufficient knowledge and skills to use it effectively (Ball, 2001; Johnson et al., 2016; Marler & Fisher, 2013). When it is difficult to use an HRIS, employees in the HR department have a negative attitude toward implementing new technology (Beckers & Bsat, 2002; Kavanagh & Johnson, 2017). As a result, HR personnel must be adequately trained so that they can evaluate the HRIS favorably. As a result, while taking TAM into account, the following hypothesis can be proposed (Venkatesh & Davis, 2000).

H₂: There is a significant impact of perceived ease of use on the attitude towards applying the HRI system.

The Impact of Perceived Usefulness on the Attitude Towards Applying the HRI System.

Employees' attitudes toward the implementation of an HRIS are influenced by their evaluation of its usefulness and ease of use (Taylor & Todd, 1995). They compare their experiences with the HRIS to their needs and expectations. Employees anticipate that an HRIS will enhance the effectiveness of HR processes in terms of usefulness (Dery et al., 2009), contribute to various HR management decisions (Bratton & Gold, 2017), and automate administrative HR tasks (Marler & Fisher, 2013), thereby improving the role of HR employees within the organization (Hussain et al., 2007; Kovach & Cathcart). However, the implementation of a new HRIS may be negatively evaluated due to changes in workflows, shifting responsibilities, and additional tasks (Ball, 2001; Dery et al., 2009; Noutsas et al., 2017).

H₃: There is a significant impact of perceived usefulness on the attitude towards applying the HRI system.

The Impact of Employees' Attitude towards HRIS and Turnover Intention.

The increased turnover intention among employees is influenced by the stress associated with learning new skills (Johnson et al., 2016; Marler & Fisher, 2013), cost reduction efforts (Marler & Fisher, 2013), process improvement goals (Ball, 2001; Strohmeier, 2009), and time-saving objectives (Parry & Tyson, 2011). Task-focused HRIS configurations that prioritize short-term performance enhancement have been found to result in higher turnover rates compared to employee-centered configurations (Joseph et al., 2007). The implementation of an HRIS can lead to changes in an employee's role, which may cause disappointment, dissatisfaction, and even resignation. In summary, implementing an HRIS alters the role and work routine of HR employees. If employees dislike the changes attributed to the HRIS, they develop a negative perception of it, while if they appreciate the changes, their perception of the HRIS is positive. Employee satisfaction forms the basis for their attitude toward using an HRIS, which directly influences turnover intention. However, if a proposed HRIS brings about changes in an employee's work, their perception of the catalyst for change also influences their attitude toward turnover intention.

H₄: There is a significant impact of employees' attitude towards HRIS and turnover intention.

The Role of Employee Attitude as a Mediator in the Relationship between Perceived Usefulness of HRIS and Turnover Intention

The role of employee attitude as a mediator in the relationship between perceived usefulness of HRIS and turnover intention is a concept rooted in the Technology Acceptance Model (TAM). Venkatesh and Davis (2000) proposed that the attitude of users towards a technology mediates its impact on their behavioral intentions, such as turnover intention. In the context of HRIS, employee attitude is influenced by how they perceive the system's usefulness. Employee satisfaction is closely linked to their attitude towards HRIS and, consequently, to turnover intention. Research by Marler and Fisher (2013), and Strohmeier (2009) have demonstrated that employee satisfaction with HRIS is associated with its perceived usefulness in making tasks easier and more efficient. When employees are satisfied with the system, they are less likely to consider leaving their jobs. It proposes that employee attitude serves as a mediator in the relationship between perceived usefulness of HRIS and turnover intention. This implies that the impact of perceived usefulness on turnover intention is not direct but is transmitted through its influence on employee attitude. If employees perceive HRIS as useful and it positively affects their work, they are more likely to have a positive attitude, which in turn lowers their turnover intention.

H₅: Employee attitude mediates the relationship between perceived usefulness of HRIS and turnover intention.

The Role of Employee Attitude as a Mediator in the Relationship between Perceived Ease of Use of HRIS and Turnover Intention

Existing literature supports this hypothesis by demonstrating the interplay between perceived ease of use, employee attitudes, and turnover intention. Studies by Venkatesh

and Davis (2000) and Zhang and Zheng (2018) have consistently established that when employees perceive HRIS as easy to use and user-friendly, they tend to develop more positive attitudes toward the system. Simultaneously, employee attitudes have been identified as significant determinants of turnover intention in various HR contexts (Hom et al., 2017; Tett & Meyer, 1993). Therefore, H₆ suggests that the perceived ease of use of HRIS, influencing the formation of employee attitudes, can subsequently impact an employee's intent to leave or stay in their job, underlining the crucial role of user-friendly HRIS systems in shaping employee attitudes and ultimately reducing turnover intention.

H₆: Employee attitude mediates the relationship between perceived ease of use of HRIS and turnover intention.

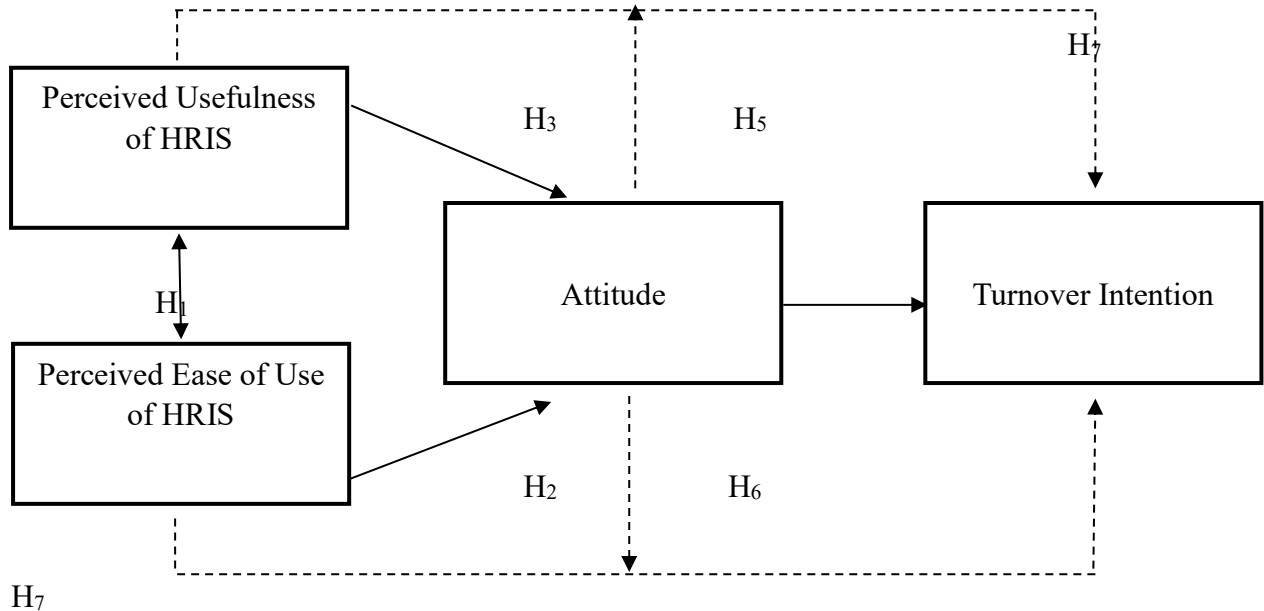
Combined Impact of Ease of Use of HRIS and Usefulness of HRIS on Turnover Intention

Several studies, such as those conducted by Venkatesh and Davis (2000) have established that perceived ease of use and perceived usefulness are individually significant predictors of employee attitudes toward HRIS. These positive attitudes, in turn, are associated with lower turnover intentions. When ease of use and usefulness are considered together, they are likely to reinforce each other's effects on employee attitudes, resulting in a more substantial combined impact on turnover intention. Therefore, H₇ suggests that HRIS that are not only easy to use but also highly useful in facilitating employees' work processes are more likely to foster positive attitudes and, in combination, significantly reduce turnover intentions within organizations.

H₇: There is a significant combined impact from ease of use of HRIS and usefulness of HRIS on turnover intention.

Accordingly, the current study will test the above-hypothesized relationships with the surveyed data using the following conceptual framework.

Figure 2
Conceptual Framework



3. Research Methodology

Data Collection

The research design employed in this study is a survey research design. Data collection was conducted using a self-administered questionnaire distributed through Google Forms to staff employees of ABC Tiles PLC. The unit of analysis is individual employees, and the sample size was determined to be 148 staff employees out of a population of 167 based on the Morgan table. Convenience sampling method was used to select the participants, allowing the researchers to obtain basic data and trends without the complexities of a randomized sample. The questionnaires were distributed via internal emails, and 134 completed responses were received, resulting in a response rate of 90%. In terms of gender distribution, there were 79 male and 55 female respondents. The majority of respondents (64) belonged to the age group of 31-40, followed by 36 respondents in the age range of 20-30 and 27 respondents in the age range of 41-50.

Measures

A five-point Likert scale was used to assess each component in the study since it offers a full measure of a participant's genuine evaluation. Perceived usefulness, the first independent variable, is defined as "the extent to which users believe that using an HRIS tool is critical in their work situation" (Kamaludin et al., (2017, p.207). Davis (1989) and Davis et al. (1989) developed 14 statements to assess perceived usefulness. These items were related to information completeness, reducing cost, saving energy, saving time, and useful information. Sample items include: 'Using HRIS improves my job performance' and 'Using HRIS increases my productivity'. Respondents rate their level of agreement for the items on a five-point Likert scale, and the scales used were adapted from previously validated scales (Davis 1989; Venkatesh & Davis, 2000;

Taylor & Todd, 1995). The Cronbach alpha for this scale was ($\alpha=.90$). The scale is set at 1 for strongly disagree and 5 for strongly agree.

Davis (1989) and Davis et al. (1989) used fourteen items to measure ease of use. Their scale takes into account "how clear and understandable the interaction with the system is, how easy it is to get the system to do what is required, the mental effort required to interact with the system, and the ease of use of the system" (Ndubisi & Jantan, 2003, p.441). Sample items include: 'I have a strong understanding of how to use the HRIS' and 'Learning to use the HRIS is simple for me'. Respondents were asked to rate their level of agreement with the statements on a five-point Likert scale, with 1 being strongly disagree and 5 being strongly agree.

Taylor and Todd's method was used to assess an employee's attitude (1995). To assess the attitude factor toward using an HRIS, a total of seven items was created. A sample item is "Using the new e-Recruiting system is a good idea".

Thatcher et al. Roodt (2004b), provided the measurement items used to assess turnover intention (2002). To calculate an individual's intention to leave their job voluntarily, a sum of eight items was proposed. For example, "I frequently consider quitting my job at my current employer." To assess the items for all five constructs, a five-point Likert scale (1='strongly disagree' to 5='strongly agree') was used.

Research Strategy

Research strategy for this study is survey method. Major justification for the application of survey strategy is that the type of investigation is non-causal. In this study there are objectives to find relationships among ease of use, usefulness, employee turnover intention and the mediation effect of attitude. Hence survey strategy was used. This study involves a use of a questionnaire to collect data by using survey strategy and it was possible to get systematic and scientific answers for the research questions of this study.

4. Results

Missing Value Analysis

The researchers ran a frequency analysis on all of the Likert scale items in the questionnaire and found there were no missing values, according to the missing value analysis. The output data set was already free of missing values due to the use of Google Form technology.

Construct's Validity and Reliability

Reliability Statistics

The measurement model in this study includes several measurements, such as perceived usefulness of HRIS, perceived ease of HRIS, attitude toward HRIS, and intention to leave. The homogeneity of items in a construct is referred to as consistency as a measure of reliability. This can be assessed by calculating the correlation between the items and their subsets. Internal consistency is the most commonly used method for testing reliability (Pallant, 2011). Reliability statistics are given in following table 1.

Table 1*Reliability Statistics*

Variable	No. of Items	Cronbach's Alpha
Perceived Usefulness	14	0.975
[Cronbach alpha = 0.975]		
Perceived Ease of Use	14	0.973
[Cronbach alpha = 0.973]		
Attitude	7	0.947
[Cronbach alpha = 0.947]		
Turnover Intention	7	0.948
[Cronbach alpha = 0.948]		

Validity Statistics

The degree to which a measure relates to other variables as expected within a system of theoretical relationships is defined as construct validity (Rubin & Babbie, 2001, p. 193). Construct validity can be assessed using factor analysis (Ghauri & Gronhaug, 2010).

This study looked into the suitability of the sample data set for conducting factor analysis. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were used to confirm this. As shown in the table 2 below. Sampling adequacy was ensured using the KMO measure and the sig. value of KMO coefficient. Further, the construct validity was assessed conducting an exploratory factor analysis (EFA) with SPSS. Factor loadings (FL) and the cumulative percentage of extraction sums of squared loading (ESSL) were used to draw conclusions. Table 2 and 3 illustrate the statistics related to sampling adequacy and construct validity.

Table 2*Sampling Adequacy*

Variable	KMO Measure of sampling adequacy	Bartlett's test of sphericity		
		Approx. square	chi- df	Sig.
Perceived Usefulness	0.967	2095.57	91	0.000
Perceived Ease of Use	0.966	2016.960	91	0.000
Attitude	0.908	860.277	21	0.000
Turnover Intention	0.897	1037.475	21	0.000

Table 3*Validity Statistics*

Variable	No. of items	Highest FL	Lowest FL	ESSL Cum%
Perceived Usefulness	14	0.889	0.828	75.990
Perceived Ease of Use	14	0.904	0.787	74.026

Attitude	7	0.911	0.846	76.364
Turnover Intention	7	0.935	0.752	76.729

According to the validity statistics shown in table 3, the cumulative percentage of the Extraction Sums of Squared Loadings (ESSL Cum%) of constructs are greater than 50%, and the item Factor Loading values are greater than the recommended threshold limit of 0.5 by Hair et al (2010). As a result, statistically, construct validity is guaranteed.

According to the reliability and validity analysis no item was deleted, thus all the items included in the standard scales were retained.

Descriptive Statistics

Table 4

Descriptive Statistics

Descriptive Statistics	Perceived usefulness	Perceived Ease of Use	Attitude	Turnover Intention
Mean	3.3801	3.3470	3.5256	2.5810
Standard deviation	0.86501	0.78891	0.85042	0.87717
Max	5	5	5	5
Min	1	1	1	1
Range	4	4	4	4
Variance	0.748	0.622	0.723	0.769
Skewness	-0.681	-0.688	-0.768	0.251
Kurtosis	-0.212	0.247	0.390	-0.285

If the standard deviation falls between +2 and -2, construct validity is considered acceptable for further inferential statistical analyses (Lu et al., 2007). Statistically, skewness measures the relative size of the two tails of the distribution, whereas kurtosis measures the combined size of two tails; measuring the extent of probability in the tails. Skewness and Kurtosis of the dependent variable; turnover intention is between -3 and +3 indicating an approximate normal distribution in the variable. The value is often compared to the kurtosis of the normal distribution, which is equal to 3. Mean, standard deviation, skewness and kurtosis values of the constructs in the current research model are given in table 4.

Hypotheses Testing

This study is based on a set of proposals related to predictors of the perceived beliefs (perceived usefulness, perceived ease of use) of employees (as users of HRIS), predictors of users' attitudes (satisfaction with HRIS), and predictors of organizational outcome (turnover intention). In order to test these hypotheses, multiple regression analysis parametric tests including correlation and simple linear regression were used.

Correlation Statistics**Table 5***Correlation Statistics*

Constructs	Pearson Correlation	Sig. (2-tailed)
Perceived Ease of Use and Perceived Usefulness	0.798	0.000
Perceived Ease of Use and Attitude	0.740	0.000
Perceived Usefulness and Attitude Towards HRIS	0.868	0.000
Attitude Towards HRIS and Turnover Intention	-0.625	0.000

As shown in table 5, a strong positive correlation was found between Perceived Ease of Use and Perceived Usefulness, Perceived Ease of Use and Attitude, Perceived Usefulness and Attitude Towards HRIS while a strong negative correlation was found between Attitude Towards HRIS and Turnover Intention which is statistically significant as Sig. 2-tailed (0.000) is less than the level of significance (0.01).

Regression Analysis**Table 6***Regression Statistics*

Constructs	R Square	B	beta	F value	T Value	Sig.
Perceived Ease of Use on Perceived Usefulness	0.636	0.875	0.798	230.925	15.196	0.000
Perceived Ease of Use on Attitude Towards HRIS	0.548	0.798	0.740	160.092	12.653	0.000
Perceived Usefulness and Attitude Towards HRIS	0.754	0.854	0.868	404.638	20.116	0.000
Attitude Towards HRIS and Turnover Intention	0.385	-0.644	-0.625	84.405	-9.187	0.000

As depicted in Table 6, 63.6% (R Square = 0.636) of the variation of perceived usefulness is explained by perceived ease of use towards HRIS. Beta value is 0.798 which is significant at 99% confidence level. This implies that perceived usefulness is positively and significantly affected by perceived ease of use. When it comes to the regression analysis of perceived ease of use and attitude, 54.8% (R Square = 0.548) of

the variation of attitude of HRIS could be significantly (Sig. = 0.000 which is less than 0.05) explained by the perceived ease of use of HRIS. The impact is positive and significant as the beta and the p values are respectively, 0.740 and 0.000. Further, there is a significant positive impact (beta = 0.868, $p = 0.000$) from perceived usefulness and attitude towards HRIS as 75.4% (R Square = 0.754) of the change in attitude of HRIS is due to the perceived usefulness of HRIS. The last finding of regression analysis is the more positive the attitude towards HRIS the less turnover intention is as the beta value is negative (beta = -.625) and this is significant at 99% confidence level. When there is a reduction of turnover intention 39% of proportion of that reduction may result due to the positive attitude towards HRIS. Furthermore, to test the hypothesis for the combined impact from ease of use of HRIS and usefulness of HRIS on turnover intention, multiple linear regression analysis was done. According to the model summary of multiple regression analysis, two independent variables (perceived ease of use of HRIS, perceived usefulness of HRIS) in the conceptual framework have a combined effect of 57.7% (as Adjusted R Square = 0.577) on the determination of the dependent variable; employees' turnover intention. Though the F value (91.608) ANOVA, is less 100 still it is statistically significant as the sig. value is 0.000. Hence, the model strength could be statistically ensured via ANOVA table.

Mediation Effect Results

To test the mediation effect of attitudes towards HRIS between the relationship of perceived usefulness and turnover intention, online Sobel calculator was used. Results are given in following figure.

Figure 3

Sobel test results

	Test statistic:	Std. Error:	p -value:
Sobel test	-1.9760041	0.11755441	0.04815431
Aroian test	-1.97364123	0.11769515	0.04842255
Goodman test	-1.97837548	0.11741351	0.04788636

As the p -value of the Sobel test statistic is less than 0.05, the Sobel test statistic is statistically accepted. Accordingly, Attitude towards HRIS has depicted a significant mediation impact. Further, as both direct and the indirect paths of the IV – DV relationship are significant, Attitude towards HRIS could be considered a partial mediator.

To test the mediation effect of attitude towards HRIS between the relationship of perceived ease of use and turnover intention, online Sobel calculator was used. Results are given in figure 4.

Figure 4

Sobel test results

	Test statistic:	Std. Error:	p -value:
Sobel test	-1.60327946	0.06918445	0.10887297
Aroian test	-1.59838564	0.06939627	0.10995718
Goodman test	-1.60821852	0.06897197	0.10778733

According to the calculation results, as shown in above figure, the Sobel test's test statistic is -1.60, with the associate p-value being 0.10, which is greater than 0.05. Thus, the mediation effect of attitude towards HRIS is not significant. Hence, H₆= Employee attitude mediates the relationship between ease of use of HRIS and turnover intention is not accepted under 95% confidence interval level.

5. Discussion of Findings

This study examines the impact of HRIS usage on employee attitudes and organizational outcomes. It focuses on the perceptions of employees in ABC Tiles PLC and their attitudes towards HRIS, considering factors that influence these perceptions. Hypotheses are formulated to explore the relationships between variables and their impact on employee perceptions and attitudes.

The study investigates the relationship between perceived ease of use and perceived usefulness of HRIS, as well as their impact on each other. It also explores the mediating role of attitude towards HRIS, which is influenced by perceived ease of use and perceived usefulness. Additionally, the study examines the mediation effect of attitude towards HRIS on employee turnover intention. The respondents' perspectives and measurements shed light on the significance of HRIS and their attitudes towards it.

Objective 1 of this study was dedicated to examine the impact of perceived ease of use on perceived usefulness of HRIS. Accordingly, by accepting H₁, current study results indicate that a significant impact was found from perceived ease of use on perceived usefulness. Due to its impact on acceptance, the literature has highlighted the significance of this construct. Therefore, this study supposed that ease of use has a significant impact on perceived usefulness.

The study findings are consistent with previous research conducted by Fishbein and Ajzen (1975), Seddon and Kiew (1996), Rai et al. (2002), Davis (1989), Husein (2015), Seddon and Kiew (1996), and Legris et al. (2003). The research highlights that system quality, particularly ease of use, has a significant impact on perceived usefulness and satisfaction with information systems. When employees perceive a system as easy to use, it leads to reduced errors, less training, and decreased anxiety, resulting in improved performance and effective time utilization. The analysis confirms a positive influence of perceived ease of use and perceived usefulness on employee attitudes towards HRIS. These variables are identified as important predictors of attitudes and are hypothesized to affect employee turnover intention. These findings align with established theories such as reasoned action theory, the Technology Acceptance Model (TAM), and previous research. Legris et al. (2003) also emphasize the significant role of perceived ease of use and perceived usefulness in shaping attitudes towards technology usage.

Hypothesis H₄, which examines the impact of employee attitude towards HRIS on employee turnover intention, was supported by the analysis results, indicating a significant influence of attitude towards HRIS on turnover intention (Maier et al., 2013). This finding aligns with previous literature highlighting the relationship between attitudes towards technology and work-related outcomes such as turnover. Maier et al. (2013) emphasize that attitude is a key driver of employee turnover intention, as it strongly influences their decision to remain or leave an organization. Therefore, it can

be inferred that user attitudes towards HRIS play a crucial role in predicting organizational turnover.

Hypothesis H₅ was supported, indicating that employee attitude towards HRIS partially mediates the relationship between perceived usefulness of HRIS and turnover intention. However, H₆ was not supported. These findings align with previous research by Maier et al. (2013), which found that perceived usefulness and perceived ease of use affect turnover intention, with employee attitude towards HRIS fully mediating this relationship. The current study also found a negative association between attitude towards HRIS and turnover intention, supporting the existing literature (Maier et al., 2013).

The regression analysis showed that perceived ease of use had a significant impact on employees' turnover intention, with a higher standardized coefficient of Beta (-0.679) compared to perceived usefulness. However, perceived usefulness was found to be insignificant and was not included in the regression equation. The combined effect of both variables accounted for 57% of the impact on turnover intention.

6. Conclusion and Implications

This study contributes to the understanding of HRIS adoption in the Sri Lankan context, specifically examining the influence of perceived ease of use and perceived usefulness on employee attitude and turnover intention. It fills a gap in the existing literature by investigating the mediating effect of attitude towards HRIS on the relationship between perceived usefulness, perceived ease of use, and turnover intention. The study's findings provide insights applicable to the manufacturing sector and similar contexts, highlighting the challenges faced by HRIS users and emphasizing the importance of top management involvement, IT skills, and infrastructure. Recommendations are provided to support HRIS users, improve system performance, and promote HRIS as a strategic tool for achieving employee goals. The study emphasizes the significance of user-friendly systems, active engagement with users, and adequate resources in maximizing HRIS benefits in HR management.

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Effect of Workplace Spirituality on Post-Retirement Work Intentions of Public Sector Employees in Sri Lanka

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Abstract

In the realm of post-pandemic economic turmoil, reemploying in the mid and late-career stages after formal retirement increasingly becomes inevitable. It is important to ascertain the readiness for the post-retirement employment of existing mid and late-career employees in organizations. The dual purpose of this study is to investigate how spiritual interventions at work influence on post-retirement work intentions of public officers in Sri Lanka and how these intentions are stimulated by their retirement self-efficacy. A significant empirical gap in the literature was noticed in the realm of post-retirement employment in the public sector. Hence, a quantitative study was designed, and data were gathered from 145 senior public officers. Data were analyzed through correlation and multiple linear regression. Further, it was found that workplace spirituality significantly impacts on determining favorable post-retirement work intentions of mid and late-career employees in the public sector in Sri Lanka while these intentions are stimulated by their retirement self-efficacy. This study empirically contributes to the contemporary body of knowledge in the post-retirement employment literature by constructing the fundamental relationship between workplace spirituality and post-retirement employment along with the moderating impact of self-efficacy of late-career employees.

Keywords: Post-Retirement Employment, Public Sector, Retirement, Self-Efficacy, Workplace Spirituality

1. Introduction

It is undoubtful that workplace spirituality determines the well-being of the workforce (Soliman et al., 2021). Researchers are increasingly attentive to workplace spirituality as an organizational predictor to validate the effect on various work-related outcomes (Gaston-Breton et al., 2021; Milliman et al., 2003). However, most of the prevailing studies merely ground on the impact of workplace spirituality on the commonly researched antecedents such as employee engagement (Mahipalan, 2018; Saks, 2011), job satisfaction (Walt & Klerk, 2014), organizational performance (Garg, 2017), and employee loyalty (Aboobaker & Zakkariya, 2020). However, the trajectory of workplace spirituality as a relieving solution for work-based phenomena led by contemporary socio-economic factors still remains largely unaddressed (Hassan & Soliman, 2021). Especially, it has been observed that employee intentions in the late-career stages are largely influenced by the economic conditions of the country which even influences retired employees to be reactive in the workforce (Iveson & Deary, 2019).

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Meanwhile, a growing body of literature connotes a trend of re-employment after the formal retirement of workers commonly observable around the world (Iveson & Deary, 2019; Perera & Weerakkody, 2018; Topa & Valero, 2017) which is formally recognized as post-retirement employment (Perera & Weerakkody, 2018) in a politically correct way. Previous studies have shown that people would re-employ after retirement mainly due to financial hardships (Perera & Weerakkody, 2018; Topa & Valero, 2017). However, not all post-retired workers re-employ themselves due to financial hardships (Perera & Weerakkody, 2018; Tarkar et al., 2016; Topa & Valero, 2017) but also, due to various non-financial reasons such as the accumulated expertise, motivation toward continuous working, post-retirement education, occupational demands, self-actualization, and so on (Perera & Weerakkody, 2018).

Moreover, the macro-demographic changes cannot also be ignored in this realm. The population growth rate around the globe has significantly been reducing (Tomar et al., 2021) while older people are getting empowered by increasing the quality of living (Topa & Valero, 2017), improved healthcare systems (Tang, 2021), and friendly retirement policies for older workers (Munnell & Wu, 2013). On the other hand, reducing the retirement benefits for post-retired employees is a largely observable phenomenon around the world (Mahipalan, 2018) which leads those employees to be still economically active even after their retirement (Jiang et al., 2021). Therefore, it is obvious that post-retirement employment is unavoidable, and academia has a mandatory bond to make post-retirement employment a more viable socio-economic construct by generating an adequate knowledge for the sake of those employees, organizations, and policymakers (Jin & Lee, 2020).

Wöhrmann et al. (2016) ascertained that work values highly predict post-retirement work intentions. This further validates the previous findings by Dendinger et al. (2005) saying baby boomers move towards post-retirement employment largely due to social, personal, financial, and generative reasons. On the other hand, the Sri Lankan government has re-employed several retired public officers. In June 2021, it was decided to re-employ retired nurses as needed (Ministry of Health, Nutrition & Indigenous Medicine, 2021). The bill was passed in the Parliament to increase the minimum retirement up to 65 years for public sector employees in Sri Lanka in the budget proposal for the fiscal year 2022 (www.news.lk, 2021). Thus, public sector employees in Sri Lanka have a tendency to re-employ themselves irrespective of their nominal retirement. Such kind of circumstances can be expected in the foreseeable future due to the labor shortage, migration, and so-called demographic changes in the STEM fields.

Hence, it is notable to realize that employees would continue working when they enjoy the work, when work becomes more meaningful when driving towards a common purpose, and when there is a person-job fit (Miliman et al., 2003; Salminen et al., 2019). The labor force participation rate in the Sri Lankan economy has dropped by 2.22% (by 182,000 employees) in 2020 (Central Bank of Sri Lanka, 2021) but employment in the public sector has increased by 4% (Ameresekere, 2021) though the present government is attempting to reduce it (Gunadasa, 2022). Nevertheless, very little is known on how workplace spirituality plays in this flux of post-retirement employment in the Sri Lankan public sector. Thus, this paper aims to determine the

impact of workplace spirituality on post-retirement intentions of current public sector employees by considering the moderating impact of retirement self-efficacy of them. In the realm of large labour migrations (Gunadasa, 2022), gradual reduction of population growth (Central Bank of Sri Lanka, 2021), and many other changes happening in macro forces, the retaining retired workforce is pushed to reemploy themselves being active in the economy. Hence, the aim of this study is to examine the impact of workplace spirituality on post-retirement work intentions of present public sector employees in Sri Lanka by concerning the moderating impact of post-retirement self-efficacy of them. Thus, it is mainly driven by the problem of ‘are post-retirement work intentions of public sector senior employees in Sri Lanka driven by spiritual dimensions at work?’

Objectives of this study are twofold followed by the above stipulated research problem. First, this study intends to explore the influence of Workplace Spirituality on Post-Retirement Work Intentions. Second, this study needs to investigate the role of Retirement Self-Efficacy on one’s Post-Retirement Work Intentions.

2. Literature Review

2.1 Workplace Spirituality

The word spirituality originally comes from the Latin word *spiritus* which means “breath of life” (Pradhan et al., 2017). Workplace spirituality is one of the vital predictors in organizational literature emerged in the early 20th century which has been the subject of many business forums (Miliman et al., 2003). It can be defined at the individual level and organizational level (Giacalone & Jurkiewicz, 2005) with various distinct conceptualizations (Walt & Klerk, 2014). However, as Soliman et al. (2021) witness, the limitations and complexities of workplace spirituality have not yet been well clarified.

Workplace spirituality is commonly defined as the recognition of an inner life which is nourished by meaningful work taking place in the community (Duchon, 2000). Meanwhile, Nick and Miliman (1994) defined it with four core elements; expression of desire to find the meaning in life, a transcendent of personal state, living by inner truth to produce positive attitudes and relationships, and a belief of being connected to each other and desire to go beyond one’s self-interest for the contribution to society at large. By providing a realistic view, Petchsawang and Duchon (2009) operationalized workplace spirituality as the feeling connected with having compassion towards others, experiencing a mindful inner consciousness in the pursuit of the meaning of work that enables transcendence.

The trajectory of the application of spirituality at work connoted in the literature is multi-faceted and has been exclusively recognized in terms of industries and nations. By specifically focusing on the hospitality and healthcare sectors, Srivastava and Gupta (2022) pointed out that workplace spirituality has been a panacea to determine the well-being of employees in the hospitality sector even during the COVID-19 pandemic crisis. Meanwhile, it was found that workplace spirituality can make a great contribution to enhancing the quality of the work life of nursing employees (Jin & Lee, 2020). Obviously, this becomes a critical determinant of job satisfaction of employees though spirituality has been neglected by researchers for the last 3 decades (Walt & Klerk, 2014). Further, Aboobaker et al. (2020) have found that workplace

spirituality can enhance the loyalty towards the workplace of Indian millennials and in this study, workplace spirituality has been characterized by meaningful work, a sense of community, and alignment with organizational values.

From the meta-analysis carried out by Diego-Cordero et al. (2021) it was found that spiritual and religious interventions may have a significant impact on alleviating occupational stress and related psychological disorders of nurses and other professionals. However, more research should be carried out in order to prove this fact (Diego-Cordero et al., 2021). Because, the work in workplace spirituality can range from organizational religiosity/spirituality as an area in research to the operationalization of this construct with the aim of developing measurement scales to scale down the spiritual expressions of employees at work (Miller & Ewest, 2013).

There are quite a number of conceptual models developed by scholars in this field. The Value-Based Model of Workplace Spirituality (Miliman, et al., 1999) and the Three-levels Model of Workplace Spirituality (Milliman et al., 2003) are highly researched models to be found in the literature which is tested in various contexts. However, there are models in workplace spirituality which gained less attention in the literature but are very meaningful. The three stances of workplace spirituality by Giacalone and Jurkiewicz (2005), three types of workplace spirituality by Ashforth and Pratt (2010), and five workplace spirituality models by Mitroff and Denton (1999) are such models which are worthy of exploration.

The development of theoretical models and frameworks to elucidate workplace spirituality during the last four decades is commendable. Giacalone and Jurkiewicz (2005) suggested three stances on the role of spirituality at work. The first stance is **the parallel relationship**, which suggests that spirituality and the workplace are mutually exclusive two different worlds. Thus, both phenomena exist at work without mutually impacting each other. Secondly, **the adversarial relationship** stance means that spirituality and the workplace do not belong together. Lastly, **the integrative relationship** posits that spirituality and the workplace are potentially connected to each other with casual relationships between faith and work. According to these authors, the modern workplace spirituality research lies in the third stance attempting to identify meaningful relationships between faith and work.

Moreover, Ashforth and Pratt (2010) posited three types of spiritual organizations which are open to free expression of faith. The first type is **enabling organizations** which means that organizations have high individual and low organizational control by allowing individuals to explore their own idiosyncratic transcendence in the means of prayer groups, meditation, yoga, or other means. Secondly, **directing organizations**, means the organizations which have low individual and high organizational control by imposing its preferences and cosmology on individuals that are intimately tied to the mission and practices of the organization itself and partnering organizations. The third type is **partnering organizations**, which means both individual and organizational controls are similarly at a higher level and this represents the middle path of the two aforementioned types. Also, this third type predicts that workplace spirituality is both top-bottom and bottom-top process without any mechanistic or legalistic outlook.

Mitroff and Denton (1999) posited five firm-level models of workplace spirituality, namely; religion-based organizations, evolutionary organizations, recovering organizations, socially responsible organizations, and value-based organizations. Hence, many of the literature before 2015 testifies that religion takes a significant portion of spirituality but the contemporary literature mostly after 2018 attempts to justify the independent and exclusive existence of spirituality and religiosity and spirituality is more towards one's personal experience and meaning of life.

Therefore, in summary, workplace spirituality had emerged as a subfield of religiosity but evolved as a meaningful, value-driven, and sensual phenomena at work. A satisfactory number of quantitatively measurable instruments have been developed to measure workplace spirituality despite its qualitative nature. Hence, it is indestructible that workplace spirituality functions as an empowerment for employees to get their work done more meaningfully, value-driven and with a sense, leading to continue their work even after retirement.

2.2 Post-retirement Employment

Vast number of studies signpost that sense of work, meaningfulness of work, value-driven employee behavior, religiosity, and harmony are person-specific determinants of post-retirement employment of individuals (Dufour et al., 2021; Perera & Weerakkody, 2018; Tarkar, 2023). Surprisingly, almost, all of these determinants are antecedents of workplace spirituality (Ashforth & Pratt, 2010; Diego-Cordero et al., 2021). Therefore, there is an unexplored but obvious postulation between workplace spirituality and post-retirement employee behavior which is worthy to further examine empirically.

Dufour et al. (2021) point out that post-retirement employment becomes increasingly important in the realm of population aging and declining the population as a meso trend. Retirement is not usually perceived negatively as it is an essential phenomenon of employees' lives which involves psychological, financial, and social facets (Valero & Topa, 2015). Meanwhile, Alvarez et al. (2021) has demonstrated that the mortality rate of individuals in retirement ages became significantly low due to the growth of healthcare and reduction of dying at young ages. Thus, it is noticeable that post-retirement employment is an unavoidable demographical trend.

One of the most important findings has been brought out by Perera and Weerakkody (2018) by exploring the determinants of post-retirement employment of older workers in the Sri Lankan context. The authors have recognized fourteen factors which significantly affect the post-retirement employment decisions of older workers. According to the findings of Perera and Weerakkody (2018), the five most important determinants of one's post-retirement work decision are **expertise, self-actualization, motivation for post-retirement employment, occupational demands, and intentions of the employer** (Tarkar, 2023). This finding is vital for the present study because the financial factors relating to post-retirement earnings are absent as a key determinant of one's post-retirement decision. On the other hand, factors such as self-actualization and motivation to rework after the retirement directly relate with the dimensions of workplace spirituality such as meaning of the work and value alignment (Breij et al., 2020). Thus, the undiscovered connotation between spirituality at work and post-retirement work decisions are obvious which requires a great attention from researchers.

2.3 Post-retirement Work Intentions

Tarkar (2023) has proved that post-retirement work intentions are highly volatile in retired workers to move towards post-retirement work and those are primarily intensified by individual attitudes, job satisfaction, and education. It simply says that intention matters. It has been found that workers go for planned retirements prior to their formal retirement age if they demonstrate less career commitment, less attachment to work, and negative expectations towards working but if all these indicators are positive, the workers tend to compromise on a planned retirement date (Dufour et al., 2021).

Further to recognize the association between workplace spirituality and post-retirement work intentions, Takar and Dhamija (2022) point out academics in higher education prefer to re-employ themselves after retirement if two conditions are satisfied. First, they should be satisfied in their existing job. Second, they should be spending a healthy age which is subjective. If so, academics prefer to work even in their late career life. Supporting the finding, Jiang et al. (2021) explored a negative relationship between high-involvement work practices and retirement intentions of older workers. Hence, the first hypothesis of this study can be stipulated by considering all these facts as follows.

H₁: Workplace Spirituality positively impacts on Post-Retirement Work Intentions

2.4 Retirement Self-efficacy

Higher retirement self-efficacy drives individuals to establish clear retirement goals and it alarms individuals who care less about their future career-improvement to rethink about the growth of their future careers (Hoffmann & Plotkina, 2021). Hence, it can be argued that individuals who have less retirement self-efficacy have less-concern about their future career improvement with unclear retirement goals. Moreover, Lee et al. (2018) found that people with high retirement self-efficacy tend to maximally utilize their own psychological resources to be more coherent in their post-retirement careers.

The concept of Self-Efficacy originally hails from the Social Cognitive theory by Bandura (1986) which is generally known as one of the most useful concepts of Psychology (Toharudin et al., 2019). It is generally defined as the judgments of people of their capabilities to arrange and execute several courses of action required to achieve pre-assigned performance (Lent et al., 1996). Therefore, the self-efficacy of an individual directs him/her to choose the most appropriate goal and put a tremendous effort into achieving those goals. On the other hand, it is the belief of an individual in his / her abilities to attain a pre-planned goal in life (Peter et al., 2021). Many contextually defined self-efficacy concepts have been derived subsequently such as financial self-efficacy, occupational self-efficacy, and retirement self-efficacy which is such a concept emerging recently.

It seems that Retirement Self-Efficacy is not an eye-catching area for researchers in the realm of post-retirement employment. The account of published scientific studies in this area is not satisfactory. However, the existing published studies provide us with a reasonable magnitude of evidence to convince its influence on Post-Retirement Work Intentions (Topa & Alcover, 2015). It has been found that retirement self-

efficacy can predict the intensity of post-retired workers to reemploy themselves even after their formal retirement (Topa & Alcover, 2015). Peter and Ambilikumar (2021) justified that retirement self-efficacy is a task-specific self-efficacy related to one's retirement. Further, the authors argue that a large part of retirement self-efficacy encompasses one's financial preparedness. By considering all the facts presented, the second hypothesis of this study can be stipulated as follows.

H₂: Retirement Self-Efficacy moderates the relationship between Workplace Spirituality and Post-Retirement Work Intentions

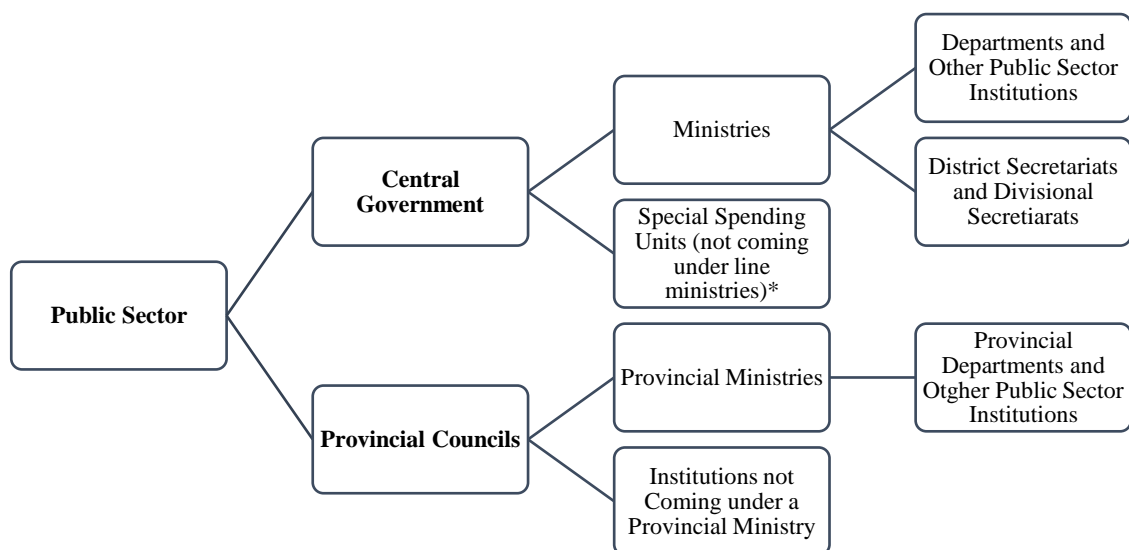
2.4 Research Context – Workforce in the Public Service in Sri Lanka

Further, the composition of Sri Lankan public sector is multi-faceted. Basically, public employees are categorized into central government and provincial councils. Ministries are the mainstream under the central government which further divides into, department and other public sector institutions and district secretariats. Secondly, provincial ministries are the mainstream under provincial councils which further divides into the provincial departments and other public sector institutions (Department of Census and Statistics, 2016). This composition can further be illustrated in Figure 1.

Public sector of Sri Lanka comprises of 1.183 million of employees in the 7.999 million workforce with labour force participation rate of 50.1% (Central Bank of Sri Lanka, 2020; Department of Census and Statistics, 2020). Thus, 19% of the total labour force consists of public sector employees. The average number of public sector employees are 853,493 from 1990 to 2017 (Department of Census and Statistics, 2019). Further, Table 1 demonstrates the public sector employment along with the proportion of labour force.

Figure 1

Composition of the Public Sector in Sri Lanka (without Semi-Government Sector)



* These are cost centers in public service claimed national budgetary provisions without a proper budget line in the national budget allocated to a specific ministry.

Usually governed by the Ministry of Finance, Economic Stabilization & National Policies

Source: Census of Public and Semi Government Sector Employment (2016)

Moreover, there is no significant growth in the public sector employment during the five-year period from 2016 to 2020 other than 2019 according to Table 1. In 2019, there is a 5% growth in total employment compared to minus growth in other years. The main reason for this ad-hoc growth is the government program of generating 100,000 employment opportunities with the intention of eradicating poverty as a partial fulfilment of pledges of presidential elections in 2019 (Presidential Secretariat, 2019). Hence, this data further validates the justification of existing public employees having a growing need to reemploy themselves irrespective of the conventional retirement age boundaries.

Table 1

Total Public Sector Employees in Sri Lanka between 2016 and 2020

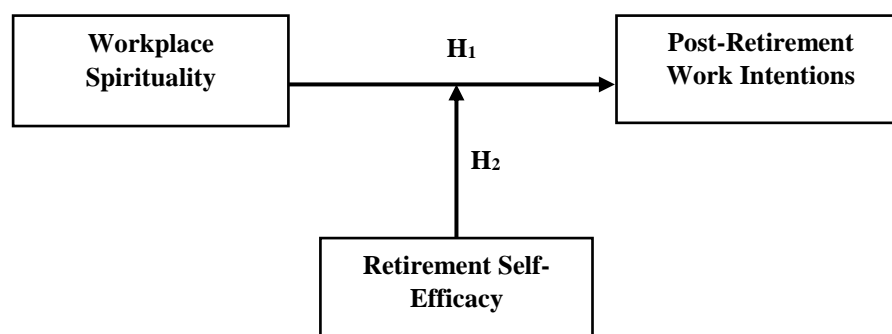
Year	Total Employment Population in the Public Sector		Proportion of Public Employees in Labour Force
	Number	Growth Rate	
2016	1,157,568	-2.14%	14.60%
2017	1,178,708	1.83%	14.40%
2018	1,158,474	-1.72%	14.50%
2019	1,216,549	5.00%	14.90%
2020	1,183,716	-2.7%	14.80%

Source: Annual Labour Force Survey (2015; 2016; 2017; 2018; 2019; 2020)

2.5 Development Hypotheses

Figure 2

Conceptual framework



Source: Author (2023)

H₁: Workplace Spirituality positively impacts over Post-Retirement Work Intentions

H₂: Retirement Self-Efficacy moderates the relationship between Workplace Spirituality and Post-Retirement Work Intentions

3. Methodology

3.1 Questionnaire and Measurements

Standardized and validated the scale in order to measure three predictors in the conceptual framework namely, Workplace Spirituality (independent variable), Retirement Self-Efficacy (moderating variable), Post-Retirement Work Intentions (researching variable). To scale workplace spirituality, the scale of Miliman et al. (2003) were adapted with 18 items under three dimensions; meaningful work (*My spirit is energized by work*), sense of community (*I feel part of the community*), and alignment of values (*my organization cares about all its employees*). Further, this scale is based on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree).

Retirement self-efficacy, which is the moderating variable of the conceptual framework was measured by Brief Retirement Self-Efficacy-11 scale (Valero & Topa, 2015) with 11 items under dimensions; finances (*I have enough money for leisure activities*), activities (*I preserve any current skills or knowledge that I want to maintain*), and health (*I obtain adequate rest and sleep*). Further, this scale is based on a five-point Likert scale ranging between 1 (*totally disagree*) and 5 (*totally agree*). The researching variable of the study, post-retirement work intentions was scaled with four items (Wohrmann et al., 2016). These items were, *I would like to engage in voluntary work after retirement*, *I would like to work for my current employer in retirement*, *I would like to work for another employer in retirement*, and *I would like to become self-employed in retirement*. Further, this scale is based on a five-point Likert scale ranging from 1 (*does not apply at all*) to 5 (*applies completely*).

In addition to the main scales, self-made items to capture socio-economic information of respondents were added to the questionnaire such as the level of employment, age category and employed industry, etc.

3.2 Procedure

A web-based questionnaire was designed and circulated to prior-selected individual respondents which were selected based on the convenience sampling technique, a probabilistic sampling method. Data were analyzed based on a sample of 145 respondents. The questionnaire was distributed to 396 senior public officers who are currently employed in Sri Lankan public organizations and only 154 filled out questionnaires were submitted at the Respondent Rate of 39%. Nine responses were excluded due to incompleteness and low reliability. Finally, only 145 responses remained for the analysis.

In order to achieve the purpose of this study, the term 'seniority' was defined based on the length of the service of a particular public-sector employee. According to the guidelines of Ministry of Public Administration, Home Affairs, Provincial Councils, and Local Government, it was relied on the seniority criteria of Sri Lanka Administrative Service which is effective for six all island services namely, (i) Sri Lanka Administrative Service, (ii) Sri Lanka Engineering Service, (iii) Sri Lanka Accountants' Service, (iv) Sri Lanka Planning Service, (v) Sri Lanka Scientific Service, and (vi) Sri Lanka Architectural Service. Hence, there are four seniority grades, grade I, II, III, and Special Grade. Only grade I and II all-island public service officers (falling under any of the so-called six all-island services) are considered as

senior public officers. Grade III and special grades were ignored from the sample. It is a commonly rooted norm in Sri Lankan society to consider only grade I and II employees as seniors.

The unit of analysis of the present study is an individual public officer with a permanent employment contract who is in service and above 45 years old as they are slightly heading to retirement. Already post-retired government employees were excluded as the present study researches about retirement intentions of not-retired people. Furthermore, this has been designed cross-sectionally mainly due to the time limitation. Data were collected only from survey questionnaire method.

4. Results and Discussion

4.1 The Reliability of the Self-administered Questionnaire

First, the reliability and the validity of the questionnaire were evaluated. The Cronbach Alpha value (alpha) stood at 0.993 of all 32 measuring items of the questionnaire. The acceptable values of alpha ranging from 0.70 to 0.95 is ideally adequate for a scientific study (Tavakol & Dennick, 2011). Thus, the alpha value of the measurement scale in the present study stood at excellent level. Also, the reliability of all three constructs in the conceptual framework of this study was tested. The Cronbach Alpha value of Workplace Spirituality (independent variable), Post-Retirement Work Intentions (dependent variable), and Retirement Self-Efficacy (moderating variable) respectively stood at 0.988, 0.939, and 0.975.

Further, The KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) value accounted for 0.771 which is commonly interpreted as a middling level making the sample statistically adequate (Kaiser, 1970). Thus, the questionnaire used for collecting data is reliable as well as valid for the purpose of the study. Also, the validity of all 32 items was tested, and the extraction value of all items ranged from 0.817 to 0.952. The highest extraction value was reported by the 16th item of the Workplace Spirituality scale which is 0.952 and the lowest by the 11th item of the Retirement Self-Efficacy scale which is 0.817. Moreover, all 32 items of 3 scales were classified under 1 component in the component matrix.

4.2 Demographics of the Sample

The sample of this study is basically female-driven. 69% of the respondents are females. The age groups of the sample vary from 45 to 65. The majority of the sample falls under the 51 – 55 age group with the value of 68%. The second largest age category is 56 – 60 with 41% of the respondents. 78% of respondents responded as they possess bachelor degrees and 66% declared that they possess at least one post-graduate qualification. 38% of employees are occupied in provincial councils and 19% are occupied in senior administrative positions in the ministries of Sri Lanka. Also, 68% of the respondents declared that they have more than 20 years of active service experience and all the respondents (100%) possess at least 5 years of work experience in the public sector. Finally, the sample does not represent any employee in public universities, Sri Lanka police, or any defense service.

4.3 Reliability and Validity of the Sample

There are 32 items in the questionnaire covering all 3 constructs in the conceptual framework. The Cronbach Alpha value of the sample stood at 0.993 and the KMO

value stood at 0.771. As Nunnally (1978) testified, the reliability of the sample should meet its minimum requirement which is 0.70 of Cronbach Alpha value (Peterson, 1994). On the other hand, as Kaiser and Rice (1974) interpreted, the validity of the present study is almost closer to the meritorious level (0.771). Therefore, it is certain that the sample taken for the present study is reliable and valid to meet its objectives.

4.4 Descriptive Statistics of the Core Variables

Data were collected for all three variables with five-Likert scale items. The mean value of Workplace Spirituality is 3.74 and 3.65 for Retirement Self-Efficacy. The mean of Post-Retirement Work Intentions is 3.68. The standard errors of means are 0.085, 0.08, and 0.085 respectively, of all 3 variables. Importantly, the standard deviation of Workplace Spirituality is 1.03 and 0.96 for retirement self-efficacy. The standard deviation of post-retirement work intention is 1.03. Refer to Table 2 for further details of descriptive statistics of these 3 variables.

Table 2

Descriptive Statistics of three core variables

Indicator	Workplace Spirituality	Retirement Self-Efficacy	Post-Retirement Work Intentions
Mean	3.744	3.645	3.678
Std. Error of Mean	.0855	.0799	.0853
Median	4.294	4.000	4.000
Mode	3.5	4.5	4.5
Std. Deviation	1.0298	.9625	1.0274
Variance	1.061	.926	1.055
Skewness	-.951	-.813	-.812
Std. Error of Skewness	.201	.201	.201
Kurtosis	-.170	-.736	-.327
Std. Error of Kurtosis	.400	.400	.400
Range	3.6	3.0	3.5
Minimum	1.4	1.7	1.5
Maximum	5.0	4.7	5.0
Sum	542.9	528.5	533.3

Source: Survey Data (2023)

4.5 Correlation and Regression Statistics of Core Variables

The Pearson Correlation was tested to measure the strength of the relationship between Workplace Spirituality and Post-Retirement Work Intentions which are, respectively, independent variable and dependent variable of this study. It was found that the correlation between these 2 variables is 0.954. Further, the level of significance (p value) is null (0.0). Moreover, the correlation between Workplace Spirituality and Retirement Self-Efficacy is 0.982. Also, the correlation between Retirement Self-Efficacy and Post-Retirement Work Intentions is 0.957. As per the interpretations of correlation coefficients, the relationship among all these variables reports very strong correlation (Schober et al., 2018). Further, the significance values

of all these relationships accounted null (0). The correlations are significant at the 0.01 level (2-tailed). Refer to Table 3 for further details of these correlations.

Table 3*Correlation matrix*

	Workplace Spirituality	Retirement Self-Efficacy	Post-Retirement Work Intentions
Workplace Spirituality	1	0.982***	0.954***
Retirement Self-Efficacy		1	0.957***
Post-Retirement Work Intentions			1

Note: ***, **, and * denote significance levels $p < 0.01$, $p < 0.05$ and $p < 0.1$, respectively.

Source: Survey Data (2023)

Also, the linear regression between Workplace Spirituality and Post-Retirement Work Intentions has also been run. Table 4 below illustrates the model summary of regression. The R square value accounted 0.910 and the adjusted R square value is 0.909 with the standard error of the estimate 0.309. According to the ANOVA table, the significance value is null (0) which can be interpreted as that the model is significant, and the null hypothesis can be rejected. The degree of freedom is 144 because only 1 predictor variable gets rejected. Refer to Table 4 for further details. The standard error of Unstandardized Coefficient of Workplace Spirituality stood at 0.250 and the Standardized Coefficient (Beta) value was 0.954 at the null (0) value of significance. Refer to Table 4 for further details.

Table 4*Model summary of regression*

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	0.954 ^a	0.910	0.909		0.309

a. Predictors: (Constant), Workplace Spirituality

Source: Survey Data (2023)

Table 5*ANOVA table (for independent and dependent variables)*

Model	Sum Squares	of df	Mean Square	F	Sig.
Regression	138.317	1	138.317	1446.583	0.000 ^b
Residual	13.673	143	0.096		
Total	151.990	144			

Dependent Variable: Post-Retirement Work Intentions

Independent variable: Workplace Spirituality

Source: Survey Data (2023)

Table 6
Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	B	Std. Error	Beta		
(Constant)	0.115	0.097		1.179	0.240
Workplace Spirituality	0.952	0.025	0.954	38.034	0.000

Dependent Variable: Post-Retirement Work Intentions

Note: ***, ** and * denote significance levels $p < 0.01$, $p < 0.05$ and $p < 0.1$, respectively.

Source: Survey Data (2023)

4.6 Analysis of the Moderating Variable: Retirement Self-Efficacy

It is predicted that retirement Self-Efficacy moderates the original relationship between Workplace Spirituality and Post-retirement Work intentions. As usual, the Pearson's correlation was tested between the moderating variable of retirement self-efficacy and the dependent variable of post-retirement work intentions. Correlation coefficient stands at 0.957 which can be considered as a very strong relationship between these two variables (Schober et al., 2018). Also, the R square and adjusted R square values are respectively, 0.917 and 0.916 at the standard error of the estimate of 0.298. Refer to Table 6 for further details. Further, the significance level of the moderator variable is null (0) as per the ANOVA table (refer to Table 8). Moreover, the Beta (B) value of the moderating variable, retirement self-efficacy is 1.022 with a standard error of 0.260. Refer to Tables 7, 8, and 9 for further details.

Table 7
Regression model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.957 ^a	0.917	0.916	0.298

a. Predictors: (Constant), Retirement Self-Efficacy

Source: Survey Data (2023)

Table 8
ANOVA table of the moderating variable

Model	Sum Squares	df	Mean Square	F	Sig.
Regression	139.332	1	139.332	1574.106	.000 ^b
Residual	12.658	143	0.089		
Total	151.990	144			

- a. Dependent Variable: Post-Retirement Work Intentions
 b. Predictors: (Constant), Retirement Self-Efficacy

Source: Survey Data (2023)

In order to further evaluate the moderating variable of this study, the Analysis of Covariance was also run on the SPSS. As per the table of Tests of Between-Subjects Effects, the significance of Retirement Self-Efficacy (moderating variable) is null (0.0) but the significance of Workplace Spirituality (independent variable) accounted 0.215. Further, the type III sum of squares of the corrected model is 144.341 with an error of 7.649. Refer to Table 10 for further details.

Table 9

Coefficient of the moderating variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-0.047	0.097		-0.484	0.629		
Retirement Self-Efficacy	1.022	0.026	0.957	39.675	0.000	1.000	1.000

a. Dependent Variable: Post-Retirement Work Intentions

Source: Survey Data (2023)

Table 10

Tests of between-subjects effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	144.341 ^a	13	11.103	190.167	0.000
Intercept	1.518	1	1.518	26.005	0.000
V_WPS	0.090	1	0.090	1.549	0.215
V_RSE	6.024	12	0.502	8.599	0.000
Error	7.649	131	0.058		
Total	2113.063	145			
Corrected Total	151.990	144			

a. R Squared = .950 (Adjusted R Squared = .945)

Source: Survey Data (2023)

When estimating the linear regression of both Workplace Spirituality (dependent variable) and Retirement Self-Efficacy (moderating variable), the R square stood at 0.922 where the adjusted R square was 0.921 with the standard error of estimate of 0.289. Refer to Table 10 for further details. The Beta (B) value of Retirement Self-

Efficacy is 0.621 while Workplace Spirituality's B value is 0.381. Refer to Table 12 for further reference.

Table 11

Regression Model Summary for IV and MV

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	0.960 ^a	0.922	0.921	0.289

a. Predictors: (Constant), Retirement Self-Efficacy, Workplace Spirituality

Source: Survey Data (2023)

Table 12

Coefficients of Dependent Variable and Moderating Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-0.014	0.095		-0.145	0.885		
Workplace Spirituality	0.381**	0.126	0.382	3.034	0.003	0.035	28.815
Retirement Self-Efficacy	0.621**	0.134	0.582	4.619	0.000	0.035	28.815

a. Dependent Variable: Post-Retirement Work Intentions

Note: ***, ** and * denote significance levels $p < 0.01$, $p < 0.05$ and $p < 0.1$, respectively.

Source: Survey Data (2023)

Hence, as per the statistical analysis, it can be justified that all three hypotheses were accepted based on their significance ($p \leq 0.05$). Hence, it is obvious that workplace spirituality positively affects post-retirement work intentions with the moderated effect from retirement self-efficacy.

5. Discussion

Initially, it was predicted that Retirement Self-Efficacy moderates this original relationship. It was statistically tested the moderating impact over Post-Retirement Work Intentions. Again, the significance (p value) of the moderator, Retirement Self-Efficacy was null (0.0), and based on that, it is convinced that the second hypothesis of the model is accepted. Also, the moderating impact was separately computed on

SPSS. The tolerance and VIF values are within the range in the coefficient model. Also, the adjusted R square value of both Workplace Spirituality and Retirement Self-Efficacy is 0.921. The adjusted R square value of the independent variable alone was 0.909 and the same value of both dependent and moderating variables together is higher than 0.909 which is 0.921. On the other hand, the Beta value of the moderator is 0.621 when the dependent variable's B value is 0.381. By considering all these facts, it can be concluded that Retirement Self-Efficacy moderates the relationship between Workplace Spirituality and Post-Retirement Work Intentions and has a significant moderating impact on that.

This study was carried out with the purpose of ascertaining the impact of Workplace Spirituality on Post-Retirement Work Intentions and determining the moderating impact of Retirement Self-Efficacy on Post-Retirement Work Intentions. The inferential statistics that were run on SPSS testify that Workplace Spirituality significantly impacts Post-Retirement Work Intentions. The relationship between these two constructs was testified with Pearson's Correlation Coefficient and the value was 0.954 which is considered as a very strong positive relationship. Accordingly, the linear regression model was run for these two constructs and the adjusted R square stood at 0.909 which means the spirituality dimension at work impacts approximately 91% for individual workers to determine their post-retirement work decisions. The *p* value (significance) was null (0.0) allowing to reject the null hypothesis which alternatively allowed to accept the first hypothesis. Thus, it can be ensured that Workplace Spirituality positively impacts Post-Retirement Work Intentions.

In the present study, the association between Workplace Spirituality and Post-Retirement Work Intentions is reported as very strong (correlation is 0.954). Meanwhile, Earl (2010) proved that workplace spirituality is of utmost importance to recognize the person in a 360-degree view to comfort the transition of employees from work to retirement. Similarly, Marston (2010) proved with a qualitative study that spirituality at work can significantly determine the meaning of life of post-retirement baby boomers. Moreover, Elkady (2019) found that spiritual well-being and meaning in life highly correlate with the self-transcendence of retirees and post-retirement employees. Moreover, Amani and Fussy (2022) testified that employees who are less or do not care about the spiritual dimensions of their lives are likely to make some severe mistakes in their post-retirement employment planning. However, there is a significant lacuna of research findings in Sri Lankan and other Asian contexts to prove this relationship empirically.

Again, there are very few findings left in contemporary academia explaining how retirement self-efficacy is associated with post-retirement work intentions. However, Topa and Valero (2017) found that retirement self-efficacy is positively associated with the satisfaction of post-retired workers and negatively associated with depression of them. The same finding was confirmed by Lee (2022) in the Korean context. Meanwhile, Topa and Pra (2018) confirmed that the self-efficacy of older workers significantly impacts the quality of their retirement adjustment quality. Also, the clarity of goals in the post-retirement employment of senior employees can be intensified by retirement self-efficacy (Hoffmann & Plotkina, 2021). Finally, Wahyuni (2023) has found that retirement self-efficacy can even ignite

entrepreneurial intentions in post-retirement life and reduce anxiety, too. Hence, it can be validated that Retirement Self-Efficacy is a significant antecedent for determining post-retirement work intentions of aged employees.

6. Implications

The purpose of carrying out such a study is to investigate the impact of Workplace Spirituality on Post-Retirement Work Intention by finding the role of Retirement Self-Efficacy in this phenomenon. Importantly, this study establishes the positive association between Workplace Spirituality and Post-Retirement Work Intentions with a very high-level correlation and regression values. However, this kind of a finding is still strange in Sri Lankan and South Asian contexts as many older workers are forced to re-employ themselves mainly due to the financial constraints (Perera & Weerakkody, 2018). However, that may be forced employment but this study vitally demonstrates how workers naturally push themselves for post-retirement employment after their formal tenure due to meaningfulness of work, sense of community, and alignment of values. These are the main dimensions of workplace spirituality.

Moreover, workplace spirituality cannot determine an individual's post-retirement work intention, but the employee must have the self-efficacy to re-employ him/herself after the formal retirement (Hoffmann & Plotkina, 2021). Even though the organization (employer) facilitates to construction of spiritual dimensions at work, individuals are unable to set their minds to re-employ after retirement without retirement self-efficacy. Therefore, this study emphasizes the mid and late-career employees who are looking for post-retirement opportunities after the formal tenure to enhance their retirement self-efficacy.

In addition, this study provides a couple of insights to employers (organizations) for optimizing the effectiveness of post-retired employees. Post-retirement employment is inevitable (Hawes, 2017) and this has been becoming increasingly normal in recent years (Vrs & Pbha, 2023). Not all individuals are looking for post-retirement employment just for money but for meaningfulness, a sense of community, and a sense of values. Therefore, jobs should be crafted by adding meaningful duties and responsibilities (Berg et al., 2013). Also, research has shown that introducing flex-working for post-retired employees is highly impactful (Campaner et al., 2022; Johnson, 2011; Siegenthaler & Brenner, 2001).

Furthermore, for employers, the values of the organization should be clearly infiltrated to the employees enabling them to compromise those organizational values with their own values (Jelenko, 2020). Also, a sense of community is a dimension of workplace spirituality so that organizations can think of special ergonomics when designing office spaces. The ergonomics design should empower team spirit (Segkouli et al., 2021) and connectedness (Allen & Wang, 2023) within office spaces leading to accumulating a sense of community in the long run.

7. Conclusion

The purpose of this study was to examine the impact of workplace spirituality on post-retirement work intentions of present public sector employees in Sri Lanka by concerning the moderating impact of post-retirement self-efficacy of them. Hence, it was ascertained that the impact of workplace spirituality on post-retirement work

intentions is obvious with a strong positive relationship by impacting almost 91% over those intentions. On the other hand, the moderating impact of retirement self-efficacy is also obvious on this relationship between workplace spirituality and post-retirement self-efficacy. Both these hypotheses are accepted based on their null significance values.

Therefore, based on the findings of this study, it can be assured that employees in the public sector in Sri Lanka significantly consider the workplace spirituality dimensions such as the meaningfulness of the work, sense of community, and value alignment when they decide whether they reemploy themselves after their formal retirement or not. Further, retirement self-efficacy in terms of possessing adequate funds, engaging in work-related social activities, and strengthening physical and emotional health can stimulate the post-retirement work intentions of mid and late-career employees.

8. Future Directions

Even though the findings are solid in this study, there are several limitations of it, to be addressed by future research. There is a contextual gap to be addressed by future studies because the phenomenon of post-retirement employment is not only viable for the employees in public sector but for the other sectorial employees too. Therefore, it is better to launch studies to ascertain the relationship among these constructs on post-retirement self-efficacy in private and non-governmental sector.

This study only focuses on post-retirement work intentions. But importantly, it is recommended to explore the impact of workplace spirituality on post-retirement planning as well, given the intention leads to planning where the employees make an actual decision to occupy themselves after their retirement. Finally, a number of studies suggest that demographic factors such as age, gender, and educational level significantly stimulate post-retirement work intentions so it is better to consider these demographic factors as moderators in this conceptual model for further studies.

Conflict of Interest

It is confirmed that the present study was executed by the author himself with a genuine intention of exploring the unknown for the sake of research in the areas of post-retirement employment and workplace spirituality by respecting to all academic and publication ethics. Further, it has no significant conflict of interest as there is no any third party or a collaborating researcher involved to this study in terms of funding or any other means. The secondary data and the past research findings which the author used for this study were extracted from openly published sources where no any third-party permission was requested.

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'The Barricaded': An Exploration of the Hostilities against Workplace Romances in Information Technology Firms in Jaffna

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Abstract

Workplace romances are inevitable social sexual behaviors that occur in work and several organizations have been maintaining hostilities against workplace romances. Such hostilities may be highly influenced by conservative societal cultures as organizations exist in societies. Accordingly, this qualitative-exploratory study (under case study strategy) has been undertaken in two contradictory-coexisting cultural spaces; geographically in Jaffna, which is known for conservative societal culture, and contextually in IT firms, which are known for modern organizational culture in order to explore the contextual hostilities that are existing. Purposive sampling was used and accordingly, two medium-scale IT firms (Startups with 06 years of survival) were selected and 06 employees (a mix of male and female employees) from each firm were interviewed (semi-structured) each for one hour. Thematic analysis was performed and two broad themes hostilities on workplace romances by Human Resource Management and hostilities on Workplace romances by co-workers were identified. Under the above two themes the study found that Human Resource Management has been maintaining a hostile mindset as a mean of controlling and regulating employees, and to comply and align with organizational and broad societal cultures. Further this study also found that co-workers were also showing hostilities through trying to safeguard societal culture, trying to be strict disciplinarian and through patriarchal ideologies. This study suggests practical implications such that withdrawal of oppressive and discriminative hostilities against workplace romances and to openly engage in explorations as the initial step. This study has also recommended more analysis on hostilities from feminist, sexual minority and Marxist perspectives in order to create a healthy-inclusive and equality concentrated work environment.

Keywords: Hostilities, Workplace Romance, IT Firms, Human Resource Management, Co-Workers

1. Introduction

Workplaces are full of human relations and interactions and even from a constructionist view, it is such relations, which ultimately construct the workplaces. Humans are both social as well as sexual beings and hence their social-sexual behaviors are normal in the workplace. Aquino et al. (2014, p.10) defined social-sexual behaviors as “workplace interactions occurring between two or more organizational members (including clients and customers) that are construed by the parties involved as having sexual connotations.” Such social-sexual behaviors cannot be eliminated as they are natural and are contextual as it is highly influenced by cultural norms, personal preferences and societal expectations. Among such behaviors, romances that take place within workplaces get a significant position.

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Workplace romance may have emerged with the shift from agrarian and craft-based economies to industrialized societies, in which workplace became a crucial place like home in human lives. From the early days, workplace romance has been a crucial debate as there were two confronting views of whether accepting or being hostile towards it.

1.1 Workplace Romances

Quinn (1977) was the pioneer in commencing the initial academic exploration of romantic relationships in workplaces documenting the first data, where he has identified different factors influencing the formation of workplace romance, the outcome of workplace romance, and several management actions concerning it. Accordingly, workplace romances can be summarised as mutual desires to be with the other person and feelings which may lead to non-sexual behaviors like sharing of personal information, complimenting each other's physical appearance, mutual caring and respect, and sexual behavior such as sharing dirty talks jokes, touching, kissing & hugging, and sexual intercourse (Aguinis et al., 1996; Aquino et al., 2014). Workplace romance need not necessarily possess sexual intimacy, even psychological intimacy itself is enough. They do take place among various organizational members and when it takes place among the same level of members, it is known as 'horizontal workplace romance' and when it takes place among the varying level of members, it is referred to as 'vertical workplace romance' (Foley & Powell, 1998). Vertical workplace romance has received mixed arguments throughout the literature, whereas horizontal romance has been supported by many. Previous researches like Biggs et al. (2012) and Riach and Wilson (2007) have well evidenced that horizontal workplace romance can increase productivity, improve work climate & culture and also reaps some other benefits like excitement, enhance communication, stimulate creativity and lead to higher job satisfaction. On the other hand, most of the earlier studies have related workplace romances with organized relationships. Aquino et al. (2014) highlight that social sexual behaviors (casual behaviors) like flirting and complimenting are also a part of workplace romance while modern studies like Sukirthan (2022b) explored the romances in information technology (IT) firms of Jaffna and found micro romances, which include romances in sharing, caring, trolling, addressing, entertainment and knowledge that take place outside any organized relationships. Accordingly, this study specifically focuses on romance with reference to the above two aspects; the combination of micro romances and horizontal romances.

1.2 Societal Culture of Jaffna

Throughout the world, several societal and organizational cultures have shown diverse reactions to workplace romances varying from supportive, selective, and hostile. In Sri Lankan culture even though studies are lacking specifically in this aspect, it can be iterated from modern social studies like Ellawala (2018) and Ruwanpura (2011) that sexuality and romances are yet considered taboo preventing discussions. Jaffna, which is a prominent city in North Sri Lanka, possesses a long traditional conservative social and religious culture and sexuality continues to be forbidden by culture in public and workplaces (Pfaffenberger, 1981; Sujitha et al., 2014). Moreover, the culture of Jaffna is hugely affected by caste and regional discrimination favouring the powerful and conservative Vellalar caste of Jaffna; also concern for female chastity and ritual diligence are highly valued and societal

unwritten rules make sure the purity of caste can be maintained by controlling the inter-caste relationships (Kuganathan, 2014; Pfaffenberger, 1981). Such a traditional mindset makes several topics like sexuality, romance, and relationships are Taboo and undiscussable. Ultimately such societal culture has led to restriction or hostile mindset towards relationships (even platonic relationships) and romances in public and they have influenced the workplaces as well.

1.3 Information Technology Industry

Information technology is a budding industry in Sri Lanka, which includes business process outsourcing (BPO), knowledge process outsourcing, software development, and IT services. Over the past years, the IT industry in Sri Lanka has rapidly developed (Central Bank of Sri Lanka [CBSL], 2014; Sumanarathna & Samarakoon, 2019). Up to now around 300 firms are operating and providing more than 200,000 jobs (Business Today, 2013). Especially after Covid-19 pandemic, with the introduction of remote working, the number of IT firms has drastically increased in Sri Lanka. In the IT industry, the work-life balance and the flexible working environment has been evidenced as well (Sumanarathna & Samarakoon, 2019). Also the human resource accumulation is high and since the industry is very modern with technological usage, the romance within the firms may not only be physical but also virtual (Paul & Townsend, 1998). Here, workplace romance has been transformed by technology such as computer networks and the internet, which allow the exchange of personal information. On the other hand, the IT industry of Jaffna is a novel industry, where even the pioneers' firms date back to 06 to 07 years, despite there exists considerably good number of firms in the peninsula at present. IT firms in Jaffna are among the very few places, where young males and females work together, which suggests a high prevalence of workplace romances.

1.4 Research Problem

Societal culture has a strong influence on the organizational cultures and if organizational culture dictates which employee behaviors are deemed appropriate (including the behavior of workplace romance), then it is also indirectly expected by the societal culture. It is quite obvious that IT firms, which emerged from western and European cultures are known for their flexible work and organizational culture, whereas the societal culture of Jaffna is strict, orthodox, and conservative as elaborated above. Such societal culture may impact and influence the organizational culture and by this, researcher hypothesized there might be possibilities for adulteration of flexible work and organizational culture of IT firms. Among such reduction of flexibility, hostilities against workplaces can also be found. Accordingly, the researcher became curious and mounted this study in the above unique scenario to explore the hostilities against romances in Jaffna's contextual IT workplaces.

1.5 Research Objectives

The objectives of this exploratory research are twofold; first to explore the contextual hostilities against workplace romances that do exist in contextual settings and second to categorize such identified hostilities for proper understanding. This study is significant as identifying and classifying the hostilities against workplace romances would update the exploration leading to contemporary analysis of workplace romances in the field of organizational behavior. This study also provides an immense contribution to properly managing the work and organizational life of human

resources (HR) by analyzing the unrealistic hostilities that may sometimes impact employee psychology and autonomy.

2. Literature Review

After the Quinn's (1977) initial exploration of romantic relationships, the several studies like Aguinis et al. (1996) created wholesome models which have addressed deeply the factors that influence the formation and impact of organizational romance. Gautier (2007) has expressed, theories of attraction have a key role in explaining the formation and reason of romance. Moreover, he has also emphasized that attraction is both a biological and a psychological phenomenon and mostly it takes place unconsciously and inevitably. Early studies were trying to explain workplace romances using models and theories, whereas the contemporary studies are into exploring the diverse nature of workplace romance. Especially studies like Aquino et al. (2014), which have diverted from the pioneering view of reductionist view on the workplace romance and presented that romances do exist besides sexual relationships, pointing out social-sexual behaviors like complimenting others and flirting as a part of romance. Following the same view, in the study of Sukirthan (2022b), new perspectives of horizontal workplace romances in IT firms were identified contextually in Jaffna, which included Micro romances and Macro Romances. Within the realm of micro romances, romances were found in casual activities (not as a part of organized relationship) like sharing, trolling, dressing, addressing and entertainments. Under Macro romances, the study found the existence of non-sexual romances under organized relationships like consensual love relationships, unrequited love relationships, and bestie relationships.

There is a lacuna for the studies directly exploring the hostilities against workplace romances. Yet certain studies have addressed about hostilities in a mild way; like Gautier (2007) has presented the hostility in workplaces pinpointing still the common perception of workplace romances appears to be mainly negative, to the extent that a minority of work organizations have banned them altogether [some legally as well]. As per previous studies two causes for such hostile mindset were identified, one is the fear of human resource management (HRM), where Society for Human Resource Management, through their poll results, has pointed that "fear of sexual harassment claims" is the major reason for hostile mindset (2006, p.3). Here it also indirectly addresses that currently, the majority of HR and administration lack the knowledge to distinguish between the workplace romances and sexual harassment. But even two decades earlier, Civil (1998) clarified the distinction that sexual harassment must be eliminated and can be as well, but romance is natural and can not be eradicated from the workplaces. This underscores that workplace romances are bound to occur wherever there is a workforce comprising humans, who are psychosexual beings. It was also clarified with an example scenario, management may think that they may have eliminated romances, but it will be taking place behind the screen and, some romances cannot be even noticed, as they just exist only in the thoughts as later highlighted by Gomes et al. (2006).

The second reason for such hostile mindset is the influence from societal and organisational cultures. Mainiero (1989) relates the hostility against workplace romances mindset with the societal taboos and defines society's basic taboos as the deeply and intensely felt prohibitions against 'unthinkable' behaviour" and concludes

workplace romance is still very much one of these taboos. Even in the study of Sukirthan (2022b), it was evidenced that new perspectives of romances are highly influenced by the contextual Jaffna's societal culture highlighting the role of societal cultures. Gautier (2007, p.3) has also reiterated that 'organizational culture, attitudes, and beliefs also play an inherent role in the way companies conceptualize, tolerate, and manage workplace romance activity'. Not all organizational cultures are against the workplace romance and relationships of employees, it is the alignment of that culture whether it is traditional or modern, that determines everything (Pietropinto, 1986). Hence, the previous studies conclude that liberal organizational culture supports workplace romance, meanwhile, conservative organizational culture acts hostile. In other words, workplaces that exist in conservative societal cultures will be hostile, whereas workplaces in modern societal cultures will be supportive of workplace romances.

On the other hand, feminist perspectives on such hostilities have been recorded, where Comanne (2010) has reported that patriarchy and toxic masculinity together aggravates women highly in the workplace. Specifically to the context of workplace romance, earlier itself, Quinn (1977) identified that women in romantic relationships are more at risk of negative performance evaluations than men in romantic relationships and are more likely to be terminated by their companies. In addition, several researches have pointed out the sexism prevailing in the workplace, where Pringle (1989) which studied about sexuality and power at work, has exposed that the organizational position of women has been traditionally observed through a sexual lens revealing the biased view. The activities and actions of women are very well observed and the patriarchy tries to defame her or character assassinate her stating that she is sexually mischievous. Hence such studies have suggested that existing hostilities are more discriminative and harsher towards women than men. Thus, altogether existing studies presents that workplace romances are a part of organizational life, which should be explored rather than explained in first, but hostile mindset have been existing in practice for broadly two reasons and even such hostilities are destructive and discriminative as well, which might cause serious repercussions not only in organizational functioning but also in psychologies of employees as stated by Schultz (2003, p. 2069) that critically analyzed the hostility mindset on workplace sexuality.

3. Methodology

The study was geographically located in Jaffna, a culturally conservative district in the north of Sri Lanka and contextually located in two medium-scale IT firms to identify the hostilities against the workplace romances prevailing in the modern and flexible IT firms, that function in conservative societal culture. The key study areas viz attitude of organizational members, organizational cultures, socio-religious beliefs, and cultural assumptions were majorly subjective, hence the study was undertaken in a qualitative interpretivist paradigm with an ontological stance of relativism, where the participants had multiple realities, which enabled to incorporate diverse viewpoints relating to hostilities. Under epistemological stance of subjectivism, the participants had their interpretation of what are the hostilities against workplace romances, which also supported to explore the contextual hostilities from own experiences of participants avoiding a reductionist or generalizing perspectives. Researcher's world views like atheistic existentialism together with politically left libertarianism emphasizing human logic, reason, and liberty might also impact the

interpretation of data from participants towards more freedom oriented, adding scientific reasoning to humans' behaviors.

Since the research dealt with the phenomena of workplace romances (unique for each context of work environment) and hostilities against workplace romances (unique for each management and organizational and social cultures), which are contextually fitted in IT firms, there were clear boundaries to consider this as a "case". Furthermore, the research area is inherently complex, possess several underlying nuances and causes requiring an in-depth understanding. Altogether has encouraged towards case study approach of Stake (1995). The study has been an intrinsic case study as it involves a single issue in the workplace which required to establish trust and rapport with participants; and an exploratory study as it aims to explore the contextual hostilities against workplace romance. In order to have an in-depth and holistic understanding, there were multiple units of analysis, which are cases (the broad case of hostilities against workplace romance), interactions (between organizational members) and practices (within the organizational culture or system). The study was also conducted in a non-contrived setting, as it gave more relativity and comfort to the participants to recall and narrate about the hostilities that prevailed in their respective workplaces.

The population or selected industry was the IT industry, although a new emerging industry in Jaffna, only possesses a few numbers of small or medium-scale firms. Also, the firms were unable to demarcate accurately from other firms due to diverse types of IT services like software development, IT services, consultancies, and outsourcing. Thus, it is not a finite population, but an infinite population because the number is also not exactly known. Purposive sampling was used for the study. The research process involved initially identifying potential IT firms in Jaffna through personal contacts and online platforms. Accordingly, six organizations were shortlisted based on size (too small firms were excluded) and willingness to cooperate for research on controversial topic like workplace romance. Similarly, three organizations declined participation right away pointing the topic of the research addressing it as culturally inappropriate, while two needed more time to decide. AviraCo agreed, while the other two ultimately declined. During a visit to AviraCo, an employee recommended CureitCo as a potential research candidate. Finally, two medium-scale IT firms viz AviraCo and CureitCo (both are pseudo names) were selected. Both the firms are software development firms engaged in development and maintenance of customized software for hotels, hospitals and construction projects for almost 06 years and are among the pioneers of IT industry in Jaffna district. As the research has to be conducted in the natural setting of the organization, a field visit was planned. The field visit was divided and carried out in two phases. The first phase involved an initial visit to the firms on 08th March 2021 for AviraCo and for CureitCo which took place on 12th March 2021 (on the date given by firms) to discuss with the directors and managers and to have a meeting with employees clarifying them about the research nature, interview structure, and some ethical concerns. Further, phase 1 helped the researcher to study the environment, organizational culture, and organizational climate of the selected companies. After phase 1, interview template was self-prepared by the researcher, which included structured questions regarding demographics and basic details; semi structured questions regarding the topic of the study. Semi structured interview was chosen as it

helped to infer and excavate in-depth understanding of the contextual hostilities. The interview template encompassed various question types, including inquiries about participants' personal experiences, disturbing events, observations, and responses to hypothetical scenarios. To ensure a comprehensive exploration of hostilities, the questions were organized into three overarching paradigms: hostilities from people, hostilities from practices, and hostilities from other aspects.

Finally, the second phase of the field visit was carried out for a total of consecutive five days, as per the request of both IT firms concerning the work schedules and COVID-19 pandemic regulations (15th March 2021 to 17th March 2021 for AviraCo and 22nd March 2021 to 23rd March 2021 for CureitCo) 06 employees from each firm were selected based on two criteria (operational level employees, willing to participate in the research) meanwhile ensuring the proportion of both males and females. The selected employees were interviewed each for one hour. Out of 12 employees, 07 were male (03 were single) and 05 were female (04 were single) and all were aged between 26 to 36 and were self-reported heterosexual persons. They were all operational-level employees to add validity and reliability to the romance that takes place horizontally. They held job positions like user experience (UX) designer, user interface (UI) designer, graphic designer, assistant software engineer, and marketing personnel. Table 1 shows the details of the participants, where the gender was relevant for identifying the discrimination and sexism that female employees faced; sexual orientation was crucial to ensure contextual people of the data and their status and age were also significant to derive their relationships within other members and generational differences respectively.

Table 1
Demographic details of the participants

Name (Pseudonym)	Gender	Firm (Pseudonym)	Age	Status	Sexual Orientation	Job Position
Arputham	Male	AviraCo	29	In a relationship outside the firm	Heterosexual	Assistant Software Engineer
Leela	Female	AviraCo	27	Single	Heterosexual	Marketing team
Vembu	Female	AviraCo	26	Single	Heterosexual	Graphic designer
Berlin	Male	AviraCo	27	Single	Heterosexual	UX Designer
Shilpa	Female	AviraCo	28	Single	Heterosexual	UI Designer
Rajan	Male	AviraCo	32	Married	Heterosexual	DevOps
Simon	Male	CureitCo	28	Single	Heterosexual	Marketing team
Vikram	Male	CureitCo	31	In a relationship outside the firm	Heterosexual	Assistant Quality Assurance Engineer
Priya	Female	CureitCo	27	Single	Heterosexual	UI/UX Designer
Vedha	Male	CureitCo	29	Unrequited lover	Heterosexual	DevOps
Chandra	Female	CureitCo	28	Engaged	Heterosexual	Graphic designer
Guna	Male	CureitCo	36	Married	Heterosexual	Associate Software Engineer

All interviews were conducted in Tamil Language, which is the native language of both the participants and the researcher, to ensure the richness of the data and to avoid

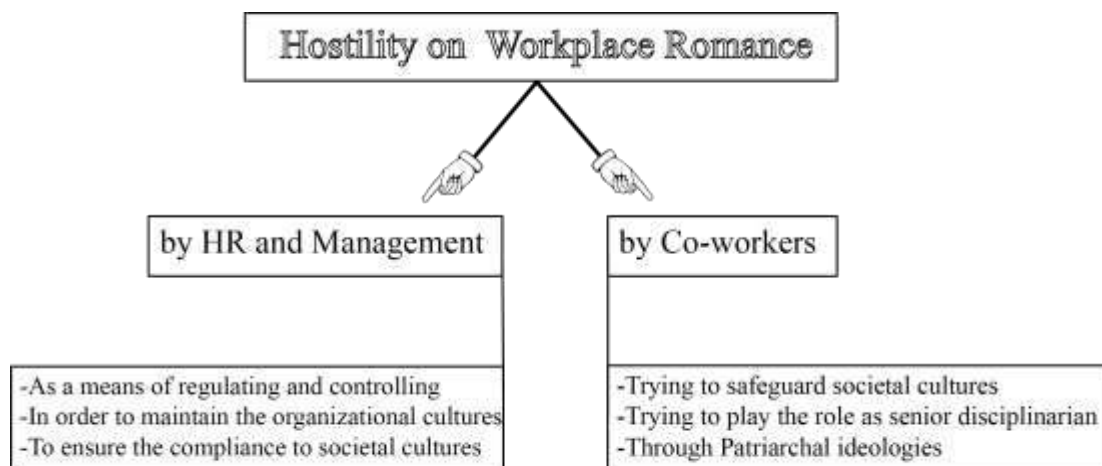
semantic noises. Interviews with managers in phase 1 and employees in phase 2 were digitally recorded, in addition researcher used field note to report the observations. Data consisted of experiences, narratives, and opinions of the employees as well as non-participant observation of the researcher. Recordings of interviews were transcribed, then translated into English. Thematic analysis was conducted where, data were manually coded into 53 codes, where open coding was followed for very promising data, and in other scenarios, selective coding was followed. Later two broad themes, viz hostilities through HR and management and hostilities through co-workers were identified. Three sub-themes for each broad theme were also included to make the data analysis and presentation more precise and clearer. With the theoretical support of Hayes et al. (2010) inductive reasoning was used in the analysis of statements, where opinions of participants relating to contextual hostilities were accumulated and a general statement was derived accordingly.

4. Findings and Discussion

The findings of the study have been divided into two as per the research objective of categorizing hostilities. Accordingly, hostility in the workplace arises from hostility by HRM and hostility by co-workers. Figure 1 shows the classification of such explored and identified hostilities against workplace romances.

Figure 1

Summary of the Categorization of Hostility on Workplace Romance



4.1 Hostility on Workplace Romance by Human Resource Management

HRM has its way of being hostile to workplace romances, where three sub-themes were identified. First HRM acts hostile through its usual duty of regulating and controlling the human resource towards the organizational performance. Secondly, HRM takes the role of protecting and implementing the organizational culture where HRM acts hostile towards workplace romance pointing out that such activities are a hindrance and damage to the organizational culture. Finally, the entire organizational management ensures its role as the protector of the societal culture and undertakes several hostile stances and measures against workplace romances. The participants in the interviews presented their opinions based on their experiences with past HR managers, which can be less problematic for them. Meanwhile, some of the

participants indirectly pointed out their experiences with present HR Managers as well.

As a Means of Regulating and Controlling

Through the observation in both firms, it was visible that the workplace had CCTV cameras for each group and employees from one firm said that there was a sound recorder previously and he stated, “*a call will come from the previous HR manager if we talk unwantedly out of work.*” Another employee stated that “*couples used the vehicle park area for their privacy talks and later CCTV was fixed there as well.*” These kinds of actions from HR department are justified by stating that it is the duty of HR manager to regulate and control human behavior. Hence, employees cannot question such actions from the management. Further many employees have stated that they used to address coworkers by using cute short names and nicknames, but whenever HR manager is nearby, they avoid such usage. This shows that the HR managers have created a fear on the mind of employees and employees have been trained and accustomed to the expected behaviors of the HR management. This also indirectly points out that noncompliance to the expected behavior may have ended in some negative consequences which can be punishment or any other withdrawal of benefits or maybe hours of advice. Some employees also shared that HR managers will maintain close relationships with employees and through such relationships, information about relationships of coworkers will be strategically collected and will be used against them. Hence it is clear that several strategic actions are also undertaken to maintain a hostile mindset against workplace romances reiterating Schultz (2003) that HR managers try to maintain sanitized workplaces through regulations.

Employees from both firms have insisted on freedom and pointed out that hostility in workplace romance and relationships are a threat to their freedom. An employee shared her previous experience in another IT firm,

“I have also worked in a tough ruling HR and I have cried a lot each time HR comes and advised me in my relationships, my cousin in Canada says that in Canada, workplaces are more flexible, and working would not be irritating.”

This shows how employees value their freedom and how it impacts the mental strength of employees. These findings also confirm with the writings of the Society for Human Resource Management (2006), which says most of the HR professionals lack training on how to manage workplace romance and emphasizes the recommendations stated in Ariani et al. (2011) that “HR leaders should think more broadly and strategically about managing workplace romance.”

To Maintain the Organizational Culture

Similar to societal cultures, organizational cultures can also be conservative or liberal, as organizational cultures usually reflect the societal culture, where the workplace exists, or it may be the societal culture of the owners or founders. Mainiero (1989) has stressed that organizational conservative cultures are more obsessed with traditional beliefs regarding the roles and sexuality of women and less flexible in norms regarding employee behavior, whereas liberal cultures are more supportive and friendlier towards sexuality and workplace romance. Accordingly, the IT firms are

known for their liberal cultures worldwide, especially in Western and European contexts, but when it comes to Jaffna these two firms fall into conservative organizational cultures.

Management has always ensured that the organizational culture is followed, practiced, and transferred to the next generation of workers. Most employees have pointed out that HR Management even though by name they are expected to work for the concern of human resource/employees, in reality, they tend to modify the employees to suit the organizational cultures. But it is the freedom of the organization to determine their own organizational culture and practice it. Whatsoever employees stated several rules and regulations based on the organizational culture and practice are very inhumane and question the autonomy and common sense. Employees have shown their grievance that such rules destroy their morale and damage their self-respect, especially in relationships supporting the findings of Stafford (2013) and Karl et al. (2005) that flexible and playful organizational cultures increase the morale and others do not.

When we dissect the reasons why employees are forced to comply with expected behaviors, it is generally the HRM where they think that the image and identity of the company lie in the behavior of the employees especially in their relationships and romance. This logic has been questioned by some employees, who pointed out that employees are also humans and they are not slaves of organizational cultures and they can have their identity as well even in workplaces. On the other hand, some employees were softly addressing that organizational cultures should include human nature and should be evolving from time to time rather than forcing the employees to fit into the old traditional organizational cultures. Mainiero (1989) and Schultz (2003) has also advocated the same that the organizational culture should concern basic human needs and be more flexible.

To Ensure Compliance with Societal Culture

Management has been too conscious about the conservative societal culture of Jaffna, where gender attractions and casual romances have been termed as dirty and taboo. Hence in the workplaces also such distances between male and female genders are much expected. Young employees pinpointed that if they speak with another gender by touching, then it has been seen as a big issue by the older staff and management. One employee shared his opinion relating to the Jaffna's less exposure to other genders,

“In schools and tuitions also, Jaffna culture separates male and female and avoids inter-gender communications and understandings. Several workplaces in Jaffna are still another tuition class, but these IT workplaces are better.”

Hence it is quite clear that the workplaces are another institution that follows social norms and unwritten practices. Whatsoever as pointed out by that employee and others, IT firms are more progressive than other firms in accepting inter-gender communications, but still, they are also hostile against another level, which is workplace casual romances and relationships. From another perspective, we can see that IT firms are revolutionary, but yet not on a huge scale.

It was also indirectly derivable from the study that Jaffna's caste concern has been the underlying reason for many of the hostilities regarding human relationships. Jaffna's society has been interwoven with caste-based graded inequality. Workplaces in Jaffna try not to oppose the societal rules; hence it makes sure that they always work in compliance with society's caste underpinnings. For example, to maintain caste purity, inter-caste relationships must be avoided, but if organizations openly follow such a rule stating that 'inter caste relationship and romances are prohibited', then the caste-based injustice will be obvious to all and in modern society it will be condemned highly. Hence workplaces use a strategic way to entirely prevent all workplace romances, by which inter-caste relationships can also be avoided and organizations can ensure the compliance to societal culture. Moreover, an employee has opened up about an incident relating to caste discrimination, "*once the previous HR manager has made a relationship to broke up by counseling that girl with some false allegation on that boy, because that particular boy belongs to oppressed caste.*" All these findings in relation to caste further elaborates the findings of Kuganathan (2014) that caste plays its game not only in society, but also in workplaces as well. Also, it was well evidenced that if any workplace romances or relationships were found, then workers were reallocated to jobs, ensuring the particular parties will never work together. Once the employees planned for a bike ride, but the HR management interfered in that plan and offered an option to hire a van, as bike rides as couples will not be preferred by the society. Employees have opened up that HR department has openly stated the above reason as well. Hence it is quite obvious that the workplaces and their management make sure that their activities are socially abiding.

4.2 Hostilities on Workplace Romance by Co-Workers

On the other hand, co-workers also exert hostilities against workplace romances through personal and structural means. Accordingly, three sub-themes were identified, where the first theme points out that co-workers also perform their duty to protect the societal culture and as a part of protecting Jaffna's conservative culture, coworkers are hostile against workplace romances. Secondly, some coworkers have been identified with a personal attitude, where they play the role of strict disciplinarian in the workplace and they advise and control the behavior of junior staff. Finally, coworkers either male or female do their duties as advised by the patriarchal structure of society curtailing women's rights to a high degree.

Trying to Safeguard Societal Cultures

Co-workers who are mostly older people, nearing the age of 30 or above have been more hostile against workplace romances as they believe that younger generations are mischievous and such behaviors of them might damage their holy societal culture. Such older employees showed their anger and frustration even during the interviews when discussing workplace romance. Some co-workers do support the caste system, where one such employee indirectly stated supporting the cultural conservatism that "*if we allow such limitless freedom for relationships, then our communal pride and dignity will be spoiled.*" And most of the employees have mentioned that when their co-worker is also throwing hostility by caring for society and not caring about the individual psychology it hurts them a lot and they have felt desperate. One employee has shared her psychological concern when sharing about the behaviors of co-workers,

“Sometimes we feel guilty for doing nothing wrong and sometimes we feel irritated. We are working with these workers together, we share and care a lot, but ultimately, they also don’t understand basic humanity and support the old societal norms”

It is obvious from these strong emotional statements, that hostility toward workplace romance from the co-worker has made a serious impact on the psychology of workers. All this emotional suffering is because some co-workers prioritize the societal culture’s well-being over the individual persons' well-being and act against workplace romances and relationships. When such desperate feelings arise, it might cause distancing with co-workers and spoils the collectivist and individual work performances. These findings further support Schultz's (2003) ideas, demonstrating that the responsibility to uphold societal norms extends beyond just the ruling class or management; it also involves active participation from fellow co-workers.

Trying to Play the Role of Senior Disciplinarian

Employees from both firms have stated that senior employees will also be advised about the expected behaviors. Such senior employees have pointed out that younger generations are unruly and are not disciplined. Hence the older staff feel that they must change the behaviors of such younger generations through advice. One such senior employee stated their relation to discipline at workplace that,

“Workplaces are like temples; can we accept romances in temples? No. Certain things cannot be accepted in certain places. People should act in a disciplined manner.”

On the other hand, young employees shared that boomers who are not updated with the present world, still live in the old traditional world, and feel workplace romances as mischievous behavior. The boomer employees identified is different from the baby boomer generations in the timeframe, as in Jaffna’s context, people who are born in 1995 are also categorized as boomers by young generations. One younger employee has pointed out two different ways of regulating or controlling, *“HR do it (being hostile for romances) indirectly, but fellow older co-worker uncles and aunties do it directly.”* This shows that the senior staff are using their older age as a power to control and enforce discipline on them. The researcher also inquired young employees about the notion that the workplace is like a temple and romances in temples cannot be accepted. One young employee replied that in temple towers there are even depictions of sexual positions and strongly argued that these reasons are just creaming and the intention is to control the youngsters. This argument addresses that senior staff is addicted to using their power by age to control others. Other employees also supported this notion that senior employees always tend to rule and control youngsters via the concept of discipline and workplace romances and relationships are one aspect where such control can be exerted. In conjunction with Pringle's (1989) work, which focuses on the concentration of power within management, these findings highlight the influence wielded by senior individual employees in overseeing and restricting the autonomy of their younger colleagues.

Moreover, it was also noted that HR and management also motivate the seniors indirectly to control the youngsters, especially in relationships and romances

expressing that youngsters are immature. Simply this follows a logic of getting things done by the working class through the same class working class than the ruling class directly interfering. Thus, the discipline ideologies of senior employees are not only just their power greed but also a structured agenda from HRM.

Through Patriarchal Ideologies

Employees stated out that rumors will be also shared by some employees regarding romance and relationships and which also affects their mental peace. Especially women are affected in a high percentage than men by rumors and false allegations when they engage in a workplace romance. An employee has stated about the injustice and gender discrimination, *“when a boy is friendly with girls, he is not questioned, but girls are questioned and character assassinated by rumors.”* This shows that women are suffering another injustice even when freedom for relationship is there. These findings confirm the writings of Quinn (1977) in which he also mentioned that women suffer a lot from negative evaluations in respect of workplace romance and relationships.

Most of the female youngsters pointed out that even in workplace romances, the coworkers will come and start advising the female rather than the male. Hence it is quite obvious that the hostility toward women’s romance is more than the hostility shown toward men. When the researcher questioned the reason for such inequality in even showing hostility, one young employee expressed that the older generation values female chastity highly. Chastity is a patriarchal concept created by men to control the freedom of women. Kuganathan (2014), Pfaffenberger (1981), and many other studies have well evidenced that Jaffna’s culture gives such significance to female chastity and the caste also fuels the significance of it. All these together may cause such unequal hostility and exert overpressure and stigma on women.

Also, other finding of the study point out that character assassination is a common practice as a means of injustice to women, whereas men are not character assassinated. But interestingly one employee stated, *“there was a character assassinating rumor regarding a girl and I have told personally not to share such rumor without any proof or evidence.”* Further, almost all other young employees below the age of 26 have stood against such injustice against women and rumors about relationships. This shows that the modern generation is very progressive and not traditional and they are open towards fun, entertainment, relationships, and workplace romance. This ensures that in the near future there can be a reduction in hostility in workplace romance from co-workers through patriarchal means.

5. Conclusion

HR Management has been a major party that has undertaken several hostilities against workplace romance. Actions like high surveillance, creating fear, maintaining strategic relationships with employees, working for the care of management, rather than concerning employees, ensuring the compliance of rigid and conservative organizational cultures, and supporting & cultivating several societal conservative norms within the workplaces have been forming hostility against workplace romances. Secondly, the co-workers have also equally contributed to creating a hostile environment. Especially, the senior employees have been engaged where actions of them prioritizing societal cultures over individual psychology, branding

those who engage in workplace romances as non-disciplined, acting like a strict disciplinarian to younger staff, alliance with rigid HR Management, supporting & cultivating the conservative societal ideologies, forwarding practices of patriarchy and caste system, advising especially women, have not only created hostility, but also employees have become psychologically frustrated. Overall, this study explored the contextual hostilities against horizontal micro romances that exist in the IT firms in Jaffna and have categorized them clearly. Further, this study suggests that such hostilities may impact the psychology and freedom of employees, especially since such hostilities are gender discriminative as well, in which women are more aggravated.

6. Implications

As an exploratory study, this possesses practical implications. First, it makes several parties like employees, employers, social members, social activists, scholars, and researchers aware of the contextual hostilities against workplace romances, especially micro romances and also it addresses a broader issue, which is the autonomy and its impact on it. Secondly, the study points out clearly that the existing HR policy is favoring the patriarchy, crushing the psychological wellbeing of employees, especially women. Thirdly it was well evidenced that the HR is mostly inclined towards the management and they are dominating, pressuring, and influencing the private affairs of employees. Thus, as a practical recommendation, this study suggests that HR must be employee friendly and they must understand the psychology and needs of employees with an open mind. As an exploratory study, this study possesses less theoretical implications due to the less exploration and theoretical constructs in this area.

7. Limitations and Recommendations

This study also possesses limitations. First, the researcher's gender being male influenced especially when interviewing female participants, where they were shy about sharing certain information. The next researcher's young age of 25 was a vulnerability, where the participants were almost elder than the researcher and they started manipulating the interviews. Also, the Covid-19 pandemic was a restriction for data collection, where interviews were to be trimmed to shorter durations and to be finished within 5 consecutive days. Finally, this study has recommended more exploration, especially from feminist perspectives, because it has been well noted in the study also that women undergo discriminations and injustices even among the hostilities. Hence such misogynistic hostilities must be analyzed. Further explorations from sexual minorities perspectives are also much needed, as the existing homophobia and non-inclusivity of sexual minority may further intensify the hostility against workplace romances of sexual minorities, which might differ from the findings of this study. Only after these explorations, it would be able to propose healthy and fair HR policies without curtailing employees' biopsychological functionalities. This study also recommends that the hostility to workplace romance from the ruling class must be explored from a Marxist point of view, where the oppression, power and dominance could be well documented as well.

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The Impact of Corporate Governance Practices on Liquidity Risk of Commercial Banks

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Abstract

Commercial banks play a crucial role in economies through financial intermediation in the financial system. In this, liquidity remains a top most factor for the maintenance of bank stability. Witnessing the corporate governance issues such as manipulation and frauds in a time of an economic peril, this study aims to investigate the impact of corporate governance practices on the liquidity risk of commercial banks in Sri Lanka. The study sample consists of 11 commercial banks observed for nine years' period from 2012-2020. Board size, board independence, audit committee meetings, and the number of audit committees represent the independent variable: corporate governance, while liquid assets to deposit ratio measure the dependent variable: bank liquidity. Besides, bank size and bank age are considered as control variables for the study. The collected data were analyzed using EViews and through fixed effect regression model. As to the findings, board size, and number of audit committee meetings have significant positive effect on commercial banks' liquidity risk. There is a positive but insignificant impact from board independence. Audit committee size has a negative but insignificant impact on bank liquidity risk. Out of the control variables, only the bank size has a significant negative effect on bank liquidity while bank age is not a concerned factor for the liquidity level of banks. The results are consistent with previous studies. The findings give useful insights into future policy decisions for better management of liquidity level of banks.

Keywords: Corporate Governance, Liquidity Risk, Commercial Banks

1. Introduction

Among the components of the financial system, the very existence of the financial system depends mainly on the stability of the financial institutions (Srivastav & Hagendorff, 2015). Among them, commercial banks are centrally important. The survival of commercial banks largely depends on the efficient allocation of funds from surplus units to deficit units. In recent years, bank corporate governance (BCG) has become the focus of attention in many countries due to the reported failures worldwide (Alomari et al., 2018). Researchers claim that there is a relationship between the banks' corporate governance (CG) practices and liquidity risk exposures (Almori et al., 2018; Nesrine & Khemais, 2019; Ouattara & Paugam, 2014). The global financial crisis of 2008 highlighted the importance of liquidity risk management in depository institutions (Nguyen, 2021). Part of the crisis can be explained through lapses in CG practices such as misuse of financial data, abuse of powers, and destroying shareholders' wealth (Al-Samadi, 2013). According to the Basel Committee on Banking Supervision (BCBS, 2008), weaknesses in liquidity management were a significant factor in the US subprime crisis. Additionally, the

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covid-19 pandemic has significantly impacted banks' liquidity risk. Liquidity risk is described as a circumstance in which a bank cannot satisfy all of its depositors' requirements for a specified timeframe, either entirely or partially (Jenkinson, 2008). It also can be characterized as a bank's failure to fulfil short-term financing needs. The board is responsible for effectively controlling and monitoring liquidity risk, establishing an effective system for liquidity risk management, and identifying strategies and policies to assist and improve the system in line with acceptable liquidity risk (Nesrine & Khemais, 2019). The effectiveness of bank risk management largely depends on the performance of the board members. However, researchers have paid less attention on studying the impact of CG on the bank liquidity risk specifically in developing countries. With the main research aim of investigating the impact of BCG practices on liquidity risk exposure, this study tries to fill the existing empirical gap. The study further tries to identify the most significant CG variable that impacts the liquidity of banks.

2. Literature Review

Several financial institutions failed during the global financial crisis of 2008, putting the entire financial system at risk. The crisis exposed numerous instances of the board of directors' misbehavior including abusing the power against the interests of shareholders and many other related stakeholders. The crisis had a significant impact on the banking sector including bank risk exposures (Al-Smadi, 2013). From the lessons learned, Basel III revised the standards with a more focus on bank liquidity by mandating banks to accumulate temporary liquid stock during times of economic boom and to utilize that stock during times of economic downturn. Liquidity refers to the ability to facilitate deposits, reduce liabilities efficiently, and finance credit growth and out-of-balance claims (Kumar & Yadav, 2013). That is the ability of a bank to fulfil its liabilities with cash and cash equivalent and to convert its assets into cash in a short period. Therefore, it is a key, and essential indicator of a bank's financial strength (Alomari et al., 2018). Liquidity risk, according to the Basel Committee on Banking Supervision (1997), is the risk that a bank will be unable to raise money on a timely basis or even at a reasonable cost to repay immediate liabilities or to meet those certain financial obligations and financing requests that arise in the ordinary course of business. As to Lartey et al. (2013) there are four main resources of liquidity for commercial banks: deposits, the market, the interbank market, and the central bank. Further, they also noted that banks could rely on the last three sources to defuse liquidity risk. Liquid assets are kept by banks for two reasons. First, to meet the demand for new lending without having to repay current loans or to make timely investments like bond issues, and secondly, to meet diurnal and seasonal deposit changes so that withdrawals can also be made in a timely and orderly manner. Bank managers must determine the optimal or optimal liquidity level so that they can fulfil their responsibilities without compromising future profits (Doyran, 2013). Moreover, liquidity risk is intertwined with other aspects of a financial institution's financial system, such as interest rate and market volatility, profit, and insolvency, to name a few. Banks in Sri Lanka are regulated by the Central Bank of Sri Lanka (CBSL) under the Banking Act No. 02 of 2005. The main two divisions in the banking industry in Sri Lanka are Licensed Specialized Banks (LSBs) and Licensed Commercial Banks (LCBs). According to the central bank, commercial banks occupy the most crucial position in the banking industry. According to the 2021 annual report of the CBSL, LCBs contribute 54.4% of total financial system assets while LSBs contribute 7.8%.

2.1 Theoretical Background

Previous researchers have primarily used agency theory when discussing corporate governance and its effect on liquidity risk. According to Bohren and Odegaard (2005) agency theory has dominated corporate governance. Agency theory is also a contractual relationship between the principal and the agent in the company. In this relationship, the principal appoints an agent on his behalf for his use and capital management. This theory, on the other hand, is based on the notion of self-interested people who aim to maximize their financial advantages (Bruce et al., 2005). In opposition to agency theory perspectives, which also focus on interaction and aligning of interests between the agent and the principal, stakeholder theory perspectives consider a more extensive range of stakeholders, including those who are not shareholders. The agency theory considers a company to be the property of its owners (Alchian & Demsetz, 1972; Fama, 1980). Stakeholder theorists, on the other hand, argue for the priority of owners and emphasize the importance of a healthy power structure among all stakeholders who participate in the business's success (Adams & Mehran, 2008). According to Fanta et al. (2013), while managers are primarily responsible for fulfilling the needs of shareholders in agency theory, in stakeholder theory, managers are responsible not only for the shareholders' needs but also for a wide range of service connections such as workers, suppliers, customers. Furthermore, also Haddad et al. (2021) and Himaj (2014) say that the stakeholder theory considers morality by incorporating human values into business operations and concerns the morality of bank activities, directives, rules, and supervision. This idea involves interaction among all stakeholders, jeopardized by a few of them being opportunistic. This may affect the effectiveness of the organization that gains from the yield using human and financial resources, such as owners, management, lenders, workers, consumers, vendors, as well as the state. As a consequence, agency issues in conventional and Islamic financial entities contain multiple different stakeholders, including all middlemen as well as those associated with the management and supervision of the organizations (Haddad et al., 2021). Also, Freeman (1984) and Fanta et al. (2013) argue that the company's goal is to provide benefits to stakeholders. That is, the company must manage its affairs to meet the needs of all stakeholders. This includes not only owners' needs but also other direct and indirect needs. That is also especially true while working with banks, which seem to be inter-organizations with different unique stakeholders such as savers, creditors, authorities, as well as other parties. Since its inception, this stakeholder approach has attracted considerable attention and interest because it strives to build CG solutions that integrate and combine a range of interests. This stakeholder approach is well-known for incorporating morality and ethics, and values into business management. Furthermore, models of CG typically (Sometimes not) employ perhaps an agency/shareholder theory (Jensen, 2000) or a stakeholder theory (Fligstein, 2001) to handle the problem of a company's productivity and effectiveness (Fanta et al., 2013). As a result, Anglo-American and continental forms of CG are based on the theories of agency and stakeholders, respectively (Fanta et al., 2013).

2.2 Corporate Governance

The wording of CG refers to the processes, conventions, rules, regulations, and institutions that guide how businesses and organizations should conduct, administrate, and control their operations. It works to achieve the organization's goals and handles stakeholder and shareholder relationships. It also addresses individual irresponsibility

via a technique that mitigates the organization's principal-agent problem (Khan, 2011). According to Shleifer and Vishny (1997) CG "deals with the ways that within which the suppliers of finance to firms guarantee themselves of obtaining a return on their investment". CG is necessary to preserve and increase public confidence in the banking system's ability to handle assets and liabilities effectively while displaying a commitment to depositors, stockholders, and other stakeholders (Trinh et al., 2015). The rising complexity of risk that banks encounter might lead to an increase in the demand for CG standards among banks. Inadequate CG may cause markets to lose faith in a bank's capability to handle all assets and debts, namely deposits, thereby triggering a bank panic or liquidity problem (Maduwanthi & Morawakage, 2019).

In the aftermath of the financial crisis, banking and CG have become a subject for many empirical and theoretical studies. The necessity of effective governance for financial performance, the need for banks to comprehend agency issues, and the efficacy of different CG methods to alleviate these difficulties are all highlighted by the 2008 debt crisis (Himaj, 2014). The assets of banks are less transparent, making it more difficult for bank owners to take track of their institution's operations. Banks can also engage in risky activities which are not instantly visible to board members or to outside investors (Becht et al., 2012). Furthermore, banks are subject to more stringent regulatory oversight and insurance contracts, which significantly affects bank executives' risk-taking motivations and adverse selection issues. Stakeholders (depositors) pay lower attention to the bank's risk level, and the presence of regulators and deposit insurance guarantees that the fundamental type of financing, which comes through depositors, is safeguarded. The capacity of conventional regulation and oversight to nature a safe and secure banking system has been challenged by rapid technological advancements and growing financial complexity (Furfin, 2001).

Board of directors have been at the center of many corporations' governance models, ensuring the smooth and sustainable operations. Boards should serve as the best authority of supervision because their responsibilities often include developing a strategic plan, mobilizing sufficient equipment (social and financial), and reviewing progress against control instruments for safeguarding the requirements of shareholders (Himaj, 2014). Directors have been at the heart of a bank's CG structure since they serve as just a connection between the three layers of parties with a stake in the company: owners, management, and users having correct exposure and openness. The Basel Committee (BCBS, 2006), as the leading global standard for such supervisory banking supervision, recognizes the board as an essential component of a bank's reform measures in its advisory document called "improvement of corporate governance in the banking sector." The number of board members determines the size of the board. Previous research, such as Nesrine and Khemais (2019) shows a smaller sized board encounter issues in managing various types of risk in the banking sector. Elgiziry and Abobakr (2017) examined board size and its effect on bank risk. Empirical results show that the dimensions of the board encompass a meaningful significant and favorable impact on risk-taking by the banks. Adams and Mehran (2005) show that banks with wider boards encounter additional exposure to bank risk. After studying the association between board size and liquidity risk for a sample of 127 banks from ten countries from 2000 to 2006, Manthos et al. (2009) is in the view that board size has an impact on risk taking behavior of banks. There are two different types of board members, insiders, and outsider. Insiders (executives) are members of

the top management team, but they are also employees of the company. Outsider or external directors (non-executive) have no affiliation but are considered affiliated or non-affiliated (independent). Affiliates, outsiders or externals are not members of the management team or employees of the organization but in some way form relationships with the company (Pearce & Zahra, 1992). As per Himaj (2014), the independence of the board of directors is considered to be the most important step in terms of board effectiveness. A large percentage of non-executive board members may abuse the board's advisory role, thus preventing the executives from joining the board. This can lead to difficulties in exchanging information between the board and the executive (Brickley et al., 1997; Adam & Mehran, 2008). According to the study by Beasley (2010), the executive board and audit committee play a significant role in the risk management process by establishing the correct tone at the top. Many other studies find that audit committee influence bank risk exposures. The committee interacts with the company's external auditors and inside finance management on a routine basis to go through the company's financial statements, audit procedures, and internal accounting procedures (Klein, 2002). Furthermore, considering the board's responsibility in defending the shareholders' interests, it is critical to monitor top management's commitment to risk management. Top management could be reluctant to accept risk management if they are not in charge. As a result, the audit committee's participation in risk management is essential for successful governance and enhanced financial results (Ojeka et al., 2021).

3. Methodology

This study has adopted a quantitative method, and the data collection is based on secondary sources. 11 commercial banks were selected for nine years from 2012 to 2020 to explore the impact of bank CG variables on liquidity risk. The dependent variable in this study is the liquidity risk of commercial banks. Liquidity risk refers to a bank's failure to satisfy obligations owned through cash flow funding and/ or more quality liquid assets which can be mortgaged without disturbing the bank's operations and financial position (Permatasari, 2020). In this study the liquid assets to total deposit ratio was considered to measure the liquidity risk. Four proxies were used to measure the independent variable: CG. Those are board size, board independence, audit committee size and audit committee meetings. Besides, two control variables were considered: bank size and bank age. The number of board members were considered in measuring the board size while board independence was measured by taking the amount of non-executive board members presented in the board. The number of members in the audit committee measure the audit committee size while number of audit committee meeting held yearly basis was also used as a proxy.

With the support of previous studies, four hypotheses were developed to test this research.

H₁: There is a positive relationship between board size and bank liquidity risk

According to Jensen (1993), a smaller board might be more efficient since it would lead to the better corporation, better choices, and lower agency costs. Abobakr and Elgiziry (2007) investigated the impact of board on bank risk. According to empirical findings, the board size seems to have a considerable beneficial impact on bank risk-taking. Furthermore, Adam and Mehran (2005) pointed out that banks with wider board members are more vulnerable to bank risk. The same conclusion was given by

an investigation of bank liquidity risk and board size carried out by Manthos et al. (2009). However, Crespi et al. (2004) show that a big board size might be an institutional solution to the business's decision-making since it would support multiple constituents to be represented. According to Danan (2009), the small board shows a negative correlation with bank risk. Furthermore, Alomari et al., (2018) found a positive relationship between board size and liquidity risk. According to empirical studies, we assume that it is difficult for a small board to deal with liquidity risk.

H₂: There is a negative relationship between board independence and bank liquidity risk

An independent director of the board of directors is an independent, non-conflicting director of the board of directors concerned with the protection of investors and the improvement of governance standards exercised by the board. This independent director is in charge of the bank's strategic policies and assists in making them more successful in terms of risk management. According to Pathan (2009), a large percentage of "outside" independent directors has a favorable impact on the mitigation of banking risks. According to Dahya et al. (2008), board independence optimizes the shareholder's value and investors by utilizing their talent and experiences in controlling various risks. The result of Vallascas et al. (2017)'s study showed that greater independence of the board of directors leads to a more conservative risk in banks.

H₃: There is a positive relationship between audit committee size and bank liquidity risk

The audit committee would have a major effect just on the bank's riskiness. Since one of the audit committee's key roles is to oversee the financial reports' accuracy, audits, and risk mitigation (Trinh et al., 2015). However, Tsorhe et al. (2011) added the audit committee size to the board of directors' index, and they found that the audit committee size does not significantly affect the bank liquidity risk.

H₄: There is a positive relationship between audit committee meetings and bank liquidity risk

Nguyen (2021) has found a positive relationship between audit committee meeting and liquidity risk. Haddad et al. (2021) report a positive relationship between audit committee and banks' liquidity in conventional banks. An investigation by Mondher and Lamia (2016) using commercial banks in Tunisia found that the number of meetings of the audit committee was not as significant as the risk of bank liquidity.

To assess the hypotheses, the researcher employed the fixed effect regression model. The orientation of the association was determined by the coefficient value, whereas the relevance was determined by the p-values. The regression model is used to illustrate the impact of CG (board size, board independence, audit committee size, and audit committee meetings). The following regression model was developed in this study based on Alomari et al. (2018)'s study of corporate governance and bank liquidity risk using 13 commercial banks during the period of 2009-2016.

$$LQDIT_{i,t} = \alpha + \beta_1 BOSIZ_{i,t} + \beta_2 BOIND_{i,t} + \beta_4 AUSIZ_{i,t} + \beta_5 AUMEN_{i,t} + \beta_6 BASIZ_{i,t} + \beta_7 BAGE_{i,t} + \epsilon_t \dots\dots$$

[In the equation, each independent variable is calculated for each firm “i” and each year “t” as well as “ ε ” as the error term, and “ β ” as the coefficients. Where: **LQDIT** i, t : is the bank liquidity of the bank (i) in a year (t). used the ratio of liquid assets to total deposits. **BOSIZ**: is the number of board members of the bank (i) in a year (t). **BOIND**: is the number of independent board members/ total number of directors of the bank (i) in a year (t). **AUSIZ**: is the number of audit committee members of the bank (i) in a year (t). **AUMEN**: is the number of audit committee meetings of the bank (i) in a year (t). **BASIZ**: is the bank size of the bank (i) in a year (t). **BAGE**: is the age of bank (i) in a year (t)]

4. Data Presentation and Analysis

4.1 Descriptive Statistics

This part complies with the descriptive statistics for the liquidity risk, the board size, board independence, audit committee size, audit committee meetings, and other control variables to give a comprehensive picture of the mean, median, minimum, maximum, standard deviation, skewness, and kurtosis of the sample. Table 1 displays the findings of the analysis.

Table 1
Descriptive Statistics

	<i>LQDIT</i>	<i>BOSIZ</i> <i>E</i>	<i>BOIND</i>	<i>AUSIZ</i> <i>E</i>	<i>AUMEN</i>	<i>BASIZ</i> <i>E</i>	<i>BAG</i> <i>E</i>
Mean	0.124	10.151	0.555	4.595	10.575	19.82 2	1.808
Median	0.112	10.000	0.545	5.000	10.000	19.88 4	1.000
Maximum	0.345	13.000	0.875	7.000	18.000	21.81 6	4.000
Minimum	0.023	4.000	0.307	3.000	3.000	17.24 3	1.000
Std. Dev.	0.064	2.086	0.141	1.087	3.295	1.057	1.036
Skewness	0.889	-0.696	0.541	0.278	0.017	-0.274	0.997
Kurtosis	3.618	2.942	2.420	2.481	2.264	2.304	2.682
Jarque-Bera	14.621	8.024	6.224	8.391	10.236	9.233	16.81 7
Probabilit y	0.000	0.018	0.044	0.020	0.003	0.001	0.000
Sum	12.344	1005.0 00	55.026	455.00 0	1047.00 0	1962. 728	179.0 00
Sum Sq. Dev.	0.408	426.72 7	1.953	115.83 8	1064.18 2	109.5 14	105.3 53
Observati ons	99	99	99	99	99	99	99

During the time period from 2012 to 2020, the average value of liquidity is 0.12 whereas the standard deviation of liquidity risk is 0.06. The average value means that the total deposits are about eight times of liquidity. It has a maximum value and a minimum value of 0.35 and 0.02 respectively. For board size and board independence, average values are 10.15 and 0.55 respectively. Their standard deviation values are 2.08 and 0.14. The highest values are 13 and 0.87. Moreover, their lowest values are 4.00 and 0.30. The mean value of the audit committee size is 4.59, with a standard deviation of 1.08. Its maximum value is 7.00 and minimum value is 3.00. Audit committee meetings' mean value is 10.57, while the standard deviation value is 3.29. Its maximum and minimum values are 18.00 and 3.00, respectively.

There is no any considerable gap between maximum values and minimum values of each variable. Skewness, kurtosis, and probability value of Jarque-Bera are used to test the normality of the data. Based on the probability value of Jarque-Bera, data of liquidity risk, the board size, board independence, audit committee size, audit committee meetings, bank size, and bank age are normally distributed since p-values are less than 5% (0.05).

4.2 Correlation Analysis

The correlation between independent and dependent variables employed in the current investigation is shown in Table 2. The absolute value of discretionary accruals (DACC), which served as the independent evaluation of the hypothesis, was found to be positively correlated with board size. Furthermore, a moderate positive correlation between liquidity and board size is shown by correlation analysis. Therefore, board size maintains a strong negative correlation with liquidity risk. According to the correlation analysis, there is a moderate negative correlation between board independence and liquidity. Due to the inverse relationship between liquidity and liquidity risk, there is a positive correlation between board independence and liquidity risk. A very weak positive correlation is found between the audit committee size and liquidity. Furthermore, according to this result, there is a negative correlation between audit committee size and liquidity risk. There is a strong positive correlation between audit committee meetings and liquidity. That is, the audit committee meetings maintain a negative relationship for liquidity risk. Moreover, it was evident that the dependent variable, which is the absolute value of discretionary accruals (DACC), had a negative correlation with board size, audit committee size, and meetings regarding the aforementioned H_1 , H_2 , and H_3 hypotheses.

Table 2
Correlation Analysis

Correlation Probability	LQDIT	BOSIZE	BOIND	AUSIZE	AUMEN	BASIZ	BAGE
LQDIT	1.000						

BOSIZE	0.539	1.000					
	0.016	-----					

BOIND	-0.279 0.005	-0.470 0.000	1.000 -----				
AUSIZE	0.185 0.065	0.405 0.000	-0.100 0.321	1.000 -----			
AUMEN	0.856 0.045	0.371 0.000	-0.218 0.029	-0.002 0.978	1.000 -----		
BASIZ	-0.478 0.000	-0.506 0.000	0.565 0.000	-0.146 0.147	-0.421 0.000	1.000 -----	
BAGE	-0.261 0.009	-0.396 0.000	0.456 0.000	-0.123 0.222	-0.367 0.000	0.569 0.000	1.000 -----

4.3 Regression Analysis

To choose stronger estimates for the model, it was regressed with pooled, fixed, and random effects. During the regression analysis, the redundant fixed effect likelihood ratio was used to select the best one among the pooled method and the fixed effect model which was obtained initially. There are two hypotheses in the redundant fixed effect likelihood ratio. The null hypothesis is that the 'fixed effect model is best', whereas the alternative hypothesis is that the 'pooled method is best'. According to the likelihood ratio, if the Cross-section F and Cross Section Chi-square probabilities are less than 0.05, the null hypothesis cannot be rejected. Since the probabilities were less than 0.05 (5%), the fixed effect model was selected. The summary of the test is given in the table below.

Table 3
Redundant Fixed Effect Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.686	(10,82)	0.037
Cross-section Chi-square	18.520	10	0.046

The correlated random Hausman test was used to select the best model between the random effect model and the fixed effect model. According to the Hausman test, if the Cross-section F and Cross Section Chi-square probabilities are less than 0.05, the null hypothesis cannot be rejected. Therefore, the fixed effect model was used for the analysis.

Table 4
Correlated Random Effects-Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	9.780	6	0.034

According to the model's adjusted R-squared, approximately 43% of the change in liquidity risk can be explained by the independent variables. Accordingly, the Durbin-Watson value was nearing 2.24, indicating that there is no autocorrelation issue. The Durbin-Watson test is another indicator of autocorrelation in regression analysis residuals. As a general principle, test statistic results between 1.5 and 2.5 are considered to be quite typical. Furthermore, the F-statistic and its probability are shown in table 5 which depicts how well the model is fitted.

Table 5
Model Summary

R-squared	0.458		
Adjusted R-squared	0.433		
S.E. of regression	0.056		
F-statistic	2.869	Durbin-Watson stat	2.242
Prob(F-statistic)	0.000		

Based on the regression results below model was developed.

$$\text{LQDIT} = 0.602 - 0.006\text{BOSIZ} + 0.045\text{BOIND} - 0.015\text{AUSIZ} - 0.006\text{AUMEN} - 0.015\text{BASIZ} - 0.052\text{BAGE} + \varepsilon_t \dots\dots$$

Board size has a coefficient value of -0.006 which implies that a 1% increase in board size will decrease bank liquidity by 0.006. Similarly, board independence will increase the bank liquidity risk by 0.045 if this variable increase by 1%. Further, 1% increase in audit committee size, audit committee meetings and bank size will lead to 0.015, 0.006 and 0.015 percent decrease in bank liquidity respectively. Increasing liquidity in commercial banks reduces liquidity risk and decreasing liquidity increases liquidity risk.

Under fixed effect method, results indicate a statistically significant negative relationship between board size and liquidity under a 95% confidence level. That implies the p-value of this variable is lesser than 5% (0.0219). Here coefficient -1.2580 implies that increasing the board size ultimately decrease the liquidity level of commercial bank in Sri Lanka. That is, there is a positive relationship between liquidity risk and board size. This relationship is also in agreement with studies done by other researchers (Abobakr & Elgiziry, 2017; Manthos et al., 2009; Nesrine & Khemais, 2019). Board independence of domestic commercial banks positively influences the liquidity of the bank. That is, board independence was considerable and favorable, suggesting that having more independent directors raises the liquidity position and reduces the liquidity risk. This could be due to the independent directors' more conservatism and their greater success in observing and enhancing the liquidity risk management practices of commercial banks (Alomari et al., 2018). That relationship, however, is in line with the work of certain researchers, including Kamaliza (2014), who claimed that improving board independence would help with improving liquidity risk. With a coefficient of 0.005549 and a probability value of 0.4596, the audit committee size of the commercial banks has a negative relationship

with liquidity risk. When considering the number of audit committee meetings, the study results that there is a significant negative relationship between commercial bank liquidity. Therefore, audit committee meetings affect the commercial bank liquidity risk positively. Bank size and age of banks were used as control variables for this study, which have been mostly used by previous researchers in related studies. According to the results of the study, it appears that bank size affects liquidity in commercial banks of Sri Lanka.

Table 6
Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.602	0.285	2.108	0.038
BOSIZE	-0.006	0.005	-1.258	0.021
BOIND	0.045	0.063	0.723	0.471
AUSIZE	0.005	0.007	0.743	0.459
AUMEN	-0.006	0.002	-2.196	0.030
BASIZ	-0.015	0.015	-0.981	0.029
BAGE	-0.052	0.029	-1.793	0.076

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.458	Mean dependent var	0.124
Adjusted R-squared	0.433	S.D. dependent var	0.064
S.E. of regression	0.056	Akaike info criterion	-2.753
Sum squared resid	0.261	Schwarz criterion	-2.308
		Hannan-Quinn	
Log-likelihood	153.310	criteria.	-2.573
F-statistic	2.869	Durbin-Watson stat	2.242
Prob(F-statistic)	0.000		

5. Conclusion

This study aims to determine the impact of CG of banks on the liquidity of domestic commercial banks in Sri Lanka. CG variables were chosen to investigate this association following a review of related studies. As a result, the study's four CG variables for banks were chosen. Those are the board size, board independence, audit committee size, and audit committee meetings. Bank age and bank size were chosen as control variables. The results indicate board size has a significant positive effect on commercial banks' liquidity risk. This study found a positive relationship between bank liquidity risk and board independence, but it is not a significant effect. Audit committee size showed an insignificant and negative effect on bank liquidity risk. Finally, this study's results showed a significant and positive relationship between audit committee meetings and the liquidity risk of Sri Lankan commercial banks.

The liquidity ratio of commercial banks in Sri Lanka has maintained a ratio of 0.12 from 2012 to 2020. Generally, the board size of commercial banks in Sri Lanka is

about ten, and about 50% of them consist of independent non-executive directors. Furthermore, when the audit committee is taken, its members are about five as an average value and usually hold about ten meetings of the annual audit committee. One of the main research objectives of the study is to identify the most significant CG variables which influence the liquidity risk. As per the study results, it is revealed that the variables of board size and audit committee meetings have shown a statistically significant relationship with liquidity risk. However, other independent variable of board independence and audit committee size have shown an insignificant relationship with bank liquidity risk. The findings of this study emphasized that more attention should be paid to the size of the board and the number of audit committee meetings to better manage the liquidity risk of Sri Lankan commercial banks. For future studies, an analysis can be done using more organizational administrative variables (number of board committee meetings, ownership structure and number of male and female directors). Similarly, rather using quantitative data, future researchers can focus on qualitative methods.

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Impact of Capital Adequacy on the Performance of Licensed Finance Companies in Sri Lanka

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Abstract

Licensed Finance Companies (LFCs) play a major role in the financial sector in Sri Lanka as a competitor to commercial banks. Given the instabilities witnessed in many finance companies in recent years, this study attempts to evaluate the impact of capital adequacy on the performance of LFCs in Sri Lanka. Panel data from 2012-2018 of 18 licensed finance companies of Sri Lanka have been considered in the study. Return on Assets, Return on Equity, and Tobin's Q are employed to measure LFCs' performance. Total assets to total equity, market value to book value, and total debt to total equity ratios are used as independent variables to investigate their relationship with dependent variables via multiple regression model. Further, firm size, age, and management efficiency are used as control variables. It was identified that LFCs in the country hold more debt compared to equity therefore are highly levered institutions. Findings suggest that there is a significant positive relationship between capital adequacy and Tobin's Q which means that a higher capital level increases the profitability of finance companies. A negative relationship was identified between the total debt to total equity ratio and Tobin's Q which means that profitability will decrease when debt level increases. Further, the debt-to-total equity ratio has a negative impact on the Return on Assets. Based on the findings it is advisable for the monitoring authorities of the financial sector to be more flexible when implementing minimum capital requirement regulations with regard to LFCs due to its significant relationship with firm performance.

Keywords: Capital adequacy, Licensed finance companies, Sri Lanka

1. Introduction

As a profit oriented monetary and financial transitional organizations, Licensed Finance Companies (LFCs) play a major role in the Sri Lankan financial system (Gamage, 2020). LFCs are a major component in the Non-Bank Financial Institutions (NBFIs) and are regulated by the Central Bank of Sri Lanka (CBSL) under the Finance Business Act, No. 42 of 2011. One of the major components of the regulatory framework of NBFIs is the requirement to maintain capital-level standards. The size of the NBFI, profitability, cost of funding, capital adequacy, and deposits are major factors that affect the confidence towards them. Generally higher amounts of capital level assist financial institutions to build public confidence. During the past few years, the NBFI intermediation rate in most of the developed countries has increased rapidly. The value of NBFI intermediation in the United Kingdom has increased from USD 1264.3 billion to USD 1499.8 billion from 2016 to 2020 respectively (Norrestad, 2021). Russia showed USD 81.1 billion in 2017 as the worth of NBFI intermediation which was only USD 19 billion in 2013 (Melkadze, 2020). Norman et al. (2017) state while banks are busy with innovations and technology, NBFIs can help the economy to fill their funding

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gap. Further several countries in Asia have also recognized the importance of NBFIs and have improved the strength of the NBFIs sector. The LFC sector in Sri Lanka has been developing rapidly over the years. In 2011, the LFC sector in Sri Lanka was comprised of 39 institutions, and by 2020 it was increased to 40. Nevertheless, the increment in the number of LFCs is insignificant throughout the period of 2011-2020 where the total asset base of the sector shows a massive improvement. In 2011, the total asset base of the sector was Rs.295 billion and it was Rs.1367.9 billion in 2020. NBFIs play a significant role in Sri Lanka by providing access to finance and mitigating the traffic around commercial banks (Gunawardhena, 2018). According to the Central Bank of Sri Lanka, the NBFIs sector includes Licensed Finance Companies (LFCs) and Specialized Leasing Companies (SLCs). At the end of 2020, the NBFIs sector comprised 40 LFCs and 3 SLCs. It can be seen that most of the institutions under the NBFIs sector in Sri Lanka are in the LFC sector. Nevertheless, it is noteworthy that most of the LFCs have experienced multiple challenges such as increasing Non-Performing Loans (NPLs), low asset quality, and liquidity issues due to strict regulatory requirements, family ownership, and undue government influences. During 2020, the LFC sector deteriorated with negative credit growth and high NPLs driven by COVID-19 pandemic situation (Central Bank of Sri Lanka [CBSL], 2020).

Thus, the focus of this study is on one of the key challenges experienced by the LFCs sector: the capital adequacy problem. In the year 2020, there was a significant plunge in the LFC sector due to the impact of the COVID-19 pandemic and a reduction in customer confidence. Table 1 shows the reduction of deposits in the year 2020. As per Central Bank of Sri Lanka, one of the reasons to damage the customers' confidence is due to the failure of a few LFCs which struggled to maintain the minimum capital requirement at an individual level.

Table 1
Composition of deposits of the LFCs sector

Item	Amount (Rs. bn)		Composition (%)	
	2019	2020 (a)	2019	2020 (a)
Time Deposits	722.2	710.5	95.4	94.9
Savings Deposits	33.5	37.3	4.4	5.0
Certificate of Deposits	0.9	0.8	0.1	0.1
Total Deposits	756.7	748.6	100.0	100.0

Source: Central Bank of Sri Lanka (2020)

In 2020, the CBSL stated that eight LFCs; Arpico Finance Co. PLC, Associated Motor Finance Co. PLC, Bimputh Finance PLC, Kanrich Finance Ltd, Merchant Bank of Sri Lanka and Finance PLC, Richard Pieris Finance Ltd, Softlogic Finance PLC and UB Finance Co. Ltd found non-compliant with the minimum capital adequacy requirement and has been given a period to comply with the regulation. The Central Bank further announced that LFCs that are non-compliant with minimum capital adequacy requirement contain a considerable risk to the depositors. Therefore, depositors and investors are encouraged to pay attention to the safety of their funds.

Core capital and total risk-weighted capital ratios of the sector have increased to 14.5% and 15.7% respectively by the end of December 2020 to December 2021 from 11% and

12.5%. Another factor that highlights the significance of studying this study context is the distressed nature of the NBFIs as a result of the twin effects of the Easter Sunday attack followed by the COVID-19 pandemic. The loan portfolio of Sri Lankan LFCs is worth over Rs.1.4 trillion and currently, 13.9% of that has been categorized as Non-Performing Assets (NPAs). There are plenty of studies conducted on the relationship between capital adequacy ratio and performance related to commercial banks but a few are related to NBFIs. The LFC sector of Sri Lanka has faced several difficulties during the past few years due to limitations imposed by CBSL considering the inability to fulfill the minimum capital requirement. Currently, CBSL has imposed a regulatory restriction on Nation Lanka Finance PLC downsizing their deposits, loan and advances by Rs.100 million and Rs.50 million, on a monthly basis. Similarly, Softlogic Finance PLC is liable to provide a viable capital restoration plan to CBSL while operating under several restrictions such as a maximum lending cap of Rs.18.2 billion and deposit cap of RS.17 billion. Therefore, studying the capital adequacy aspect of LFCs proves to be significant in the current financial turmoil faced by the country. The main objective of this study is to identify the impact of capital adequacy and leverage on the performance of LFCs taking Sri Lanka as an illustrative example of a developing country.

2. Literature Review

Researchers have presented different perspectives on the capital adequacy concept. According to Asikhia and Adeyinka (2013) every bank should put effort to maintain a ratio of not less than 1:10 between the capital funds of the bank and the total credit net of provisions. Gardner et al. (2004) state that bank capital works as a cushion against losses, and it should grow as deposits grow. Similarly, Bosede et al. (2013) state that it is important to maintain a certain level of capital as a cushion to absorb uncertainties in the external environment. Chandrasegaran (2020) asserted that the maintenance of adequate capital reserves can stimulate confidence in the financial soundness and stability of the banks in Sri Lanka. Therefore, it is important to implement proper regulatory frameworks for capital requirements at NBFIs to avoid or minimize the efficiencies arising from market failure situations (Sehrish et al., 2011). The Basel accords provide a regulatory framework for capital adequacy status at banks which also can be applied to NBFIs. Basel II accords introduced three pillar minimum capital requirements to promote greater stability in the financial system. Basel Pillars will assist banks in facing several risks such as credit risk, operational risk, market risk, systemic risks, pension risks, concentration risks etc. Due to the deficiencies that occurred during the financial crisis of 2008, Basel further improved their accords and the Basel III accord currently acts as a global regulatory standard on banks' capital adequacy (Abdul, 2017). According to Basel III, banks are required to hold 4.5% of common equity (up from 2% in Basel II) and 6% of Tier I capital (up from 4% in Basel II) of Risk-Weighted Assets (RWAs). Further Basel Committee explains banks can use the buffer against financial stress, but the buffer can lead to even more financial constraints in paying dividends (Basel Committee on Banking Supervision, 2019).

Several capital structure theories explain the theoretical background of this study. Modigliani and Miller (1958) theory explains the irrelevance of the capital structure where in an efficient capital market, a firm value is unaffected by the leverage level of a firm. The theory argues that for companies in similar risk classes, the total market value is independent of the capital structure. Then using the arbitrage process, it was further explained why the market value of the firm is not affected by leverage factor.

Ultimately Modigliani and Miller theory concludes that the capital structure is irrelevant. Going beyond theories, researchers have presented different arguments on this issue through empirical investigations. It was found that higher regulation on capital requirements influences banks to diminish their credit offer. Barrios and Blanco (2003) stated that this may lead to a reduced productiveness of investment in banks. In contrast, investigating concentration and other determinants of bank profitability, it is found that there is a positive correlation between capital ratios and profitability (Bourke, 1989). Further, it states that banks with high capital can reach less expensive and less risky sources of funds or that the prudence implied by higher capital proportions is kept up in the loan portfolio with subsequent increments in profit rates. Findings of the study conducted by Berger (1995) concluded a strong positive correlation between capital and earnings in U.S. banks in the 1980s. Further, he argued raising capital may cause higher earnings if the firm decreases the expected costs of financial distress, including bankruptcy cost. According to Berger (1995), it will decrease the cost of funding of the firm and further enhance its profitability at the same time. Holmstrom and Tirole (1997) especially highlight that capital could enhance Return on Equity (ROE) only if minimum capital regulations encourage NBFIs to monitor capital structure more cautiously. On the other hand, several investigations have revealed that capital adequacy negatively impacts firm performance or performance related elements. Jamil et al. (2014) claim that performance is negatively affected by capital adequacy under Return on Assets (ROA) measurement and suggest highly profitable banks have the ability to maintain a lower capital adequacy ratio to absorb losses.

Investigating the banking crisis in Uganda, Mpuga (2002) argues new capital requirements which were higher than previous have negatively impacted the performance of locally owned commercial banks. Further, Mpuga (2002) stated when banks increase the capital adequacy ratio, the deposits tend to fall eventually which lowers the opportunity to earn profits. Chien-Chiang and Heish (2012) concluded that investment banks show the smallest positive capital effect on performance while commercial banks uncover the most elevated opposite effect. Moreover, the banks in upper-middle-income countries have the highest positive capital effect on ROE while the high-income countries have the smallest positive capital effect and finally the banks in Middle Eastern countries show the highest and positive capital effect on ROE. A cross-sectional and dynamic panel analysis of European banks shows a positive correlation between Capital Adequacy Ratio (CAR) and profitability. However, the findings of the study do not reveal the expected theoretical relationship between risk and return and a high CAR-maintaining bank should understand that they are operating over-cautiously while ignoring possible profitable trading opportunities. However, Zhou (2001) found a notable negative impact of a capital structure on the firms' performance of Jordanian financial firms. Altunbas et al. (2007) have found an inverse relationship between corporate financial strength and capital adequacy in European banks and argued stronger corporate entities maintain a lower capital level. Similarly, Goddard et al. (2013) suggested a negative relationship between capital and profitability ratios by examining banks from eight European countries. They explain banks that maintain high capital adequacy ratios are operating over cautiously while ignoring potentially profitable trading opportunities. However, examining European banks, Staikouras and Wood (2004) claim that a higher level of capital adequacy causes to rise in profits. Similarly, the results of the investigation by Abdul (2017) indicate a

positive impact on profitability from the capital adequacy factor. This is in line with the arguments of Pasiouras et al. (2007) and Olalekan and Adeyinka (2013). Pasiouras et al. (2007) explain financial institutions with higher capital-to-asset ratio generally will have a lower requirement for external debt and therefore those institutions earn more profits. Similarly, investigating U.S. financial institutions, Zhang et al. (2017) stated lack of capital is one of the major reasons for financial distress in well-implemented financial institutions. On the other hand, Gul et al. (2011) have provided evidence for the fact that there is no significant relationship between profitability and capital adequacy in financial institutions.

3. Methodology

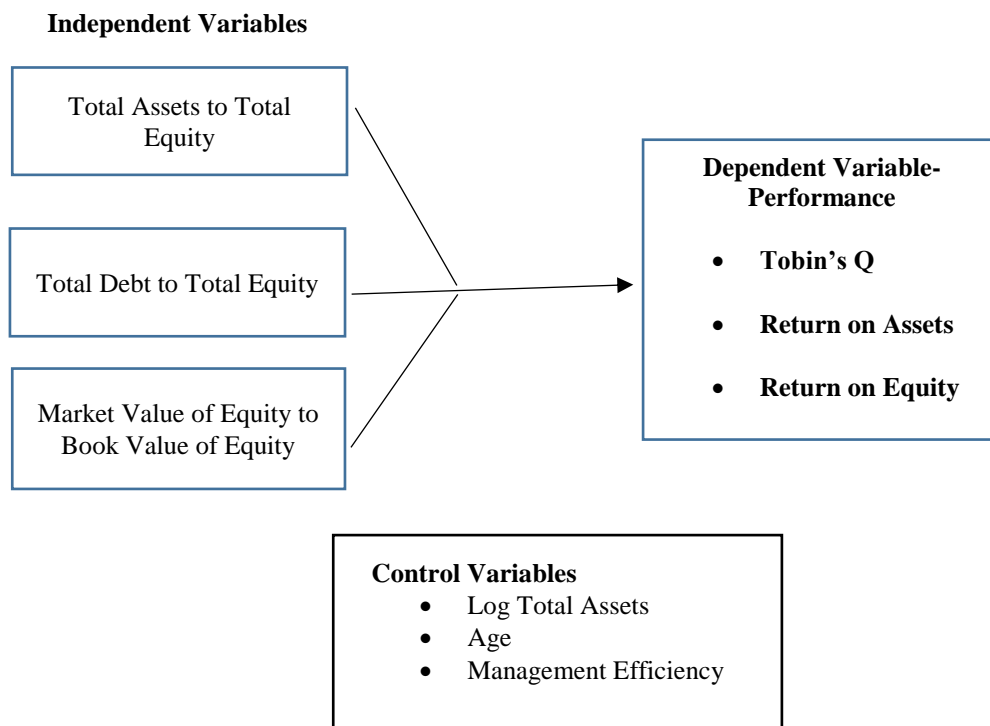
The objective of this study is to identify the impact of capital adequacy and leverage on the performance of LFCs in Sri Lanka. The research is a quantitative study and uses secondary data from company annual reports, central bank reports, websites, and other publications. There are 39 LFCs in Sri Lanka as of the end of 2021. From this population, 29 LFCs were taken as the sample. Data was extracted from annual reports for an eight-year time period from 2012 to 2019. The independent variable of the study is capital adequacy whereas the dependent variable of the study is firm performance. Total equity to total asset, total debt to total equity, and market-value of equity to book value of equity ratio were taken to measure capital adequacy whereas Tobin's Q, ROA, and ROE were employed to measure performance. Log of Total assets - size (Bateni et al., 2014), Age (Ofoeda et al., 2014), and Management efficiency (Aspal & Nazneen, 2014) were used as the control variables.

Panel data which derive from both multiple economic units and multiple time periods was taken for the investigation. Panel data displays both cross-sectional variation and time series variation which is needed to observe the effect on firm performance from capital adequacy over the years.

3.1 Conceptual Framework

Figure 1 represents the conceptual framework which comprises of independent variables, dependent variables and control variables. The dependent variable of the study is the firm performance which is measured using ROE, ROA, and Tobin's Q. The main dependent variable is ROE. The independent variable of the study are capital adequacy which is measured using total assets to total equity (CAP) and Market to Book Value Ratio (MBVR) whereas the Firm leverage was measured using Total Debt to Total Equity (TDTE). Further, the firm size, age, and management efficiency are three control variables used to limit the influence on the model from other factors.

Figure 1
Conceptual framework



3.2 Operationalization of Variables

As this study investigates the impact of capital adequacy on firm performance, the dependent variable is firm performance. Following the study of Sarkar (2021) this study employed ROE, ROA and Tobin's Q to measure firm performance of the LFCs. ROA is a common financial ratio which indicates how profitable a company is in relation to its total assets. ROE measures the financial performance of an entity dividing net income by shareholders' equity. Tobin's Q is the ratio between market value of a company and its assets replacement cost and especially on the value of companies that demonstrate performance management in managing the assets of the company. A Tobin's Q more than one shows that the firm is valuable more than the cost of its assets. The independent variable of the study is capital adequacy since the primary objective is to investigate the impact on performance from capital adequacy. Total equity to total asset ratio and market value of equity to book value of equity ratio are used to measure the capital adequacy of firms. To operate with the secondary objective, which is to investigate the impact on performance from leverage, one measurement is used. The total equity to total asset ratio (CAP) is used as a substitution for the capital adequacy ratio to measure capital adequacy. CAP ratio measures the amount of capital a firm holds compared to its assets. Sarkar (2021) has used this proxy to measure capital adequacy and has come up with a successful investigation. The higher the CAP ratio, the less leveraged the company means that the firm holds a larger percentage of its assets, and a larger portion of the assets are available against external shocks which is the purpose of regulatory capital requirement. The MBVR ratio compares the market value of a firm's equity to its book value of equity. The book value of equity is the value of assets minus the value of liabilities whereas the market value of a company is the market price of one of its shares multiplied by the number of shares outstanding.

Sarkar (2021) has used the MBVR ratio to get insight into the market perception. The TDTE ratio has been used as a proxy to estimate leverage which is needed to fulfill the secondary objective of the study. TDTE measures the value of total debt against the total shareholder's equity. Besides, the study has identified three control variables: firm size, age, and management efficiency. The size of LFCs captures possible economies or diseconomies of scale in the financial sector. Generally, larger financial institutions are less exposed to normal business hazards or to economic downturns compared to smaller financial institutions. Therefore, firm size is used as a control variable to derive more accurate results. The size of the LFC is measured using the logarithm value of total assets. Age is the number of years since the establishment of each LFC. It controls the years of experience of each NBFI. The age of a financial institution influences its performance positively most of the time via depositor confidence. When a financial institution remains in the sector for a longer period even at external shocks, the depositors tend to trust the institution as usual. Management efficiency influences the growth and survival of a company. Several scholars have claimed that management efficiency influences the performance of firms positively (Liu, 2018). Therefore, management efficiency has been used as a control variable and will be measured via expenditure to income ratio which is the ratio between operating expenses to total income. It shows the ability of the bank to cover the operating expenses from the income earned by the bank.

Table 2

Variable specification

CAP	Total equity to total asset
TDTE	Total debt to total equity
MBVR	Market value of equity to book value of equity ratio
Q	Tobin's Q
ROE	Return on equity
ROA	Return on assets
SIZ	Firm size
AGE	Age of the firm
MEF	Management efficiency

The MBVR ratio compares the market value of a firm's equity to its book value of equity. The book value of equity is the value of assets minus the value of liabilities whereas the market value of a company is the market price of one of its shares multiplied by the number of shares outstanding. Sarkar (2021) has used MBVR ratio to get insight into the market perception. Total debt to total equity ratio has been used as a proxy to estimate leverage which needs to fulfill the secondary objective of the study. TDTE measures the value of total debt against the total shareholder's equity. Sarkar (2021) and Abubakar (2015) have used TDTE ratio to estimate leverage status of financial institutions. Below hypotheses are formulated with the support of literature.

- H₁: There is a negative relationship between CAP and Tobin's Q
- H₄: There is a negative relationship between TDTE and Tobin's Q
- H₆: There is a positive relationship between MBVR and Tobin's Q

Tobin's Q is the ratio between the market value of a company and its assets replacement cost demonstrating the performance aspect of a company. A Tobin's Q of more than one shows that the firm is valuable more than the cost of its assets. Sarkar (2021) claims

there is a positive relationship between performance and capital adequacy when performance is measured using Tobin's Q.

- H₂: There is a positive relationship between CAP and ROA
 H₅: There is negative relationship between TDTE and ROA
 H₇: There is a positive relationship between MBVR and ROA

ROA is commonly used to measure performance of finance companies in literature. Ofoeda et al. (2014) and Ayeman (2013) have justified that ROA is positively correlated with capital adequacy. However, Sarkar (2021) states a significant relationship does not exist between ROA and capital adequacy.

- H₃: There is a positive relationship between CAP and ROE
 H₈: There is a positive relationship between MBVR and ROE
 H₉: There is positive relationship between TDTE and ROE

ROE measures the financial performance of an entity dividing net income by shareholders' equity. Heish (2013) has justified that capital adequacy positively affects ROE of financial institutions whereas Salim (2012) has claimed a negative relationship.

Size of a NBFIs captures possible economies or diseconomies of scale in the financial sector. Generally larger financial institutions are less exposed to normal business hazards or to economic downturns compared to smaller financial institutions. Therefore, firm size is used as a control variable to derive more accurate results. Size of a LFC is measured using logarithm value of total assets. Age is the number of years since the establishment of each LFC. It controls the years of experience of each NBFIs. The age of a financial institution influences its performance positively most of the time via depositor confidence. When a financial institution remains in the sector for a longer period, even at external shocks, depositors tend to trust the institution as usual. Therefore, the age of the LFC is controlled through the investigation. Management efficiency influences the growth and survival of a company. Several scholars have claimed that management efficiency influences the performance of firms positively (Liu, 2018). Therefore, management efficiency has been used as a control variable and will be measured via expenditure to income ratio which is the ratio between operating expenses to total income. It shows the ability of the banks to cover the operating expenses from the income earned by the bank. Based on the above discussion nine hypotheses were developed to test in the investigation. As per existing literature, it has been concluded that the Ordinary Least Square (OLS) technique of multiple regression method is suitable for the analysis purpose. Abdul (2017) has claimed that it has been adopted in a wide range of economic relationships with fairly satisfactory results. Accordingly, the methodology selected for this study is OLS regression analysis using secondary panel data.

Model 1 given below investigates the factors affecting ROE.

$$ROE = \beta_0 + \beta_1 CAP_{it} + \beta_2 TDTE_{it} + \beta_3 MBVR + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \beta_6 MEF_{it} + \varepsilon_{it}$$

Model 2 given below investigates the factors affecting ROA.

$$ROA = \beta_0 + \beta_1 CAP_{it} + \beta_2 TDTE_{it} + \beta_3 MBVR + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + \beta_6 MEF_{it} + \varepsilon_{it}$$

Model 3 given below investigates the factors affecting Tobin's Q.

$$Q = \beta_0 + \beta_1 \text{CAPit} + \beta_2 \text{TDTEit} + \beta_3 \text{MBVR} + \beta_4 \text{SIZit} + \beta_5 \text{AGEit} + \beta_6 \text{MEFit} + \varepsilon_{it}$$

(Where; ROE = Return on Equity / ROA = Return on Assets / Q = Tobin's Q / β_0 is the intercept of the regression equation / $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ are the coefficients of the regression equation / CAPit = Total assets to total equity of year t / TDTEit = Total Debt to Total Equity of year t / MBVRit = Market value to Book Value Ratio of year t / SIZit = Log value of total assets of year t / AGEit = Age of year t / MEFit = Management Efficiency of year t).

4. Findings and Analysis

4.1 Descriptive Statistics

Table 3 presents the descriptive statistics for all the variables in the study gathered relating to 18 licensed finance companies from 2012 to 2018 which amounts to 126 observations under each variable. The table comprised of mean, median, maximum, minimum, and standard deviation for all the dependent, independent variables and control variables.

Table 3

Descriptive statistics

	ROE	ROA	Q	CAP	LTDT E	LMBV R	SIZ	ME F	AGE
Mean	0.152	0.0305	0.646	0.248	1.463	-0.245	9.475	0.371	35.388
Maximum	0.742	0.395	6.485	3.060	2.700	2.180	11.088	0.962	64.000
Minimum	-0.524	-0.077	0.084	0.062	-1.916	-6.379	6.465	0.119	11.000
Standard deviation	0.154	0.049	0.786	0.317	0.838	1.715	1.190	0.236	17.390
Skewness	0.342	4.978	3.957	6.063	-1.643	-1.381	-1.016	0.881	0.146
Kurtosis	8.488	33.742	26.162	50.708	6.550	4.710	3.070	2.626	1.680

Descriptive statistics are vital in terms of predicting the nature of the data and thereby helps to understand trends over the period from 2012 to 2018. Basically, it provides a useful summary regarding the central tendency and dispersion of data presenting mean, median, standard deviation, minimum, and maximum value for each variable. According to the results, the mean of CAP is 0.249 which shows most of the LFCs maintain 24% of capital portion from total assets. According to BASEL III requirements, the minimum capital adequacy ratio that should be maintained by a firm is 8%. The TDTE mean value of 1.46 shows that most LFCs hold more debt compared to equity. The Skewness of CAP is 6.06 suggests a positive skewness but a long right tail. Even the kurtosis value indicates an asymmetric distribution since it is not less than

three. The mean value of ROE is 0.152 (15.2%) whereas the industry average ROE for banks is 20.14% in Sri Lanka during the 2012-2020 period (Sri Lanka Return on equity - data, 2020). That explains why LFCs hold a significant ROE throughout the period. Skewness and kurtosis value for ROE does not indicate a symmetric distribution whereas ROA indicates a symmetric distribution. The mean value of age is 35 years which explains that most of the LFCs in the data set have been operated for a longer period in the country. The skewness of all the control variables lied between -1 to +1 and kurtosis values are less than 3. That concludes distribution is symmetric and normal.

4.2 Reliability and Validity

Multicollinearity problem occurs when two or more independent variables in a multiple regression model are highly correlated, meaning that one can be linearly predicted from the others with a non-trivial degree of accuracy. If the problem of multicollinearity exists in the model, the accuracy of the regression coefficients inclines to be very low. Table 4 shows the pairwise correlation analysis for independent and control variables. The higher the association, the more complicated is to change the variable without modifying another. Hair et al. (2006) argued that a correlation coefficient below 0.9 may not cause a serious multicollinearity problem.

Table 4

Pairwise correlation

Correlation probability	LCAP	LTDTE	LMBVR	AGE	SIZ	MEF
LCAP	1.000					
LTDTE	-0.933	1.000				
LMBR	0.115	-0.117	1.000			
AGE	0.197	-0.205	-0.077	1.000		
SIZ	-0.383	0.392	-0.184	-0.335	1.000	
MEF	-0.262	0.270	-0.040	-0.900	0.436	1.000

According to the results all the correlation coefficients are less than 0.9 between CAP and other independent variables. That concludes the multi collinearity problem does not exist in the model which means independent variables are not highly correlated with each other. Stationarity implies that the mean, variance, and autocorrelation of a variable do not change with time. All the dependent and independent variables are tested for stationarity in order to identify the unit root issue using the Levin-Lin-Chu (LLC) test. The test was performed for variables individually and the results are presented in Table 5.

Table 5

Levin-Lin-Chu (LLC) test

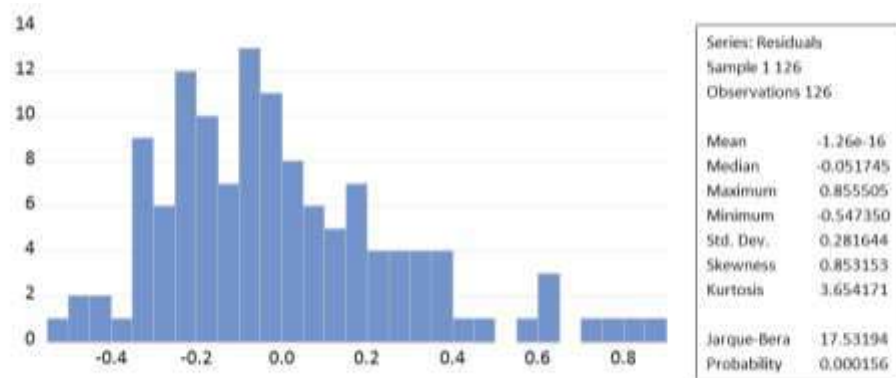
Variable	<i>t</i> statistic	Probability
CAP	-2.885	0.000
MBVR	-2.885	0.003
TDTE	-3.483	0.000
ROE	-2.885	0.000
ROA	-2.885	0.000
Q	-2.885	0.000

AGE	-2.579	0.021
SIZ	-2.885	0.022
MEF	-2.885	0.188

If the *p*-value is less than 0.05 null hypothesis can be rejected. According to test results, the *p*-value of all the variables is less than 0.05 other than the MEF. That concludes variables are free from unit root issue.

Brooks (2008) explains if the residuals are normally distributed, the histogram should be bell-shaped and the Jarque-Bera statistic should not be significant. The *p*-value derived from the normality test should be greater than 0.05 to accept the null hypothesis which says the residuals are normally distributed. Theoretically, if the test is not significant, then the data are normal, so any value above 0.05 indicates normality. According to the results shown in the figure, the *p*-value of the residuals is 0.000156, and the Jarque bera value is 0.000156. That concludes the data is not normally distributed because the *p*-value is less than 0.05 and Jarque bera is higher than 0.005. However, 0.853 of skewness and 3.654 of kurtosis explain distribution is symmetric around the mean and peak.

Figure 2
Test of normality



The assumption homoscedasticity expects variance of the errors to be constant. If the errors do not have a constant variance, they are said to be heteroskedastic. To find out whether there is an existence of heteroscedasticity among the standard error component of the model, the researcher has used the Likelihood Ratio (LR) test. According to LR test if the *p* value is greater than 0.05, heteroscedasticity does not exist.

Table 6
Likelihood test

	Value	DF	Probability
Likelihood ratio	123.131	18	0.000

The results conclude heteroscedasticity issue exists in the study. Since the heteroscedasticity issue exists in the model, the author has made sure to run white test before running the regression model to eliminate heteroscedasticity issue. The two models to run the regression of a study are the random-effect model and the fixed-effect

model. Before running the regression model the researcher should select a suitable model for the investigation. Therefore, the Hausman test is used to determine the best model for the study.

Table 7

Huasmann test

Test summary	Chi-Sq Statistic	Chi-Sq. d.f.	Probability
Cross section random	0.000	5	1.000

According to results p value is significant at 5% level which means that the null hypothesis is accepted. Therefore, it is concluded that random effect model is suitable for the study. Random effect model works with the assumption of the individual-specific effects are uncorrelated with the explanatory variables. It is expected that random effect model makes inferences on the population data based on the assumption of normal distribution.

4.3 Regression Analysis

In the regression analysis three models have been regressed using the OLS method. Three models have been constructed for each of the dependent variables. The first equation analyses the relationship between Tobin's Q and independent variables along with the control variables. According to the results, Q is positively correlated with CAP and MBVR and both relationships are significant. That explains when the capital adequacy and MBVR increase profitability in terms of Tobin's Q also increases. Also, Q has a negative relationship with TDTE which is insignificant. The goodness of fit of the series is 88% ($R^2=0.887$). It indicates that the variable in the equation explains 88% of the dependent variable which says the model is reliable. Q shows an insignificant and weak relationship with all control variables which explains firm size, age, or management efficiency do not significantly affect the profitability.

Table 8

Regression estimation model 1

Q	Independent and dependent variables						
	C	CAP	TDTE	MBVR	MEF	SIZ	AGE
Coefficient	0.084	1.925**	-0.018	0.1848**	-0.293	0.009	-0.003
t statistic	0.220	9.546	-1.116	5.459	-1.112	0.293	-0.959
p -value	0.826	0.000	0.267	0.000	0.268	0.770	0.339
R-squared	0.888						
F statistic	156.752						
Prob (F statistic) - 0.0000							
N=126							

Note: ***, ** and * denote significance levels $p < 0.01$, $p < 0.05$ and $p < 0.1$, respectively.

The second equation analyses the relationship between ROA and independent variables along with the control variables. According to the results, ROA is negatively correlated with CAP. The outcomes contradicts the findings made by Ofoeda et al. (2014) as they have stated that capital adequacy and profitability in terms of ROA shows a positive relationship. Many of the authors have found a positive relationship between ROA and capital adequacy ratio whereas Alqasem and Alajmi (2015) claimed that performance is negatively affected by capital adequacy under ROA measurement. Similarly, ROA shows a negative relationship with TDTE and MBVR. However, any of the relationships are not significant at the 5% level. The goodness of fit of the series is 8.4% ($R^2=0.084$). It indicates that the variables in the equation explain only 8.4% of the dependent variable which concludes the model is weak.

Table 9
Regression estimation model 2

ROA	Independent and dependent variables						
	C	CAP	TDTE	MBVR	MEF	SIZ	AGE
Coefficient	0.108	-0.004	-0.000	-0.009	-	-0.002	-0.001
<i>t</i> -statistic	1.168	-0.300	-0.223	-1.515	-	-0.731	-0.554
<i>p</i> -value	0.245	0.765	0.824	0.132	0.051	0.467	0.5801
R- squared	0.084						
F statistic	1.819						
Prob (F statistic) - 0.101							
N= 126							

Note: ***, ** and * denote significance levels $p < 0.01$, $p < 0.05$ and $p < 0.1$, respectively.

The third equation analyses the relationship between ROE and independent variables along with the control variables. According to the results, ROE is positively correlated with CAP and TDTE. However only TDTE shows a significant relationship with ROE whereas other variables show an non-significant relationship at 5% level. Firm size shows a negative relationship with ROE which explains higher value of total assets lowers profitability. The goodness of fit of the series is 26% ($R^2=0.226$). It indicates that the variables in the equation explain only 26% of the dependent variable.

Table 10
Regression estimation for model 3

ROE	Independent and dependent variables						
	C	CAP	TDTE	MBVR	MEF	S IZ	AGE
Coefficient	-0.016	0.021	0.026**	-0.010	0.184	-0.011	0.002
t-statistic	-0.178	0.823	2.346	-1.062	1.104	-1.289	1.306
p-value	0.859	0.412	0.021	0.291	0.272	0.200	0.194
R- squared	0.226						
F statistic	5.794						
Prob (F statistic) -	0.000						
N=126							
Note: ***, ** and * denote significance levels $p < 0.01$, $p < 0.05$ and $p < 0.1$, respectively.							

5. Conclusion

LFCs play a major role in Sri Lankan financial system. One of the important components of the regulatory framework of LFCs is the requirement to maintain capital level standards. The study discussed on the instability of LFCs in Sri Lanka in terms of maintaining capital levels. The study focused on finding the relationship of capital adequacy and leverage on LFCs performance measured through several proxies. Three dependent variables are used to measure profitability. Hypothesis 1 argues that there is no significant relationship between CAP ratio and Tobin's Q. Equation 1 shows there is a significant positive relationship between CAP and Tobin's Q which explains that a higher capital level increases the profitability of LFCs. However, this finding is not in line with Sarkar (2021) who argued that capital adequacy significantly and negatively affects performance when proxies are CAP and Tobin's Q. Analysis presents a negative relationship between TDTE and Tobin's Q which explains profitability will decrease when debt level increases. As to Sarkar (2021) when debt percentage increases compared to equity percentage, performance of the NBFIs tend to decrease. Three control variables management efficiency, firm size and age show a negative, positive, and negative relationships respectively with Tobin's Q. Since all three relationships are non-significant it can be concluded age, firm size, or management efficiency of the LFCs do not impact the profitability of the firms. Equation 2 shows there is a negative relationship between CAP and ROA which explains that a higher capital level decreases the profitability of LFCs. This finding is not in line with Sarkar (2021) who argues capital adequacy positively affects performance when proxies are CAP and ROA. Analysis presents a negative relationship between TDTE and ROA which explains profitability will decrease when the debt level increases. All three control variables show a non-significant negative relationship with ROA which explains again firm size, age, and management efficiency do not impact the profitability of the firms. Hypothesis 3 argues that there is no significant relationship between the CAP ratio and ROE.

Equation 3 shows there is a positive relationship between ROE and CAP. It explains when LFCs maintain a higher capital level, the profitability of LFCs will increase. This finding is in line with the argument of Sarkar (2021) and Hesh (2012) who explained capital adequacy significantly and positively affects performance when proxies are CAP and ROE. In terms of leverage, the results depict a positive relationship between ROE and TDTE which explains when the debt level increases profitability also increases. Similarly, Sarkar (2021) argued that leverage significantly and positively affects performance when proxies are TDTE and ROE.

One of the major challenges in the LFCs sector has been taken into consideration in this study which is the capital adequacy problem. Recently Central Bank of Sri Lanka stated one of the reasons for the damage in customer confidence is that several LFCs failed to maintain minimum capital requirements at an individual level. This statement of CBSL shows that financial institutions are expected to be stable when they maintain a higher level of capital level. In addition to that CBSL has announced a red list which includes LFCs that were unable to fulfill the minimum capital requirement. However, the analysis of the study presents only one significant positive relationship between profitability and capital adequacy ratio. That finding questions the accuracy of expecting profitability to be increased when LFCs maintain the capital requirement. Therefore, it is advisable to further research on this issue to increase the stability of LFCs in Sri Lanka. Regulation policies of the government and the Central Bank of Sri Lanka have a significant effect on the stability and performance of financial institutions. Similarly, the soundness of financial institutions will impact the economic growth of a country. Thus, proper policies should be formed by the Sri Lankan government or the Central Bank of Sri Lanka to achieve competitive and stable finance companies in order to provide better competition to the finance sector. Following are the policy implications based on the present study that the Sri Lankan economy can follow to achieve economic growth. The CBSL should be more considerable when implementing minimum capital requirements to LFCs and when publishing the names of the LFCs who were not able to fulfill the requirement. The reason is this study found only one significant relationship which says capital adequacy impacts profitability positively. It is suggested to implement flexible policies regarding capital adequacy because throughout the study it is found that several developed countries are maintaining less capital level and earn higher earnings by utilizing their capital. Future researchers are suggested to conduct a study on the same topic increasing the quality of research methodology. Basically, using the capital adequacy real formula as the main independent variable which comprises tier one and two capital and risk-weighted assets may help researchers to get more accurate results. To further broaden the scope of the study researchers can investigate how the Basel III regulatory framework affects Licensed Finance Companies. Many researchers have conducted studies related to Basel and how it affects commercial banks in Sri Lanka. Since there are only a few research regarding LFCs on this matter that would add value to financial sector empirical studies in the Sri Lankan context.

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Impact of Consumer Ethnocentrism on the Purchase Intention towards Foreign Brands: Special Reference to Sri Lankan Skincare Product Market

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Abstract

The primary objective of this study is to examine the impact of consumer ethnocentrism on the purchase intention towards foreign skincare brands in Sri Lankan consumers, with an emphasis on identifying if there are significant differences in the level of ethnocentric tendencies among different demographic groups of Sri Lankan consumers. The data was obtained using a self-administered structured questionnaire from 225 consumers who live in urban areas in Sri Lanka. It was later analysed using various statistical techniques such as descriptive analysis, correlation analysis, simple linear regression, independent sample T test and One Way ANOVA test. The findings demonstrated that consumer ethnocentrism negatively influences the purchase intention towards foreign skincare brands in Sri Lankan consumers and that males are more ethnocentric, with gender significantly influencing the degree of ethnocentrism. The findings further suggest that age, income, and education have no significant impact. Accordingly, this study would help to advance the understanding and application of consumer ethnocentrism in a variety of contexts, in this case, the Sri Lankan market for skincare products, by extending on the social identity theory.

Keywords: Consumer Ethnocentrism, Purchase Intention, Foreign Brands, Skincare Product Market

1. Introduction

1.1 Background of the Study

The increase in globalisation and the changing nature of the world, have resulted in a drastic increase in international trade across countries. Further, political liberalisation, reduction or elimination of entry barriers have given companies the opportunity to expand their business activities internationally, beyond borders and operate in foreign markets (Barumwete & Rao, 2008). Furthermore, it is evident that identifying the readiness to accept these foreign brands is a significant subject (Klein et al., 2006). Therefore, in International Marketing literature, the analysis of consumer preference models, attitudes and purchase intentions concerning domestic versus foreign products has received much attention (Watson & Wright, 2000).

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The Sri Lankan market has been no exception to the aforesaid globalisation and rapid acceleration of the importation of foreign products (Central Bank of Sri Lanka [CBSL], 2021). Specifically, the Sri Lankan skincare market has been flooded by foreign skincare and cosmetic brands from all over the world in an attempt to capture a profitable market segment. It is a booming industry with important insights as a growing market with a significant presence of 120 local cosmetics and beauty care product manufacturers, more than 100 importers, along with approximately 1800 local and foreign skincare products in the market (Mushtaq, 2014). Moreover, some international brands based in other countries that used to export skincare products to Sri Lanka now manufacture them on the island itself, by obtaining licenses (Mushtaq, 2014). Many industry experts have revealed that even if the number of local manufacturers of beauty and skincare products are increasing and have been taking over the market share, they still face a significant challenge from importers, especially in sub-sectors such as skincare and haircare (Mushtaq, 2014). Therefore, understanding consumer attitudes, purchase intentions and preferences towards both domestic and foreign products are crucial for companies to survive in highly competitive markets (Netemeyer et al., 1991).

In the field of consumer purchasing behaviour, a wide variety of factors come into the equation, when marketers decide which strategies to choose to capture their target audience. One such tool that has emerged and helped marketers understand consumer behaviour is the concept of Consumer Ethnocentrism (Camacho et al., 2021; Shoham & Brencic, 2003). It can be defined as “The beliefs held by consumers about the appropriateness, indeed morality of purchasing foreign-made products and the loyalty of consumers to the products manufactured in their home country” (Shimp & Sharma, 1987, p. 280). Ethnocentric tendencies lead consumers to identify themselves with their social in group resulting in favourable attitudes and purchase intention towards domestic products. This means ethnocentric consumers tend to avoid purchasing foreign products due to nationalistic reasons (Shimp & Sharma, 1987).

1.2 Research Problem

Ethnocentrism is likely to influence the attitudes of consumers and thereby these changed attitudes are likely to influence their purchase decisions (Thomas et al., 2020). Although there seem to be numerous empirical and theoretical studies related to consumer ethnocentrism based in developed nations (for eg., Shankarmahesh et al., 2006; Sharma, 2015; Shimp & Sharma, 1987 etc.), there seemed to be a dearth of studies related to consumer ethnocentrism in developing nations (Alam et al., 2022). This is despite the changes in consumer lifestyle in the South Asian context (Dewasiri et al., 2021). In paying attention to the Sri Lankan context, it is evident that the impact of consumer ethnocentrism has not been studied enough (Silili & Karunaratne, 2014).

The skin care product market in Sri Lanka is projected to grow at a rate of 8.7% from 2021 to 2027, due to various factors such as changing lifestyles, rising disposable incomes, and the expansion of online and offline distribution channels (Helix Strategy, 2021). Most studies related to consumer ethnocentrism have focussed on consumer products in general (Wang & Chen, 2004), or electronic products (Alam et al., 2022), and only a few studies have considered skincare-related products (for example, Garmatjuk & Parts, 2015) and most seemed to be based on either North American or European contexts.

Moreover, another essential trend to note is that herbal product use has increased throughout the world over the last decade (Byard et al., 2017). Many consumer segments have switched to herbal product usage, due to the recognition of long-term health benefits, increasing the market potential for the herbal sector (George, 2011). Sri Lanka has a long history of ayurvedic and herbal beauty remedies (Wasundara, 2019, as cited in Wanniachchige & Sirisena, 2019). It is enriched with a unique biodiversity of medicinal flora and a deep base of traditional knowledge, creating numerous possibilities for the Sri Lankan skincare and cosmetics industries to grow. As a result, the Sri Lankan skincare industry is thriving, with ayurvedic and herbal products catering to both domestic and international markets (Export Development Board, 2021).

A study was done in India, which is another country that uses herbal ayurvedic products in their everyday life. This study revealed that the preference for the ayurvedic brands is strongly related to the ethnocentric tendencies in consumers (Misra et al., 2018). This may have resulted because ayurvedic or herbal products may trigger in-group-biasness and local familiarity in consumers. But on the other hand, consumers in developing countries have been reported to exhibit negative sentiments towards local products and prefer products from developed countries (Ranjbarian et al., 2010). This is a consequence of the perception that such consumers have that products and brands that originate from economically and technologically developed countries are superior to their own products, in terms of quality and reliability (Acharya & Elliot, 2003). Therefore, it is generally believed that consumers from emerging and less developed nations are more likely to purchase imported goods than local goods (Karoui & Khemakhem, 2019).

Therefore, given that Sri Lanka is a developing country with a skincare market that holds unique features with both domestic as well as foreign brands, the importance of local research is high, from both an academic and a managerial standpoint. Such empirical findings regarding consumer ethnocentrism and purchase intention towards foreign brands would be distinctive and beneficial for the strategic business decisions of both domestic manufacturers and imported product marketers, as they require timely and accurate information that describes the behavioural patterns and preferences of consumers. Thus, this leads to the question: "Do ethnocentric tendencies in Sri Lankan consumers lead to negative purchase intentions towards foreign skincare brands?"

1.3 Research Questions

1. What is the impact of consumer ethnocentrism on the purchase intention towards foreign skincare brands by Sri Lankan consumers?
2. Is there a significant difference between age, gender, income and education level (demographic characteristics) of Sri Lankan consumers and their degree of ethnocentrism?

2. Literature Review

2.1 Purchase Intention

Assessing consumers' purchasing behavior is difficult; (Kimery & McCord, 2002) as a result, studying consumers' intentions is one of the most prominent methods used by marketers to attain a better knowledge of their actual behaviour (Ghalandari & Norouzi,

2012). Traditionally, the term intention has been defined as the factors that influence and motivate customers to acquire goods and services (Hawkins & Mothersbaugh, 2010). It is defined by Blackwell et al. (2001) as "what we think we will buy." In other words, purchase intention is a complicated process that is linked to customer behavior, perceptions, and attitudes, making it a useful tool for predicting the buying process (Mirabi et al., 2015).

In recent years, due to the globalised marketplace, examining what impacts buyers' intentions to purchase foreign items has been an important subject. Studies have been undertaken in many parts of the world to learn more about what influences consumer purchasing intentions for foreign goods (Haque et al., 2018). This is fueled in part by the knowledge that customers from other nations differ not just culturally, but also economically and demographically (Essoussi & Merunka, 2007; Sohail & Sahin, 2010). In such conditions, investigations done in one nation cannot simply be translated to another nation (Sohail & Sahin, 2010). Because customers' spending preferences are distinct, and it is vital to do research in the context of other nations to determine which aspects influence their inclination to purchase foreign items.

2.2 Social Identity Theory

Tajfel and Turner (1986) proposed the social identity theory, which states that people have collective identities based on their membership in a group. The social identity theory suggests that an individual establishes and strengthens their self-worth by categorising themselves and others into conspicuous in-groups and out-groups (Turner et al., 1987).

In the context of consumer purchase behaviour, social categorisation classifies relevant social objects into ingroup and outgroup categories. The ingroup category consists of social objects that originate from home country, or commonly known as domestic products, while out group category consists of imported products that originate from foreign countries (Cutura, 2020). Ethnocentrism is a result of intense commitment to ingroup and is strongly associated with ingroup partiality. In addition, consumer ethnocentrism suggests that an individual with a closer identification to an in-group will become more biased when judging that group since such decisions will have a greater impact on oneself if the in-group identity is more critical to the individual (Shimp & Sharma, 1987).

Consumer ethnocentrism provides an individual with a sense of identity and belonging, as well as an understanding of what purchase behaviour is acceptable or unacceptable to the ingroup (Shimp & Sharma, 1987). Domestic products (ingroup) are sources of pride and devotion for ethnocentric consumers, whereas imported products (outgroup) are sources of disdain (Shimp & Sharma, 1987). Therefore, ethnocentrism can often lead to negative sentiments toward the outgroup because of the strong affiliation with the ingroup. Baber et al. (2022) have highlighted that social identity theory is a prominent theoretical foundation for consumer ethnocentrism.

A social setting that results in threats to the established social identity is one example of a specific circumstance that can trigger negative feelings against the outgroup (Cutura, 2020). Therefore, an ethnocentric consumer would believe that buying imported goods is unpatriotic as it harms the domestic economy and causes

unemployment (Supphellen & Rittenburg, 2001). As a result, the majority of past research has repeatedly demonstrated that consumer ethnocentrism is positively connected to both product judgments and intent to purchase domestic goods, as well as adverse views and negative purchase intentions toward foreign products (Shankarmahesh, 2006). This explanation clearly indicates that the ingroup perspective is the foundation for understanding consumer ethnocentrism, which is the basis of social identity theory.

2.3 Consumer Ethnocentrism

This was first conceptualised formally by Shimp and Sharma (1987) by applying the concept of ethnocentrism that emerged in the early 1900's to the consumer. The authors first defined the concept as "the beliefs held by the (American) consumers about the appropriateness, indeed morality, of purchasing foreign made products" (Shimp & Sharma, 1987, p. 280). Simply, it is the tendency of consumers to buy domestic products over foreign products. This means a highly ethnocentric consumer would choose the local brand to support their country's culture, products and economy (Cleveland et al., 2009). They see purchasing imported products as an attack on the domestic economy, anti-patriotic and a cause of unemployment (Shankarmahesh, 2006). Therefore, for highly ethnocentric consumers, it is not only an economic concern it becomes a moral concern as well. Likewise, a consumer that is less ethnocentric would evaluate foreign products based on their own merits rather than considering where they are made (Shimp & Sharma, 1987). Thus, consumer ethnocentrism is thought to offer consumers guidance and a sense of belonging to a community and certain rules pertaining to their purchase behaviour for them to have standardised perceptions of what's appropriate and acceptable (Siamagka, 2009).

2.4 Antecedents of Consumer Ethnocentrism

Shankarmahesh (2006) acknowledged that cultural openness, world-mindedness, patriotism, conservatism, collectivism, animosity, materialism, external and internal values, salience, and dogmatism are socio-psychological antecedents. The constituents of economic antecedents were identified as capitalism, the stage of economic development, improving national economy, and improving personal finances. Furthermore, political propaganda, history of oppression, the size and power of outgroups, proximity, and leader manipulation are elements of political antecedents, whereas demographic antecedents include age, gender, income, education, race, and social class.

One of the most important set of antecedents of consumer ethnocentrism is socio demographic characteristics. It is suggested that individual consumers exhibit different levels of consumer ethnocentrism based on their unique socio demographic characteristics, and these variables make a significant impact on consumers' decision-making in terms of their purchasing behaviors and or intentions (Chiu et al., 2017; Gilal et al., 2018; Tiruwa et al., 2018; Wahyudi et al., 2019). As mentioned earlier, age, gender, education and income are among the well-known demographic determinants of ethnocentrism purchase behaviours towards foreign and domestic brands (Huddleston et. al, 2001). Some researchers argue that people who are older tend to have conservative behaviour and thinking patterns, and they tend to be more ethnocentric thereby resulting in a positive relationship between age and ethnocentrism (Balabanis et al., 2002; Sharma et al., 1995). In paying attention to

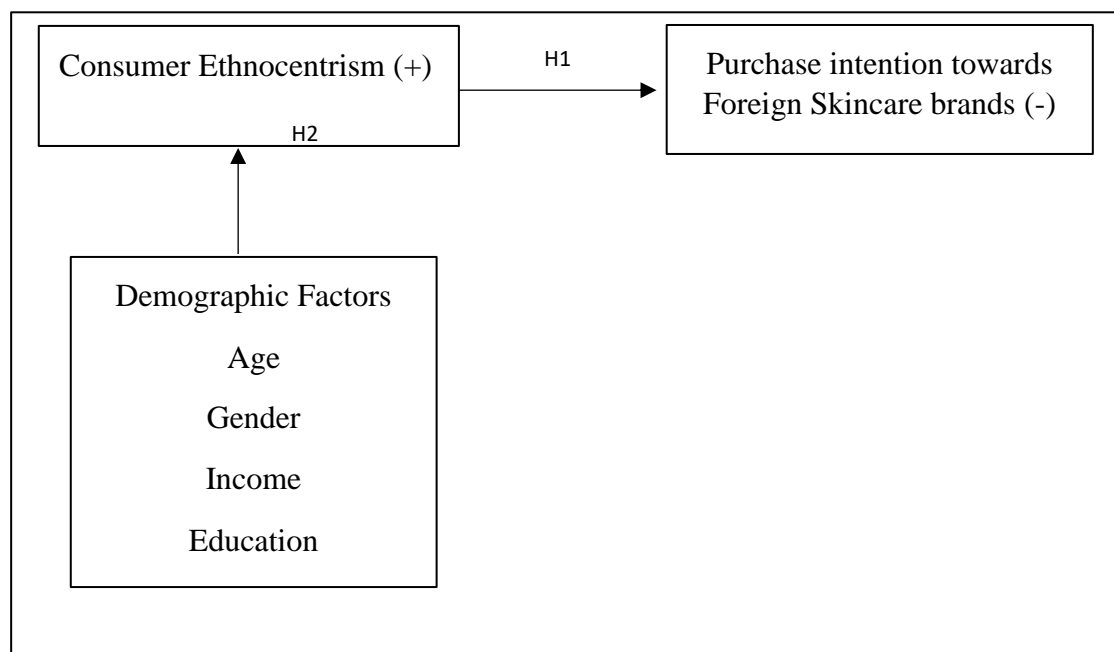
gender, some studies have revealed that women tend to be more ethnocentric than men (Balabanis et al., 2002; Philip & Brown, 2003) while some findings showed that men have a higher ethnocentric tendency (Bannister & Saunders, 1978; Schooler, 1971). In terms of income, Sharma et al. (1995) pointed out that wealthy consumers may have the option to visit other countries and exchange ideas with foreigners, influencing them to create their own ideas and cosmopolitan views. Finally, in focusing on education level, except in very few cases, an overwhelming number of studies have found a negative relationship between education and the level of consumer ethnocentrism (Sharma et al., 1995; Watson & Wright, 2000). In paying attention to more recent studies related to consumer ethnocentrism in South Asia, Alam et al. (2022) have highlighted that consumer ethnocentrism seems to have no significant variation in terms of gender and income level, however, consumer ethnocentrism was suggested to vary based on factors such as occupation, education level and income level.

2.5 Conceptual Framework

Based on the literature review, the conceptual framework was developed in relation to the social identity theory and previous findings as illustrated in Figure 1.

Figure 1

Conceptual Model



Source: Author's construction

2.6 Hypotheses

H₁; Consumer Ethnocentrism negatively influences the Purchase Intention towards foreign skincare brands by Sri Lankan consumers.

H₂; There is a significant difference in the age levels of Sri Lankan consumers and their degree of consumer ethnocentrism

H₃; There is a significant difference in the gender of Sri Lankan consumers and their degree of consumer ethnocentrism

H₄; There is a significant difference in the income level of Sri Lankan consumers and their degree of consumer ethnocentrism

H_s; There is a significant difference in the education level of Sri Lankan consumers and their degree of consumer ethnocentrism

3. Research Methodology

This study follows a positivistic philosophy and employs a deductive approach with quantitative analysis methods. This is to be aligned with related studies which have adopted a similar methodology when investigating the impact of consumer ethnocentrism (Akbarov, 2020; Cumberland et al., 2010; Josiassen et al., 2011). An online self-administered questionnaire was shared among a population of consumers above the age of 18 years and collected responses from a convenient sample of 225 consumers based on a snow ball technique, similar to previous studies (for example, Akbarov, 2020; Cumberland et al., 2010; Josiassen et al., 2011; Philip & Brown, 2003). The first section of the questionnaire comprised statements to measure consumer ethnocentrism based on the CETSCALE developed by Shimp and Sharma (1987), while the second section was focused on measuring the purchase intention towards foreign skincare brands based on the purchase intention scale developed by Riefler (2012). Finally, the questionnaire included close-ended questions to collect demographic data such as age, gender, income, and education level of the respondents. The data collected via questionnaires were analysed, employing various statistical techniques, using the statistical computer package SPSS 22. The study utilised simple linear regression analysis to study the impact of consumer ethnocentrism on the purchase intention towards foreign skincare brands in Sri Lankan consumers.

4. Results and Discussion

4.1 Data Profile

For data collection purposes, 290 questionnaires were distributed, of which 225 were returned, and all of those questionnaires were used in the analysis. Therefore, in this study, the response rate was found to be 77.6%. The sample consisted of respondents who are over the age of 18 and reside in urban areas in Sri Lanka, as it can be argued that they have the knowledge, desire, and financial means to purchase and consume skincare products.

According to the characteristics of the respondents, the majority of them are female (54.6%), and most of them are between the ages of 18 and 25 (51.1%). This could explain why the income level of 102 (45.3%) individuals are less than Rs. 30,000 per month and why most of the respondents are undergraduates. Moreover, an online Google form was used to gather data for this study. It is understood that the younger generations are more familiar with online platforms and are more comfortable adapting to technological methods. Thus, the predominance of those aged 18 - 25 and aged 26 - 35 among the respondents could be explained by this.

4.2 Descriptive statistics

Table 3

Descriptive Statistics for Consumer Ethnocentrism and Purchase Intention

Scale	No. of Items	Mean	Standard Deviation
CETSCALE	17	2.9995	0.70750

Purchase Intention Scale	3	3.0415	0.89379
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Note. 5-point Likert Scale, Strongly disagree = 1 Strongly agree = 5

Source: Survey data

According to Table 4.2, the mean value for the Consumer Ethnocentrism level is 2.9995, which is close to the average level that is neither agree nor disagree and that represents the midpoint of the scale. Purchase intention towards foreign skincare brands has a mean score of 3.0415, suggesting that, on average, respondents are neutral towards the statements provided under it.

The standard deviation of the Consumer Ethnocentrism scale is 0.70750, while the standard deviation of Purchase Intention towards foreign skincare brands is 0.89379, both of which are greater than 0.5, indicating an adequate level (Refer appendix B for all descriptive statistics of each item in both scales).

4.3 Multivariate Assumptions

In terms of normality, the skewness of both the CETSCALE and Purchase Intention scale as shown in Table 4.3 fall below 10. As a result, the data can be regarded as normal. The Kurtosis value is zero if a distribution is similar to the normal distribution. A kurtosis coefficient value of less than 10 indicates a normal distribution, whereas values more than 10 are troublesome (Kline, 2011). In the present study, the kurtosis coefficient values are less than 10, as shown in Table 4.

Therefore, both skewness and kurtosis indicate that the data is normally distributed in this study.

Table 4

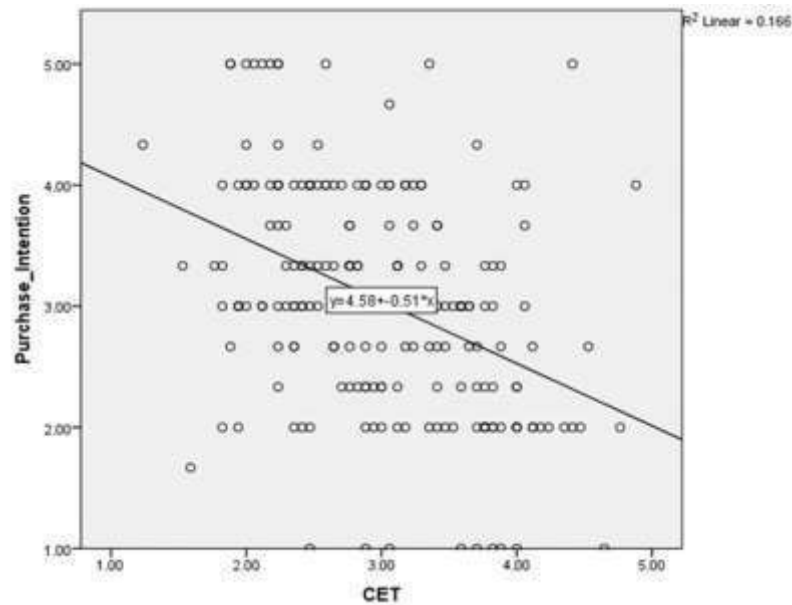
Normality Test

	Consumer Ethnocentrism	Purchase Intention
Skewness	0.177	0.044
Kurtosis	-0.509	-0.033

Source: Survey data

Further linearity demonstrates a consistent relationship between the dependent and independent variables (Casson & Farmer, 2014). As shown in Figure 2, the present study indicates a linear relationship between the independent variable, consumer ethnocentrism and the dependent variable, purchase intention towards foreign skincare brands.

Figure 2
Residual Behaviour

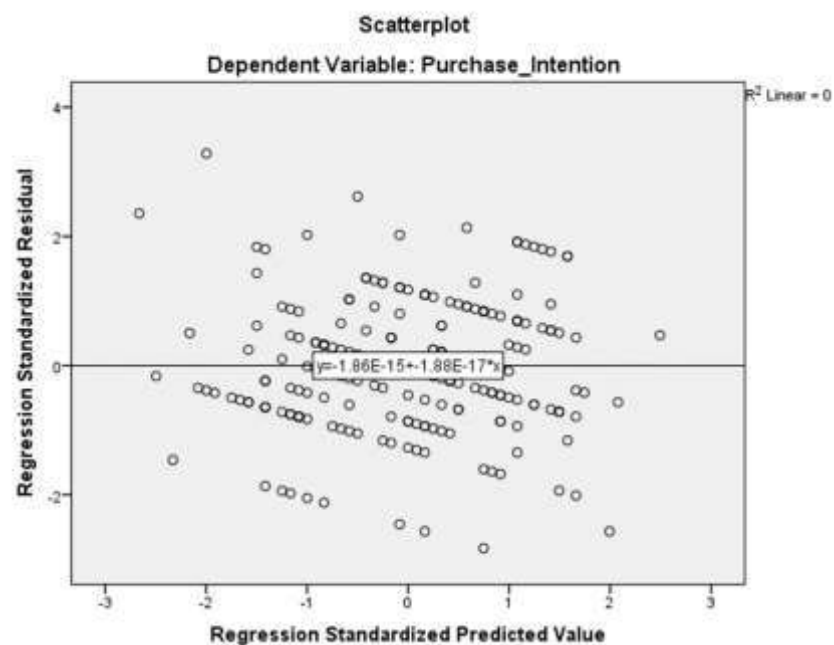


Source: SPSS software

Moreover, when the assumptions of multivariate linear normality are met, it is stated that the relationship between variables is likely to become homoscedastic (Tabachnick & Fidell, 2014).

According to Figure 3, the standardised residuals and standardised predicted values are spread at random, with no discernible pattern. This suggests that the residual variance is constant.

Figure 3
Behaviour of Standardised Residuals and Standardised Predicted Values Source: SPSS software



Multicollinearity arises when various variables are significantly correlated not only with the dependent variable but also with each other in a multiple linear regression analysis (Shrestha, 2020). The current study, on the other hand, looks at simple linear regression with one independent variable, Consumer Ethnocentrism. Hence, the multivariate assumption of multicollinearity has no bearing on this study's validity.

4.4 Reliability

Nunnally (1978) states that for research to be regarded as reliable, a reliability coefficient of 0.7 or above is deemed appropriate. As demonstrated in Table 5, the CETSCALE items used to evaluate consumer ethnocentrism have a Cronbach's alpha of 0.925, whereas the scale used to measure purchase intention for foreign skincare brands has a Cronbach's alpha of 0.919. Thus, this demonstrates that both scales employed in this study have Cronbach alpha values over 0.7, indicating that they are highly reliable. It proves that all the variables in this study generate consistent findings.

Table 5

Reliability Analysis

Variable	No. of Items	Cronbach's Alpha
Consumer Ethnocentrism	17	0.925
Purchase Intention	3	0.919

Source: Survey data

4.5 Correlation Analysis

According to Table (6), the relationship between consumer ethnocentrism and purchase intention toward foreign skincare brands is highly significant. The correlation coefficient is -0.407, and the probability of correlation is 0.000. A 'p' value less than 0.001 suggests that there is a highly significant negative relationship between consumer ethnocentrism and purchase intention towards foreign skincare brands.

Table 6

Correlation Analysis

		CET	Purchase Intention
CET	Pearson	1	-0.407**
	Correlation		
	Sig. (2-tailed)		0.000
	N	225	225

Note. Correlation is significant at the 0.01 level (2-tailed).

Source: Survey data

4.6 Regression Analysis

Linear regression is a statistical test that is applied to a data set to define and quantify the relationship between the variables under consideration (Zou et al., 2003). According to Table 7, the findings in regression results the beta value for consumer ethnocentrism is -0.514, indicating that consumer ethnocentrism has a negative impact on purchase intention towards foreign skincare brands. This is highly significant since the *p* value is less than 0.05 ($p < 0.05$). Moreover, the model predicts that every 1 unit increase in

ethnocentric tendencies among consumers will lead to a 0.514 decrease in purchase intention towards foreign skincare brands.

Table 7

Model Summary of Simple Linear Regression

Model		Unstandardised Coefficients		Standardised Coefficients	<i>t</i>	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.584	0.238		19.252	0.000
	CET	-0.514	0.077	-0.407	-6.655	0.000

Note. Dependent Variable: Purchase Intention

Source: Survey data

Table 8

Regression ANOVA Results

Model		ANOVA ^a				
		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.653	1	29.653	44.294	0.000 ^b
	Residual	149.293	223	0.669		
	Total	178.946	224			

Note. a. Dependent Variable: Purchase Intention b. Predictors: (Constant), CET

Source: Survey data

According to the results of the regression ANOVA as demonstrated in Table 8, the probability of the F test statistic is 0.000, with a F ratio of 44.294 indicating that the relationship between consumer ethnocentric tendencies and purchase intention towards foreign skincare brands is highly significant. The greater the F-ratio, the greater the variance in the dependent variable. Thus, consumer ethnocentrism can predict whether a consumer's purchase intention towards foreign skincare brands is more positive or negative. As a result, it is evident that consumer ethnocentrism influences and has a significant impact on purchase intention toward foreign skincare brands.

4.7 Independent Sample *t*- Test

Table 9

Levene's Test for Equality of variances and t test

	Gender	N	Mean	Std. Deviation	Std. Error Mean
CET	Male	91	3.1164	0.72824	0.07634
	Female	134	2.9201	0.68445	0.05913

Source: Survey data

The independent-sample *t*-test statistical analysis compares the means of two unrelated groups. The test was chosen to determine whether there is a significant difference in the degree of consumer ethnocentrism between the male and female groups and to explore the relationship between consumer ethnocentrism and the demographic variable gender.

According to the findings, as shown in Table 9, the p value for Levine's tests 0.607, which is greater than 0.05. This means that it is not statistically significant and equal variance is assumed in the model. Therefore, in the test statistics where equal variances are assumed, the p value is 0.041. Since it is less than the significance value of 0.05 it is evident that there is a significant difference in consumer ethnocentrism levels between genders.

The aforementioned Table 9 shows that men's consumer ethnocentrism levels are on average 3.1164, while female's ethnocentric levels are on average 2.9201. Therefore, it is evident that males are more ethnocentric than females since their mean value is higher.

Table 10

Results of Independent Sample t test for Gender

		Levene's Test for Equality of Variances		t test for Equality of Means		
		F	Sig.	t	df	Sig. (2- tailed)
CET	Equal variances assumed	0.266	0.607	2.057	223	0.041
	Equal variances not assumed			2.032	185.256	0.044

Source: Survey data

4.8 One-Way ANOVA Test

The present study utilises the one-way ANOVA test to investigate if there are any significant differences in consumer ethnocentrism in terms of age, income and education among different groups that respondents belong to.

Table 11

Analysis of Variance (ANOVA) Results

Variable	Sum of squares	df	Mean square	f	Sig.
Age	4.014	4	1.003	2.042	0.090
Income	2.660	4	0.665	1.336	0.257
Education	2.661	4	0.665	1.337	0.257

Source: Survey data

According to the findings in Table 10, the F statistic values for age, income, and education are 0.090, 0.257, and 0.257, respectively, all of which are greater than the significance level of 0.05. Therefore, it is observed that ethnocentric tendencies among Sri Lankan consumers do not differ significantly by age, income, or education level.

4.9 Hypothesis Testing

Table 12

Summary of Hypothesis Testing

Hypothesis	Result
H₁ ; Consumer Ethnocentrism negatively influences the Purchase Intention towards foreign skincare brands by Sri Lankan consumers.	Accepted
H₂ ; There is a significant difference in the age levels of Sri Lankan consumers and their degree of consumer ethnocentrism	Rejected
H₃ ; There is a significant difference in the gender of Sri Lankan consumers and their degree of consumer ethnocentrism	Accepted
H₄ ; There is a significant difference in the income levels of Sri Lankan consumers and their degree of consumer ethnocentrism	Rejected
H₅ ; There is a significant difference in the education levels of Sri Lankan consumers and their degree of consumer ethnocentrism	Rejected

Source: Author's construction

4.10 Discussion

1. To investigate the impact of consumer ethnocentrism on the purchase intention towards foreign skincare brands in Sri Lankan consumers

This objective was attained through testing H₁. As explained in the previous section, the findings revealed that consumer ethnocentrism has a negative impact on purchase intention towards foreign skincare brands. This finding aligns with the extant literature. Studies have found that consumers with ethnocentric tendencies identify with their social in-group, resulting in negative attitudes and purchase intentions towards foreign products (Durvasula et al., 1997; Granzin & Painter, 2001; Shimp & Sharma, 1987; Šmaižienė & Vaitkienė, 2012). This occurs because a consumer's ethnocentric tendencies lead him to believe that his own country is superior to others, making purchasing foreign products inappropriate and detrimental to the domestic economy (Granzin & Painter, 2001; Shimp & Sharma, 1987). As a result, an ethnocentric consumer believes he has a moral obligation to support local goods and services (Karoui & Khemakhem, 2019; Shimp & Sharma, 1987).

2. To examine whether there is a significant difference between the demographic characteristics of Sri Lankan consumers and their degree of consumer ethnocentrism.

Investigating the effects of demographic factors on Sri Lankan consumers' ethnocentric consumer tendencies is another important objective of this study, and the conclusions were derived by testing H₂. The results indicated that there was no significant relationship between age, income, or education and the degree of ethnocentrism, but that there was a significant relationship for gender, with males being more ethnocentric.

And while there is disagreement regarding which gender is more ethnocentric, most studies reveal significant gender differences in ethnocentric tendencies (Balabanis et al., 2002; Philp & Brown, 2003; Shankarmahesh, 2006; Sharma et al., 1995). Additionally, a few studies have found that male consumers are more ethnocentric than female consumers (Bannister & Saunders, 1978; Schooler, 1971). Accordingly, when

Sri Lankan consumers are considered, the current study's findings, which show that men are more ethnocentric, are consistent with these.

The current study found no significant relationship between age and ethnocentric tendencies in the context of Sri Lankan consumers, despite many studies indicating that older consumers are more ethnocentric due to their conservative nature (Balabanis et al., 2002; Caruana, 2005). These results are in line with the study by Philip and Brown (2003), which found no significant age differences.

It was also observed that there were no significant differences in ethnocentric tendencies among consumers from different income level groups. Multiple studies found a significant negative relationship between income levels and ethnocentrism (Balabanis et al., 2001, Cumberland et al., 2010; Watson and Wright, 2000). Contradictory results from the current study, however, show that there is no significant relationship between the degree of ethnocentrism in Sri Lankan consumers and variations in income levels.

Prior research has also revealed that consumers with higher levels of education tend to be less ethnocentric and more accepting of products and cultures from other countries (Watson & Johnson, 1972). The current study, however, found that despite differences in education levels, there are no significant differences in the level of consumer ethnocentrism. Additionally, a few studies (Balabanis et al., 2001; Javalgi et al., 2005; Saffu & Walker, 2005; Wanninayake, 2013) yielded similar results, indicating no significant impact.

5. Implications and Conclusion

5.1 Implications

From a theoretical standpoint, this study contributes to the understanding of how consumer ethnocentrism impacts purchase intention toward foreign goods. Although the impact of consumer ethnocentrism on products has been extensively studied, the findings are frequently conflicting. From a theoretical standpoint, this study helps to advance the understanding and application of consumer ethnocentrism in a variety of contexts, in this case, the Sri Lankan market for skincare products, by building on social identity theory. This will add to the body of existing knowledge of consumer ethnocentrism and ethnocentrism (for example, Cumberland et al., 2010; Garmatjuk & Parts, 2015; Joachim & Weerasekera, 2022; Šmaičienė & Vaitkienė, 2012).

Additionally, consumer behavior is a less discussed area in developing countries (Silili & Karunaratne, 2014), and therefore, this study has significant implications for gaining more clarity on consumer behaviour by taking into account a developing nation like Sri Lanka.

From a practical perspective, domestic skincare product manufacturers can use consumer ethnocentrism as a tactical tool to attract customers. The local brand appeal could be incorporated into their marketing strategies. This implies that they could also use herbal or ayurvedic skincare products to elicit a sense of cultural familiarity, as it is found that such tendencies impact their purchase intentions. Moreover, multinational corporations and other foreign skincare product manufacturers must exercise caution in

their marketing communication and promotional plans because any insensitivity to Sri Lankan culture will result in Sri Lankan consumers rejecting their brands and products.

Marketers also benefit from the findings regarding consumer characteristics and their ethnocentric tendencies when developing their marketing, segmenting, and positioning strategies. For example, the study reveals that men are more ethnocentric than women. As a result, they could make extensive use of cultural and local branding appeals in their integrated marketing communications for their male-targeted skincare products to appeal to men's ethnocentric tendencies and increase their likelihood of making a purchase. Furthermore, the discovery that other demographic characteristics such as age, income, and education level have no effect, suggests that targeting a specific demographic with an ethnocentric tool will be ineffective.

5.2 Limitations and Avenues for Future Research

A few limitations of the current study include, the 225 responses were gathered using a convenience sampling technique targeted at Sri Lankans living in urban areas with internet and technology access. As a result, the participants were predominantly younger respondents from the Western Province. Most survey respondents came from Colombo, Gampaha, Kalutara, Kandy, and other urban areas in Sri Lanka. Accordingly, some findings might not be generalisable to different contexts and locations. The results of the current study suggest that future research should concentrate on a larger geographic area to increase the generalisability of the findings (collecting data from people living in all parts of the country) with the use of random or stratified sampling to represent the entire population in Sri Lanka.

Moreover, this is a cross-sectional study, and future studies can consider more longitudinal studies which can be conducted over a long period of time. Additionally, future researchers can consider the moderating effect of demographic variables on the relationship between ethnocentrism and purchase intention. Finally, the area of consumer ethnocentrism remains to be a mature area of research, nevertheless, future researchers can consider exploring the concept of consumer ethnocentrism through qualitative methods to obtain an in-depth understanding.

5.3 Conclusion

The primary objective of this study was to determine the impact of consumer ethnocentrism on the purchase intention of foreign brands when the Sri Lankan skincare product market is considered, by using a quantitative research approach. The theoretical framework and hypotheses were developed based on previous findings which were built on social identity theory. The literature suggests that consumer ethnocentrism is positively connected to both product assessments and willingness to purchase domestic items, and results in unfavourable purchase intentions towards foreign products.

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Appendix A

Descriptive Statistics

Descriptive statistics of each item in CETSCALE

	N		Mean	Std. Deviation
	Valid	Missing		
CE_1	225	0	2.84	1.154
CE_2	225	0	3.25	1.036
CE_3	225	0	3.81	0.913
CE_4	225	0	3.06	1.05
CE_5	225	0	2.45	1.068
CE_6	225	0	2.74	1.007
CE_7	225	0	2.57	1.108
CE_8	225	0	3.33	1.118
CE_9	225	0	3.18	1.068
CE_10	225	0	3.42	1.002
CE_11	225	0	2.81	1.057
CE_12	225	0	2.88	1.079
CE_13	225	0	3.38	0.985
CE_14	225	0	2.45	0.972
CE_15	225	0	2.97	1.05
CE_16	225	0	3.29	1.07
CE_17	225	0	2.54	1.073

Descriptive statistics of each item in Purchase Intention scale

	N		Mean	Std. Deviation
	Valid	Missing		
PI_1	225	0	2.96	0.925
PI_2	225	0	3.08	0.963
PI_3	225	0	3.09	1.002

Analysis of Rejection Factors Influencing in Registrations of Boutique Hotels in Sri Lanka

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Abstract

This study aims to scrutinise the representation of boutique hotel registrations in the Sri Lankan tourism and hospitality accommodation sector to gain insights into the rejection factors influencing boutique hotel registrations in Sri Lanka. The rapid expansion of the tourism and hospitality sector has led to the generation of numerous informal establishments rather than formal establishments. Sri Lanka Tourism Development Authority (SLTDA), as the major governing authority in the tourism and hospitality industry, has a major responsibility to register all tourist enterprises and services under their authority. Yet most of the tourist enterprises fail to register their properties due to failure to meet the minimum standard requirements assigned. This has resulted in a number of rejections in boutique hotel registrations along with the other categories. The main objective of this study is to analyse the rejection factors influencing boutique hotel registrations together with the secondary objectives to identify the relationship and impact of the rejection reasons on the registration process developing a statistical regression model. The methodology comprises of the conceptual framework with five independent and one dependent variable. The population would be rejected boutique hotel applicants while the sample is the rejected boutique hotel applicants. The sample size is determined by the outcome of research based on 100% representation of rejected boutique hotel applicants from the year 2018-2022. The method employed for research is convenience sampling, in the form of data collection. As per findings for the first and second objective, minimum standard requirements, legal documentation requirements, lack of awareness of the registration process, miscommunication of rules and regulations and other social and technological barriers has an equally significant relationship on the rejection of boutique hotel registrations. Thus, as per the findings for the third objective the other social and technological barriers have the highest impact on the boutique hotel registrations. Therefore, the required recommendations presented include effective strategies to encourage boutique hotel registrations, especially with regard to the social and technological barriers. Suggestions to implement and follow are highlighted for the stakeholders involved in the registration process, either private or government as a whole.

Keywords: Tourism Accommodations, Boutique Hotel Registrations, Registration Process, Rejection of Registrations.

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1. Introduction

Sri Lanka as a renowned country famous for its hospitality earns its highest revenue through the accommodation sector. Among accommodation sectors in Sri Lanka, the concept of boutique hotels plays a significant role in the trending tourism industry attracting high-end tourists. In the Sri Lankan context, the national governing body; the Sri Lanka Tourism Development Authority (SLTDA) maintains quality accommodations for tourists and registers all the tourism accommodations and services under section 48 (4) of Tourism Act No.38 of 2005. To register a boutique hotel property under the SLTDA, a registration applicant must adhere to the minimum classification requirements followed by the authority to register their tourist enterprises and tourist services. Thus, a majority of the applicants fail to register their properties at the SLTDA due to various reasons such as not following standard guidelines, lack of awareness about the online registration process, the number of legal documents needed, miscommunication of rules and regulations, and other social and technological factors. As a result, the number of rejected boutique hotel applications is rapidly increasing day by day. Thus, this study will specifically analyse the rejection factors influencing the registrations of boutique hotels, their impacts on the registration process by developing a rejection model based on the rejection factors of boutique hotel registrations in Sri Lanka.

As per the rules and regulations in Sri Lanka, tourist accommodations and services must be registered with the SLTDA, and the failure to register is considered illegal. Registering with the SLTDA provides several benefits for accommodation establishments. These include legal recognition, participation in the tourism industry's communication system, eligibility for government programmes, professional development opportunities, and more. The categorisation comprises of registered formal accommodations, while unregistered establishments are considered informal. Among the diversity of registration property categories at SLTDA, boutique hotels have a significant trend. Boutique hotels in Sri Lanka provide distinctive amenities and individualised services (Balekjian & Sarheim, 2011; Wettasinghe, 2018). In Sri Lanka, there were 24 boutique hotels that were registered in 2019 and more than 400 units that were unofficial and unregistered (Reddot Tours 2019; Sri Lanka Tourism Development Authority [SLTDA], 2019). According to SLTDA statistics on registrations of boutique hotels in Sri Lanka, there are 48 registered boutique hotels so far in Sri Lanka until 2022 resulting in a greater contribution to economic and social development, and a substantial growth rate (Shantha, 2018). When considering the international context, customised hotels first appeared in the UK and the USA in the 1980s, and the phrase 'boutique hotel' entered the business (Albazzaz et al., 2003; Lim & Endean, 2009). The first boutique hotels to emerge under the boutique hotel idea were The Blake's Hotel in South Kensington, London, and The Bedford in Union Square, San Francisco. Since then, the concept has gained popularity worldwide, and boutique hotels have become a prominent segment of the hospitality industry. Boutique hotels are known for their unique design, personalised services, and attention to detail. They offer an intimate and upscale experience to guests, often with a focus on a specific theme or concept. Internationally, boutique hotels have thrived in various destinations, including major cities, popular tourist areas, and exotic locations. They have become a preferred choice for travellers looking for a more intimate and authentic experience as compared to larger chain hotels. These hotels often showcase local culture, art, and architecture, adding to their appeal.

1.1 Problem Statement

Sri Lanka is softly killing the tourism industry (Dias, 2018). Also, due to a lack of standards, concentration, and professional labour procedures, the competitiveness of the Sri Lankan tourism industry is becoming less competitive against other South Asian travel destinations (Jayasuriya, 2017). In order to accommodate the rising demand for tourist accommodations, there has been a sharp increase in homeowners leasing extra space. Unfortunately, the majority of tourism property owners do not register their tourist businesses under the SLTDA as a result of not adhering to the minimum SLTDA guideline categorisation criteria. As a result, the informal sector has rapidly emerged, which is a big source of worry for the sector. The formal sector occupancy is around 36% with the informal sector recording around 62%. The formal sector room capacity is around 35,000 (including supplementary accommodation) and the informal sector is around 12,500 (Tourism industry crisis, 2022).

Out of the informal accommodation sector, the number of unregistered boutique hotels is increasing. In 2019, there were 24 boutique hotels in Sri Lanka under the registered category and more than 400 units in the informal unregistered category (SLTDA, 2019). In 2022, so far there are 48 registered boutique hotels in Sri Lanka while the number of new registrations for the year 2022 is zero.

Table 1

'2019–2022 Annual Boutique Hotel Registrations'

Year	Number of Registered Boutique Hotels
2019	05
2020	01
2021	03
2022	0

Source : SLTDA , 2022

According to Table 1 '2019–2022 Annual Boutique Hotels Registrations', the number of rejecting boutique hotel application rates in Sri Lanka are comparatively increasing in recent years from 2019-2022 and only a limited number of applications have been approved by the SLTDA to register under the boutique hotel category. Therefore, this research aims to analyse the rejection factors influencing in registrations of boutique hotels in Sri Lanka together with their impact on the registration process.

1.2 Research Question(s)

To analyse the boutique hotel rejection factors more specifically, in the Sri Lankan context the following research questions will be addressed.

RQ1 – What are the factors influencing the rejection of boutique hotel registrations in Sri Lanka?

The above research question will identify the factors highly influencing a boutique hotel registration process, thus identifying the above rejection factors' benefits on finalising its relationship and impact on the registration process.

RQ2 – What is the impact of the rejection factors on the registration process?

The above research question helps to identify the impact and the relationship of each rejection factor on the entire boutique hotel registration process

RQ3 – How to develop a statistical regression rejection model based on the rejection factors of boutique hotel registrations in Sri Lanka?

The above research question helps in building up a regression model to find out the most affecting and the least affecting factors of a boutique hotel registration process.

1.3 Objectives of the Study

Major Objective

Identifying the rejection factors influencing boutique hotel registrations in Sri Lanka

Other Specific Objectives

Sub Objective 1: Identifying the relationship between the rejection factors on the registration process

Sub Objective 2: Identifying the impact of the rejection factors on the registration process

1.4 Research Gap

Though there is a plethora of studies conducted on boutique hotels from the visitors' perspective, there is a dearth of research conducted on the rejection factors influencing boutique hotel registrations. Thus, there are a few research gaps identified such as the Literature Gap, the Knowledge Gap, and the Empirical Gap. As for the literature gap, there are missing pieces in the above-selected research literature as the areas are not yet being explored or are under-explored. The previous studies have explored extensively the sustainability practices that could be followed in the Sri Lankan boutique hotel context. The World Bank group (International Financial Corporation [IFC], 2020) has also done a report analysing the sustainability of the growing Sri Lankan boutique hotel industry. However, there are only a limited number of studies that are conducted in an Asian context to explore the rejection factors of boutique hotel registrations. As for the knowledge gap, the desired findings about this area of study do not exist in the Sri Lankan context as there is no research done in the area. Hence, to analyse this situation more specifically in the Sri Lankan context, the factors affecting boutique hotel registrations will be analysed and discussed to improve the registration rate, establish quality boutique hotel demand, supply in the country to attract more luxury tourists, and involve more stakeholders. For the empirical gap, though the previous studies have extensively explored the sustainability impacts in the Sri Lankan context, no studies have been verified or disproved by observation or experiments on the area of rejection factors influencing boutique hotel registrations.

1.5 Significance of the Research

This study will mainly benefit the stakeholders involved in the entire tourism industry. SLTDA, the major Sri Lankan governing body, will be able to identify the economic, social, legal, and technological factors that cause boutique hotel application rejections and implement effective strategies to uplift the number of boutique hotels willing to register, minimising the factors affecting registrations. The study is important to the potential boutique hotel owners to determine the crucial economic, social, legal and technological causes of their boutique hotels failing to register as they are supposed to be the leading registered boutique hotels in the future.

The academic significance of this study is for the students, educational institutes, and future researchers to gain knowledge about the economic, social, legal, and technological factors influencing boutique hotel registrations and identify each factor that impacts the registration process. Future researchers can use the study findings to expand the scope of the study, fill the research gaps, and develop the existing statistical rejection model based on the rejection factors of boutique hotel registrations in Sri Lanka developed for further studies. As a whole, the entire tourism industry either the government or the private sector would benefit because, the more you identify the rejection causes the easier it becomes to implement strategies and increase the number of registered boutique hotel establishments in the country. Strengthening the formal establishment sector will ultimately generate major benefits for the tourism industry stakeholders.

2. Literature Review

2.1 Theoretical Background of the Topic

Sri Lankan and International Boutique Hotels

Sri Lanka offers a variety of boutique hotels, including luxury, quirky, family-run, and more. These establishments offer distinctive amenities and individualised services in a lavish, private setting, often using local vernacular architecture and design (SLTDA, 2022). These hotels are often the finest choice due to their personal touch and unique atmosphere. They are standalone properties, often not part of chain hotels, and focus on comfort and tranquillity than technology. Guest services are often handled by hotel personnel, and some boutique hotels provide pubs, lounges, and on-site dining options. The concept of boutique or designer hotels is gaining popularity in Sri Lanka, particularly in the interior, where they are havens of luxury in beautiful settings. A boutique hotel is a tourist establishment offering a unique service, product, or experience. These hotels are not subtyping of the larger hotel industry but rather distinct and individual businesses within their own market (IFC, 2013). In Sri Lanka, there are no boutique hotel classifications due to the limited number of formal and informal boutique hotels. However, categorising boutique hotel properties in Sri Lanka allows for attracting a diverse range of tourists based on their service preferences (Walker Tours, 2022).

Thus, when registering or building a boutique hotel, there are a number of requirements. Thus, it varies with the Sri Lankan context as well as the international context. International boutique hotels typically have smaller sizes, typically 10 to 100 rooms and on-site suites, making them more intimate and enhancing the customised experience (Giulietta, 2018). Some exceptional boutique hotels have fewer than 30 rooms, such as the Villa Spalletti Trivelli in Rome. They are unique in character,

blending fascinating architecture, creative furnishings, and playful decors to create a character. Design is crucial in developing distinctive qualities in a boutique hotel, focusing on making even the smallest aspects of the space excellent. Some boutique hotels offer out-of-this-world themes, but most maintain a contemporary, elegant, and trendy vibe with a touch of personality. Some hotels also play with themes that run throughout the hotel, such as the Hotel Not Hotel in Amsterdam and Maison Souquet in Paris.

The SLTDA registration license for boutique hotels in Sri Lanka requires meeting several standard requirements, such as location/site coverage ratio, building design, number of guest rooms, guest room size, bathroom size, disabled rooms, butler service, swimming pool, and a common area. If none of these requirements are met, the SLTDA will not proceed with registering the hotel. The hotel's focus on curating services and offerings makes it more appealing to travellers seeking a unique and memorable experience. The registration process for Sri Lankan and international boutique hotels to start and operate a hotel business, numerous permits and registrations are required, including those for opening and renewal. To maintain validity, a license must adhere to specific guidelines. Sri Lankan boutique hotels must register their boutique hotels through the SLTDA guidelines, which consist of four major steps: online application submission, administration payment, inspection document submission, and registration/rejections (Investor Relations Report, 2021).

Factors Affecting Boutique Hotel Registrations in Sri Lanka

The minimum standard requirements of SLTDA play a massive role when it comes to the boutique hotel registration process. According to the standard requirements of SLTDA to register a tourist business, the business must meet certain criteria established in regulations or board-adopted guidelines. Thus, a boutique hotel needs to adhere to a set of requirements to fall and register under the category (Investor Handbook, 2019).

The location/site coverage ratio of the hotel's building to land ratio should give off an impression of space. The building design including the ground floor, a boutique hotel building should not have more than two floors. Number of guest rooms in the boutique hotel should have minimum 10 guest rooms with attached bathrooms. As for the size of guestroom apart from the designated sitting and dressing areas, the bed room should be at least 30.0 square meters (excluding the attached balcony and bathroom). The room's width should not be less than 3.0 meters. The bathroom size of each guest room should be at least 4.5 square meters in size. The sanitary installations should be of the highest quality and be very well maintained. Whereas having a disabled room according to the "Protection of the Rights of People with Disabilities Act" (gazette notification no. 1, 467/15 of October 17, 2006), the hotel must abide by the rules set forth in this act. Thus, if none of the requirements are met, the SLTDA will not proceed in registering the boutique hotel property to maintain their standard and quality or the application will be moved to a category that fits the criteria (SLTDA, 2018). According to the above elaborated minimum standard requirements not following the initial guidelines on the location, building design, number of rooms, room size, bathroom size, disabled room access, and the butler service has a 100% chance of the application getting rejected or changing into another category with the categorization.

Legal documentation is another major factor affecting boutique hotel registrations. When registering a boutique hotel property under the SLTDA, several documents are needed such as the online application form for registration, business registration 3 Form 1 or 48/20 (if the business is reregistered as a limited liability company), trade license or consent letter from the local authority, approved building plan or consent letter from the local authority or Urban Development Authority, environmental protection license or consent letter from Central Environmental Authority/ Provincial Environment Authority or relevant local authority is taken after construction, some tourism businesses require an environmental protection license. This license is issued by the Central Environmental Authority or the local authority. Depending on the size of the project, an EPL is required before registering with SLTDA. Apart from the above documents, a valid Deed or lease agreement or consent letter from the Divisional Secretariat or land-owning authority, insurance policy covering public liability, insurance policy covering workmen compensation, water quality test reports (bacteriological examination and chemical analysis), medical reports of staff, certificate of fire protection, bio data of executive staff and the board resolution for trade name (if the business is registered as a limited liability company) are required when registering or renewing licenses of a boutique hotel property (SLTDA, 2018). With regard to the main 14 documents, the SLTDA examines architectural plans to see if the project will, as built, adhere to standards for the desired sort of facility. On its website, the SLTDA publishes these requirements. After the building plan is checked by the SLTDA standard and quality assurance division, they will work with the applicant to make any adjustments that are required if the project designs do not meet the agreed specifications or else reject the boutique hotel applications if the property design is entirely different or need a lot of work. Thus, out of the 14 required documents, only four to five documents impact the rejection of applications during the initial registration process. The initial documents that result rejection in the early registration phase are, the building plan, the online registration application, the business registration and the valid deed or lease. (Boutique hotels, 2020)

Lack of awareness of the registration process is also another significant factor influencing boutique hotel registrations. Sri Lanka as a developing country is having a tough time in using digitalisation methods. When registering at SLTDA, there are insufficient online guideline materials in all three languages briefly explaining how to obtain the formal license. (Sarath, 2021) Though there are available sources on obtaining the provisional license process, there are insufficient online guideline materials elaborating on obtaining a direct license which could also be one of the major reasons resulting in boutique hotel rejections during the registration process. This indirectly creates a sense of isolation due to having the least human assistance while registering (Thompson, 2018). Since the entire registration process is done through online platforms, the human interaction for a beginner or a re-applicant is less. Hence the above situation will lead to a lack of discipline where the applicant will tend to be ignorant and provide false data due to negligence as well. Some applicants possess the ability to work independently, while others find comfort in getting real guidance from actual human assistance rather than totally registering in isolation (Sam, 2021). If an applicant does not feel they are getting the proper guidance, they may not have enough self-discipline to fill the registration applications with accurate data with the right guidance. Moving to virtual, real-time registrations the applicants that need support via the registration process might be able to successfully register in one go

instead of using just the online registration. Therefore, lack of awareness of the registration process followed up with insufficient online guideline materials, less human interaction and ignorance and negligence while filling out the online application could also be the reasons why the rejection of boutique hotel registrations is higher.

Miscommunication of government rules and regulations is another prominent factor for why boutique hotel registrations are affected. Most of the applicants willing to register their properties try to fall under the boutique hotel/villa category as it belongs to the luxury accommodation sector. Sri Lanka as a country running with tourism has a target market of Europeans who always look for standard and quality-assured luxury categories such as registered boutique hotels/villas for their stay (Sri Lankan Boutique Hotels, -2021). Thus, many tourist accommodation property applicants try to register their properties by entering false data in the application when they barely meet the minimum requirements to register under the boutique hotel category. As a result, this miscommunication the false perception derives in higher application rejection rates of the boutique hotel category. Apart from the luxury accommodation sector boutique hotels/villas, tourist hotels and classified hotels all the other tourist establishments and services are given a provisional license of 6 months instead of the formal license (SLTDA, 2021). Thus, the majority of the property owners try to apply for the above luxury categories to get the formal license and reduce their cost and time spent on provisional license and their inspections. Hence a majority of boutique hotel applications are rejected as they do not comply with the minimum guidelines and yet try to register under the category with the false perception of obtaining the formal license which happens mostly due to the miscommunication of rules and regulations inspections are usually done during the registration and issuing of the license. The majority of the applicants have a false miscommunicated perception of online inspection. Yet even an online image inspection is done a physical inspection will be done prior to registering and obtaining the license. Not knowing that the majority of applicants send fake images for image inspection and when real physical inspections are done the relevant boutique hotel cannot be registered under the boutique hotel category or will be temporarily moved to another category with the available facilities and design of the overall building (Perera, 2018). Thus, this miscommunication of inspections done prior also gives a false perception to the applicant to register as a boutique hotel when the minimum requirements are not even met. Therefore, according to the literature review discussed in the above paragraph the false perception of registering as a luxury establishment, intentions of getting formal license and the inspections done prior registrations fall under the miscommunication of rules and regulations

Other social and technological barriers are also possible rejection factors when it comes to registrations of boutique hotels. The common social barrier of an entrepreneur is having lack of computer literacy and sound English knowledge (Social Enterprise Barriers, 2017). People with low English literacy skills may not be able to read an English book understand road signs or price labels, fill out a form, read instructions, or use the internet (Sam, 2015). Hence the entire registration process of a boutique hotel is done online, no matter how much you are good in computer literacy if there is an insufficiency in English literacy. Since most of the applicants do not have sufficient English knowledge, the applications that are filled tend to require false data because

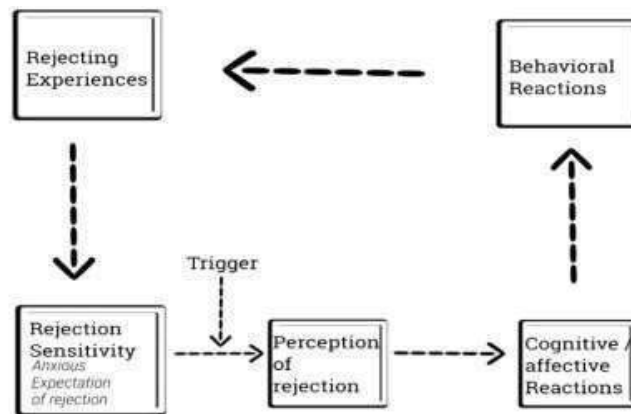
the applicant does not understand the instructions to provide accurate data. Nevertheless, insufficient English literacy is another major social barrier resulting in boutique hotel registration rejection rate. The lack of digital literacy may include the inability to perform simple functions such as composing emails, logging into online platforms, and even saving work to a thumb or disk drive (Richmond, 2018). Thus, it is one of the major reasons why boutique hotel applications tend to be rejected as the majority of the applicants lack basic computer literacy to fill out their registration applications. As a result, multiple applications from the same applicant will be received, some with false data and incomplete applications. In the end, such boutique hotel applications will not be able to proceed with the registration process. For a business to register and survive in a competitive market, it is crucial to constantly innovate and improve. Bringing in new business and registering it is a vital part of this process. Without regulatory knowledge of technology both the progress and performance of registering a business run the risk of lagging helplessly behind. Being updated in new technology in registering and running a business it is likely to encounter several barriers (Perera, 2018). However, since everything is based on new technology and online platforms the registrations and renewals of the tourist board also follow means and challenges with registering their boutique hotels such as the online registration platform and email communication to process the registrations. Due to the covid-19 situation and the economic crisis faced in the Sri Lankan context, most of the day-to-day activities were switched to be done online. Nevertheless, the registrations and renewals of the SLTDA were also systemised to be done via the latest online technologies and their systems (SLTDA, 2020). Hence many applications tend to fail as Sri Lanka is a developing country and fails to keep up with the modern systems due to reasons such as lack of personal guidance to fill the applications, lack of awareness to fill the application with very limited guidance on the document, filling false data, and not knowing how to create an account to register with accurate details has resulted in a massive number of failed boutique hotel applications. As a result of another technological barrier communicating via email has also increased the number of rejection rates of not only boutique hotels but all the other tourism accommodations and services. Email communication plays a vital role in today's industry (Glythe, 2021). Hence, all the online application details will be acknowledged by the SLTDA officers and relevant requests as per application will be made via email communications. Yet most of the applicants fail to communicate via emails and online systems. As a result, the registration either gets delayed, falls under the shortcoming category, or completely gets rejected. Thus, social and other technological barriers are created due to insufficient English literacy, computer literacy, and the advanced online applications followed up with email communication according to the above-explained literature review.

2.2 Models and Theories Related to Rejection

The model of rejection sensitivity (Levy et al., 2001)

The rejection sensitivity model identifies rejection sensitivity and its individual causes in relationships, focusing on the role of RS in significant others.

Figure 1
Rejection Sensitivity Model



Source: Levy et al. (2001)

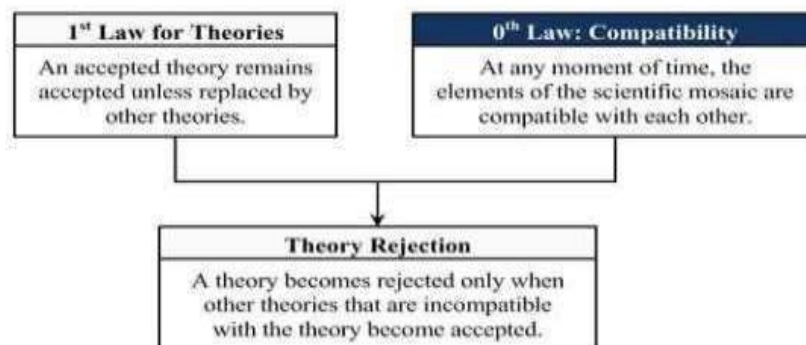
Boutique hotel registrations are influenced by external factors like minimum requirements, legal documentation, lack of awareness, miscommunication, and social and technological factors. These factors can lead to rejections, resulting in a rejection sensitivity model.

The rejection sensitivity model identifies rejection sensitivity and its individual causes, focusing on relationships with significant others. It also examines the impact of external factors on boutique hotel registrations, such as standard minimum requirements, legal documentation, lack of awareness, and miscommunication of rules and regulations. The model outputs rejections based on these factors, similar to rejections in boutique hotel registrations.

Theory Rejection Theorem (Barseghyan, 2015)

According to the Theory Rejection Theorem, a theory becomes rejected only when other theories that are incompatible with the theory become accepted.

Figure 2
Theory Rejection Theorem (Barseghyan, 2015)



Source: Barseghyan (2015)

The theory suggests that a theory is rejected if other incompatible theories are accepted alongside the initial theory. In boutique hotel registrations, non-compliance with minimum standards and accurate registration processes prevents registration from proceeding, even if the initial theory is already submitted.

2.3 Summary of Supporting Literatures

Table 2

Summary of supporting literature

Context	Supporting literary evidence
Local and international boutique hotels	(BLLA,2021), (IFC report,2013), (Walkers tours,2022)
Mandatory requirements of international and Sri Lankan boutique hotels	(BLLA,2019) , (SLTDA ,2021), (Guiletta,2018)
Registration process of Sri Lankan and international boutique hotels	(SLTDA,2022), (Anon,2021), (Arjith,2018), (Shen,2013)
Advantages of registering a boutique hotel establishment	(SLTDA,2019), (Edirimuni,2020)
Minimum standard requirements of SLTDA	(SLTDA,2022) ,(Perera,2018), (Yashoda,2015)
Legal documentation requirements	(SLTDA,2020), (Shen,2013)
Lack of awareness on registration process	(SLTDA,2021),(Thompson 2018) ,(Kenz,2019)
Miscommunication of rules & regulations	(SLTDA,2021) ,(Perera,2018)
Social & technological barriers	(SLTDA,2021),(Glythe,2018),(Richmond,2018)
Case Studies	(Pathirana,2020), (Yashoda,2020), (Jiyan,2022)
The model of rejection sensitivity & Theory rejection theorem	(Levy,Ayduk;Leary,2001) , (Barseghyan,2015)

Source: Research literary evidence, 2023

3. Methodology

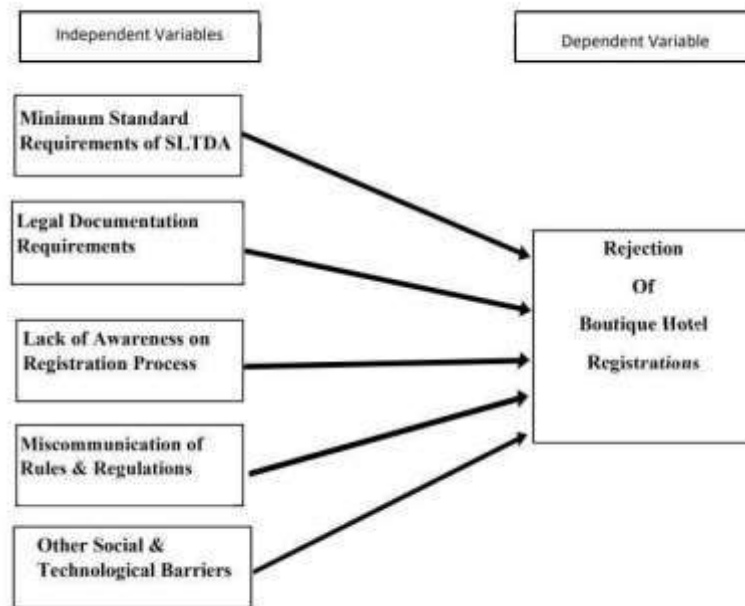
3.1 Research Design

The study aims to identify rejection factors, and their impact on registration, and develop a statistical rejection model. It follows a quantitative approach with a deductive method, using five independent variables and one dependent variable. The research is explanatory, with a sample size of 2022 boutique hotel applicants. Data analysis methods include descriptive, correlation, and regression.

3.2 Conceptual Framework

Figure 3

Conceptual Framework,



Source: Research Conceptual framework based on Literature 2023

According to Figure 3 the conceptual framework is built based on the literature and it denotes the relationship between variables or the characteristics or properties to be studied. Conceptual frameworks can be generated in written form or visual form developed and based on a literature review of existing studies about the topic. As per factors identified from the literature review phase, there are five independent variables identified: Minimum standard guidelines of the SLTDA, legal documentation, lack of awareness of registration process, Miscommunication of rules and regulations, and Other social and technological barriers. As for the dependent variable of the study, rejections of boutique hotel registrations and their evaluation were taken. The first independent variable minimum standard requirements is measured by six indicators: building design, guest room size, number of guest rooms, bathroom size, disabled rooms and butler services. The second independent variable Legal documentation is measured by four indicators: building plan, online registration application, business registration documents, and deed/lease. The third variable lack of awareness of the registration process is measured by three indicators: online guidelines materials, ignorance of the applicant, and the least human assistance. The fourth variable Miscommunication of rules and regulations is measured by three variables; the motive to register as a luxury establishment, intentions of getting a formal license, and inspections done prior to registrations. The fifth variable Social and technological barriers has four indicators: computer literacy, English literacy, online registration process and email communication. Therefore, based on the above conceptual framework the questionnaire will be created to measure each independent and dependent variable as per number of indicators.

3.3 Operationalization of Variables

Table 3

Operationalisation of tables

Concept	Variable	Indicators	Measured by question No.	Measurement scale
Independent Variable	Minimum Standard Requirements of SLTDA	Building Design	Part B - 07	Five Point Likert Scale.
		Guest Room Size	Part B - 08	
		No. of Guest rooms	Part B - 09	
		Bathroom size	Part B - 10	
		Disabled rooms	Part B - 11	
		Butler service	Part B - 12	
		Legal Documentations	Building Plan	
	Online registration application	Part B - 14		
	Business Registration Document	Part B - 15		
	Dead/Lease	Part B - 16		
	Lack of Awareness on Registration Process	Online Guideline Materials	Part B - 17	Five Point Likert Scale
		Ignorance and providing false data	Part B - 18	
		Less human assistance	Part B - 19	
	Miscommunication of rules & regulations	Motive to register as luxury establishments	Part B - 20	
		Intentions of getting formal license	Part B - 21	
		Inspections done prior to registrations	Part B - 22	

	Other Social & Technological Factors	Insufficient computer literacy	Part B - 23	Five Point Likert Scale
		English Literacy	Part B - 24	
		Online registration process	Part B - 25	
		Email Communication	Part B - 26	
Dependent Variable	Factors mostly affecting boutique hotel registrations	Minimum standard requirements	Part C -27	Five Point Likert Scale
		Legal documentation	Part C -28	
		Lack of Awareness	Part C -29	
		Miscommunication of rules and regulations	Part C - 30	
		Other Social & Technological Barriers	Part C -31	
	Evaluation	Awareness on registration process before applying	Part C -31	Five Point Likert Scale
		Possibility of successful registration if aware of the registration process	Part C - 33	
		Re-applying for registrations	Part C - 34	

Source: Research conceptual framework and questionnaire, 2023

Table 3 operationalises variables by type, indicators, question numbers, and measurement scale. A questionnaire is divided into three parts: A, B, and C. Independent variables include minimum standard guidelines, legal documentation, lack of awareness, and miscommunication. Dependent variables include rejection factors and evaluation variables.

3.4 Types of the Study

Three main types of research study are descriptive, explanatory, and exploratory. Explanatory studies analyse rejection factors influencing boutique hotel registrations, while explanatory studies examine the relationship between independent and dependent variables.

3.5 Nature of the Study

The study examines five independent variables: minimum SLTDA requirements, legal documentation, lack of awareness, miscommunication, and social barriers. It conducts correlation and regression analysis to determine the relationship and develop a statistical rejection model.

3.6 Population and Sample

Population

The study examines five independent variables: minimum SLTDA requirements, legal documentation, lack of awareness, miscommunication, and social barriers. It conducts correlation and regression analysis to determine the relationship and develop a statistical rejection model.

Sample

Sampling involves selecting a sample unit, including rejected boutique hotel applicants from the population during the years of 2018-2022. The Krejcie and Morgan formula yields a total sample size of 152, based on 250 applicants.

Sampling Technique

The Convenience sampling technique was used to study 152 rejected boutique hotel applicants from 250 applicants between 2018-2022, analysing primary data through questionnaires provided to rejected applicants.

3.7 Data Collection Methods

Research objectives and data type determine the data collection methodology, with primary data collected through surveys and secondary data from published sources. The primary data was collected via a questionnaire created using Google Forms distributed via online platforms among the rejected boutique hotel applicants.

4. Results and Discussion

4.1 Analysis of Applicant Personnel Information and Rejection Reasons

Age Distribution Analysis of Respondents

The age distribution category of the applicants revealed that the majority of applicants (24.8%) were above the age of 60, which represents that most of the boutique hotel applicants are elderly applicants while the age category between 20-30 years had the lowest boutique hotel applicant's percentage.

Level of Education of Respondent Analysis

Continuing to examine the educational qualifications of the applicants, it was found that the majority, 39.2%, were school leavers. This concludes that the majority of the applicants have basic education knowledge whereas only a very few of 20.3% are graduates and above.

Tourism Industry Experience of Respondent Analysis

Next, in terms of the applicant's experience in the tourism industry, a majority of the rejected applicants have over 15 years of experience in the industry while the lowest experience category was between 5 to 10 years.

Year of Boutique Hotel Rejection of Respondent Analysis

When analyzing the responses to the question about boutique hotel rejection, it was found that the majority of applications were rejected in 2022, while the least number of rejections occurred in 2019.

District Distribution of Boutique Hotel of Respondent Analysis

The majority of hotels were located in the Colombo district, followed by the Galle district. Yet there are no applications from the Batticaloa, Kilinochchi, Mannar, and Vavuniya districts which represent the entire Northern province.

Number of Attempts Taken to Re-Register After the Rejection of the Last Application of Respondent Analysis

The majority of applicants made only one attempt, while the least number of attempts made was four as depicted. Since 34% of the applicants have still not attempted, there is a higher possibility of them reapplying.

4.2 Reliability Test

This study investigates measurement scales and their constituent items using the Reliability Analysis procedure. It evaluates the internal consistency of constructs using Cronbach's Alpha, a reliability test for multipoint-scaled items. Cronbach's Alpha measures positive correlation among items, with higher values indicating better internal consistency.

Table 4

Reliability Statistics

Variable	Cronbach's Alpha
Min: Stan: Req: of SLDA	0.966
Legal Doc: Req:	0.866
Lack of Awa: of Reg: Pro:	0.740
Miscommunication of Rules & Reg:	0.697
Other Social & Tec: Barriers	0.969
Rejection of Application	0.699

Source: Survey Data (2023)

Cronbach's Alpha test assessed the reliability of the 152-item questionnaire, revealing high levels of internal consistency. The high values indicate the data's reliability, allowing for confident use in future research and making accurate conclusions and recommendations.

4.3 Descriptive Statistics

Mean and Standard Deviation

This study uses descriptive statistics to analyse data characteristics, using standard deviation as a measure of variability. Five independent variables are measured using a Likert scale, and descriptive statistics are presented in Table 4.2.

Table 5
Mean and Standard Deviation

	Mean	St. Deviation	Skewness	
	Statistic	Statistic	Statistic	Std. Error
Min: Stan: Req: of SLDA				
Aspect 1	3.87	1.005	-1.172	.197
Aspect 2	3.79	1.143	-1.330	.197
Aspect 3	3.80	1.174	-1.376	.197
Aspect 4	3.93	.885	-1.078	.197
Aspect 5	3.89	1.017	-1.315	.197
Aspect 6	3.86	1.042	-1.141	.197
Legal Doc: Req:				
Aspect 1	3.25	.878	-.869	.197
Aspect 2	2.61	.956	-.849	.197
Aspect 3	2.58	.967	-.844	.197
Aspect 4	2.65	.978	-.750	.197
Lack of Awa: of Reg: Pro:				
Aspect 1	3.99	1.101	-.862	.197
Aspect 2	2.57	.835	.203	.197
Aspect 3	4.37	.874	-1.458	.197
Miscommunication of Rules & Reg:				
Aspect 1	2.30	.920	.722	.197
Aspect 2	2.22	1.005	.490	.197
Aspect 3	2.49	1.023	.394	.197
Other Social & Tec: Barriers				
Aspect 1	3.43	1.394	-.636	.197
Aspect 2	3.40	1.452	-.544	.197
Aspect 3	3.62	1.539	-.607	.197
Aspect 4	3.60	1.558	-.596	.197
Application Rejection				
Aspect 1	3.42	1.400	-.678	.197
Aspect 2	3.41	1.453	-.524	.197
Aspect 3	3.65	1.600	-.618	.197
Aspect 4	3.66	1.557	-.599	.197
Aspect 5	3.67	1.392	-.648	.197
Aspect 6	3.68	1.451	-.529	.197
Aspect 7	3.69	1.540	-.618	.197
Aspect 8	3.62	1.545	-.599	.197

Source: Survey Data (2023)

The study found that most independent variables and dependent variables exceeded the moderate level, indicating high agreement among respondents. Lack of awareness of the registration process was found to be the most significant factor, with aspect 3 having the highest mean value of 4.37. Skewness was moderately distributed, with aspect 2 having the lowest standard deviation.

4.4 Correlation Analysis

The study used correlation analysis to assess relationships between independent and dependent variables, using the Pearson correlation test and software.

Table 6
Correlation Analysis

		MSR	LDR	LARP	MRR	OSTB	AR
MSR	Pearson Correlation	1	.480**	.421**	.157	-.418**	-.348**
	Sig. (2-tailed)		.000	.000	.054	.000	.000
	N	152	152	152	152	152	152
LDR	Pearson Correlation	.480**	1	.242**	.146	-.181*	.245**
	Sig. (2-tailed)	.000		.001	.072	.025	.000
	N	152	152	152	152	152	152
LARP	Pearson Correlation	.421**	.242**	1	.251**	.741**	.280**
	Sig. (2-tailed)	.000	.003		.002	.000	.000
	N	152	152	152	152	152	152
MRR	Pearson Correlation	.157	.146	.251**	1	-.119	.424**
	Sig. (2-tailed)	.054	.072	.002		.143	.000
	N	152	152	152	152	152	152
OSTB	Pearson Correlation	.418**	.181*	.741**	-.119	1	.496**
	Sig. (2-tailed)	.000	0.025	.000	0.143		.000
	N	152	152	152	152	152	152
AR	Pearson Correlation	.348**	.245**	.280**	.424**	.496**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000
	N	152	152	152	152	152	152

** . Correlation is significant at the 0.01 level (2-tailed).

Notation

MSR- Minimum Standard Requirements of SLTDA LDR- Legal Documentation Requirements

LARP- Lack of Awareness of the Registration Process, MRR- Miscommunication of Rules & Regulations

OSTB- Other Social & Technological Barriers, AR- Application Rejection

The correlation analysis revealed significant findings, with medium and low positive values for each variable. The highest correlation was found for Other social; technological barriers (0.496), with rejection of application variables. The lowest correlation was found for legal documentation requirements (0.245), and the second highest correlation was for miscommunication of rules and regulations (0.424).

Summary of Correlations Analysis**Table 7***Summary of Correlations Analysis*

Description	Test Stat.	Probability P. value	Status
Correlation between Application Rejection & Minimum Standard Requirements of SLTDA	0.348	<0.001	Significant 1%
Correlation between Application Rejection & Legal Documentation Requirements	0.245	<0.001	Significant 1%
Correlation between Application Rejection & Lack of Awareness of the Registration Process	0.280	<0.001	Significant 1%
Correlation between Application Rejection & Miscommunication of Rules & Regulations	0.424	<0.001	Significant 1%
Correlation between Application Rejection & Other Social & Technological Barriers	0.496	<0.001	Significant 1%

Source: Survey Data (2023)

Table 8*Regression Analysis*

Model	Unstandardized Coefficients		Standardized Coefficients	t
	B.	Std. Error	Beta	
1				
(Constant)	.340	.405		0.839
MSR	.464	.179	.403	2.598
2				
(Constant)	.998	.0460		2.169
MSR	.411	.142	.411	2.827
LDR	.541	.203	.600	2.665
3				
(Constant)	-.169	.272		-4.290
MSR	.622	.102	.732	6.097
LDR	.730	.120	.788	6.078
LARP	.146	.067	.181	2.174
4				
(Constant)	.057	.425		2.485
MSR	.463	.131	.412	3.537
LDR	.631	.187	.607	3.365
LARP	.112	.105	.125	1.074
MRR	.736	.111	.758	6.655
5				
(Constant)	-.720	1.325		-.543
MSR	.901	0.140	.979	6.440
LDR	.431	1.352	.695	1.797
LARP	.705	.173	.387	9.884
MRR	.837	.424	.914	1.972
OSTB	.548	.133	.986	11.632

4.5 Model Summary

Table 9

Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	0.890 ^a	0.792	0.760	0.539	2.472
2	0.749 ^b	0.562	0.495	0.612	
3	0.925 ^c	0.855	0.833	0.363	
4	0.848 ^d	0.719	0.676	0.566	
5	0.998 ^e	0.996	0.137	0.996	

a. Predictors: (Constant), MSR

b. Predictors: (Constant), MSR, LDR

c. Predictors: (Constant), MSR, LDR, LARP

d. Predictors: (Constant), MSR, LDR, LARP, MRR

e. Predictors: (Constant), MSR, LDR, LARP, OSTB

f. Dependent Variable: AR

Source: Survey Data (2023)

The study found a strong positive relationship between variable 1 and rejection of the application process, with a significant value of 0.000. Variable 2 and variable 3 also had a significant positive impact, with a significant value of 0.000. Variable 4 had a strong positive correlation with rejection, while variable 5 had a strong positive correlation with rejection. The R Square represents the percentage of variability explained by the independent variable. The Durbin-Watson test statistic indicates independent residuals, with values between 1.5 and 2.5.

A value below 0.5 indicates significant impact, while values above 0.5 are not significant. Beta (β) is a standardised regression coefficient used to compare the importance of predictors. Social and Technological barriers had the most significant impact, followed by lack of awareness, minimum standard requirements, miscommunication, and legal documentation requirements.

4.7 Model Development

The model shows that Minimum standard requirements is the most strongly influenced variable, followed by miscommunication of rules and regulations. The relationship between application rejection and these variables is shown in Equation 1.

$$\text{Application} = 0.720 + 0.901 * (\text{MSR}) + 0.431 * (\text{LDR}) + 0.705 * (\text{LARP}) + 0.837 * (\text{MRR}) + 0.548 * (\text{OSTB}) \dots\dots\dots$$

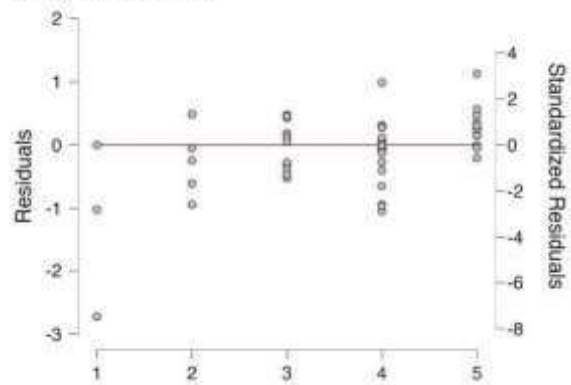
Equation 1

Social and other barriers were found to be the most significant independent variable, with a high *t*-value of 11.632.

4.8 Scatter Plots

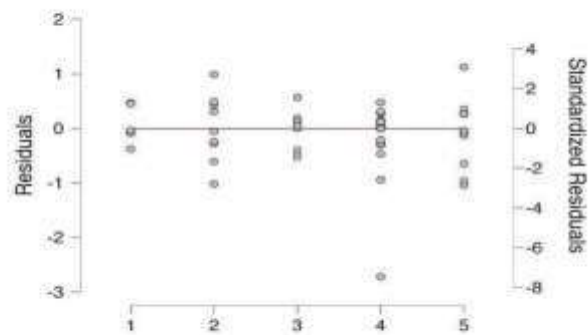
Figure 4.1 represents the related scatter plots used in the analysis process. These scatter plots are a useful tool for visualising the relationship between the two variables.

Residuals vs. Dependent

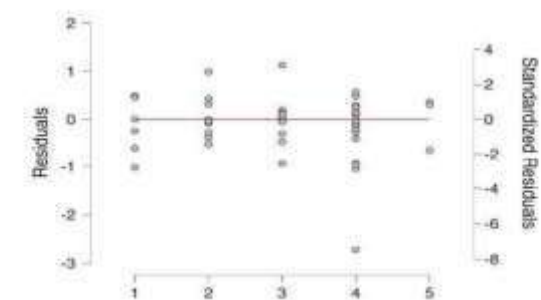


Residuals Vs. Covariates

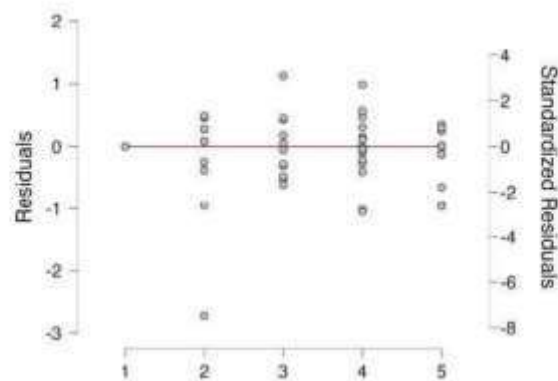
Variable 1-MSR



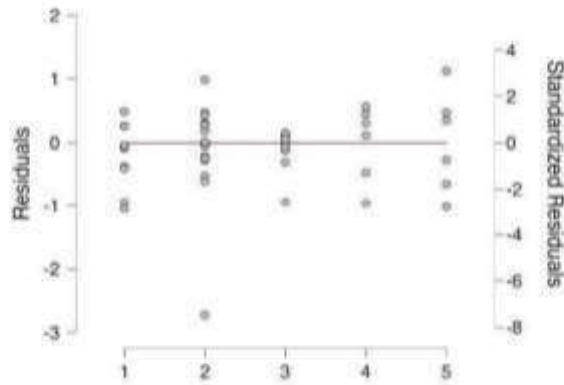
Variable 2-LDR



Variable 3-LARP



Variable 4-MRR



A scatter plot of residuals versus predicted values is useful for identifying patterns or trends that may indicate problems with the regression model. Ideally, residuals should be randomly distributed around the zero line, indicating a good fit. However, if there is a pattern, such as systematic over- or underprediction, it suggests the model may not be a good fit. Additionally, the plot can identify outliers or influential data points affecting the model's fit.

Variable 5-OSTB

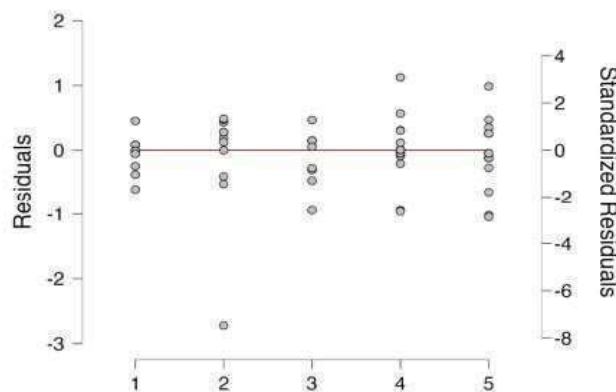


Figure 4. 1 Scatter Plots used in the Analysis

As depicted from the dots, in variable 5, are clustered tightly and form a clear pattern, there is likely a strong relationship between the variables than other variables.

Residuals vs. Predicted

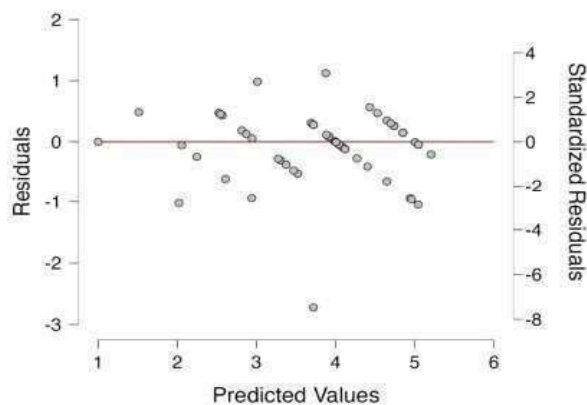


Figure 4. 2 Residuals vs Predicted

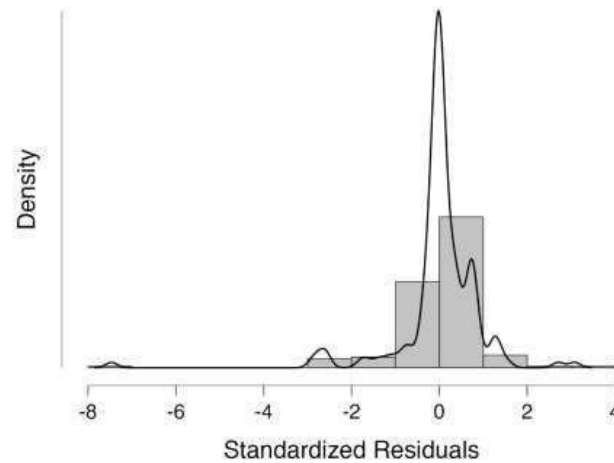


Figure 4. 3 Standardized Residuals

A histogram of standardised residuals displays their distribution, with a bell-shaped curve indicating normal distribution. Skewed or multiple peaks indicate non-normal distribution.

4.9 Q-Plots

A q-plot compares residuals' distribution to expected distribution under normality, plotting quantiles on y-axis and expected quantiles on x-axis. Normal residuals show a straight line, while deviations indicate deviations from normality.

4.10 Anova Tables

ANOVA analysis shows a statistically significant model with a p -value of 0.000, indicating joint influence from independent variables, using a hypothesis testing tool.

Table 4.7

Anova

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	144.897	20	7.245	24.947	.000 ^b
	Residual	38.043	131	.290		
	Total	182.941	151			
2	Regression	62.869	20	3.143	8.392	.000 ^c
	Residual	49.072	131	.375		
	Total	111.941	151			
3	Regression	101.496	20	5.075	38.619	.000 ^d
	Residual	17.215	131	.131		
	Total	118.711	151			
4	Regression	107.061	20	5.353	16.723	.000 ^e
	Residual	41.932	131	.320		
	Total	148.993	151			
5	Regression	36.297	20	1.815	96.549	.000 ^f
	Residual	.132	7	.019		
	Total	36.429	27			

(Source; Survey data 2023)

- a. Dependent Variable: AR
- b. Predictors: (Constant), MSR
- c. Predictors: (Constant), MSR, LDR
- d. Predictors: (Constant), MSR, LDR, LARP
- e. Predictors: (Constant), MSR, LDR, LARP, MRR
- f. Predictors: (Constant), MSR, LDR, LARP, MRR, OSTB

Notation

MSR - Minimum Standard Requirements of SLTDA

LDR - Legal Documentation Requirements

LARP - Lack of Awareness of the Registration Process

MRR - Miscommunication of Rules & Regulations

OSTB - Other Social & Technological Barriers

AR - Application Rejection

The ANOVA table in Table 4.14 shows the statistical significance of the model and individual predictors. The dependent variable, AR, is the dependent variable. The first model explained significant variance in AR, with an F-value of 24.947 and a p -value of 0.000. The independent variables, MSR, LDR, LARP, MRR, and OSTB, have a joint influence on AR. However, the ANOVA table only provides information on the statistical significance of the model and its predictors.

4.11 Hypothesis Testing

The findings from the multiple regression analysis are presented with reference to the hypotheses established in the study at a 95% confidence level, and a summary of the hypothesis results can be found in Table 4.15

Table 4. 8

Hypothesis Testing

Hypothesis	H ₀	H ₁	Sig	Status
H _A	The minimum standard guidelines do not influence the rejection of boutique hotel registrations	The minimum standard guidelines influence rejection of boutique hotel registrations	0.000	Reject H ₀ , Accepted H ₁ (Highly Significant)
H _B	The legal documentation does not influence the rejection of boutique hotel registrations	The legal documentations influence rejection of boutique hotel registrations	0.000	Reject H ₀ , Accepted H ₁ (Highly Significant)
H _C	Lack of Awareness of the Registration Process does not affect the rejection of boutique hotel registration	Lack of Awareness of the Registration Process influences the rejection of boutique hotel registration	0.000	Reject H ₀ , Accepted H ₁ (Highly Significant)
H _D	Miscommunication of rules and regulations does not affect the rejection of boutique hotel registration	Miscommunication of rules and regulations influence the rejection of boutique hotel registration	0.000	Accepted Reject H ₀ , Accepted H ₁ (Highly Significant)
H _E	Other social and technological barriers do not affect the rejection of boutique hotel registration	Other social and technological barriers influence the rejection of boutique hotel registration	0.000	Accepted Reject H ₀ , Accepted H ₁ (Highly Significant)

(Source: Survey data 2023)

The study found five highly significant hypotheses related to boutique hotel registration rejection. The null hypothesis (H_0) was rejected, indicating that independent variables like minimum standard guidelines, legal documentation, lack of awareness, miscommunication, and social and technological barriers significantly influence registration rejection. The alternative hypotheses (HA, HB, HC, HD, and HE) were accepted, supporting the highly significant results.

5. Conclusion and Recommendations

5.1 Discussion of Results

A quantitative research technique was used to analyse the data obtained from a sample of 152 rejected boutique hotel applicants who had applied for boutique hotel registration in Sri Lanka during the years 2018 and 2022. In terms of findings based on personal details, the majority of applicants are from the 60-above age group with more than 15+ experience in the tourism industry with school-level educational qualifications. The highest number of boutique hotel applications were rejected during the years 2022, 2021, and 2020. The majority of the rejected applicants have attempted reapplying more than one time and their rejection output was mostly suspension of application. Most of the rejected boutique hotel applications are from Galle, Colombo, and Nuwara Eliya districts.

The results of the Cronbach's Alpha test in this study showed that most of the data collected were reliable and had acceptable values. There is an indication of high levels of internal consistency to acceptable consistency according to the reliability test collected for each variable. Overall, the high values obtained for the Cronbach's Alpha test in this study suggested that the data collected from the questionnaire is reliable and can be used with confidence in future research.

Results showed that there were positive as well as negative correlations between variables for each variable and their respective aspects. Mostly the variables showed medium and low positive values depicting a medium-positive relationship. According to the findings, variable 5, other social and technological barriers had the strongest positive correlation with the rejection of the application process. Upon analysing the beta values in the multiple regression model, it was found that social and technological barriers had the most significant impact. Subsequently, it showed lack of awareness of the registration process, minimum standard requirements, miscommunication of rules and regulations, and legal documentation requirements.

5.2 Conclusion and Recommendations

Conclusion of the Study

The study analysed rejection factors affecting boutique hotel registrations in Sri Lanka. Social and technological barriers were found to be the most significant, followed by lack of awareness, minimum standard requirements, miscommunication, and legal documentation requirements. Authorities should address these barriers, particularly in the online registration process, to reduce rejection rates and increase formal boutique hotel establishments.

Recommendations

As the finding implies, the SLTDA should be attentive to the issues a boutique hotel applicant faces when registering. As per the study each and every independent variable has a high significant value, yet the social and technological barriers have the most significant impact on the registration process. Sri Lanka as a developing country is not

still developed when it comes to its social and technological aspects. Also, since most of the applicants are above 60, they do have massive technological barriers and social barriers since most of the rejected applicants are school leavers. Therefore, the insufficient knowledge of computer and English literacy along with the advanced online registration process and the email communication done through the registration process has a massive impact on the boutique hotel applicants as well as on the registration process.

Overcoming social and technological barriers while registering online can be challenging, yet the SLTDA could follow the recommendations of the study such as providing a user-friendly online registration process where the entire process is broken down into smaller steps so that it can be helpful for the applicant to engage in the registration process without feeling overwhelmed. As for the applicants with insufficient English literacy, it could be better if there were applications formatted in Sinhala and Tamil in addition to English as Sri Lanka has a majority of Sinhala, Tamil and Muslim population in the country. That way every applicant has a chance to fill in their application with their language of preference. For applicants with insufficient computer literacy, it is recommended that the SLTDA assist them through customer care support that answers calls and helps the applicants. That way the applicants will be able to fill in their applications with proper guidance through the process and any other technical assistance could be provided. Thus, it is also the applicant's responsibility to understand the technology before attempting to register online. It would be ideal to take some time to familiarise oneself with the technology being used. This could include understanding the different sections of the application patiently that need to be filled out, such as the required file formats for attachments, and any other technical requirements. That way the number of rejected boutique hotel applicants would decrease if the above recommendations are followed.

As for not adhering to minimum standards of SLTDA and lack of awareness on the registration process can be overcome by the following recommendations such as identifying the areas where the applicants mostly do not follow the requirements to specifically hold awareness programmes on specific areas to address. Therefore, the applicants will be aware of the minimum requirements that needed to be accomplished to register their boutique hotel properties. This may involve making changes and implementing new policies and procedures to minimise the rejection rate. It is also ideal if the awareness programs on minimum standards and the registration process can be done in areas where most of the applications get rejected such as Galle, Colombo, and Nuwara Eliya as per study findings. Therefore, by taking these steps, the SLTDA can address any issues by not adhering to the minimum standards to ensure more boutique hotel registrations in the coming years. From the boutique hotel applicants' perspective, it is also their responsibility to read the provided documents on the SLTDA website carefully and be aware of the entire registration process prior to registering to reduce the chance of their application getting rejected. As for the miscommunication of rules and regulations and legal documentation requirements, it is the authority's responsibility to make their applicants aware of the rules and regulations in advance. Thus, the two barriers could be overcome if the SLTDA attach a review terms and conditions notice with frequently asked questions, and any other relevant information clarified by the authority so that it helps the applicant to identify any areas of confusion and seek clarification where necessary before the application is submitted.

In conclusion, the above-suggested recommendations could be applied to reduce the rejection of boutique hotel applications in the coming years.

5.3 Suggestions for Future Research

The study reveals boutique hotel applicants primarily from Galle, Colombo, and Nuwara Eliya districts, while northern provinces have no boutique hotel applications. Thus, an analysis can be done on the above areas in the future.

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The Entrepreneurial Decision-Making Approaches of Dried Fish Processing Business Operators in Coastal Sri Lanka

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Abstract

The Sri Lankan marine dried fish sector significantly contributes to the country's economy, livelihoods, and the well-being of fishing communities. Nevertheless, dried-fish processors operate in a resource-constrained environment shaped by external and internal shocks and stressors. Despite these resource constraints, some Dried Fish Processing Business Operators (DBOs) have managed to survive and grow their businesses. The study aimed to investigate the types of Entrepreneurial Decision-Making (EDM) approaches adopted by DBOs, and whether the EDM types change with the characteristics of business owners and their businesses. In doing so, the study drew on three different concepts of EDM approaches—causation, bricolage, and effectuation. The research was conducted in fishing communities in Negombo in the Western province of Sri Lanka. The study employed mixed methods, including a questionnaire survey with DBOs (n=86) and in-depth interviews with a subset of the sample (n=20). Data were analyzed using statistical tests (MANOVA and ANOVA) and were supplemented with insights that emerged through qualitative data. The findings revealed that DBOs adopted all three EDM approaches to different degrees. The results further showed that these approaches significantly vary with the age and gender of DBOs, the stage and the size of their businesses ($p < 0.05$). In particular, younger owners adopted more effectuation, while older owners adopted more causation. In contrast, young females adopted both effectuation and bricolage. Furthermore, experienced owners relied more on the causation approach. Moreover, the findings related to business characteristics showed that effectuation and bricolage approaches are common in small-scale businesses and start-ups. In contrast, large-scale and developed businesses adopted the causation approach. The findings of the study suggest that policies and interventions that seek to improve dried fish businesses should pay attention to the diversity among DBOs and their approaches to sustain their business by going beyond the usual loan facilities towards business development.

Keywords: Entrepreneurship, Entrepreneurial Decision-Making Approaches, Causation, Effectuation, Bricolage, Dried Fish, Sri Lanka

1. Introduction

1.1 Introduction and Justification of the Research

Entrepreneurship is considered as a factor of economic development and a source of national wealth as it creates jobs in different sectors (Luca, 2017). In today's economy entrepreneurs are admired as heroes but according to Venkataraman (1979) the world of entrepreneurship remains a mystery to many.

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The decisions and actions of the entrepreneur throughout the entrepreneurship process is significant for the success of the value creation process because the success of any business depends on the decisions they make during its business operations (Sarasvathy, 2008). According to Sarasvathy (2001) Causation is a reasoning model that the individual can apply in making such decisions. It suggests that to attain the goals business operators commence by analyzing the environment, identifying opportunities, developing and matching resources to achieve them (Sarasvathy, 2001).

Nevertheless, under certain conditions, entrepreneurs take a different path to identify and exploit opportunities (Fisher, 2012). Therefore, Contrary to the above classic model, two Non-conventional entrepreneurial decision-making approaches are presented. Effectuation identified by Sarasvathy (2001) and Bricolage identified by Baker and Nelson (2005) Focuses on means and creating the outcome by means they already possess. Effectuation and bricolage processes are considered the entrepreneurial decision-making approaches adopted by business operators under uncertain and resource-scarce environments which makes planning a difficult task (Baker & Nelson, 2005). They explain how the business operator's rationality and behaviors lead to the creation of new opportunities and making business-related decisions (Fisher, 2012; Welter et al., 2016) regardless of resource ownership. These two concepts explain the resourcing behavior of business operators under resource-constraint environments (Baker & Nelson, 2005; Sarasvathy, 2001).

The marine and inland fisheries in Sri Lanka make up the country's small-scale fisheries industry. Small-scale fisheries represent a significant yet marginalized sub-sector within global capture fisheries (Chuenpagdee & Jentoft, 2018). The Sri Lankan marine dried fish sector makes significant contributions to the country's economy as well as the livelihoods, well-being, and survival of fishing communities (Galappaththi et al., 2021) those who live around the coastal region of the country. The total domestic dried fish production is 56,790 Mt. out of 326,930 Mt. of total marine fish production (Ministry of Fisheries and Aquatic Resources Development [MFARD], 2022) and the marine fisheries provide employment opportunities for 225,020 people, including males and females (MFARD, 2022).

“In a world of increasing uncertainty, complexity, and change, acting entrepreneurially is essential for both individuals and organizations” (Shepherd et al., 2015). Since, the dried fish business operators are also functioning in a resource-constrained environment, which is affected by external shocks such as Tsunami 2004 and from 2019 to 2021, they were affected by the lockdown period due to COVID-19 pandemic and finally the Current Economic crisis which is prevailing in the county and price fluctuations of the dried fish market. Moreover, they are affected by internal capability determined by assets, food stores, support from the community, and safety policies (Allison et al., 2001). Therefore, as a whole, these business operators are affected by lack of opportunities and resources in the operating environment (Nawaratne et al., 2011)

Therefore, starting and operating a business entrepreneurially in such an environment is challenging. Despite these resource constraints, some dried fish processors have managed to sustain their businesses and ensure the growth of their businesses within

this sub-sector in the local economy (Galappaththi, 2021), which suggests that they behave in an entrepreneurial way.

The dried fish processing business operators warrant investigations to unknot the entrepreneurial decision-making approaches they have adopted to overcome various resource-related challenges, identify, and pursue opportunities in this competitive environment, and grow their businesses. This leads to the following research questions.

Furthermore, there is a lack of literature, particularly in the Sri Lankan context explaining fish drying as an entrepreneurial business operation specifically under a resource-constrained environment (Belton et al., 2022). Thus, this study will fill the research gap by testing the dried fish processing business owners' decision-making approaches with respect to the theories of entrepreneurial decision-making approaches namely; causation, effectuation, and bricolage, the factors that change the adoption of these entrepreneurial decision-making approaches and the nature of this business context.

1.2 Research Questions

- What are the demographic characteristics of the dried fish processing business operators and the characteristics of their businesses?
- What are the types of entrepreneurial decision-making approaches adopted by the dried fish processing business operators in their business operations?
- Do entrepreneurial decision-making approaches change with the personal characteristics of the business owner?
- Do entrepreneurial decision-making approaches change with the characteristics of the business?

2. Review of Literature

2.1 Specific Research Context: Dried Fish Sector

Dried fish sector in global context:

Africa and Asia are the main producing regions for dried fish. However, the industry is still mostly "hidden" and underestimated within Small Scale Fisheries (Belton et al., 2022). According to the Food and Agriculture Organization [FAO] (2020), roughly 11% of all fish harvests are processed into dried fish, while developing nations reporting substantially higher volume conversions. For instance, 34% and 25% of the total fish harvests in Myanmar and Bangladesh, respectively, are processed as dried fish (Hossain et al., 2015). Dried fish production and consumption systems are organized as value chains (Galappaththi, 2021) and in comparison, to food value chains in a global level, dried fish value chains are mainly bounded to their locality and firmly attached to the community context via cultural and social ties (Belton et al., 2018). The majority of the socioeconomic groups that engage in dried fish production and related activities are marginalized and disadvantaged, including the impoverished, caste groups, refugees, and other minority groups (Belton et al., 2018). People who depend on dried fish participate in these value chains and gain a variety of important benefits, including money, jobs, food, social relationships, and cultural

values that are vital to their well-being and sustainable livelihood (Belton et al., 2022).

Dried fish sector in local context:

In the context of Sri Lanka dried fish has played a key nutritional and cultural significance Being an addition to the diet as well as a substantial product traded across the island and among neighboring countries The Sri Lankan marine dried fish sector makes significant contributions to the country's economy through providing 56,790Mt. out of 326,930 Mt. of total marine fish production as the total domestic dried fish production (MFARD, 2022) and opening about 225,020 employment opportunities for people including both males and females (MFARD, 2022). Although roughly 37% of local demand is still fulfilled by imports, dried fish production in Sri Lanka has consistently expanded over the past 20 years, rising from 24,000 Mt in 2000 to 64,000 Mt in 2017 (MFARD, 2018, 2020). Around 60–63% of the dried fish demand in the nation is met by large-, medium-, and small-scale domestic-level processors dispersed around Sri Lanka's coastal belt using primarily conventional processing techniques (Neranjala et al., 2022). Previous literature has identified different scales of conducting urban coastal dried fish business operations (Galappaththi, 2021). The following table 1, illustrates the classification of urban coastal dried fish business operations depending on the scale.

Table 1

The classification of urban coastal dried fish business operations depending on the scale.

The scale of fish drying	Criteria (Number of persons engaged)
Home-based drying	Using family labour
Small-scale drying site	With 3-10 hired workers
Medium-scale drying site	With 25- 30 hired workers
Large-scale drying site	With 50 or more hired workers
Seasonal or occasional drying	Using family labour

Source: Galappaththi (2021)

2.2 Entrepreneurship

This is a complex concept, which has been given many definitions in terms of different schools of thought in order to give a better understanding (Cunningham, 1991; Kodithuwakku & Rosa, 2002). Even though there is no universally accepted solid definition for entrepreneurship, with time, this concept has developed as an academic discipline, and many researchers have proposed various definitions.

According to Scott et al. (1997), entrepreneurship is a process of creative extraction of social and economic values present in the environment. That means an entrepreneur should be able to perceive opportunities in the environment and creatively tackle them to be benefitted. Entrepreneurship has been once described as a process of locating and seizing advantageous chances to increase both personal and societal wealth by Venkataraman (1997). However, the lack of resources in a relatively underdeveloped area may be viewed as a persistent, nearly impassable obstacle to an entrepreneur's

capacity to develop perceived prospects of any considerable commercial worth. Nevertheless, it hasn't been discovered that not having resources under control is always a barrier to success and growth (Sexton & Bowman Upton, 1991). The conclusion that follows is "Entrepreneurship is a process through which individuals pursue opportunities without regard to the resources they already possess" (Hart et al., 1995; Stevenson, 1997). Moreover, the capacity to take risks and look for even modest chances, and as a result, it theoretically becomes a key tactic for achievement in a resource-constrained setting (Kodithuwakku & Rosa, 2002).

2.3 Causation, Effectuation, and Bricolage: a Conceptual Review

Causation approach

A traditional approach based on both forecasting and business planning. In the theory of causation, the entrepreneur decides on a predetermined goal and selects between means to achieve that goal (Sarasvathy, 2001). When exploring entrepreneurial opportunities, entrepreneurs should act logically and with a purpose in mind, according to Perry et al. (2012). This is a technique that emphasizes planning and prediction which is comprised of a series of tasks including 1) Developing a business plan 2) Conducting market research 3) Competitive analysis 4) Acquisition of resources and stakeholders 5) Adapting to the environment 6) Creating and sustaining competitive advantage (Read & Sarasvathy, 2005) It combines tight goal-oriented decision-making with a technique for company planning that maximizes profits (Kurkinen, 2018). The models employing the causal method begin by defining a clear objective to be attained (Kurkinen, 2018). As a result, the primary objective of the causation logic is to accomplish a specific objective (Kristinsson et al., 2016). However, this traditional causation planning logic has recently been challenged by effectuation approach of decision-making, which was developed by Sarasvathy (2001).

Effectuation approach

In contrast to the causation approach, the 'Effectuation process takes a set of means as given and focuses on selecting between possible effects that can be created with that set of means' (Sarasvathy, 2001). The effectuating business operators accept the means as given and proceed towards the goals which can be achieved through those means proceed toward the goal where they can go using those means, instead of having goals and efforts to achieve those goals (Sarasvathy & Dew, 2005).

There are five principles for the effectuation logic (Woetmann, 2014). Firstly, the principle of the bird-in-hand denotes starting with your means. It explains the fact that when entrepreneurs are planning to start a new venture, they start with their existing means (Blank, 2013). Secondly, the principle of an affordable loss denotes the focus on the downside risk. This explains that entrepreneurs limit their risk by assessing the loss they can afford in each step (Dew et al., 2009). Thirdly, the principle of lemonade denotes the leverage of the contingencies. Here, the effectual entrepreneurs start planning new business possibilities in situations of bad news (Sarasvathy, 2008). They manage contingencies by leveraging surprises (Sarasvathy, 2008). Fourthly, the principle of patchwork quilt denotes the fact of forming partnerships. By obtaining pre-commitments from the stakeholders, entrepreneurs can reduce uncertainty in their future businesses (Kurkinen, 2018). Finally, according to the principle of pilot-in-the-

plane, entrepreneurs can enter their desired outcome by focusing on activities that are under their control (Kurkinen, 2018).

Bricolage approach

Levi-Strauss (1966), defined bricolage as making do with the resources at hand while Baker and Nelson (2005), defined Bricolage as creating something from nothing, and it has been used as an explanation for several inventive entrepreneurial behaviors that do not correspond to traditional rationalistic thinking (Baker & Nelson 2005; Levi-Strauss, 1966).

The three main characteristics of bricolage can be considered as making do, use of resources at hand, and combining these resources for new purposes (Baker & Nelson, 2005). Based on the nature of the available resources, there are two distinct forms of bricolage theory, namely -; internal bricolage and external bricolage (Vanevenhoven et al., 2011). Internal bricolage comprised of life and work experiences, professional and academic certifications, and idiosyncratic mental endowments. Contrary to internal bricolage, external bricolage consists of the combination of resources available to the entrepreneur in his external environment (Vanevenhoven et al., 2011). External bricolage has two forms; Network bricolage (Baker et al., 2003) and Asset bricolage (Vanevenhoven et al., 2011). Network bricolage consists of all the necessary and helpful contacts and ties with stakeholders (Baker & Nelson, 2005). Asset bricolage means the pool of tangible resources or physical resources that is useful (Vanevenhoven et al., 2011).

2.4 Factors that Change the Adoption of the Decision-Making Approaches by Entrepreneurs

Characteristics of business owners that change the adoption of decision-making approaches.

Influence of gender and age (Demographic factors)

The decision to use the approaches of causation, effectuation, and bricolage can be significantly influenced by the demographic characteristics of the business owner (Makama, 2016). Men are the primary subject of study in the majority of studies on how gender affects effectuation than women. Men are more likely than women to adopt the causation approach among business owners—about 60% of them—than women (Ranabahu, 2017). According to the research conducted by Ranabahu (2017) using micro-entrepreneurs, he has discovered that the adoption of means-driven techniques (effectuation) and causality thinking among business operators is related to gender and age and seems to be caused by the social and cultural norms associated with gender-based roles and duties in Sri Lanka. In contrast to men, he asserts, women typically employ effectuation-based strategies (Ranabahu, 2017). Most studies have examined the influence of the interplay of age and gender for the use of causality, effectuation, and bricolage since women actively participate in the business process after their reproductive years (Noseleit, 2014; Patrick et al., 2016).

These arguments lead to the following hypotheses of the study.

H₁: There is a significant difference between dried fish processing business operator's entrepreneurial decision-making approach with the gender.

H₂: There is a significant difference between dried fish processing business operator's entrepreneurial decision-making approach with the age.

Effect of prior experience in business operation

The choice of employing Causation, effectuation or bricolage-based decisions depends in large part on the quantity of task-specific experience (Dew et al., 2009; Read et al., 2009). Well experienced business people are more prone to employ effectuation than causality, according to research by Read and Sarasvathy (2005) and Dew et al. (2009) in particular. Experts don't make use of prognostic/ predictive information. They make decisions based on past experiences and decision-making tendencies rather than relying just on forecasting data (Read & Sarasvathy, 2005). Expert operators were more inclined to employ partnerships over competitive analysis, weigh affordable loss over an expected return, and use means-driven rather than goals-driven approaches (Harms & Schiele, 2012).

Operators with little to no prior expertise should not rely solely on their resources (Luttikhuis, 2014). Experienced business owners are typically effectual entrepreneurs, yet they may also opt for causation-based methods depending on the situation because they are aware of the advantages of formal planning in some circumstances (Gruber, 2007). Bricolage use also relies on the managerial or entrepreneurial skills of the company (Baker & Nelson, 2005).

These arguments lead to the following hypothesis of the study.

H₃: There is a significant difference between the dried fish processing business operator's entrepreneurial decision-making approach with the prior experience in the business operations.

Characteristics of the business entities that change the adoption of decision-making approaches.

Influence of the size of the business

In addition to planning for the future, firms can expand the employment, thereby expanding the firm's size (Shane, 2003). As a result, larger companies with a huge workforce prefer the causation process to effectuation or bricolage (Eyana et al., 2017). The company life cycle model, however, states that new businesses experience a series of growth and transformation. The choice to hire new personnel will depend on the resources that are available at various phases of the company (Brush et al., 1997). At an early stage of their firms or when they are relatively modest in size, business operators in effectuation and bricolage mobilize resources from the stakeholders (Eyana et al., 2017). Therefore, compared to smaller organizations, there is a strong tendency for larger firms to choose causation rather than effectuation or bricolage (Figueredo, 2010). Smaller businesses can choose between effectuation and bricolage depending on the resources they have accessible (Berends et al., 2014; Eyana et al., 2017; Senyard et al., 2014).

These arguments lead to the following hypothesis of the study.

H₄: There is a significant difference between the dried fish processing business operator's entrepreneurial decision-making approach with the scale/size of the business.

Influence of the stage of business operation

Although, the stages of a firm's development have been categorized in a variety of ways in previous studies, most of the earlier evidence implies two fundamental

divisions as early and development stages (An et al., 2018; Brettel et al., 2012) despite the other differences. According to Harting's (2014) research, companies in the growth stage are more likely to adopt causality than effectuation. Contrarily, the basic and early stages of venture creation typically adhere to effectuation reasoning as opposed to causation (Morrish, 2009). According to Sarasvathy (2008) and Reymen et al. (2015), the effectuation is more effective in start-up firms than in mature ones. Additionally, formal planning (Causation) is more effective throughout the development stage of a business than it is during the startup stage (Brinckmann et al., 2010). Researchers have discovered that, when considering bricolage, bricolage is advantageous for the survival of companies in their early stages (Fisher, 2012).

These arguments lead to the following hypothesis of the study.

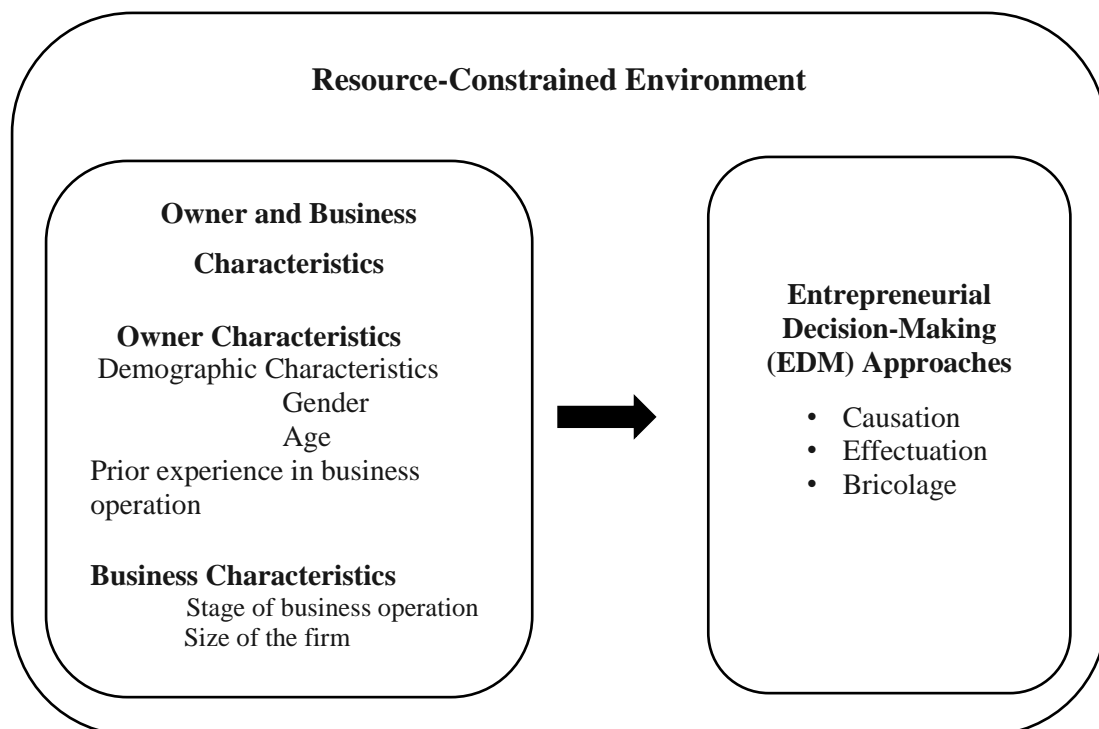
H₅: There is a significant difference between the dried fish processing business operator's entrepreneurial decision-making approach with the stage of the business.

2.5 Conceptual Framework and Hypotheses

Conceptual framework

Figure 1

Conceptual framework of the study



2.6 Hypotheses

H₁: There is a statistically significant difference between dried fish processing business operator's decision-making approach with the age.

H₂: There is a statistically significant difference between dried fish processing business operator's decision-making approach with the gender.

H₃: There is a statistically significant difference between dried fish processing business operator's decision-making approach with the prior experience in business operations.

H₄: There is a statistically significant difference between the dried fish processing business operator's decision-making approach with the scale of the business operation.

H₅: There is a statistically significant difference between the dried fish processing business operator's decision-making approach with the stage of the firm.

3. Methodology

3.1 Research Design and Approach

The purpose of this study is to examine the decision-making processes employed by dried fish processing business operators, and the business and owner characteristics that affect the choice of decision-making approaches, in the context of Sri Lanka. Any researcher's construction of a study design is influenced by the nature of the research question (De Vaus, 2001). As a result, the study can be categorized as descriptive research using a deductive approach. Due to the complexity of the entrepreneurial phenomenon, methodological diversity is required (Davidsson, 2004). Therefore, the best methodology was determined to be a parallel mixed-method approach with a questionnaire survey and case studies. The results of the survey were used to determine the types of decisions made by owners of businesses that process dried fish, such as effectuation, causality, or bricolage (Ranabahu, 2017).

3.2 Study Site and Population

The study site was Negombo Municipal area, Gampaha District, Western Province, Sri Lanka. Negombo is an urban coastal city situated within a well-developed highway, road network, and railway system. According to the Department of Marine Fisheries and according to the sources of Dried Fish Matters Sri-Lanka Country Team (2020), Negombo area has the highest number of fisheries divisions which is 13 out of 14 fisheries districts and 5th highest Annual Dried fish production which is 976,520 kgs. Furthermore, a variety of production processes and variety of business scales can be identified in that area. Therefore, to capture the variations among the dried fish processing business, owners from Negombo has been selected. In this region, the dried fish processing business operators from the beach-side ~~area~~ and the Pitipana ~~area~~ (around Lellama and the lagoon area) were selected for the study data collection. Dried fish business operations within these communities are organized as private-owned independently managed small to large-scale businesses.

The target population is dried fish processing business owners who engage in dried fish purchasing, processing, and selling. This excludes the dried fish importers and other intermediaries. Therefore, the unit of analysis of this study is a dried fish processing business owner in Negombo area.

3.3 Sampling Strategy

Even though the initially planned sampling method was random sampling followed by obtaining a sampling frame of dried fish processing business operators from an active society which is operating in the area, it was not possible since, their dried fish processing owners' societies were inactive for years and they did not possess a proper list of dried fish processing business owners in the area, and available lists were not updated for many years. Afterwards, it was planned to interview respondents randomly, but it was not successful since this dried fish processing community is very

reluctant to expose their details as well as the details of their business operations to strangers which is a limitation of this study that reduce the response rate of the study sample.

Thus, as a solution for this problem, snowball sampling was identified as the most appropriate sampling method because one respondent will introduce another person who is trustworthy and friendly with that person which makes those people respond to the questionnaire of the study. Therefore, 3 key informants (via known contacts in the industry) were identified, to detect the initial participants for the study as this needed a significant number of respondents to do the quantitative analysis. Then those respondents provided information about the other respondents who are accessible for the study. Likewise, this study increased the number of respondents via snowball/referral sampling. As three key informants were used to identify the respondents, it led to a high variation within the sample. Therefore, to comply with the large sample size, the total sample size became 86 and, sampling was terminated at this point due to the limitation of time, money, and other resources.

3.4 Data Collection

The data collection process is comprised of two steps: 1) Pilot test and 2) Quantitative data collection. For quantitative data, primary data was collected through a questionnaire survey, which was guided by a pre-tested structured questionnaire. The questionnaire was pre-tested by administering it to 05 dried fish processing business operators from the selected study site. This process assisted in identifying the best approach to collect data, the time required to fill out the questionnaire, and whether the questions were clear. It provided feedback related to the questionnaire's format, language, layout, instructions, and answer options as well.

The questionnaire was a structured one with several open-ended questions which consist of three sections; information on the personal details of the respondents, the features of their businesses, and their use of decision-making approaches: causation, effectuation, and bricolage during the business operation process. Most of the questions were close-ended and had either dichotomous or multiple answer categories. The use of causation, effectuation, and bricolage was measured using standard Likert scales.

3.5 Measuring Instrument

As mentioned above, the questionnaire comprised of three main sections. The first section (Section A) was used to gather background information of the respondents, such as their gender, age, level of education, other occupations of the respondent, related work experience, and prior training experience. Section B focused on the respondent's main business to gather information about the industry, size, stage, duration of the main business, the number of employees, and the mode of business start-up. The data collected through these two sections are considered the independent variables of the study.

The final section of the questionnaire (Section C) included three Likert scales to assess the respondents' use of entrepreneurial decision-making approach: causation, effectuation, and bricolage which are dependent variables of the study. The questionnaire has 29 statements in total to identify and measure causation,

effectuation, and bricolage. This study adapted Chandler et al. (2011) causation and effectuation scales, where causation is a seven-item scale and a reflective, unidimensional scale. Effectuation is a thirteen-item scale and a formative scale with reflective sub-constructs. Effectuation consisted of sub-dimensions of means-driven approach, affordable loss, leverage contingencies, and pre-commitments. Means-driven approach was a four-item scale, the affordable loss was a three-item scale, Leverage contingencies was a four-item scale, and pre-commitments was a two-item scale. Likert scales were used to measure these entrepreneurial behaviours. There are other scales such as Brettel et al. (2012) and Werhahn et al. (2015) as well to measure effectuation and causation. However, there were two key reasons why Chandler et al. (2011) scales were used in this investigation. First, the scales developed by Chandler et al. have been rigorously tested and verified, and they even served as the basis for the scales developed by Brettel et al. (2012) and Werhahn et al. (2015). In addition, several more empirical research has made use of the scales developed by Chandler et al. (2011). Harms and Schiele (2012), Mthanti and Urban (2014), Roach (2016), and others are a few of them.

The Senyard et al. (2009) bricolage scale was adapted for this investigation. Based on earlier grounded research and the Baker and Nelson (2005) definition, it is an eight-item scale that is used to assess the bricolage process. A likert scale was employed to quantify entrepreneurial activity, and it is formative in nature.

Measurements of the variables

Following Table 2 presents the variables, measurements and the scales used for the dependent and independent variables of the study.

Table 2

Variables, Measurements and Scales used in the study

Variable	Measurement	Scale
Entrepreneurial Decision-Making Approach: Causation, Effectuation, Bricolage	Items on three validated scales	Five-point Likert scale anchored from 1 (= strongly disagree) to 5 (= strongly agree).
Age	Year categories	Nominal
Gender	Male/Female	Nominal
Dried fish industry related prior experience	Yes/No No. of years of experience (Year categories)	Nominal
Stage of the business	Start-up/Growth	Nominal
Size of the firm	Small-scale/ Medium scale/ Large-scale	Nominal

3.6 Data Analysis

The survey data was used for quantitative data analysis. It included coding, data entry, verification, data cleaning, and analysis. SPSS Statistical software package was used for the data analysis. Since the questionnaire was designed with pre-defined responses, these pre-codes were used for data entry. Other than that, there were several questions that required post-coding (e.g. type of prior training, daily business operations of the respondents). The information was then entered and validated by verifying entries twice and locating duplicate and missing responses. Data was cleaned by removing outliers, converting, generating, and labeling variables, as well as by discarding observations. Since the researcher was the one who gave the questionnaire, none of the three scales had any replies with missing information.

The reliability of the scales was tested by conducting factor analysis for causation, effectuation, and bricolage scales. The internal consistency of the scales was measured by Cronbach's alpha reliability test. The scales have factor loadings and alpha values which were higher than 0.7. Therefore, according to the results, it is evident that the three scales have a good level of internal consistency and reliability. The overall results are given in Table 3.

Table 3

Results of the factor analysis and the Cronbach's alpha test

Scale	Number of Items	Results	
		Factor loadings	Cronbach's alpha
Causation	7	Statements loaded to a single factor 0.7401 to 0.8622	$\alpha = 0.83$
Effectuation	13	Statements loaded to three factors	$\alpha = 0.84$
Bricolage	8	Statements loaded to a single factor 0.7626 to 0.7814	$\alpha = 0.82$

Normality of the data set was analyzed by Shapiro Wilk's test. The p value of causation, effectuation and bricolage were 0.20, 0.43 and 0.13 respectively. According to the results, the data set was normally distributed ($p > 0.05$). Both descriptive and inferential statistical analysis techniques provided responses to answer the research questions. The following Table 4 indicates the objectives and the data analytical methods used to pursue each objective.

Table 4*The objectives and the analytical methods used in data analysis.*

Objective	Method of Data Analysis
To identify the characteristics of Dried Fish Processing Business owners and their businesses	Descriptive and tabular analysis by calculating frequencies and percentages
To identify the entrepreneurial decision-making approaches adopted by Dried Fish Processing Business owners	Descriptive statistics and descriptive analysis by calculating frequencies and percentages
To identify whether the entrepreneurial decision-making approaches changes with the owner characteristics and business characteristics	Multivariate Analysis (MANOVA) with a follow-up One-way Analysis of Variance (ANOVA)

4. Results and Discussion

4.1 Sample Profile

Characteristics of the respondents

Background information of respondents

Most of the population in this particular area (around lagoon area) were migrants who were fisher families from North- Eastern provinces due to war conditions. They have migrated to Negombo area and settled down around the lagoon area and have started this dried fish business as their (including males and females) main livelihood activity. Few of them were (males) engaged in fishing before started the dried fish processing business as their main business and from the beginning, the females who stayed at home have started to dry the left-out fish which their husbands or fathers brought home after selling the fresh fish at the fish landing center. Then due to the difficulties of handling boat fishing, majority of males shifted to full-time fish drying process as a business operation through buying fish from fish auctions at the fish landing center or selling centers.

These inhabitants have started their businesses with minimum resources such as less land extent, less transport facilities and financial facilities and have limited to home-based family labour or few wage workers. However, through investing the profit back to the business, almost all of those businesses grow rapidly over the years. Less competition and low cost of production were key factors for this rapid growth of their businesses during the early stages of their businesses and that area's economy.

Figure 2
Gender distribution of the respondents

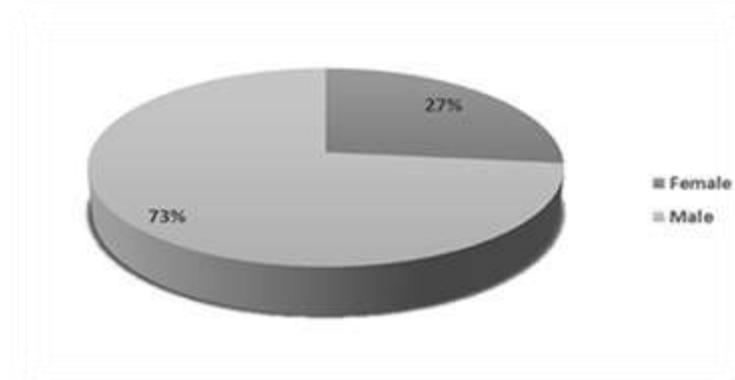
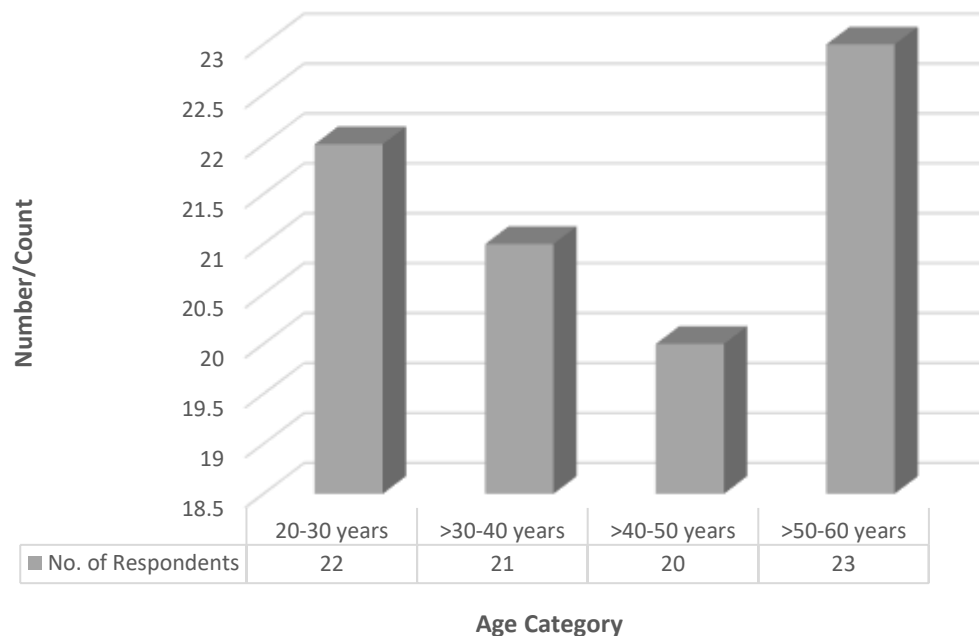


Figure 3
Age group distribution of the respondents



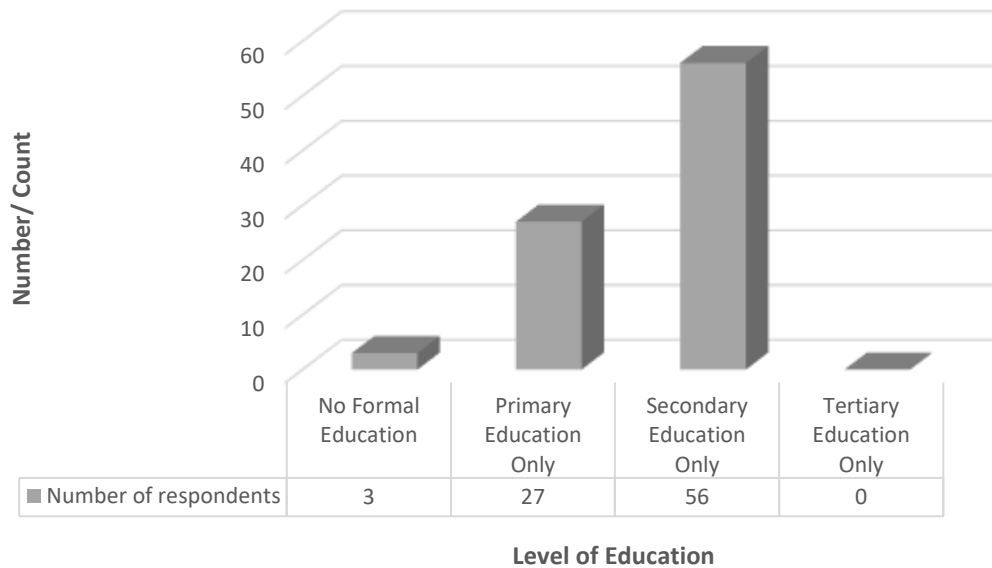
Demographic characteristics

The sample of 86 respondent consisted of 63 (73%) male respondents and 23 (27%) female respondents (28%). Majority of the respondents (67%) were aged between 30 to 50 years and there was 27% of the respondents whose age was more than 50 years. This may be due to they are the aborigines of these lands around the lagoon area, and they prepared those lands as suitable to living and started the dried fish processing and selling as their main business and they still engage in their businesses as they are more experienced in this industry of business than younger ones.

Figure 4 presents the level of highest education obtained by the business operators in the sample. According to the results, only 4% (3 respondents) of the respondents haven't received formal education. Whereas the majority (65% - 56 respondents) have only completed the secondary education followed by 31% (27 respondents) of the respondents have only received the primary education, while none of the respondents have obtained tertiary education.

Figure 4

The level of education of the respondents



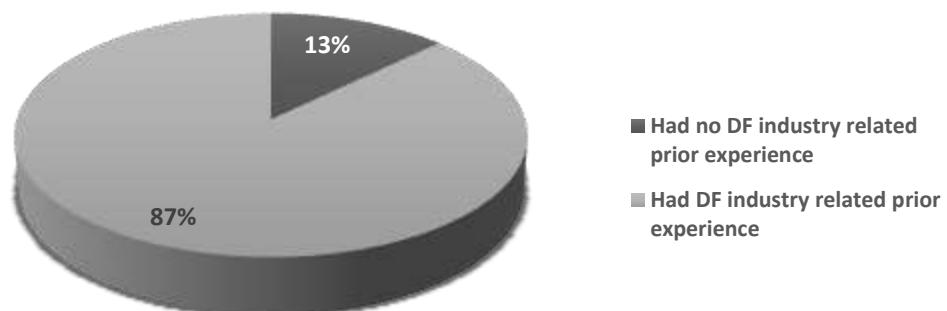
Respondents' prior experience in business operation

The prior experience was analyzed through the survey by inquiring whether they have started businesses by themselves and whether they had any previous work experience that is directly related to their dried fish businesses (industry experience).

When considering the industry experience, the majority of the respondents (87%) had prior work experience directly related to the business. They have worked as employees or labourers in similar kinds of business before starting their businesses. Around 13% of the total respondents have never had any work experience in a similar business.

Figure 5

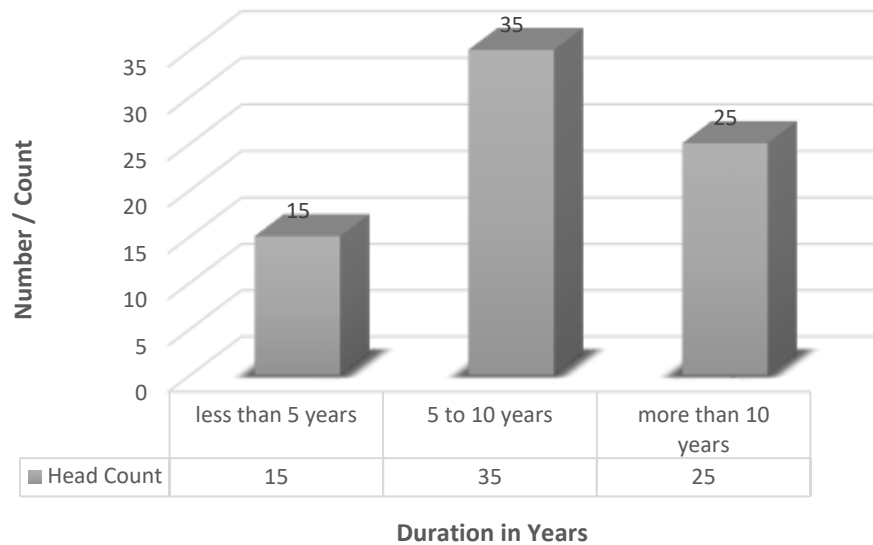
Respondents with prior work experience directly related to the dried fish industry



The respondents who had industry experience were categorized into 3 groups based on the duration of the work experience they had. According to the data, the majority of the respondents (35 respondents – 47%) had 5 to 10 years of prior work experience. And 33% (25) of them had more than 10 years of work experience while only 20% (15) of them had less than 5 years of work experience related to the dried fish industry.

Figure 6

Duration of the related work experience of the respondents

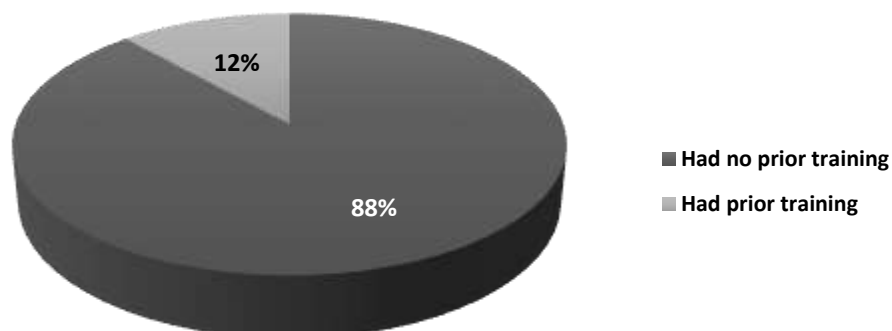


Respondents prior training related experience

When considering prior training-related experience, the majority of the respondents (88%) had never attended a training programme related to the business. There were only 12% of the respondents who had attended at least one training programme that is directly related to the business they are operating.

Figure 7

Respondents with prior business-related training



This situation arise mainly due to that this population is more reluctant to receive any advice or training experiences from the outside people; especially from government organizations because these dried fish processing business owners claims that they are

the most experienced people in this industry except anyone and there is no need to receive any training programs from those outsiders who are not from their own context. Because they know those authorities do not know any rules or the nature of context and the environments that these dried fish business owners are operating. Furthermore, the development interventions associated to dried fish including the training programs on processing technologies (such as smoking ovens), which have little or no uptake since they don't fit the operational requirements or the production scales of dried fish businesses. Therefore, this community is very reluctant to receive any business-related training from government authorities.

Among the respondents who have prior business-related training, the majority of the respondents had the trainings related to the hygienic drying methods and the packaging methods of dried fish which has held by Ministry of Fisheries and Pitipana Aquaculture Development Center.

Characteristics of the businesses

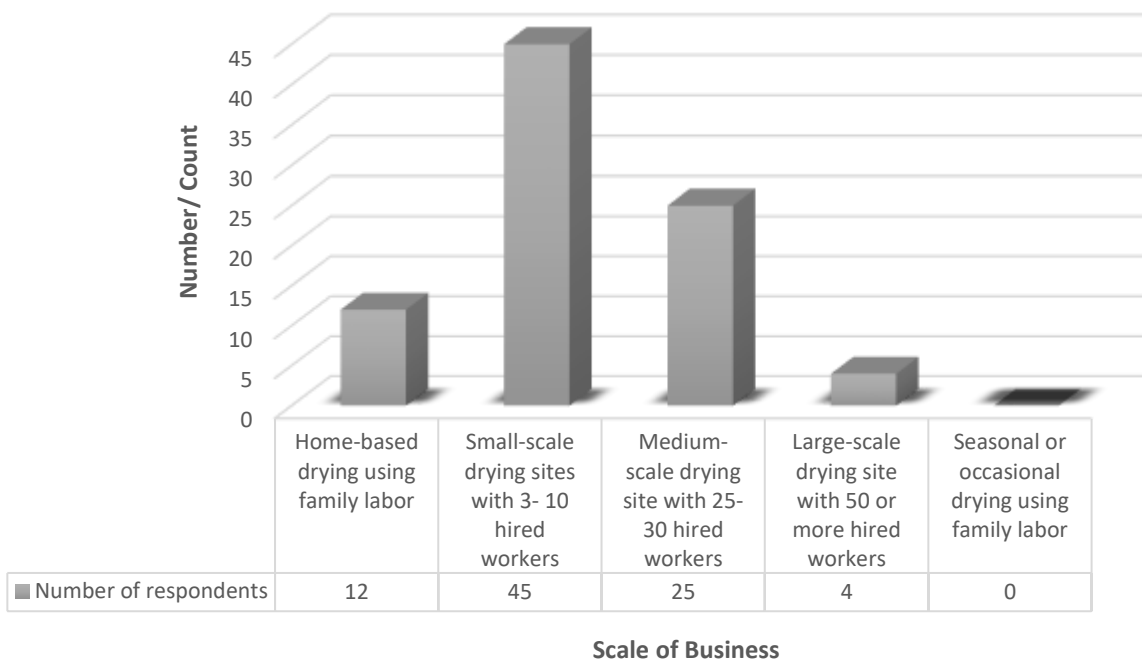
This section presents the business characteristics. It would specifically mention about the operating stage, size and duration and the mode of startup of the business.

Size of the business

Previous literature has identified different scales of conducting urban coastal dried fish business operations (Galappaththi, 2021). Table 2.1 in the literature review, illustrates the classification of urban coastal dried fish business operations depending on the scale. There the business scales were categorized into different scales, depending on the number of employees of the firm and the type of drying pattern. The type of drying could be full time drying with hired labour or family labour or seasonal or occasional drying with family labour. The total number of hired labour in those categories was considered in determining whether the business is small-scale or medium-scale or large-scale.

Figure 8 presents the total number of different scale's businesses in the sample depending on each scale of businesses. The majority of businesses in the sample were small-scale drying sites with 3-10 hired workers (45 respondents). Second highest is the medium scale drying site with 25 to 30 hired workers where 25 respondents belong followed by home-based drying sites using family labour (12 respondents). There were only 4 large scale drying sites with more than 50 hired workers. There were no seasonal or occasional drying sites using family labour in the obtained sample.

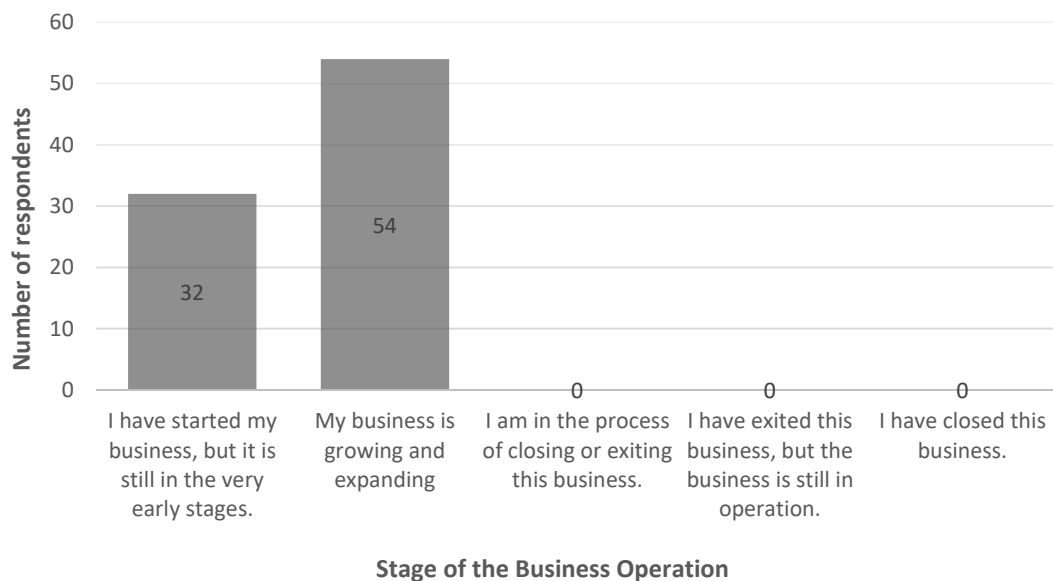
Figure 8
The size of the businesses



Stage of the business

Considering the stage of the business operations, 54 of respondents (63%) mentioned that their main businesses were at the development stage. The rest 32 respondents (37%) considered their businesses were at the start-up stage or the early stage. There were no respondents who have left or closed their businesses.

Figure 9
Stage of business operation

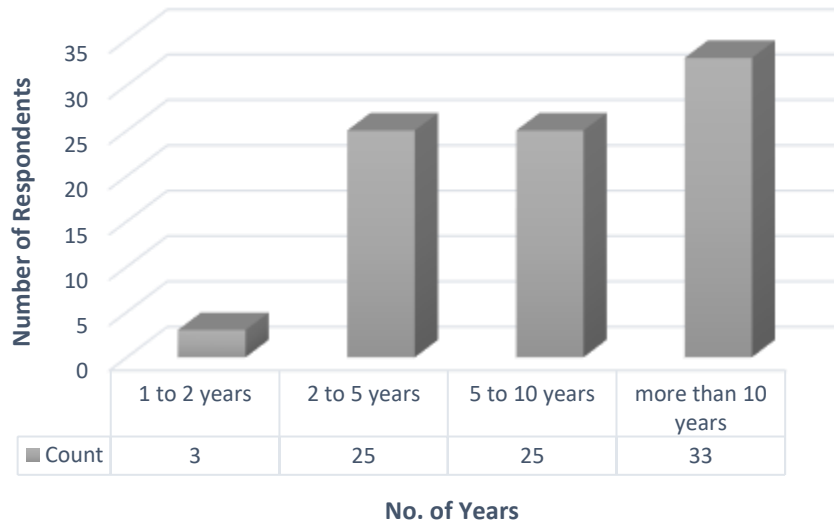


Duration of the main business

The majority of the respondents have operated their businesses for more than 10 years (38% - 33 businesses). This was followed by businesses that have operated for 2 to 5 years and 5 to 10 years (both 29% - 25 businesses each). Only 4% (3) of the respondents have operated their businesses for 1 to 2 years.

Figure 10

Duration of the business

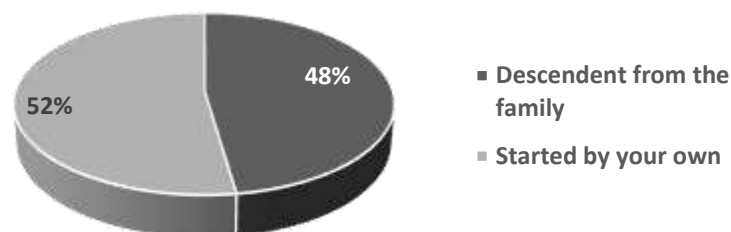


Mode of Business Start-up

Figure 11 presents the mode of business start-up of these respondents, which means whether the businesses started by their own or whether their businesses descendent from their families to the current owner. According to the data, it showed that majority of the businesses have started by their own (52%) and 48% of the businesses are descendent from the owner's family.

Figure 11

Mode of Business Start-up



Idea of business expansion

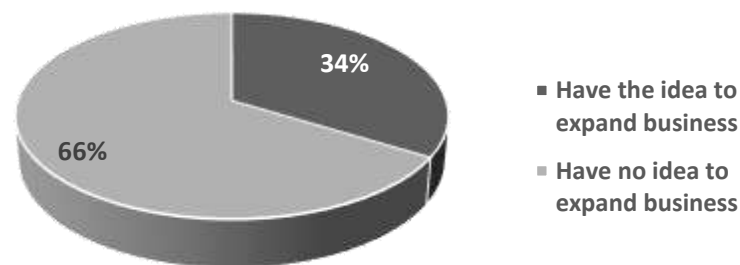
Considering the respondents' idea on expanding their businesses, majority of the respondents (66%) have the idea to expand their business in terms of land extent, land location, export markets, increment of production quantities, using new technologies such as solar power units in rainy seasons etc.

However, 34% of the respondents have no expectations to expand their businesses further and also, they do not want their children to get involved in this business future. According to the key informants, the main reason for this is the uncertainty of this business and the hardships they must bear while doing this business.

Figure 4.11 presents the idea of business expansion of the respondents graphically.

Figure 12

Business Expansion Idea



Identified patterns between the business owners' characteristics and characteristics of the businesses

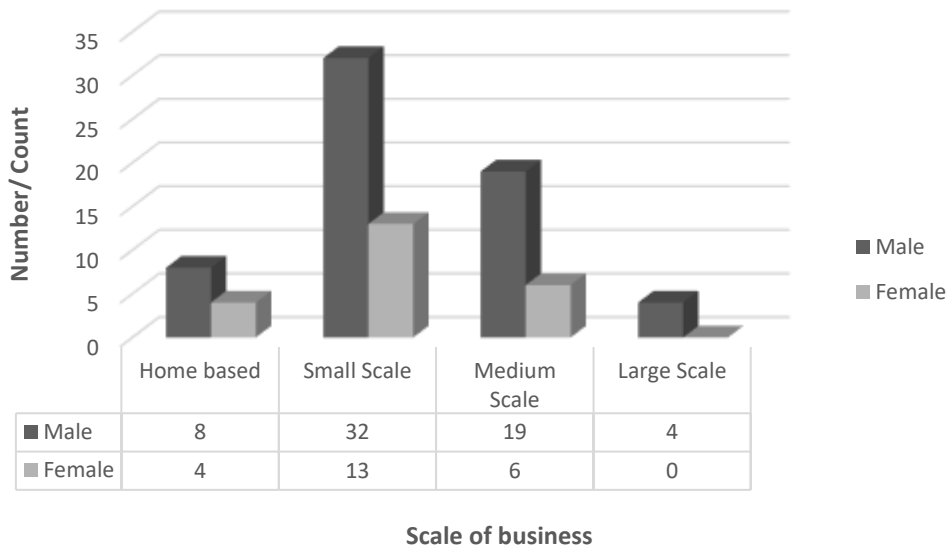
This section will explain the identified patterns between the characteristics of the owner and the characteristics of the business among the respondents of the population.

Gender and its variations

When considering the gendered involvement in this industry, comparatively, a lower number of female participation can be witnessed in comparison to male participation. However, high amount of women participation in here as wage workers while most of full-time drying sites are owned and run by men. The trading within the community (at weekly fair) the female participation can be seen. Female workers are normally assigned cleaning, cutting of small fish, salting, washing, and drying activities whereas cutting large fish, carrying loads, and packing are male dominant tasks.

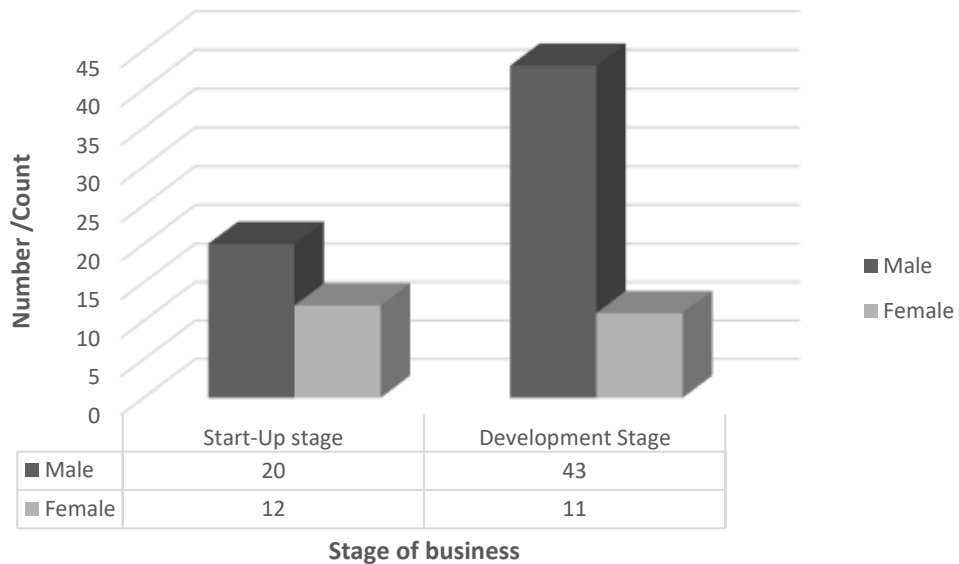
Almost all the female business owners run a small scale or medium scale businesses while large scale businesses are owned by men. Figure 13 present the comparison of gender with the scale of the businesses. In there, no female participation in owning large scale business, while 4 men are owning large scale drying sites. Female ownership has limited to home-based, small scale and medium scale businesses. Among female business owners, majority owns small scale drying sites.

Figure 13
Gender based Business scale distribution



When considering the stage of the businesses, majority of female business owners (12) are in start-up stage of the business while most of the male owners (43) at the development stage of their business. Figure 14 presents the distribution of stage of the businesses according to the gender.

Figure 14
Gender based business stage distribution



The reason for these patterns would be the nature of this industry. Because this industry is dominated by the males and most of the females enter to this business due to the absence of their father or husband in the current business or as they shift to other businesses such as boat fishing. Therefore, they remain in the early stages of their businesses whereas the opposite with men because they start this dried fish

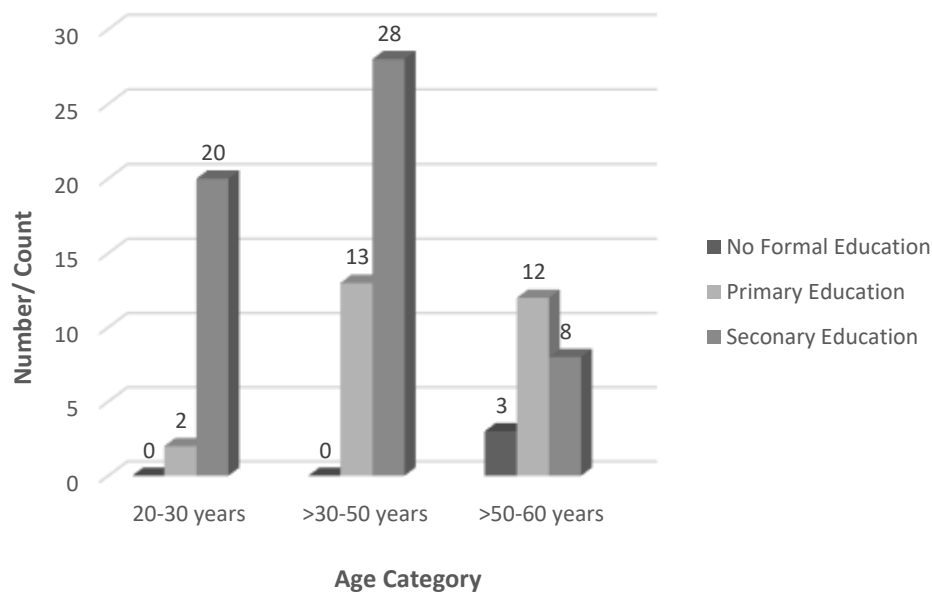
business from the beginning and therefore, they have reached more mature stages of the business.

Age and its variations

When considering the patterns related to the age of the respondents, most of the aged respondents have received less education than the young respondents. This is mainly due to the difference between society's perception towards education during past and present times. During past, they were not forced towards education by their parents or the surrounding society, as their main focus was on their livelihood activities at that time in this community. As time passes, the society's perception on education has changed and their children were pushed to receive a good education in order to pursue more reputed employment opportunity by leaving their own society which they grew up. And also, another reason for this is the increased infrastructure facilities of the area such as building of schools, roads, bridges, water, and electricity facilities and etc. Figure 15 presents how the education level changes with the age of the respondents.

Figure 15

Age Vs Education level

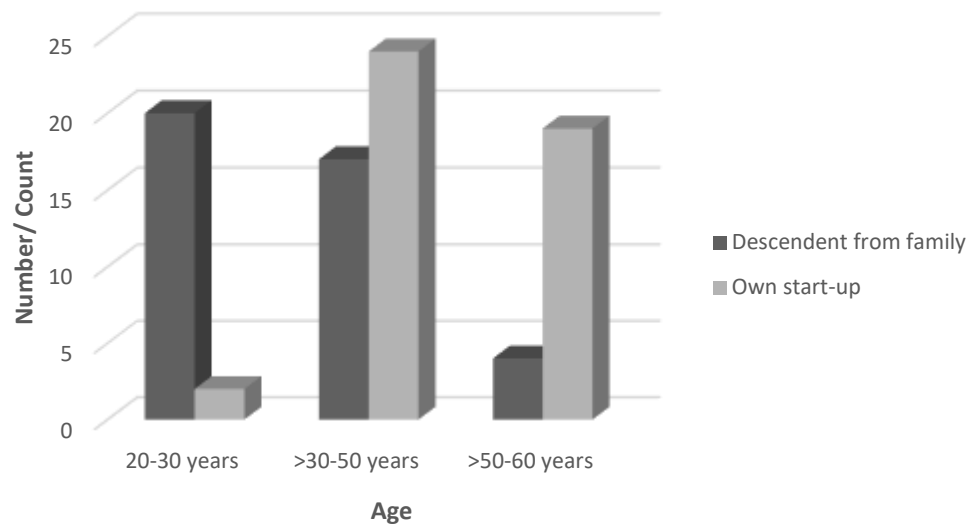


According to the above graph, below 30 years group and 30-50 group has received secondary education while above 50 years group have received only primary education or had no formal education.

When considering the mode of business start-up of the respondents, majority of aged respondents (>50 years) have started their businesses on their own whereas, most of younger respondents (20-30 years) carrying out their parent's business further. This was a common feature among this population, because due to COVID-19 pandemic period most of the youngsters have given up their other carrier paths and have joined their family's dried fish business as it started to gain more profits during the lockdown period.

Figure 16 presents how the mode of business start-up changes with the age of respondents.

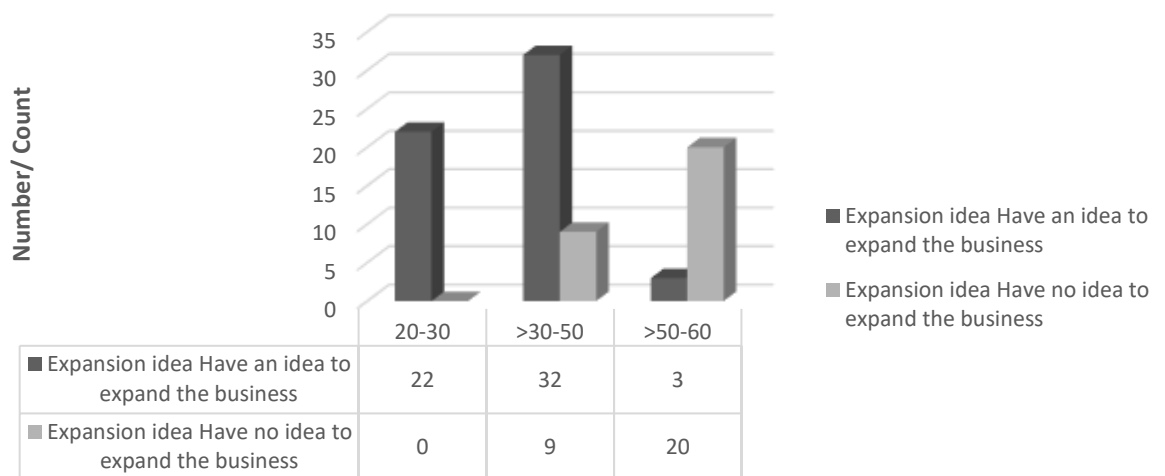
Figure 16
Age Vs. Mode of Business start-up



When considering the business expansion idea with the age of the respondents, the business expansion idea is dominated in younger business operators rather than aged business operators. They plan to expand their businesses in terms of land extent, land location, export markets, increment of production quantities, using new technologies such as solar power units in rainy seasons etc. Most of the older respondents who operate their businesses, are not interested in engaging their children to this business as they want their children to go abroad after their education or shift into another career path after schooling.

Figure 17 presents how the willingness to expand the business changes with the age.

Figure 17
Age Vs Business expansion idea



4.2 Exploring the Decision-Making Approaches Adopted by the Dried Fish Processing Business Operators

This section presents the findings on the decision-making approaches adopted by dried fish processing business operators.

This section answers the research question “What are the types of entrepreneurial decision-making approaches adopted by the dried fish processing business operators in their business operations?” which stated under the research questions section. Table 4.2 provides descriptive statistics of the decision-making approaches adopted by the respondents.

Table 5

Descriptive statistics of the decision-making approaches adopted by dried fish processing business operators

Decision-making Approach	Mean	Standard Dev.
Causation	3.04	0.66
Effectuation	3.31	0.53
Means-Driven approach	3.08	0.59
Affordable loss	3.54	0.99
Leverage Contingencies	3.28	0.54
Pre-commitments	3.46	0.96
Bricolage	3.23	0.51

Considering the results, the Dried Fish Processing Business operators are involved in all three entrepreneurial decision-making approaches to different degrees. According to table 5, the mean score of effectuation (3.31) and bricolage (3.23) are higher than that of causation (3.04). When considering the principles of the effectuation logic, affordable loss has the highest mean score value (3.54) than other principles. Therefore, dried fish processing business owners have used effectuation and bricolage than causation and dried fish processing business operators have predominantly adopted effectuation logic while adopting Causation and Bricolage as well.

4.3 The Change of the Decision-making Approach with the Owner Characteristics

This section answers the research questions, “Do entrepreneurial decision-making approaches change with the personal characteristics of the business owner?” First, it will present the change of the decision-making approach with the owner’s age and gender.

The change of the decision-making approaches with the business owner’s age and gender

The study used two explanatory factors: gender and age of the respondents with their interaction effects. Table 6 and Table 7 provide descriptive statistics of the adoption of decision-making approaches with the dried fish processing business operators’ gender and age.

Table 6

Descriptive statistics of dried fish processing business owner's decision-making approaches with the gender

Entrepreneurial decision-making approach	Male		Female	
	Mean	Standard Dev.	Mean	Standard Dev.
Causation	3.17	0.65	2.69	0.11
Effectuation	3.15	0.57	3.73	0.64
Means Driven Approach	2.98	0.62	3.35	0.13
Affordable Loss	3.27	0.11	4.29	0.96
Leverage contingencies	3.15	0.62	3.63	0.76
Pre-commitments	3.33	0.12	3.83	0.14
Bricolage	3.16	0.64	3.41	0.72

The mean scores for effectuation (3.73) and all its sub-dimensions and bricolage (3.41) are higher in females. Males have a higher mean-score for causation (3.17) and lower scores for both effectuation (3.15) and bricolage (3.16). When considering the principles of the effectuation approach, Affordable loss and Pre-commitments principles have the highest mean score value than other principles, regardless of the gender difference in this population.

Table 7

Descriptive statistics of dried fish processing business owner's decision-making approaches with the age

Entrepreneurial decision-making approach	<=30 Years		>30-50 Years		>50 Years	
	Mean	Standard Dev.	Mean	Standard Dev.	Mean	Standard Dev.
Causation	2.40	0.56	3.01	0.74	3.72	0.54
Effectuation	3.76	0.71	3.27	0.69	2.94	0.74
Means-Driven Approach	3.53	0.89	3.03	0.77	2.74	0.10
Affordable Loss	4.14	0.14	3.42	0.15	3.19	0.14
Leverage contingencies	3.59	0.92	3.29	0.69	2.96	0.10
Pre-commitments	3.98	0.12	3.48	0.14	2.93	0.17

Bricolage	3.57	0.12	3.21	0.55	2.94	0.75
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When considering the age of the respondents, the mean scores of effectuation (3.76) and all its' sub-dimensions and bricolage (3.57) are higher for younger respondents (≤ 30 years). Only the mean score for causation (3.72) was higher in elder respondents (> 50 years). Therefore, younger respondents have adopted more effectuation and bricolage approaches while older respondents have adopted more causation approach.

Multivariate analysis (MANOVA) was used to find the statistical significance of these results. Table 8 presents the four multivariate test results of the two groups.

Table 8

MANOVA test results for the gender and age

W = Wilks' lambda

P = Pillai's trace

L = Lawley-Hotelling trace

R = Roy's largest root

Source	Statistics	df	F	P
Gender	W = 0.72	1	10.914	<0.001***
	P = 0.29		10.914	<0.001***
	L = 0.39		10.914	<0.001***
	R = 0.39		10.914	<0.001***
Age	W = 0.65	2	17.631	<0.001***
	P = 0.36		13.266	<0.001***
	L = 0.67		22.390	<0.001***
	R = 0.64		45.017	<0.001***

*** $p < 0.001$ ** $p < 0.05$

The Pillai's trace value was used to evaluate the significance since equal variances could not be assumed in the Box's M test. It indicates that there was a statistically significant difference between dried fish processing business owner's decision-making approaches with the main factors age and the gender ($p < 0.05$). Table 9 presents the results of the follow-up ANOVA tests for age and the interaction effect.

Table 9

ANOVA test results indicating the difference between dried fish processing business owner's decision-making approach with gender and age

Gender			
Source of variance	df	F	P
Causation	1	11.254	0.001
Effectuation	1	30.565	<0.001***
Means-Driven Approach	1	7.941	<0.006**
Affordable Loss	1	27.363	<0.001***
Leverage contingencies	1	18.003	<0.001***
Pre-commitments	1	5.642	<0.020**

Bricolage	1	4.388	<0.039**
Age			
Causation	2	67.11	<0.001***
Effectuation	2	24.52	<0.001***
Means-Driven Approach	2	16.40	<0.001***
Affordable Loss	2	7.75	0.001
Leverage contingencies	2	11.06	<0.001***
Pre-commitments	2	9.25	<0.001***
Bricolage	2	12.70	<0.001***

*** $p < 0.001$ ** $p < 0.05$

There was a statistically significant difference between dried fish processing business owner's effectual, bricolage and causal decision-making approaches with the age ($P < 0.05$). Also, there was a statistically significant difference between dried fish processing business owner's effectual, bricolage and causal approaches with the gender ($p < 0.05$). Therefore, hypotheses 01 and 02 are not rejected.

The change of the decision-making approach with the business owner's prior experience in business operation

The study used one explanatory factor to explore the effect of prior experience in business operation which is dried fish Industry related prior experience – Whether dried fish processing business owners have gained work experience in a related field or a drying site before starting their own business.

Table 10 provides descriptive statistics of the adoption of decision-making approaches by the dried fish processing business operators with/without industry experience.

Table 10

Descriptive statistics of the adoption of decision-making approaches by the dried fish processing business operators with/without industry experience

Entrepreneurial decision-making approach	With industry exp.		Without industry exp.	
	Mean	Standard Dev.	Mean	Standard Dev.
Causation	3.08	0.71	2.77	0.14
Effectuation	3.27	0.57	3.52	0.12
Means Driven Approach	3.06	0.63	3.23	0.17
Affordable Loss	3.52	0.10	3.69	0.34
Leverage contingencies	3.25	0.58	3.52	0.13
Pre-commitments	3.40	0.10	3.86	0.22
Bricolage	3.18	0.53	3.55	0.14

The mean score for the causation (3.08) is higher when the respondents have prior exposure to the industry. When the respondents do not have prior exposure to the industry, the mean score of effectuation (3.52), all its sub-dimensions and bricolage (3.55) are higher than that of causation. Therefore, respondents with industry experience have strongly adopted causation.

Multivariate analysis (MANOVA) was used to find the statistical significance of the above results. The main effect of the explanatory factor was considered for the analysis. Table 11 presents the four multivariate test results of the three groups.

Table 11
MANOVA test results for the industry experience

Source	Statistics	df	F	P
Industry Experience	W = 0.072	1	2.066	0.111
	P = 0.930		2.066	0.111
	L = 0.076		2.066	0.111
	R = 0.076		2.066	0.111

***P<0.001 **P<0.05

The Pillai's trace value was used to evaluate the significance since equal variances could not be assumed in the Box's M test. However, there was no significant difference between dried fish processing business owner's decision-making approach with the industry experience ($p > 0.05$). Table 4.9 presents the results of the follow-up ANOVA (analysis of variance) tests for industry experience.

Table 12
ANOVA results indicating the difference between business owners' decision-making approach with the industry experience

Industry Experience				
Source of variance	df	F	P	
Causation	1	2.604	0.110	
Effectuation	1	2.493	0.118	
Means-Driven Approach	1	0.883	0.350	
Affordable Loss	1	0.355	0.553	
Leverage contingencies	1	2.943	0.090	
Pre-commitments	1	2.663	0.106	
Bricolage	1	4.171	0.062	

***P<0.001 **P<0.05

According to the table, there is no statistically significant difference between Dried Fish Processing Business operator's entrepreneurial decision-making approach with the prior experience related to the dried fish industry. Therefore, the third hypothesis of the study is rejected.

4.3 The Change of the Decision-Making Approach with the Business Characteristics

This section answers the research questions, “Do entrepreneurial decision-making approaches change with the characteristics of the business?” First, it will present the change of the decision-making approach with the scale of business operation.

The change of the decision-making approaches with the scale of business operation

Table 13 provides descriptive statistics of dried fish processing business owner’s decision-making approach with the scale of business operation.

Table 13

Descriptive statistics of dried fish processing business owner’s decision-making approach with the scale of business operation

Entrepreneurial decision-making approach	Home-based drying using family labor		Small-scale drying sites with 3- 10 hired workers		Medium-scale drying site with 25- 30 hired workers		Large-scale drying site with 50 or more hired workers	
	Mean	Standard Dev.	Mean	Standard Dev.	Mean	Standard Dev.	Mean	Standard Dev.
Causation	3.26	0.19	2.78	0.85	3.30	0.97	3.68	0.13
Effectuation	3.34	0.14	3.49	0.68	3.03	0.84	2.88	0.11
Means Driven Approach	3.10	0.13	3.22	0.83	2.79	0.10	3.31	0.21
Affordable Loss	3.64	0.19	3.73	0.13	3.40	0.17	2.00	0.05
Leverage contingencies	3.23	0.17	3.47	0.68	3.02	0.89	3.00	0.17
Pre-commitments	3.58	0.28	3.71	0.11	3.00	0.17	3.13	0.42
Bricolage	3.06	0.15	3.37	0.76	3.11	0.66	2.97	0.17

The mean scores for effectuation and all its sub-dimensions and bricolage are higher when the businesses are home based / small-scaled. The mean score for causation was higher when the businesses were Large-scaled / Medium- scaled. Therefore, small-scale businesses have strongly adopted effectuation and bricolage whereas: large or medium-scale businesses have strongly adopted causation approach.

Multivariate analysis (MANOVA) was used to find the statistical significance of these results. Table 14 presents the four multivariate test results of the four groups.

Table 14

MANOVA test results for the businesses in different scales

Source	Statistics	df	F	P
Scale of the Business	W = 0.328	3	3.351	0.001
	P = 0.695		3.492	0.001
	L = 0.407		3.554	<0.001***
	R = 0.299		8.170	<0.001***

***P<0.001 **P<0.05

Having significant values for all the four statistics indicate that there was a significant difference between dried fish processing business owner's decision-making approaches with the businesses at their different scales. The Pillai's trace value was used to evaluate the significance since equal variances could not be assumed in the Box's M test. The scale of the business had a significant Pillai's trace value ($P < 0.05$) indicating a significant difference between the decision-making approaches. Table 15 presents the results of the follow-up ANOVA (analysis of variance) tests.

Table 15

ANOVA results indicating the difference between decision-making approach with the scale of the business

Scale of the Business				
Source of variance		df	F	P
Causation		1	7.674	<0.001***
Effectuation		1	6.765	<0.001***
Means-Driven Approach		1	3.823	0.013**
Affordable Loss		1	5.403	0.002**
Leverage contingencies		1	5.471	0.002**
Pre-commitments		1	4.103	0.009**
Bricolage		1	2.874	0.041**

***P<0.001 **P<0.05

According to the table of ANOVA results, there was a significant ($P < 0.05$) difference between the decision-making approaches with different scales of businesses. Therefore, hypothesis 04 of the study is not rejected.

The change of the decision-making approaches with the stage of business operation

Table 16 provides descriptive statistics of the decision-making approaches changes with stage of businesses.

Table 16

Descriptive statistics of the decision-making approaches changes with stage of businesses.

Entrepreneurial decision-making approach	Start-up Stage		Development Stage	
	Mean	Standard Dev.	Mean	Standard Dev.
Causation	2.53	0.63	3.35	0.71
Effectuation	3.68	0.63	3.09	0.57
Means Driven Approach	3.47	0.77	2.85	0.65
Affordable Loss	3.93	0.15	3.31	0.11
Leverage contingencies	3.58	0.66	3.10	0.65
Pre-commitments	3.91	0.11	3.19	0.12
Bricolage	3.49	0.72	3.08	0.61

The mean scores for effectuation (3.68) and all its sub-dimensions as well as bricolage (3.49) were higher in businesses at their start-up stage. The mean score for causation (3.35) was higher in the businesses at the development stage. Therefore, the businesses at the start-up stage have strongly adopted effectuation and bricolage while businesses at development stage have strongly adopted causation.

Multivariate analysis (MANOVA) was used to find the statistical significance of the above results. Table 17 presents the four multivariate test results.

Table 17

MANOVA test results for the start-up stage and development stage businesses

Source	Statistics	df	F	P
Stage of the Business	W = 0.555		21.925	<0.001***
	P = 0.455	1	21.925	<0.001***
	L = 0.802		21.925	<0.001***
	R = 0.802		21.925	<0.001***

***P<0.001 **P<0.05

Pillai's trace value was used to evaluate the significance since equal variances could not be assumed in the Box's M test. The stage of the business has a significant Pillai's trace value ($P < 0.05$) indicating a significant difference between the decision-making approaches. Table 18 presents the results of the follow-up ANOVA (analysis of variance) tests.

Table 18

ANOVA test results indicating the difference between the decision-making approaches with stage of business

Stage of the Business			
Source of variance	df	F	P
Causation	1	62.025	<0.001***
Effectuation	1	43.188	<0.001***
Means-Driven Approach	1	35.373	<0.001***
Affordable Loss	1	9.915	0.002**
Leverage contingencies	1	23.416	<0.001***
Pre-commitments	1	15.022	<0.001***
Bricolage	1	18.098	<0.001***

***P<0.001 **P<0.05

According to the table of ANOVA results, there was a significant ($P < 0.05$) difference between the decision-making approaches with stage of businesses. Therefore, hypothesis 05 of the study is not rejected.

4 Conclusions and Recommendations

4.1 Conclusions

This study contributes to understanding the use of causation, effectuation and bricolage thinking adopted by the dried fish processing business operators. It confirms that dried fish processing business operators have been involved in all three entrepreneurial decision-making approaches to different degrees. In fact, when considering the overall adoption of the decision-making approaches, dried fish processing business operators rely more on effectuation and bricolage than causation as they are behaving in a different way due to the resource constraints they face in the surrounding environment. Furthermore, the study has confirmed that younger business owners highly adopt effectuation whereas older business owners highly adopt causation and younger female owners highly adopt both effectuation and bricolage decision-making approaches. However, this study revealed that in this community, there is no effect of dried fish industry-related prior experience with dried fish processing business owners on entrepreneurial decision-making approaches. Small-scale businesses and the 57 businesses at their start-up stage strongly adopt effectuation and bricolage while medium-scale businesses and the businesses at their growth stage strongly adopt causation.

4.2 Policy Implications

The findings of the study, including the in-depth interviews with DBOs suggest that policymakers adopt a more pragmatic approach when supporting small business development rather than restricting to granting financial support/loan facilities. The necessary implications should be taken upon recognizing their presence, and important contributions of them and understanding these are not typical commercial businesses but more culturally based ways of life. Implications such as identifying the dried fish processing business operators' presence and take necessary institutional implications such as saving their lands which they do production processes, support them to reach markets such as export market, provide necessary awareness programs

on necessary information to reach such markets, provide financial investment support systems to enhance the technology, quality of production etc. Furthermore, limit the importation of dried fish during peak season of dried fish production in Sri Lanka, where they can provide enough supply to the domestic market was a crucial fact that exposed during the discussions. The policymakers can reduce the inter-sectoral competition which this industry is going through with tourism industry via suitable policy implications and support for their livelihood. Furthermore, this is a significant research gap in both business and economics side in Sri-Lankan Fisheries of agriculture sector which was filled through this research by identifying the entrepreneurial aspect of the dried fish business operations.

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Marketing

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Do Privacy Concerns and Intrusiveness of Proximity-based SMS Marketing Messages Affect Customers' Intention to Visit an Outlet?

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Abstract

Mobile advertising is considered as one of the most widely used advertising mediums in the world. In this domain, the options for location-based marketing/advertising (LBM/A) on smartphones are expanding, making it easier to deliver such services. Proximity-based Short Message Service (SMS) marketing, a push-based LBM/A, in which marketing messages are delivered to the mobile phones of consumers in close proximity to a retail outlet even when the user has not requested such messages. Although there is a growing body of literature in this domain, the impact of push-based LBM/A in inducing customers to visit an outlet is limited. Receiving unsolicited proximity-based SMS from outlets might seem intrusive, a violation of privacy, and therefore, could negatively influence the consumer's intention to visit the relevant outlet. Thus, this study explored the impact of perceived intrusiveness and perceived privacy concerns of proximity-based SMS on the mobile user's intention to visit an outlet in response to such SMS, through affecting the attitude towards proximity-based SMS marketing. It also examined whether these concerns could differ for older and younger consumers since younger consumers tend to be more receptive of digital marketing efforts. The study employed a cross-sectional survey utilizing 208 Sri Lankan consumers and data were analysed using regression techniques. Findings indicate that the older consumers have a significantly higher perception of both intrusiveness concerns and privacy concerns of proximity-based SMS marketing than younger consumers. Further, for older consumers, both perceived intrusiveness and privacy concerns have a negative impact on the intention to visit a retail outlet in response to proximity-based SMS marketing and attitude towards proximity-based SMS marketing mediates both the relationships. For younger consumers, only perceived intrusiveness has an impact on the intention to visit a retail outlet in response to proximity-based SMS marketing.

Keywords: Location Based Marketing, Location Based Advertising, Mobile Marketing, Perceived Intrusiveness, Perceived Privacy Concerns

1. Introduction

Location-based mobile marketing / advertising (LBM and LBA), in which information is specially tailored for the place where users access the advertising medium (Chen et al., 2014), has become an important aspect of mobile marketing (Berman, 2016; Kamiya & Branisso, 2021). It is an effective advertising tool; since consumers always have their mobile phones with them, LBA saves time and increases the visibility of specific offers and outlet information (AlBraheem et al., 2017). However, scholarly understanding of how LBA could be used to affect customer behaviour in the brick-and-mortar shopping context is still underdeveloped (Högberg et al., 2020; Kamiya &

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Branisso, 2021). In particular, it has been highlighted that the effect of push notifications on a person visiting a shop has not received systematic attention (Kamiya & Branisso, 2021). Addressing this gap in the literature, this study examines effectiveness of proximity-based SMS marketing (PB-SMS-M), one form of push-based LBA (Papandrea et al., 2010), in inducing customers to visit retail outlets that are located close to where they are at a given time, focusing on the privacy concerns and intrusiveness that may be associated with this form of advertising.

As mentioned above, LBA may be approached in two ways: the push method and the pull approach (Lin & Bautista, 2018; Stansfield, 2003). Pull-based LBA involves location-based marketing communications that are only delivered to mobile devices once a customer specifically requests them (Lin & Bautista, 2018). The push-based method involves communications delivered to a mobile device without the subscribers' request (Dubos Le Cadre, 2016; Stansfield, 2003); PB-SMS-M falls into the latter category. PB-SMS-M is used by a wide range of enterprises. Major shops, for example, broadcast proximity advertisements to potential customers who are close to their stores (Wang et al., 2017). A recent Sri Lankan example can be found in Odel's advertising strategy. When consumers (whose mobile numbers are in Odel's database) happen to walk by Odel, the customers would often receive a discount coupon as an SMS.

Literature shows that perceived privacy concerns and perceived intrusiveness concerns of customers regarding even pull-based LBA methods, where customers have requested for marketing messages, could lead to negative purchase intentions and other behavioural intentions (Ryu & Park, 2020). However, mobile pull is generally considered as less privacy intrusive than push methods since it gives users greater control over how they interact with the provider (Kamiya & Branisso, 2021). This indicates that privacy and intrusiveness concerns could be greater for push-based methods. For example, in ad acceptance literature, it has been noted that consumers tend to consider push LBA as more intrusive than pull LBA (Shin & Lin, 2016) and that ad avoidance due to privacy concerns occurs only in push LBA and not pull LBA (Limpf & Voorveld, 2015). Extending these views to behavioural intentions, this study examined whether perceived privacy and intrusive concerns could have an impact on intention to visit an outlet in response PB-SMS-M marketing, which is a push LBA method. Thus, the study focused on the research problem "Do perceived privacy concerns about and intrusiveness of proximity-based SMS marketing messages impact a consumers' intention to visit an outlet?"

In addressing this research problem, the study focused on three objectives. The first objective addressed a possible demographic impact on the perceived privacy concerns and intrusiveness of PB-SMS-M. Literature identifies that younger consumers tend to be more ready to accept mobile marketing and consumption, such as the adoption of mobile banking, than older consumers (Merhi et al., 2020). Further, many studies have also established that younger consumers are less concerned about information privacy issues involved in ICT (Information Communication Technology), usage (Lee et al., 2019) and the acceptance of LBA (Ryu & Park, 2020). Thus, the first objective of the study was to identify whether the perceived privacy concerns and intrusiveness are less for younger consumers than older consumers. The second objective was to identify whether the perceived privacy concerns and intrusiveness have a negative impact on customers' intention to visit a retail store in response to PB-SMS-M. The third objective

was to identify whether attitude towards PB-SMS-M mediates the relationships between perceived privacy concerns and intrusiveness, and intention to visit a retail store in response to PB-SMS-M. It was decided to address the second and third objectives separately for older and younger consumers if a difference is found between these two age groups in the perception of privacy concerns and intrusiveness (i.e., Objective 1).

In the remainder of the paper, initially prevailing literature in the study area is presented, starting with defining PB-SMS-M, then moving on to perceived privacy concerns about and intrusiveness of LBM, and then highlighting the gap in the literature. Next, the conceptual model is presented along with the hypotheses of the study. Thereafter, the methodology is elaborated followed by the findings and a discussion related to previous literature. Finally, the study's limitations are identified as well as implications for practice and future research.

2. Literature Review & Conceptualisation

In today's environment, many businesses rely on cutting-edge mobile media technologies to expand their marketing communication channels (Kamiya & Branisso, 2021). Among the different uses of mobile technology in marketing LBM/LBA have become important since it enables companies to make use of the location-sensitive nature of mobile phones (Högberg et al., 2020; Pizzi & Scarpi, 2016). Location-based marketing provides huge support for marketers to pursue their market, as it is said that both location and timing of the marketing message can attract more customers to a retail outlet (Danaher et al., 2015). The subject area of this study is proximity-based SMS marketing which is a narrower concept within LBA (Lee et al., 2015).

2.1 Privacy concerns and Intrusiveness in the context of LBA and Proximity-based SMS Marketing (PB-SMS-M)

LBA, an element of a broader marketing approach known as location-based services (Kini & Suomi, 2016), can be defined as marketer-controlled information specially tailored for the place where users access the advertising medium (Chen et al., 2014). A primary mode of delivering LBA is the Short Message Service (SMS) – a method of communicating with consumers via text messages regarding campaigns, promotions, news, and other topics (Garcia, 2023).

LBA can be divided into two categories as pull and push based – the former involving the provision of marketing information at the request of mobile users and the latter providing unsolicited information (Dubos Le Cadre, 2016; Lin & Bautista, 2018; Stansfield, 2003). PB-SMS-M belongs to the latter category. With this technique, advertising messages may be sent to all mobile users in a certain geographic region. With this technique, advertisements can be sent out to any hand-held technological device (such as mobile phones) capable of capturing customers' attention, exposing them to advertising content, and altering their perceptions, attitudes, and behaviour towards it (Drossos et al., 2007). It has been proposed that customers could be induced to visit shops by sending this kind of message when they are in the proximity of the shop (Kamiya & Branisso, 2021). This has been presented only as a proposition, and as noted in the introduction, the ability of these push messages to draw customers to a shop does not appear to have been empirically verified (Kamiya & Branisso, 2021). The lack of empirical investigation about the ability of location-based mobile marketing

to impact on offline consumer behaviour has also been identified by other scholars (Högberg et al., 2020). Thus, this study investigated one aspect of the impact of PB-SMS-M in customers' intention to visit an outlet, namely the privacy concerns and intrusiveness associated with PB-SMS-M.

While PB-SMS-M can provide value to consumers by presenting information relevant to their location, consumers have various concerns about receiving such messages. As previously noted, the push-based model allows marketers to send marketing messages to mobile users even when the user has not requested such messages or promotions. Receiving random mobile marketing messages from outlets/businesses depending on the consumer's location might seem intrusive (Verhagen et al., 2021) and a violation of privacy (Xu et al., 2011); such perceptions also have the potential to a consumer's intention to visit the relevant outlet.

Prior researchers demonstrate that information privacy is a major problem in mobile marketing, and it is suggested that privacy is continuing to erode due to technological advancements (Martin & Murphy, 2016). Privacy is a key concern of consumers especially in the use of mobile devices where they can be potentially tracked ubiquitously (Smith et al., 2011). Individuals are concerned about a loss of privacy when utilizing location-based advertising, as their locations and other personally identifiable information may be monitored by service providers (Benamati et al., 2016). Misuse of personal data, such as disclosing a person's real-time location or movements, can result in an increased invasion of privacy, which can have negative outcomes towards the marketing message (Nguyen et al., 2022; Ryu & Park, 2020). Privacy concerns have been identified to be associated more with push LBA than pull LBA (Limpf & Voorveld, 2015). Thus, as PB-SMS-M is a push method, privacy concerns are highly likely to impact its effectiveness in drawing consumers to an outlet.

The issue of perceived ad intrusiveness is also relevant to the debate about the acceptance and efficacy of mobile advertising (Hühn et al., 2017). Intrusiveness is defined as a "psychological response to advertisements that disrupt a consumer's ongoing cognitive processes" (Li et al., 2002, p. 32). Intrusiveness in the context of mobile location-based advertising is a psychological reaction to unsolicited location-based ads that interfere with their ongoing cognitive processes (Truong & Simmons, 2010). Even with pull-based LBA, literature shows that customers could feel like their freedom to choose is affected due to marketing messages (Rau et al., 2011). However, in pull LBA customers have more control over receiving information than in push LBA (Kamiya & Branisso, 2021). In the latter case, since mobile users receive advertising messages without specifically requesting them, the amount of intrusiveness is significant (Gutierrez et al., 2019). For example, Lin et al. (2016) note that one respondent reported feeling "annoyed when he was constantly disturbed by SMS ads sent by retailers in a mall" (p. 343). Therefore, as PB-SMS-M is a push method, intrusiveness is highly likely to impact its effectiveness in drawing consumers to an outlet.

With these observations relating to the privacy concerns and intrusiveness associated with PB-SMS-M, the possible impact of these variables on the customers' intention to visit an outlet using PB-SMS-M were conceptualized as follows.

2.1 Conceptualisation

This study had three objectives and one hypothesis was developed in relation to each. The first of these was to test age differences in privacy and intrusiveness concerns of PB-SMS-M. The literature on age differences regarding information privacy concerns related to ICT is not conclusive (Lee et al., 2019). However, there is evidence in the literature that identifies older people as having greater information privacy concerns (Goldfarb & Tucker, 2012; Lee et al., 2019). Other scholars have similar observations in relation to mobile marketing (Merhi et al., 2020) and LBA (Lin et al., 2016; Schade et al., 2018). It was not possible to identify the possible difference in perceived intrusiveness of mobile advertising in the literature. In an overall sense, it has been identified that older people are less willing to accept LBA (Ryu & Park, 2020).

H₁: In comparison to younger consumers, older consumers have greater (a) privacy and (b) intrusiveness concerns of PB-SMS-M used by retail outlets.

The second and third objectives and related hypotheses were broadly framed by the Theory of Reasoned Action (TRA), a widely used theory in consumer research (Reina Paz & Rodríguez Vargas, 2023). TRA proposes that behaviours can be predicted by intentions to behave, that intentions can be (partially) predicted by attitudes towards the behaviour, and that attitudes, in turn, can be predicted by beliefs related to the behaviour (Reina Paz & Rodríguez Vargas, 2023). Guided by these notions, the study proposed that perceived privacy concerns and perceived intrusiveness (two beliefs related to PB-SMS-M) will have an impact on customers' intention to visit an outlet in response to PB-SMS-M through the impact of these beliefs on customers' attitude towards PB-SMS-M. Thus, the second objective was about the impact of privacy and intrusiveness concerns on customers' intention to visit outlets using PB-SMS-M.

Because location data typically discloses a person's whereabouts in real time, the possibility for privacy invasion is a serious problem (Xu et al., 2011). Researchers have discovered that privacy concerns have a significant negative impact on purchase intention, and that consumers will be less interested in SMS marketing messages if their personal privacy is threatened (Gana & Koce, 2016). It has been discovered that one of the most important influencing variables on customer purchase intention is privacy, which is a critical aspect for mobile marketing efforts in the twenty-first century (Benamati et al., 2016). In the context of LBM, it has been identified that privacy concerns have a negative impact on consumers' willingness to accept LBA (Limpf & Voorveld, 2015; Lin et al., 2016; Ryu & Park, 2020; Schade et al., 2018). Given these findings related to different adverse behavioural outcomes of privacy concerns associated with mobile marketing, LBA in particular, the first part of the second hypothesis of this study proposes that privacy concerns of PB-SMS-M will have a negative impact on customers' intention to visit an outlet in response to PB-SMS-M.

Literature in relation to the behavioural consequences of the second independent variable – intrusiveness – is sparse. In general, advertising literature establishes that the more receivers perceive advertising as irritating and invasive, the more negative effects such as annoyance and avoidance may occur (Brinson & Britt, 2021) which will lead to behavioural impacts like advertisement avoidance or denial of permission requests (Edwards et al., 2002). In LBM, it has been identified that consumers are less willing

to accept LBA, especially push SMS messages, because they consider them as intrusive (Lin et al., 2016).

Scholars use the theory of psychological reactance to explain the possible impact of the intrusiveness of unsolicited marketing communication on adverse behavioural outcomes (Morimoto & Chang, 2006). The key premise of psychological reactance is as follows:

If individuals feel that any of their free behaviours, in which they can engage at any moment or in the future, is eliminated or threatened with elimination, the motivational state of psychological reactance will be aroused. This reactance state is directed toward the restoration of the threatened or eliminated behaviour. ... Because reactance is a motivational state, it possesses energizing properties that drive individuals to engage in freedom-restoration behaviours (Miron & Brehm, 2006, p. 10).

In relation to the intrusiveness of unsolicited marketing communication, this theory implies that infringement of such communication on the freedom to engage in other activities would push customers to engage in behaviours in opposition to what is communicated. For example, Shin and Lin (2016) identified that 'goal impediment', the disruption of ongoing mobile phone activities due to LBA, was the strongest predictor of LBA avoidance. They propose that this avoidance is possibly due to psychological reactance because "an unexpected appearance of LBA messages is likely to be viewed as particularly disruptive 'noise'" (Shin & Lin, 2016, p. 450). Thus, the literature on ad intrusiveness and the psychological reactance theory suggests that intrusiveness of PB-SMS-M could potentially negatively impact a customer's intention to visit an outlet in response to PB-SMS-M.

Based on the above observations the second hypothesis of the study is:

H₂: (a) Perceived privacy concerns and (b) perceived intrusiveness of PB-SMS-M negatively impact customers' intention to visit an outlet in response to PB-SMS-M

The third objective and the relevant hypothesis of the study were related to the mediating impact of attitude towards PB-SMS-M. Guided by the basic premises of TRA (Reina Paz & Rodríguez Vargas, 2023), this hypothesis proposes that privacy and intrusiveness concerns can impact a consumer's intention to visit an outlet because such concerns lead to a negative attitude about proximity-based SMS marketing, which, in turn, impacts negatively on the consumer's intention to visit the outlet using this marketing method.

Consumer privacy issues could have a detrimental influence on their attitudes about mobile advertising and serve as a barrier for them to accept it (Martin, 2018; Taylor et al., 2011). This is also identified, specifically in relation to LBA (Limpf & Voorveld, 2015; Lin et al., 2016; Ryu & Park, 2020). Further, attitude towards LBA has been identified as a mediator between perceived privacy concerns and LBA acceptance (Limpf & Voorveld, 2015; Ryu & Park, 2020). There is less evidence related to perceived intrusiveness. A study on repetition of web advertisements has identified that advertising intrusiveness could have a negative impact on attitude towards the website, and that attitude mediates the impact of intrusiveness on intention to revisit the site

(McCoy et al., 2017). In the context of LBA, a qualitative study has identified that the intrusive nature of push SMS creates a negative attitude towards LBA and thereby a reluctance to respond to LBA messages.

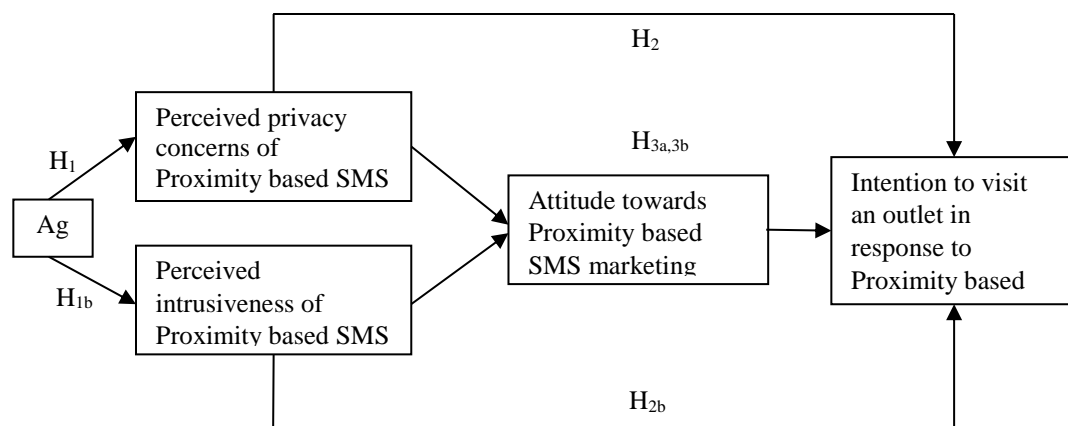
Based on the above empirical and theoretical observations, the third hypothesis was proposed as:

H₃: Attitude towards PB-SMSM mediates the relationships between (a) Perceived privacy concerns PB-SMSM and customers' intention to visit the outlet in response to PB-SMS-M and (b) Perceived intrusiveness of PB-SMS-M and the consumers' intention to visit the outlet in response to PB-SMS-M

Figure 1 presents the conceptual model depicting the hypotheses presented above.

Figure 1

The conceptual model



3. Methodology

Based on the positivistic philosophy, this study used a survey as its research strategy. The time horizon was a single cross-sectional research design where data were collected only once from only one sample (Lillis & Mundy, 2005). The indicators used in measuring the variables were taken from previous research papers to increase validity and reliability: Perceived privacy (Xu, 2007), Perceived intrusiveness (Li et al., 2002), Attitude towards PB-SMS-M (Bruner & Kumar, 2007), Intention to visit an outlet (Chen & Barnes, 2007; Ling et al., 2010; Salisbury et al., 2001). Where necessary, the questions were slightly modified; for example, the attitude measure developed by Bruner and Kumar (2007) is for location-based advertising and the words 'location based advertising' were replaced by 'proximity-based SMS marketing messages'. All indicators were measured using a 7-point Likert scale.

The population of this study was mobile users in Sri Lanka between 18-55 years. Of the sample, 27% had an educational level of GCE Advanced level, 50% had graduate or postgraduate qualifications, and 23% had professional qualifications. The occupations represented were senior managers (28%), professionals (12%), clerical/technician level employees (10%), business owners (6%), and students (44%).

In terms of gender, 53% were females and 47% were males. Since the study intended to check the difference between young consumers (below 30 years) and older ones (above 30 years) the participants were divided into two groups based on age. Participants in the age category 18-30 years were named as '1' and the age category 31-55 years were named as '2' for analysis. Group 1 consisted of 131 (63%) participants and Group 2 consisted of 77 (37%) participants.

The total sample was 208 participants. In using regression analysis, a sample size of $N > 104 + m$ (where m is the number of predictors in a multiple regression) is considered to be sufficient for detecting medium-size relationships (Green, 1991; VanVoorhis & Morgan, 2007). In this study, the number of predictors was three, which required a sample size of 107. However, to increase the power of detecting even small effects, the sample size was increased to be over 200.

Data was collected using a self-administered structured questionnaire. The questionnaire was distributed online and was made using Google Forms. The questionnaire was in English language.

For testing the hypotheses, the items measuring each variable were summated. As previously noted, the measurement instruments for the different variables were derived from previous literature to ensure reliability and validity. However, prior to summation, the Cronbach alpha value was computed for each variable to check for internal consistency (Field, 2018). While the values were above 0.7 for all other variables, it was below this acceptable level (Field, 2018) for 'attitude towards proximity based SMS marketing'. Therefore, one reverse coded question was removed. The developers of the measure also state that this item could be removed if a shorter scale is desired (Bruner & Kumar, 2007). The final scale had acceptable alpha values for all variables (see Table 1).

Table 1

Questions used for measuring the variables

Variable	Question items	Cronbach's Alpha
Intention to visit an outlet in response to proximity-based SMS marketing	<ul style="list-style-type: none"> ● I could see myself visiting an outlet that sends me a proximity based SMS message. ● I would visit an outlet that sends me a proximity based SMS message ● It is likely that I would visit an outlet that sends me a proximity based SMS message ● Given the chance, I predict that I would visit an outlet that sends me a proximity based SMS message. ● Given the chance, I intend to visit an outlet that sends me a proximity based SMS message. 	0.911
Attitude towards proximity-based SMS marketing	<ul style="list-style-type: none"> ● I would like to be able to receive proximity based SMS marketing messages. ● I think, in general, proximity based SMS marketing messages are likely to be entertaining. 	0.845

	<ul style="list-style-type: none"> ● I think proximity based SMS marketing will become necessary ● I think proximity based SMS marketing would provide useful information ● I feel that proximity based SMS marketing would be an exciting improvement in wireless communication ● In general, I think I would be favourable towards proximity based SMS marketing ● I think I will probably not pay attention to proximity based SMS marketing messages 	
Perceived intrusiveness of proximity-based SMS marketing	<ul style="list-style-type: none"> ● I feel that proximity based SMS marketing messages would be distracting ● I feel that proximity based SMS marketing messages would be disturbing ● I feel that proximity based SMS marketing messages would be forced ● I feel that proximity based SMS marketing messages would be interfering ● I feel that proximity based SMS marketing messages would be intrusive ● I feel that proximity based SMS marketing messages would be invasive ● I feel that proximity based SMS marketing messages would be obtrusive 	0.873
Perceived privacy concerns of proximity-based SMS marketing	<ul style="list-style-type: none"> ● I am concerned that companies using proximity based SMS would be collecting too much information about me. ● I am concerned that companies using proximity based SMS may not take measures to prevent unauthorized access to my location information. ● I am concerned that companies using proximity based SMS would keep my location information in an inaccurate manner in their database. ● I am concerned that companies using proximity based SMS may divulge my location information to unauthorized parties without my consent ● Overall, I feel unsafe about providing location information to the company through the use of proximity based SMS marketing 	0.905

4. Data Analysis

The hypotheses were tested utilizing SPSS (V 25) software. The H₁ hypothesis was tested using the independent sample *t*-test, simple regression was used to test H₂. H₃, and the mediating relationship was tested using Model 4 in the PROCESS macro (version 3.5) by Andrew F. Hayes in the SPSS software. In checking for the assumptions of regression, the standardized residual scatter plot of the dependent variable was used to check for linearity, homoscedasticity and the independence of

residuals. This scatter plot was randomly distributed for all the regression models. The normal distribution of residuals was checked using histograms and P-P plots. All the relevant histograms were approximately bell-shaped, and the residuals were adequately close to the diagonals in the P-P plots.

4.1 Difference between Younger and Older Consumers in Their Privacy and Intrusiveness of PB-SMS-M Used by Retail Outlets

To test the differences in perceived privacy concerns and perceived intrusiveness of the two age groups (Younger and Older consumers) regarding PB-SMS-M, an independent sample *t*-test was used.

Table 2

Mean comparison for perceived privacy concerns and perceived intrusiveness concerns of the two age groups

	Age category	Mean	<i>t</i>	<i>p</i>
Perceived privacy concerns	18 - 30 years of age	4.7344	6.977	0.000
	Above 30 years old	5.6571		
Perceived intrusiveness	18 - 30 years of age	3.8931	8.343	0.000
	Above 30 years old	4.8683		

As shown in Table 2, the mean values obtained for the above 30 years' age (older) category for both perceived intrusiveness and privacy concerns about proximity-based SMS marketing are higher than the mean values for participants in 18 - 30 years' age (younger) category, thus indicating that older consumers have greater privacy and intrusiveness concerns. When carrying out the independent sample *t*-test, Levene's Test for Equality of Variances was significant for the test for both perceived intrusiveness concerns and perceived privacy concerns. Hence *t*-test results where equal variances were not assumed were used. the *t* values were significant for both perceived intrusiveness concerns and perceived privacy concerns. This shows that older people have significantly higher concerns regarding both the intrusiveness and privacy of proximity-based SMS marketing. Given this difference, it was decided to test the second and third hypotheses separately for the older and younger consumer groups.

4.1 Perceived Privacy Concerns and Customers' Intention to Visit an Outlet

H2a was developed to identify whether perceived privacy concerns of PB-SMS-M impact customers' intention to visit an outlet in response to PB-SMS-M.

Table 3

Perceived privacy concerns and customers' intention to visit an outlet

Age category	R ²	F	<i>p</i>	β	<i>p</i>
18 - 30 years	0.002	0.197	0.658		
Above 30 years	0.119	10.127	0.002	-0.345	0.002

As shown in Table 3, for participants between 18 - 30 years of age, the F ratio derived from the regression model was 0.197, with a significance value of 0.658 (i.e., $p > 0.05$), indicating that the data does not fit the model (Field, 2018). Thus, the impact of the perceived privacy concerns of proximity-based SMS marketing on customers' intention to visit an outlet in response to proximity-based SMS marketing is insignificant for younger consumers. For the participants above 30 years of age, the F ratio derived from the regression model was 10.127, significant at $p < 0.05$ indicating a fit between the model and the data. The significant beta value of -0.345 depicts the negative relationship, i.e., for people in this category, when the perceived privacy concerns are high, their intention to visit will be low. Therefore, it can be concluded that the perceived privacy concerns of PB-SMS-M have a negative impact on the intention to visit an outlet in response to PB-SMS-M for older people but not for younger people.

4.2 Perceived Intrusiveness and Customers' Intention to Visit an Outlet

The H_{2b} was developed to identify whether perceived intrusiveness of PB-SMS-M impacts customers' intention to visit an outlet in response to PB-SMS-M. As mentioned earlier, the hypothesis was also tested separately for the two age categories.

Table 4

Perceived intrusiveness and customers' intention to visit an outlet

Age category	R ²	F	p	β	p
18 - 30 years	0.01	1.346	0.248		
Above 30 years	0.234	22.964	0.000	-0.484	0.000

As shown in Table 4, for participants between 18 - 30 years of age, the F ratio derived from the regression model was 1.346, with a significance value of 0.248 (i.e., $p > 0.05$), indicating that the data does not fit the model (Field, 2018). Thus, the impact of the perceived intrusiveness of PB-SMS-M on customers' intention to visit an outlet in response to PB-SMS-M is insignificant for younger consumers. For the participants above 30 years of age, the F ratio derived from the regression model was 22.964, significant at $p < 0.05$ indicating a fit between the model and the data. The significant beta value of -0.484 depicts the negative relationship, i.e., when people in this category perceive intrusiveness to be high, their intention to visit will be low. Therefore, it can be concluded that the perceived intrusiveness of PB-SMS-M has a negative impact on the intention to visit an outlet in response to PB-SMS-M for older people but not for younger people.

4.3 Attitude towards Proximity-Based SMS Marketing as a Mediator between Perceived Privacy Concerns and the Consumers' Intention to Visit the Outlet

Although traditionally, it has been assumed that a direct effect of the predictor and criterion variable is a necessary condition for testing mediation, this is no longer considered as a necessary condition (Zhao et al., 2010). Therefore, the mediation test was conducted for both age groups. Figure 2 depicts the mediation effect of attitude towards proximity-based SMS marketing in the relationship between perceived privacy and intention to visit an outlet in response to PB-SMS-M for younger consumers. Figure 3 depicts this mediation effect for the older group.

Figure 2

Privacy concerns and Intention to visit an outlet: Mediation by Attitude towards proximity-based SMS marketing (Younger consumers)

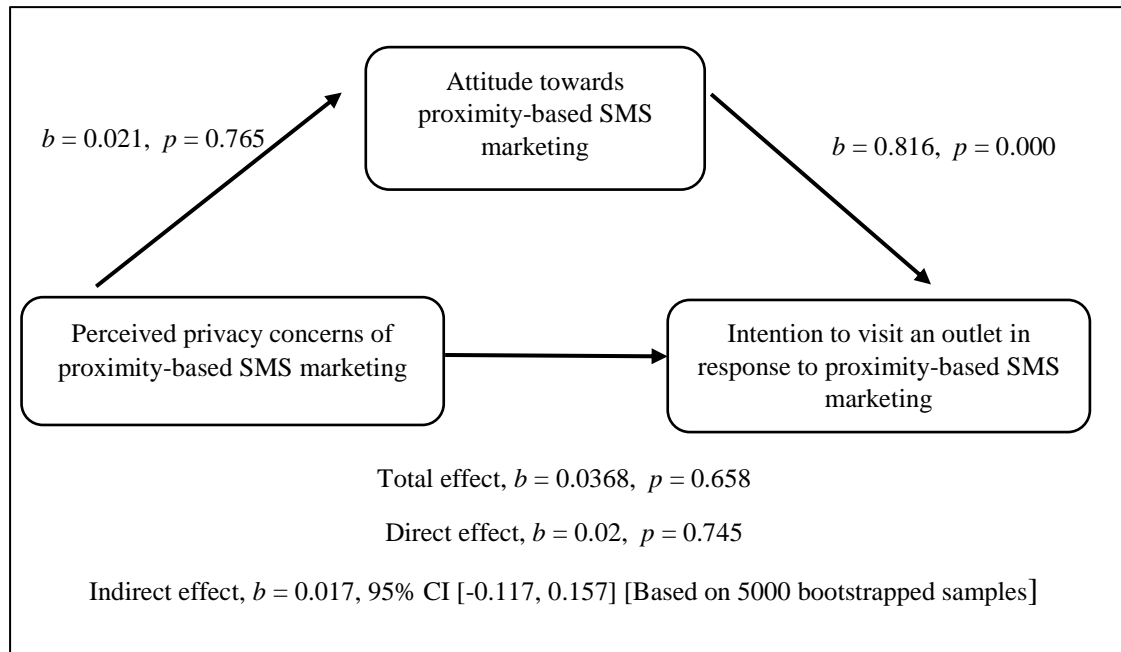


Figure 2 indicates that for the younger age group, the total, direct and indirect (through attitude) effects of privacy concerns on intention to visit an outlet in response to PB-SMS-M are all insignificant. (The p values of the total and direct effects are above 0.05 and the bootstrap confidence interval of the indirect effect contains zero.) It is also noteworthy that perceived privacy concerns do not have an impact on the attitude towards PB-SMS-M. The only significant effect is of the attitude towards PB-SMS-M on intention to visit an outlet. Therefore, it can be concluded that for younger consumers, privacy concerns have no impact on intention to visit an outlet in response to proximity-based SMS marketing either directly or indirectly through attitude towards PB-SMS-M.

Figure 3

Privacy concerns and Intention to visit an outlet: Mediation by Attitude towards proximity-based SMS marketing (Older consumers)

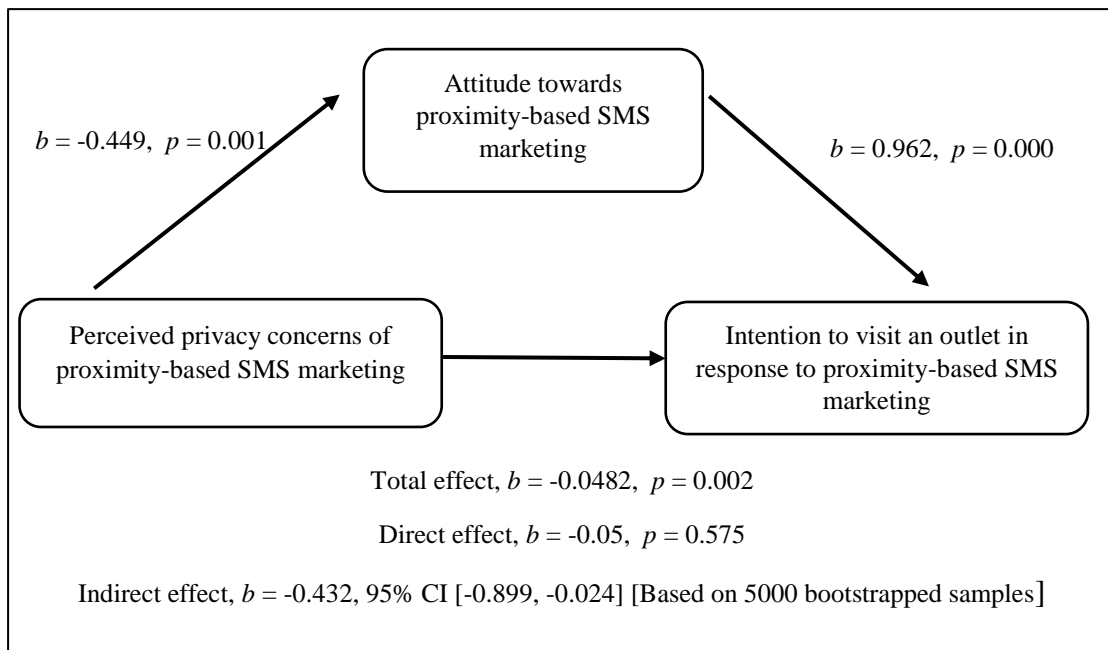


Figure 3 indicates that, for the older group, attitude towards PB-SMS-M mediates the impact of perceived privacy concerns of PB-SMS-M on customers' intention to visit and outlet in response to PB-SMS-M (the bootstrap confidence interval does not contain 0). The direct effect is insignificant ($p > 0.05$), which indicates that there is an indirect-only mediation (Zhao et al., 2010). Given the coefficient of the indirect effect is negative, it can be concluded that, for older consumers, perceived privacy concerns about PB-SMS-M negatively impacts the intention to visit an outlet in response to PB-SMS-M, only indirectly through attitude towards PB-SMS-M.

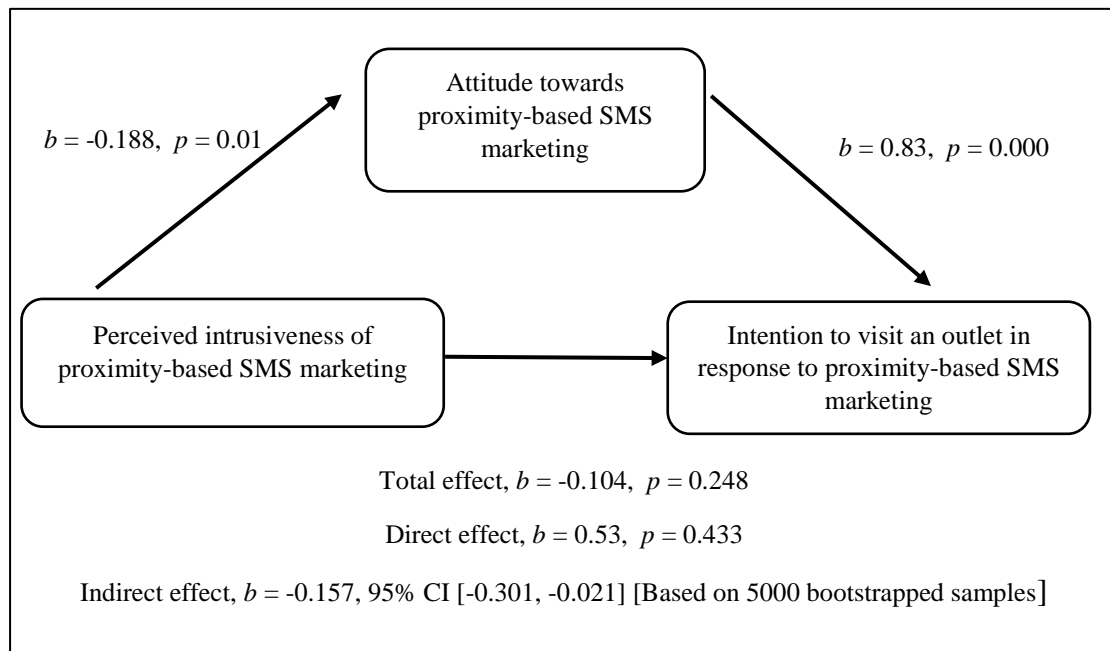
In summary, H_{2a} cannot be accepted for the younger consumers, but can be accepted for older consumers.

4.3 Attitude towards PB-SMS-M as a Mediator between Perceived Intrusiveness and the Consumers' Intention to Visit the Outlet

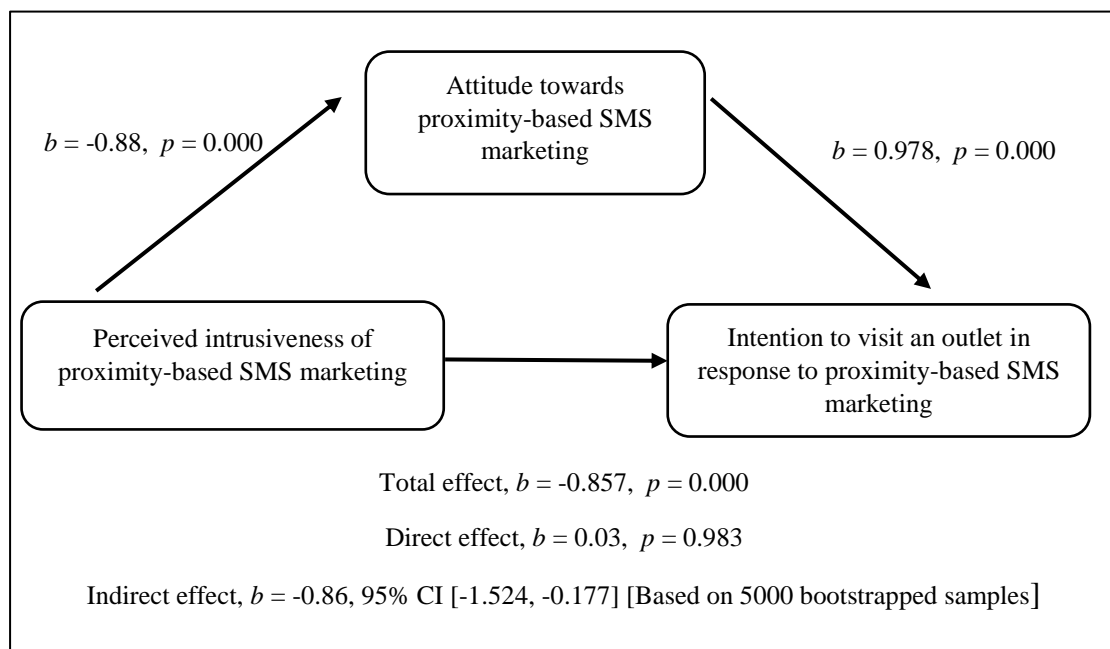
Figure 4 depicts the mediation effect of attitude towards PB-SMS-M in the relationship between perceived intrusiveness and intention to visit an outlet in response to PB-SMS-M for younger consumers. Figure 5 depicts this mediation effect for the older group.

Figure 4

Intrusiveness and Intention to visit an outlet: Mediation by Attitude towards proximity-based SMS marketing (Younger consumers)

**Figure 5**

Intrusiveness and Intention to visit an outlet: Mediation by Attitude towards proximity-based SMS marketing (Older consumers)



Figures 4 and 5 indicate that for both younger and older consumers, the indirect effect is significant (the bootstrap confidence interval does not contain 0), and that the coefficient of the indirect effect is negative. Further, for both groups, the direct effect is insignificant ($p > 0.05$), indicating an indirect-only mediation. Thus, for both groups, perceived intrusiveness negatively impacts intention to visit an outlet in response to PB-SMS-M only indirectly through attitude towards PB-SMS-M. Thus, H_{2b} is supported for both younger and older consumers.

The summary of findings of all hypothesis tests are presented in Table 6.

Table 6

Summary of results

Hypothesis	Age category 1 (18-30 years)	Age category 2 (Above 30)
Objective 1		
H1: There is a difference between older and younger consumers in their privacy and intrusiveness concerns of proximity-based SMS marketing used by retail outlets.	Supported	
Objective 2		
H2a: Perceived privacy concerns of proximity-based SMS marketing negatively impact customers' intention to visit an outlet in response to proximity-based SMS marketing	Not supported	Supported
H2b: Perceived intrusiveness of proximity-based SMS marketing negatively impact customers' intention to visit an outlet in response to proximity-based SMS marketing	Not supported	Supported
Objective 3		
H _{3a} : Attitude towards Proximity-based SMS marketing mediates the relationship between perceived privacy concerns of proximity-based SMS marketing and customers' intention to visit the outlet in response to proximity-based SMS marketing	Not supported	Supported (indirect-only mediation)
H _{3b} : Attitude towards Proximity-based SMS marketing mediates the relationship between perceived intrusiveness of proximity-based SMS marketing and the consumers' intention to visit the outlet in response to proximity-based SMS marketing.	Supported (indirect-only mediation)	Supported (indirect-only mediation)

5. Discussion

In relation to the first objective, the study found older consumers (above 30 years) to have greater privacy and intrusiveness concerns regarding PB-SMS-M than younger consumers. This finding adds to the many studies that have identified older people as having more concerns about information privacy in general (Goldfarb & Tucker, 2012; Lee et al., 2019), and about mobile marketing and LBA (Lin et al., 2016; Schade et al., 2018). The study also finds a similar pattern regarding intrusiveness of PB-SMS-M, though the literature does not seem to have tested this before.

In relation to the second and third objectives, the expected negative impact of privacy concerns on customers' intention to visit an outlet in response to PB-SMS-M through generating a negative attitude towards PB-SMS-M was confirmed for the older consumers, but not for the younger consumers. The findings related to older consumers are consistent with previous studies that identified privacy concerns to have a negative impact on willingness to accept LBA (Limpf & Voorveld, 2015; Lin et al., 2016; Ryu & Park, 2020; Schade et al., 2018), and the mediating effect of the attitude towards LBA in this relationship (Limpf & Voorveld, 2015). This study extended the impact of privacy concerns on 'willingness to accept' to a specific behavioural intention, intention to visit an outlet, in response to a push based LBA, PB-SMS-M. The reason why this relationship was not identified for the younger group could be because they appear to have less privacy concerns in relation to PB-SMS-M than older consumers.

In previous literature, LBA, especially push LBA, has been identified as intrusive (Gutierrez et al., 2019; Kamiya & Branisso, 2021; Lin et al., 2016). It has also been noted that perceived intrusiveness could lead to negative attitudes towards LBA (Lin et al., 2016) and that goal impediment (a form of intrusiveness) leads to avoidance of LBA (Shin & Lin, 2016). This study extends this limited previous empirical evidence on the consequences of perceived intrusiveness of LBA, by showing that perceived intrusiveness of PB-SMS-M (a form of push LBA) negatively impacts customers' intention to visit outlets in response to PB-SMS-M, and that this impact occurs through generating a negative attitude towards PB-SMS-M. These findings confirm the findings of Lin et al. (2016) who identified, in a qualitative study, that consumers hold negative attitudes about push-based SMS and tend to treat them as spam.

6. Contributions & Conclusion

The key knowledge contributions of this study are in the domain of the impact of LBA on customer behaviour in the offline shopping context – an area identified as under researched (Högberg et al., 2020; Kamiya & Branisso, 2021). By examining two possibly problematic characteristics, privacy violation and intrusion, of PB-SMS-M (a push based LBA), the study contributed to the sparse knowledge on the effect of push notifications on a person's intention to visit a shop (Kamiya & Branisso, 2021). Further, within the LBA literature, less attention has been paid to the impact of intrusiveness. To the best of the knowledge of the authors, this is the first study that systematically examined the attitudinal and behavioural consequences of intrusiveness of any type of LBA, although the impact of 'goal impediment' (intrusion on using the mobile phone for other activities) on willingness to accept LBA has previously been studied (Shin & Lin, 2016). Finally, the study further confirmed to the continued usefulness of TRA, despite being an old theory, in explaining the effects of even the cutting-edge marketing tools. The identification of indirect-only impact of both perceived privacy concerns and

intrusiveness of PB-SMS-M through attitude towards PB-SMS-M shows that the impact of beliefs on behavioural intentions through attitudes proposed by the TRA (Reina Paz & Rodríguez Vargas, 2023) is still useful in examining the effects of new marketing tools.

The study also has implications for practice. First, the use of PB-SMS-M for older consumers may not be fruitful since they have reservations about visiting an outlet in response to such messages due to privacy concerns and intrusiveness. Second, given that younger consumers are less concerned with privacy violation of PB-SMS-M in responding to such SMS messages, marketers could employ this tool when targeting consumers below 30 years of age. However, even the young consumers are likely to form negative attitudes and therefore respond negatively if such SMS messages become too intrusive, for example, by disturbing them constantly when in a particular location such as a shopping mall (Lin et al., 2016). Therefore, the indiscriminate use of PB-SMS-M, even when targeting younger consumers, could be counterproductive.

The implications for further research arising from this study are mainly in relation to the impact of perceived intrusiveness on consumers' intention to visit an outlet in response to PB-SMS-M. One potential area of study is the identification of moderators that could reduce the strength of the negative impact – one such moderator might be greater relevance of the messages to the consumer (Lin et al., 2016). A second area of study is psychological reactance as an explanation of the negative impact. Although this study used the theory of psychological reactance as a basis for conceptualising the negative impact of perceived intrusiveness on attitudes and behavioural intention, the intrusiveness measures do not operationalise reactance, i.e., perceived loss of freedom. Explicit operationalising of reactance in future research could provide a more in depth understanding of the impact of intrusiveness, and thereby enhance the knowledge on how push-based LBA could be used effectively to induce positive consumer responses.

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Responses to reviewer comments**Paper ID:**

Do Privacy Concerns and Intrusiveness of Proximity-based SMS Marketing Messages Affect Customers' Intention to Visit an Outlet?

Note: Much of the paper was re-written in addressing the reviewer comments. Only the places that are specifically related to the comments are highlighted on the paper.

Comments and Recommendation/s (Reviewer 1)	
Empirical gap is clear and well established. If possible, elaborate any gaps in theory (with respect to an attitude-behavior theoretical framework) that can relate to the empirical phenomenon.	Two theories were brought in, TRA (p. 4) and Psychological reactance theory (p. 5), to support the conceptualization. However, it was not possible to identify a gap related to either of the theories.
It is suggested to add 2-3 specific research objectives after presenting the problem statement	Three objectives were specified (p. 2)
It is suggested to add some extract of theoretical literature related to attitudes and behavior that guides the conceptualization.	Two theories were brought in, TRA (p. 4) and Psychological reactance theory (p. 5), to support the conceptualization.
In methodology, please provide a justification for the sample size	Justification added (p. 7)
Please justify how you assured the construct validity of the measurers.	We acknowledge it is best to use statistical techniques to assure validity of measures. Unfortunately, we were only able to ensure validity by using previously used measures.
the mediation is well presented using the traditional process approach. In addition to the traditional presentation of mediation interpretation, please present the mediation analysis based on the following tree diagram-based approach in order to interpret whether it is complementary, competing mediation or indirect- only. (It is proposed to follow the guidelines of the following articles) (1. Reconsidering Baron and Kenny: Myths and truths about mediation analysis. Zhao et al., 2010. 2. MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding and suppression effect. Prevention science, 1(4), 173-181	The mediation tests were completely re-written based on the guidelines of Zhao et al., 2010). (pp. 10-13)
The discussion of mediation hypotheses can be further elaborated by bringing indirect literature to support the mediation of attitudes.	The discussion was re-written with appropriate literature support. (pp. 14-15)

<p>Further, please elaborate what specific theoretical gap with respect to an attitude-behavior theoretical framework that the study fills in under implications. The contribution to fill theoretical gap is not adequately explained</p>	<p>The contributions section was re-written. Using the term ‘theoretical gap’ was a mistake in the previous version of the paper since we did not identify a gap in relation to a specific theory. The contributions made to knowledge were identified. In addition, the continuing usefulness of TRA for explaining marketing phenomena was highlighted (p. 15)</p>
<p>Comments and Recommendation/s (Reviewer 2)</p>	
<p>It would have been better if the author can specify somewhere in the introductory section of the paper that the paper is primarily from a customer experience perspective in order to make it clear to the reader.</p>	<p>This paper is based on customer perceptions, rather than experiences and it is highlighted in the introduction. (p. 2)</p>
<p>It is required to use the key concepts/ variables of the paper in a consistent and clear manner throughout the paper. Although the key concepts are somewhat carefully specified in the introductory sections of the paper and in the literature review section, thereafter, they are used interchangeably without adequately referring to their meanings in the other sections of the paper. Be specific with the terms such as Location based Marketing (LBM) and Location-based Advertising (LBA), push-based SMS Marketing and etc. It is required to use these variables/ name of concepts carefully and consistently.</p>	<p>The entire paper was checked and the terms made consistent.</p>
<p>It is clearly noted that a significantly less attention has been given to the dependent variable of the study when specifying the contribution of the study/paper in the introduction of the paper and throughout the paper. That needs to be addressed in order to improve the content of the paper.</p>	<p>The contribution of the paper in relation to ‘intention to visit an outlet’ is highlighted in the introduction (p. 1-2), in the literature review (p. 3) and in the contribution (p. 15).</p>
<p>The paper lacks some recent literature on the issue being studied. This is noticeable particularly as the topic and the variables of the study are very much contemporary. As suggestions, areas such as contextual marketing, mobile contextual marketing, mobile promotions and mobile advertising, geolocation, locationbased push notifications, location-based alerts can be suggested to consider appropriately, if necessary</p>	<p>More recent literature was included (post 2015)</p>

<p>The key argument, as introduced in the paper, is developed around the push-based LBM and however, it has not been adequately emphasized in the other sections of the paper including in the methodology section and analysis section of the paper, which needs to be addressed in order to emphasize the contribution of the paper.</p>	<p>The paper is focused on a type of push-based LBA – proximity based SMS marketing – rather than push LBA in general. This is now clearly indicated throughout the paper.</p>
<p>The structure of the paper is appropriate. Nevertheless, the clarity of the content should be improved and of course, the length of the paper must be condensed to make the paper more reader-friendly. Some specific suggestions are given in the paper itself as comments to summarize the content and to use different data presentation techniques for that purpose.</p>	<p>Much of the paper was re-written to make the arguments tighter and clearer. As a result the length of the paper has been reduce to just above 9000 words.</p>
<p>Analysis, especially the mediating relationships, is satisfactorily presented. Further improvements are suggested. Particularly, it is suggested to incorporate sample profile, reliability of variable measurements and descriptive statistics of dependant variable.</p>	<p>Sample profile (p. 7) and a table including the reliability scores (pp. 7-8) were included. However, we did not include descriptive statistics since they are customarily not included in papers. The mean values are presented only in relation to H1 since it involves a mean comparison.</p>
<p>Discussion section needs to be improved by eliminating discussion points that may not come under the scope of current study, and by bring in some of the latest research findings from relevant literature.</p>	<p>The discussion was completely re-written and condensed.</p>
<p>More specifically, conclusion section and implications for managers and future research sections should be further improved, aligning with the scope of the study and findings of the study.</p>	<p>The conclusion section was completely re-written.</p>
<p>Carefully check whether all the items in the reference list are actually used in the current paper. And, correct the typos, language and grammar mistakes carefully.</p>	<p>The paper was checked for errors in referencing, language and typos and mistakes corrected.</p>

The Influence of Newsjacking in Advertising on Consumers' Social Media Engagement

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Abstract

Newsjacking has been used by marketers to address the problem of low consumer engagement with social media ads due to the large number of ads in such platforms. Due to the limited existing literature on newsjacking, the researcher aimed to study this practice and explore its impact on consumers' social media engagement. The study collected data from various newsjacking campaigns and their corresponding web comments. Additionally, the opinions of young consumers active on social media were gathered to understand their social media engagement behavior in response to newsjacking advertisements. The data was analyzed using thematic analysis and presented within a theoretical framework for consumers' social media engagement. The study identified six key elements of newsjacking: rapidness, relevance to the audience, humour, message comprehension, virality, and creativity. It was observed that these characteristics could influence specific social media engagement activities of consumers, thereby addressing a theoretical gap and supporting the notion that newsjacking influences consumers' social media engagement.

Keywords: Social Media Marketing, Consumer Engagement, Newsjacking, COBRA Model, Interactive Marketing

1. Introduction

Advertisers are increasingly using social media to enhance consumer engagement. This emerging trend leverages cognitive, emotional, and behavioral interactions between consumers and the brand on social platforms (Gill et al., 2017). However, the average user attention span is limited to eight seconds (Gomez, 2018), and marketers need to apply innovative attempts to keep users to their brand. Newsjacking is a new technique in which a company responds to the latest piece of news to accomplish media exposure brand awareness, interact with consumers, and improve brand reputation (Tan, 2019). The term "Newsjacking" stands for "The practice of taking advantage of current events or news stories in such a way as to promote or advertise one's product or brand" (Lexico, 2019). At the point when an organization is using newsjacking in their strategy, they are responding to what is going on in the news and ensuring it is the first entity to react (Scott, 2010).

Although there has been research conducted on how brands behave on social media to achieve their objectives (influence on purchasing, increase brand loyalty), only a limited number of studies have recognized the newsjacking practice. Bjursten and Sylvendahl (2017) conducted research on how newsjacking affects social media engagement based on a TV series. The findings of the research showed that consumers highly engage in lower-level engagement activities (viewing, watching) and middle-

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level engagement activities (commenting, sharing) compared to higher-level (uploading user-generated content) social media engagement activities. However, there appears to be little to no research to recognize the support provided by newsjacking to increase social media engagement. Thus, this study investigates what are the newsjacking and social media characteristics used by advertisers to increase consumer engagement and how different characteristics of newsjacking campaigns influence social media engagement. As the theoretical lens, the study used the Consumer Online Brand-Related Activities Model by Mutinga et al. (2011). This model categorizes consumers into three dimensions for their activeness in social media: consuming, contributing, and creating. For data collection, the study focused on the younger demographic, and it was carried out among consumers between 16-30 years of age from urban and suburban areas in Sri Lanka. Since these participants show active behavior on social media platforms, they were taken into the study.

2. Literature Review and Theoretical Framework

This section explores existing literature on social media marketing and engagement. It specifically investigates the impact of newsjacking on consumer engagement. It covers the emergence of social media marketing, the theoretical understanding of newsjacking, the evolution of consumer engagement, and measurements of newsjacking's influence on social media engagement.

2.1 Social Media Marketing

Social media marketing emerged during the dot-com era, with Web 1.0 focused on persuading consumers to purchase and drive website traffic. The advent of Web 2.0 introduced social networking platforms, changing the nature of online conversations and enabling two-way communication (Anderson, 2010; Evans & McKee, 2010). Initially, brands found it unfamiliar to have a social media presence, disrupting user experiences (Kerns, 2014). They realized the need to adapt and engage with audiences personally, rather than addressing them as a general public (Evans & McKee, 2010). Well-prepared social media content, infused with memorability, humour, and originality, garnered exceptional responses from audiences (Kerns, 2014; Hunter & Burkhart, 2013). Brands monitored consumer discussions; tailoring content based on audience interests to enhance engagement (Evans & McKee, 2010). Newsjacking has emerged as a contemporary marketing technique to amplify brand voices and facilitate audience interaction (Kerns, 2014). Through strategic planning, groundwork, and tools, brands engage in conversations with consumers, leveraging the persuasive power of newsjacking to target specific demographics and cultivate a brand personality (Kerns, 2014).

2.2 Newsjacking

Newsjacking involves integrating their ideas into ongoing news stories (Scott, 2011). By capitalizing on trending news and engaging with consumers through social media, brands aim to garner attention and positive responses, fostering connection and amplifying their reach (Kerns, 2014).

Newsjacking needs a precise knowledge of breaking information and trending topics. To execute a newsjacking campaign at the right time, the brand must be into the story before it peaks. Brands that get in early and execute quickly become the most successful (Sprout Social, 2022). In line with this argument, Scott (2011) also emphasized that a

brand's task is to act swiftly and capture the occasion. At the point when a company is utilizing newsjacking in its social media marketing strategy, they are responding to what is going on in the news on an instant basis. They are ensuring they are the first group to respond to the incident. For a marketer, this infers developing relevant messages in real-time (Kerns, 2014).

A famous example of newsjacking practice is Oreo's successful tweet during the 2013 Super Bowl (Football game) in New Orleans. At the point when the stadium endured a 35-minute power interruption during the game, people turned to their social media (mainly Twitter) to talk about the power interruption (Scott, 2011). Oreo (a chocolate cookie brand) planned to take advantage of this. and within a short time, they had made an image of an Oreo cookie on a table in a dark room with the tagline "Power out? Don't worry about it; you can still dunk in the dark" (Håkansson & Bengtsson, 2015, p. 19-20). Since the audience had diverted their concentration to their smartphones, and since the power interruption was trending news, Oreo's tweet became highly famous on Twitter. Within a few hours, this newsjacking campaign captured the attention of different news platforms, such as CNN, NBC.

Newsjacking is a powerful tool, but it must be used wisely. Inappropriate associations can harm brands (Scott, 2011). For instance, when Hurricane Sandy hit the USA in 2012, clothing store American Apparel used the "Hurricane Sandy Sale" (Håkansson & Bengtsson, 2015, p.23), offering its customers a way to spend their leisure time shopping. Taking into account that Hurricane Sandy caused the death of 209 people and that the nation endured big economic loss, that type of newsjacking strategy is not appropriate for any brand (Håkansson & Bengtsson, 2015). Newsjacking is about looking at what is happening at the moment, capturing it, and producing content that is relevant to the brand (Håkansson & Bengtsson, 2015). In most events, there are opportunities for companies to set up content for their social media marketing campaigns.

According to Kerns (2014), Those opportunities can be categorized into planned, opportunistic, watch-list, and every day. According to Kerns (2014), planned events are easy to predict and will be known to occur at a specific time and place, opportunistic events are difficult to anticipate and require a rapid response to generate newsjacking content. Mainly, this is the reason brands should monitor the trends and news materials in the world, watch and list events that are reasonably expected. Here, Kerns (2014) stated that even though brands do not have specific details concerning it, they should be prepared because brands may miss the head-start if something occurs during the event, and everyday news for consumers' conversations. Furthermore, creativity in newsjacking campaigns adds value to the brand and engages consumers on social media. In the next section social media engagement theory is examined to understand its relationship with newsjacking.

2.3 Social Media Engagement

In general, consumer engagement is an evolving process that encompasses consumers' experiences and perceptions of a brand (Ajiboye et al., 2019). It refers to the level of cognitive, emotional, and behavioral activity displayed by individuals in their interactions with a brand (Hollebeek, 2011). These dimensions of engagement are interconnected, with emotional engagement positively impacting cognitive and

behavioral engagement (Brodie et al., 2013). Consumer engagement is a multifaceted concept that captures the motivational and contextual aspects of consumers' brand-related mindset (Jiang et al., 2016).

Consumer engagement in the context of social media involves actions such as liking, commenting, sharing, and expressing support or disapproval for brands (Jiang et al., 2016). It encompasses cognitive, emotional, and behavioral activities performed by consumers in relation to brands (Hollebeek, 2011). Social media engagement emphasizes the interaction and collaboration between consumers and brands, with consumers recognizing the value of sharing experiences (Evans & McKee, 2010; Muntinga et al., 2011; Schivinski et al., 2019; Schivinski et al., 2016). This engagement process moves consumers from consuming brand content to actively co-creating and collaborating with brands, involving four components: consumption, curation, creation, and collaboration (Evans & McKee, 2010).

Consumption is the initial level of engagement in the social media process, where consumers start their journey by filtering and obtaining limited information (Evans & McKee, 2010; Muntinga et al., 2011). It involves activities such as reading, viewing, listening, or downloading digital content created by the brand or other users (Evans & McKee, 2010). At this stage, consumers primarily observe and consume content without actively contributing or creating (Li & Bernoff, 2011).

Curation is the next level in the social media engagement process, involving arranging and selecting content through activities like filtering, rating, reviewing, commenting, and tagging (Evans & McKee, 2010). It goes beyond consumption as consumers actively create content that is useful and relevant to others, such as product reviews or service testimonials (Evans & McKee, 2010). Curation stimulates social interaction and contributes to better-informed consumers (Evans & McKee, 2010; Li & Bernoff, 2011).

Creation is the third step in the social media engagement process, involving consumers creating brand-related content such as blogs, videos, and music (Evans & McKee, 2010; Muntinga et al., 2011). This level of engagement requires a higher level of consumer involvement and allows individuals to express themselves creatively and escape reality (Courtois et al., 2009; Evans & McKee, 2010). Consumers who actively engage in content creation are considered highly dynamic social media users, moving beyond interaction to active participation (Evans & McKee, 2010). **Collaboration** is the highest level of social media engagement, involving the joint effort of brands and consumers in co-creating content (Evans & McKee, 2010). Unlike creation, collaboration includes incorporating and utilizing contributions from others in the content creation process (Evans & McKee, 2010). Brands often ask their followers to contribute content, which they then incorporate into their future content (Evans & McKee, 2010).

2.4 Social Media Engagement and Newsjacking Outcomes

Engagement is a suitable method to start discussions with an audience. Numerous brands utilize social media to perform the same activity. Brands should not attempt to sell something with every social media content (Kerns, 2014). They need people that interact with their brand to comprehend their sentiments. They need to mix into the social stream without pushing heavily (Evans & McKee, 2010).

The following outcomes of newsjacking in social media as explained by Kerns (2014), have similar characteristics to COBRA models' consumption and contribution components which are to be discussed under the theoretical lenses of the study.

The number of **viewers/followers** represents the individuals who choose to receive brand content on social media, indicating the brand's ability to connect and retain existing connections (Kerns, 2014). For instance, Seylan Bank's credit card offer advertisement featuring Gehan Blok and Dino Corera garnered a higher number of views across platforms. On Facebook and Instagram, the video received 650,000 views, while on YouTube, it gained 128,600 views and over 1 million impressions. This example demonstrates user engagement at the consumption level in the COBRA model, which involves viewing and listening to brand-related content, following brand community forums, and reading comments on brand profiles on social network sites (Muntinga et al., 2011).

Consumers express their support for a brand through **likes**, which indicates virtual empathy towards brands and other consumers on social media (Kerns, 2014; Rosen, 2012). For example, when a singer at the Grammy Music Awards wore a hat resembling Arby's logo, the restaurant quickly newsjacked the moment by tweeting, "Hey @Pharrell, can we have our hat back? #GRAMMYS." This tweet received nearly 50,000 favorites (equivalent to 'Likes' on Facebook) (Kerns, 2014)

Comments on social media posts serve as an indicator of audience engagement with newsjacking content (Kerns, 2014). The quantity and quality of comments are considered by brands. For example, Clogard Fresh Blast Gel Honey and Propolis toothpaste brand launched an advertising campaign during the 2019 presidential election in Sri Lanka. Posts featuring hypothetical candidates received over 6,500 comments, including positive feedback and expressions of surprise (Hemas Holdings, 2019).

Shares on social media indicate audience engagement and the potential impact of newsjacking content (Kerns, 2014). In the case of the Clogard Fresh Blast Honey and Propolis toothpaste campaign, posts from the social media page of Propolisia Danthararayana were shared over 4,700 times, increasing impressions, reach, and the influence on followers (Hemas Holdings, 2019). These outcomes demonstrate how social media users actively contribute by sharing content, highlighting their engagement with newsjacking campaigns (Muntinga et al., 2011).

As the above instances indicate, consumers perceive newsjacking as a creative and enjoyable promotional approach, making brands more relatable and authentic (Demand Metric, 2018). This belief contributes to higher social media engagement from consumers. However, while there is anecdotal evidence supporting this impact, there is limited research on this phenomenon.

2.5 Newsjacking and Social Media Characteristics Leading to Greater Engagement

The study focuses on how newsjacking impacts social media engagement. Brands have found that incorporating relevant news elements into their strategies can generate a strong response from the social audience. Understanding the key characteristics of newsjacking and its connection to social media engagement is essential for this research.

Newsjacking is influenced by several key characteristics that impact social media engagement. **Rapidness** is crucial as the timing of newsjacking must align with the popularity of the story, avoiding being too early or too late (A quick guide to Newsjacking, 2014). **Relevance** is another important factor, as advertisements that are congruent with the brand image and product require less cognitive effort to comprehend (Maon et al., 2018). **Humour** is also utilized in newsjacking to capture attention and facilitate message understanding, although brands must be cautious in its use to avoid misinterpretation (Maon et al., 2018; Snow, 2015). Finally, consumers' **ability to decode news stories** and understand the underlying message is essential for successful newsjacking campaigns (Maon et al., 2018). These characteristics play a significant role in engaging the social audience and should be considered by brands when implementing newsjacking strategies.

In addition to the above characteristics that have been noted as important for newsjacking, there are other social media characteristics that have generally been identified as leading to greater engagement.

Virality refers to the rapid circulation of content from one internet user to another (Dictionary.com, 2023). It is successful on social media because people are inclined to consume valuable new content and engage emotionally with the brand, leading them to share it with others (Bernazzani, 2018). **Creativity** is the process of creating something novel in the context of the actual or digital world (Gauntlett, 2011). It is inspired by novelty and encompasses unexpectedness, surprise, unusualness, uniqueness, and unpredictability (San et al., 2020). Creativity plays a role in how social media content is evaluated, influencing cognitive, affective, and behavioral engagement (San et al., 2020). It enhances attitudes toward advertisements and brands, providing hedonic value (Smith et al., 2007). Given the multitude of brands on social media, creativity serves as a key element to stand out from the competition.

Although these characteristics have been identified as important for increasing consumer engagement with newsjacking campaigns and with social media advertisements in general, there seems to be no empirical research on what makes consumers engage with newsjacking campaigns and this paper attempts to address that gap.

3. Theoretical Lenses

One key theory was used as a theoretical lens in this study and that is, Consumer Oriented Brand-Related Activity Model (COBRA Model) introduced by Muntinga et al. (2011).

3.1 Consumers' Oriented Brand-Related Activity Model (COBRA Model)

Social media allows consumers to transit from passive consumers to active participants and creators of brand-related content (Muntinga et al., 2011; Schivinski et al., 2016). Schivinski et al. (2016) emphasize the importance of consumers' engagement with brand-related content on social media. The COBRA model, developed by Muntinga et al. (2011), provides a framework that categorizes brand-related online activities, including consumption, contribution, and creation of media content. This model distinguishes brand-related activities on social media from other behaviors (Schivinski et al., 2016).

The **consumption stage** in Consumers' Online Brand-Related Activities represents the basic level of engagement where consumers primarily consume brand-related content created by the firm (Muntinga et al., 2011). This stage involves activities such as viewing pictures or watching videos related to a brand, like seeing a Harley-Davidson motorcycle in a movie (Schivinski et al., 2019).

The **contribution stage** in Consumers' Online Brand-Related Activities involves consumers actively participating in brand-related content by commenting on posts or sharing content created by the company or other consumers (Muntinga et al., 2011). This interactive dimension has become popular among consumers, as they transit from being observers to contributors (Schivinski et al., 2019).

The **creation stage** in Consumers' Online Brand-Related Activities refers to consumers creating and sharing their own brand-related content online, which represents a high level of engagement. User-generated content can inspire others to consume and contribute to the brand (Muntinga et al., 2011). It involves consumers uploading their own brand-related content, such as sharing a picture of their new Nike sneakers on Facebook (Schivinski et al., 2019).

Accordingly, this study will employ the COBRA model, developed by Muntinga et al. (2011), as the theoretical framework to elucidate the specific attributes of newsjacking that contribute to heightened engagement in consumers' online brand-related activities.

4. Methodology

This was an interpretive study that utilized a qualitative approach. Since this study examines newsjacking and other social media characteristics that intensify consumers' social media engagement, it relies on how consumers attribute meaning to the newsjacking content. It is important to note that newsjacking is not a well-established concept but rather a practice. Therefore, interpretivism aligns well with the research purpose as it seeks to address the questions "how?" and "why?". Similarly, this research consists of two main phases. The first phase involves identifying various characteristics associated with newsjacking campaigns where existing literature deems significant for engaging consumers. This is done by analyzing selected newsjacking campaigns and the comments posted about them. The second phase of the research entails conducting interviews to determine how specific newsjacking characteristics influence different levels of consumer engagement.

To identify the specific characteristics of newsjacking campaigns, the study meticulously monitored the brands that execute newsjacking campaigns on social media. In analyzing web comments, the research looked at the respective newsjacking campaigns' comments that users had posted as texts. Hence, the purposive sampling method was employed to select campaigns that are rich in information and representational aspects, thus facilitating more reliable insights.

To ascertain the influence of specific newsjacking attributes on social media engagement among consumers, interviews were conducted with individuals from the younger demographic. A sample of young consumers between the ages of 16 and 30 was selected based on the snowball sampling technique to identify consumers who engage highly on social media. Accordingly, interviews were conducted with 10 individuals respectively with 06 male respondents and 04 female respondents.

Data was analysed using two mechanisms. First, to identify distinct newsjacking characteristics in Sri Lankan newsjacking campaigns, the directed content analysis was conducted on selected newsjacking campaigns and web comments. The nature of directed content analysis involves "identifying key concepts and variables as initial coding categories" (Potter & Levine-Donnerstein, as cited in Hsieh & Shannon, 2005, p. 1281). Therefore, it was understood that newsjacking characteristics could be recognized as initial codes of the research. Then interviews were conducted based on an interview guide, which comprised of questions that were developed through initial codes used in the analysis of newsjacking campaigns. The interview guide also covered specific activities of social media engagement with respect to the theoretical lens of the study. Next, the interview data collected from young consumers was analyzed using the thematic analysis method. The interviews were transcribed, coded, and later categorized into themes to identify how specific newsjacking characteristics influence consumers' social media engagement.

5. Data Analysis

As per the two different phases of the study identified above, the analysis of this study involves two phases namely, content and web comment analysis to gain insight into newsjacking characteristics and analysis of the influence of newsjacking characteristics on consumers' social media engagement.

5.1 Phase 01 – Campaign and Web Comment Analysis

5.1.1 Identifying newsjacking and other social media characteristics

The literature review section presents the characteristics associated with newsjacking. Four key characteristics were identified: rapidness, relevance, humour, and storytelling (Maon et al., 2018). These characteristics contribute to making newsjacking campaigns engaging by capturing attention, participating in consumer conversations, creating favorable attitudes, and effectively communicating the story. Additionally, two characteristics; virality and creativity were identified as influential factors in newsjacking campaigns, although not extensively discussed in the theoretical framework. To identify whether these characteristics are present in newsjacking campaigns, several Sri Lankan newsjacking campaigns executed on Facebook were examined.

Maliban Biscuits' Oxygen Campaign

The News Item

A proposal to develop a playground in the Kadolkele mangrove of the Negombo lagoon was reversed after the solid stand taken by the Gampaha District Forest Officer. A video containing the footage of a discussion where a few residents of the area are arguing with the forest official demanding her permission for the development of the playground turned into a viral topic on social media. In the video footage, one resident got hostile with the forest officer and said, "there is no need for oxygen" (මක්සිජන් ඕෂන් නෑ) (Daily Mirror, 2020).

Maliban Campaign

After releasing video footage to the internet, the above incident gradually became a viral video on social media. Maliban Biscuit Manufactories (Pvt) Limited capitalised on this incident and published a static post by saying, "when you are out of Maliban

biscuits for teatime, it is like having no oxygen to breathe.” (නේ වෙලාවට මැලිබන් බිස්කට් නෑ කියන්නේ ඉතින් ඔක්සිජන් නෑ වගේ නමො).

On February 10, 2020, the incident occurred involving mangroves (Daily Mirror, 2020). News reporters covered the incident on February 12. The media team of Maliban Biscuits Company observed the trending topic and swiftly responded by publishing a campaign on the same day, demonstrating a rapid response (Maon et al., 2018). Regarding rapidness, one comment praised Maliban Biscuits for its marketing approach, stating, "it is all about the right place and the right time. Nice marketing approach Maliban Biscuits!". This indicates that the audience appreciated the timely execution of the campaign, and understanding the connection to the incident.

The campaign was relevant to the audience as it capitalized on the ongoing conversation about the mangrove incident (Maon et al., 2018). Instead of merely repeating the news, Maliban Biscuits added a meaningful message implying that their biscuits were as essential as oxygen during teatime, garnering users' attention. In terms of relevance to the audience, such as "Yes, there will not be oxygen without Maliban, so everyone will have to eat Maliban" comments supported the message of the advertisement. This shows that when a brand conveys a meaningful message that resonates with the audience, it is appreciated.

Humour was not explicitly included in the campaign; however, itself became a subject of mockery on social media due to the reckless comment devaluing the importance of oxygen. The ability to decode the news story was facilitated by the association of the incident with oxygen. By using a similar phrase ("t is like having no oxygen"), Maliban Biscuits allowed the audience to understand the underlying incident and engage with the campaign. The ability to decode the story was evident in comments related to the district where the incident occurred (Maon et al., 2018). For example, users mentioned living in Gampaha, despite the post not explicitly mentioning the district: "It is not a big deal. People live in Gampaha can even live without oxygen."

“Do not you sell those in Gampaha?”

This suggests that users were able to decipher the story based on the given cues in the advertisement as shown below.

Virality was achieved through the use of triggers. The campaign emphasized that not having Maliban Biscuits at teatime was akin to lacking oxygen to breathe, leveraging the importance of oxygen as a trigger for engagement (Berger, 2016). Creativity was demonstrated by the unexpected timing of the advertisement (San et al., 2020), which caught the audience by surprise and added an element of novelty to the campaign. No specific user remarks were found regarding the virality element. However, users invited their peers to engage with the campaign, tagging their user profiles in the campaign, which contributed to increase the virality (Berger, 2016). Comments expressing admiration for the brand's creativity, such as "Marketing level 99.99%" and "Amazing Maliban!" indicated that users perceived Maliban Biscuits as highly creative when executing newsjacking campaigns.

Clogard Fresh Blast Gel with Cinnamon and Propolis

The News Item and Campaign

In October 2019, Clogard Fresh Blast Gel introduced its new tooth gel to the market. It was named Clogard Fresh Blast Gel with Cinnamon and Propolis. At the time that Clogard Fresh Blast Gel launched the product into the market, the presidential election in Sri Lanka was a highly popular topic among the local audience. Clogard Fresh Blast Gel identified this hype and launched a newsjacking campaign using two hypothetical presidential candidates with the names of the main ingredients. “Propolisia Danthanarayana” represented the Propolis ingredient. “Hasitha Kurunduwatte” (හසිත කුරුඳුවත්ත) represented the Cinnamon ingredient and Kurundu is the Sinhala term for cinnamon. Similar to the other presidential candidates, Propolisia Danthanarayana and Hasitha Kurunduwatte started their campaigns through their respective social media pages. Throughout the campaign, Propolisia and Hasitha adopted significant political incidents which happened in the presidential election. It was clear that this campaign was a humorous play on the actual presidential campaign, but it was not clear to the audience that it was an advertising campaign. A day before the election date, Propolisia and Hasitha held a livestream talk show on social media. They revealed their connection with Clogard Fresh Blast Gel Cinnamon and Propolis tooth gel and informed the users that they were not the candidates for the presidential election but the ingredients of the tooth gel.

Rapidness – during the presidential elections, Clogard Fresh Blast Gel with Cinnamon and Propolis launched a newsjacking campaign featuring Propolisia Danthanarayana and Hasitha Kurunduwatte. They incorporated significant political incidents from the elections into their campaigns. For instance, in a meeting on the 31st of October, one presidential candidate said, “I promise that I will go to the homes at night to check on peoples’ wellbeing.” (Gunasekara, 2019). This quote gained immense popularity on social media. Recognizing the opportunity, Hasitha Kurunduwatte initiated a newsjacking campaign on 4th of November with the slogan "morning and night, Hasitha is close to you." By publishing this post while the incident was trending, the campaign effectively captured the audience's attention and engagement.

Relevance to the audience - the Clogard Fresh Blast Gel with Cinnamon and Propolis campaign cleverly launched fifteen days before the presidential election, capitalizing on the nation's political interest at that time. Conventional advertising methods like television and outdoor promotions would likely go unnoticed amidst the audience's focus on political happenings. People anticipate mudslinging, speech criticisms, party crossovers, and false promises during election campaigns. For instance, a viral voice clip by Propolisia Danthanarayana exposed how Hasitha Kurunduwatte allegedly paid individuals to tarnish her reputation, garnering significant attention. By incorporating events from the presidential election, the campaign achieved heightened popularity on social media platforms. The below comments for this campaign also indicated that users believed the campaign to be related to the presidential election, with some expressing their support and considering the candidates as true contenders. “My vote is for Propolisia.”

“Guys, shall we vote for him this time?”

Humour played a significant role in the campaign, evident through the use of humorous content materials. In a video by Hasitha Kurunduwatte, he accidentally triggered the voice search feature and jokingly said, "if Propolisia wins, I will have to leave for Australia by boat." The voice assistant humorously replied, "you cannot come to Australia by boat, they will send you back." This exchange, along with the awkward moment faced by Hasitha, showcases the video's sense of humor and adds to its comedic appeal. When it comes to the web comments, Users responded to the campaign's post "morning and night, Hasitha is close to you" with humorous comments, referencing the presidential candidate's unusual promise. They ridiculed the candidate, resulting in comments like, "Nightshift was already reserved by you can come to the day shift" and "you are so like son." These comments showcased the audience's humour and playfully teased the candidate.

Ability to decode the news story - On one occasion, Propolisia Danthanarayana's social media post highlighted her eco-friendly political campaign and requested donations from the audience, stating, "my political campaign is eco-friendly. So, I want your donations to carry out my campaign." This use of the word "donation" resonated with the public due to a previous incident where a candidate withdrew from the presidential election after accepting public donations. By referencing the word "donation" in her post, Propolisia Danthanarayana allowed the audience to connect with the underlying story and understand the significance of the term in the election context. Some users were able to decode the story and recognized the relevance of the toothpaste ad, as indicated by comments stating, "This is a toothpaste ad for sure."

Virality was achieved as the entire campaign revolved around the presidential election and used the popularity of the candidates to generate interest. The campaign's diverse storytelling and entertaining content contributed to its widespread circulation on social media. Creativity was evident throughout the campaign, with candidates utilising various mediums such as static posts, videos, live discussions, and virtual polls to promote themselves. Notably, a live debate on Facebook added a unique element to the campaign, where the candidates initially boasted about defeating each other but eventually reached a resolution and revealed their true identities.

In summary, the Clogard Fresh Blast Gel with Cinnamon and Propolis campaign showcased rapidness, relevance, humour, the ability to decode the news story, virality, and creativity within the context of the Sri Lankan presidential elections. By leveraging these characteristics, the campaign effectively engaged the audience and gained popularity on social media platforms.

5.2 Phase 2 - Influence of newsjacking characteristics on consumers' social media engagement

This section presents findings from research interviews, focusing on the influence of newsjacking characteristics on consumers' social media engagement. Responses from young consumers were analyzed using codes and themes to identify patterns and insights. The study integrated newsjacking elements into key social media engagement activities based on participant responses. Each sub-section of this analysis will present findings on different characteristics of newsjacking that lead to different levels of engagement, starting with the lowest level of engagement and moving to the highest level. Interview quotes would support each theme, providing insights into specific social media engagement levels.

- **Viewing, watching newsjacking campaigns**

Respondents highlighted their reasons for paying attention to newsjacking campaigns, emphasizing the distinctiveness compared to general social media ads. Curiosity emerged as a significant factor, driven by the inability to comprehend the campaign's story or a genuine intrigue about its purpose. This was revealed through interviews with participants who expressed curiosity as a key attraction towards newsjacking campaigns.

In the study, most participants indicated that curiosity plays a significant role in their engagement with newsjacking campaigns. They mentioned that their curiosity arose from either a lack of understanding regarding the hidden message behind the campaign or wondering what the campaign was about. When asked about the factors that attracted them to newsjacking campaigns, respondents frequently cited curiosity as a driving force.

“Well, they made me curious. Sometimes, I couldn't recall the exact event right away, but I found myself staying on the post. After that, I would go to the page to explore more similar posts.” (Respondent 02)

“These posts grab my attention because they make me curious. Once I get what really happened, I tend to go back to them because they become even more interesting. They're not like typical social media ads that say, buy our product! or anything like that.” (Respondent 05)

Participants in the interviews stated that when they could not comprehend the meaning, it made them more engaged in the campaign. This was because such campaigns captured their attention more effectively than general social media advertisements. Their curiosity prompted them to stay with the post and explore the brand's profile. Consequently, the study indicates that curiosity enhances the appeal of newsjacking campaigns, motivates user engagement, and creates excitement among individuals. In addition, many participants emphasized that newsjacking campaigns caught their attention because they were connected to current societal events. They mentioned that these campaigns were centered around events they were aware of and pertains to what was being discussed.

“When an ad taps into a popular topic, we're already familiar with, it really sticks in our minds. It's way more effective than a regular ad.” (Respondent 01)
“I find these posts really interesting. They're all about what's happening in society, and honestly, I think selling a product through a newsjacking post is way more effective than a regular ad.” (Respondent 06)

Respondents noted that incorporating current societal events influences the reception of newsjacking campaigns. They preferred these campaigns for their relevancy with trending topics, which effectively capture audience's attention. Furthermore, some participants emphasized that the creativity of newsjacking campaigns attracted their attention because of their unique and artistic execution. The following are the responses of respondents who said that creativity was the reason for viewing newsjacking campaigns.

"Newsjacking posts are more attractive than typical product ads. They make me stop scrolling and spend more time with them due to their creativity. Despite being ads, they are the only ones I actually enjoy watching." (Respondent 03)

"Usually, social media posts don't stick in my memory. But when I come across a newsjacking post, I remember it because it's more creative than other content." (Respondent 04)

Respondents expressed disinterest in regular social media posts but demonstrated a higher level of attention with newsjacking campaigns, owing to their creativity. The unique and creative nature of these campaigns made them memorable to respondents, even though they were aware of their promotional intent.

Respondents paid attention to newsjacking campaigns due to curiosity, trending topics, and creativity. These distinct features set newsjacking campaigns apart from conventional social media campaigns, leading respondents to seek more information and spend significant time. The study indicates that these elements significantly influenced respondents' attention levels.

- **Reading comments in newsjacking campaigns**

Respondents cited that obtaining product information is the main reason for reading comments on generic social media advertisements. On the contrary, it did not prove to be a contributing factor in the context of reading comments on newsjacking campaigns. The ensuing section highlights particular components within newsjacking campaigns and their influence on how respondents engage with comments.

"I've noticed lots of Facebook users and pages posting hilarious comments on these posts. They know people like us are here for the entertainment. That's why they sometimes ask things like 'Raise your hand if you're here for the comments.' It's all part of the fun." (Respondent 05)

"There were no product related questions in the post but there are plenty of humorous comments. It is a place with a super fun nature." (Respondent 07)

Respondents appreciated the humorous nature of comments on newsjacking campaigns and noticed the absence of product-related remarks. They highlighted that the involvement of Facebook pages that specialize in humor content, attracting an audience specifically interested in reading comments. This recurring process involves the posting of funny comments on these pages, drawing in an audience eager to read them.

Further respondents expressed a strong curiosity-driven motivation to read comments on newsjacking campaigns. The desire to uncover what other users had said led them to click on "view more comments." Respondents perceived comments in newsjacking campaigns as unique and divergent from typical product-related remarks. The study found that comments played a significant role in sparking curiosity among respondents.

"I was tempted to read comments in newsjacking campaigns because I saw there are a huge number of comments in there. I did wonder what people were commenting on." (Respondent 01)

"I'm someone who reads comments on newsjacking campaigns. Regular facebook ads are all about price and product details, but with newsjacking

campaigns, the comments are completely different. That's what makes them so tempting to read." (Respondent 03).

- **Commenting on newsjacking campaigns**

While many respondents refrained from commenting on social media posts for personal reasons, some expressed that creativity inspired them to engage by writing comments on newsjacking campaigns. They showed interest in brands that ran such campaigns and encouraged their peers to join in, creating an interactive comment section. Active participation in these conversations contributed to a positive perception of the brand. The below responses confirm it.

"Newsjacking posts have more creativity than others. So, I am attentive to posts from these brands. I appreciate the brand for their creativity. By commenting, I want to express that I am with them." (Respondent 01)

"Some newsjacking campaigns are highly creative. If I see such a campaign, I will not hesitate to comment. I mention my friends to get their comments too. Sometimes the brand replies to our comments." (Respondent 10)

- **Sharing newsjacking campaigns**

Respondents shared newsjacking campaigns on social media for two main reasons: to showcase entertaining content to their friends and be the first to inform. Respondents shared campaigns tagging friends' profiles to ensure they did not miss out. Sharing newsjacking campaigns brought great joy to respondents, and their friends continued sharing them, amplifying the enjoyment. Notably, one respondent shared newsjacking campaigns because they considered them important and valuable.

"I do not think my friends have seen this. So, I share the newsjacking campaign to show them. I hope this campaign is a must see." (Respondent 02)

"I am not only sharing the newsjacking campaign. What I do is tag my friends. Because if they did not see what I share, it is pointless. They will definitely see when it is tagged to their profile." (Respondent, 10)

"I share this type of posts with my friends thinking they would have fun watching it too." (Respondent 06)

Respondent 04 seems to prioritize the meaningfulness and significance of newsjacking campaigns, highlighting the importance of contributing to less-discussed topics for a more impactful sharing experience compared to the other respondents who focus on sharing for fun or ensuring visibility among their friends.

"The newsjacking campaigns I have seen even included things that were important to people. Therefore, if there is valuable news or a good message in a newsjacking campaign that is not much talked about in society, I will contribute by sharing." (Respondent 04)

- The above response indicates that some individuals engage with newsjacking campaigns not just for entertainment but also with a sense of responsibility and a desire to raise awareness about topics they consider valuable. It reflects a more purpose-driven approach to sharing, aligning with the idea that newsjacking

campaigns can serve not only as sources of entertainment but also as vehicles for highlighting significant issues. **Uploading user-generated content to the newsjacking campaigns**

Respondents actively participated in uploading user-generated content on online platforms, including images, videos, and texts, particularly related to newsjacking campaigns. Their decision to share such content was strongly influenced by the creativity of the campaigns.

Increase in User Imagination through Creativity.

“The time I take to upload such an image depends on how innovative they are as a brand. So, I look at the creativity of the message that combines the topic and the brand. That is what I meant by the innovativeness of the brand. Also, other users will see this uploaded image in the comment section. If they like it, I prefer to be recognized by them and then I am encouraged to do more.” (Respondent 03)

“I like to upload my creations in tandem to the newsjacking post’s creativity. If people appreciated my artwork, I would like to put some effort and get recognized for such a design again.” (Respondent 05)

Respondents emphasized the impact of creativity on their decision to upload user-generated content on social media. They assessed the creativity of newsjacking campaigns to determine whether their effort would be productive. Achieving a comparable level of creativity was important to them. Additionally, respondents mentioned that the audience’s recognition and engagement with their uploaded content motivated them to continue creating and publishing. Seeking social acceptance was also a driving factor in their content creation.

- **Writing recommendations for a product**

Writing recommendations about a product or service on social media contributes to engagement and serves as digital word-of-mouth marketing (Berger, 2016). However, the study observed that respondents are reluctant to write recommendations for few reasons.

“I do not write reviews. It is my personal choice.” (Respondent 01)

“It takes a lot of effort to write reviews. You need to go to their Facebook page and find the place to put reviews.” (Respondent 07)

“I like to write reviews. But I forget it due to various reasons like time and extra commitments.” (Respondent 05)

Respondents mentioned that they are reluctant to write recommendations on social media. Personal attitudes and the great effort they had to put in were common reasons that hindered them from writing reviews. Due to these reasons, the study observed that newsjacking does not induce participants to write reviews for products.

The analysis focused on the key aspects of newsjacking campaigns that captured respondents’ attention. Curiosity, relevance to well-known incidents, and creativity acted as magnets, attracting audiences to watch and view newsjacking campaigns. Respondents enjoyed reading humourous and intriguing comments on these campaigns,

forming a specific audience for comment consumption. Creativity was the sole factor that motivated them to write comments. When sharing, respondents aimed to be the first to inform their peers and share important information and entertainment. However, the study revealed that respondents rarely wrote recommendations on social media.

7. Discussion

This section gives an overall impression of the findings in line with the objectives of the study, which were presented earlier through two phases, namely, campaign and web comment analysis and consumer engagement analysis.

7.1 Findings on Newsjacking Characteristics in Sri Lankan Newsjacking Campaigns

The following section focuses on the findings of content analysis to address the first research objective of identifying specific newsjacking characteristics in Sri Lankan newsjacking campaigns.

Brands should publish their newsjacking campaigns instantly after an event becomes a trending topic on social media (Dumitriu & Bahna, as cited in Université de Liège et al., 2018). Web comments analysis showed that users appreciated the rapid response of newsjacking campaigns.

Kerns (2014) emphasized the importance of creating content that resonates with the audience and incorporating a meaningful message into newsjacking campaigns. Sri Lankan brands received appreciation within the comment section when their messages added value to conversations about the incident

The campaign analysis revealed that the majority of newsjacking campaigns incorporated political humor, which tended to generate higher user engagement on social media (Heiss & Matthes, 2019). Although the advertisements themselves may not have been humorous, comment analysis revealed that users found humor in the original incident and expressed it through emojis.

Consumers require a reasonable cognitive capacity to decode the underlying meaning of newsjacking events (Maon et al., 2018). Web comment analysis observed that brands which strategically used cues to enhance user understanding received positive feedback when users successfully deciphered the incident.

Mendelsohn and McKenna (2010) asserted that share-worthy content includes valuable information along with rational and emotional cues that encourage users to share. In line with this, the campaign analysis indicated that newsjacking campaigns also incorporate the previously mentioned cues of entertainment, storytelling, and promotional offers.

Novelty is a crucial element of creativity (Lee & Hong, 2016)). It played a crucial role in creating a positive attitude towards brands that adapt newsjacking campaigns.

7.2 Findings on How Newsjacking Characteristics Influence Consumers' Social Media Engagement

This section focuses on the relevance of the findings of the thematic analysis to social media engagement activities aligned with the Consumer Brand-Related Activities

Model (COBRA Model). The model consists of consuming brand-related content, contributing to brand-related content, and creating brand-related content stages (Mutinga et al., 2011).

Consuming brand-related content

Consumption of brand-related content is the minimum level of social media engagement, involving activities such as watching, viewing, and reading brand-related content (Mutinga et al., 2011). It's noteworthy that consumers' engagement with brand-related content is influenced by their curiosity (Daume & Hüttl-Maack, 2019). Consumers invest time in newsjacking campaigns to understand them and seek more information when they don't comprehend the content. This aligns with the idea that curiosity is a driving force behind knowledge acquisition (Kidd & Hayden, 2015). Social curiosity, which involves understanding individuals' behaviour, thinking, and perceptions on social media (Ernst et al., 2015), plays a crucial role in consumers' engagement with newsjacking campaigns.

Furthermore, the interview findings indicated that consumers are more interested in newsjacking campaigns when they are associated with trending incidents. This aligns with Micu and Thorson's (2008) research, which suggests that individuals engage more thoughtfully with advertisements presented as news stories rather than traditional commercials. The authors also discussed the synergetic effect of this advertising technique and how the original event's publicity can enhance the campaign's popularity. Consumers mentioned that newsjacking campaigns have the potential to intensify their reputation, particularly when the incident is considered a trending story.

Moreover, creative brand messages have a greater ability to capture attention and generate positive attitudes toward brands (Reinartz & Saffert, 2014). According to Shen et al. (2020), creativity improves the recall of advertisements in consumers' minds, particularly when implemented through modern marketing strategies. Correspondingly, the interview findings indicate that consumers prefer artistic advertisements over repetitive ones, as creativity grabs their attention and enhances memorability.

Additionally, Heiss and Matthes (2019) suggested that consumers engage with humor due to their entertainment-seeking behaviour. The findings from the study also indicate that the humorous nature of the campaigns motivated respondents to read the comments. According to Ge and Gretzel (2017), humor fosters relationships with familiar and unfamiliar audiences and strengthens like-mindedness between people. Similarly, the study observed the formation of a specific community that actively posts and reads humorous comments in newsjacking campaigns.

Contributing to brand-related content

The contribution level represents consumers who actively engage by posting comments and sharing brand-related content (Mutinga et al., 2011). The level of creativity in brand messages is a significant factor in capturing consumers' attention and encouraging them to engage (Reinartz & Saffert, 2014). Moreover, Lee and Hong (2016) suggest that when users perceive an advertisement as extraordinary, they are more likely to invite their colleagues to contribute to it. The study's findings indicate that consumers are inspired to comment and encourage their peers to engage with campaigns they perceive as creative.

Furthermore, the findings align with a study by Fengler and Russ-Mohl (as cited in Trilling et al., 2016), which suggests that some users have a desire to be the first to share exciting content before it becomes widely known. The interview findings support this, as consumers expressed satisfaction in being part of the initial group to share content with their peers. Additionally, according to Mendelsohn and McKenna (2010), advertisements are shared based on the presence of emotional and rational cues. The interview findings revealed that humor and entertainment act as emotional cues, while monetary incentives and useful information act as rational cues.

Creating brand-related content

The creation level represents the highest level within the consumer online brand-related activity model. It refers to consumers who actively engage by uploading brand-related content and writing recommendations for products. Piller et al. (2012) highlighted that individuals who engage in content creation perceive it as a highly creative process. The study's findings indicate that the level of creativity in newsjacking campaigns impacted consumers' tendency to create content. Additionally, the findings denoted that consumers seek social acceptance through their content creation, aligning with the research of Mutinga et al. (2016), which emphasizes the importance of intrinsic factors like social recognition and community interactions when users create brand-related content. In contrast, the research conducted by the Power Reviews Organization (2018) indicated that the number of consumers who write reviews is declining, especially among younger demographics. The study revealed that consumers, particularly the younger demographic, display diminished motivation to write reviews due to the effort required. This finding corresponds with the observation that consumers may have a reduced inclination to contribute reviews in the context of newsjacking campaigns due to perceived effort constraints.

8. Conclusion and Implications

Newsjacking is a prominent social media marketing practice, but Sri Lankan brands and users, even the global brands did not recognize it as such, due to insufficient practice, usage and theoretical discussions. This study aimed to fill that gap and found that the speed of the campaign, relevance to the audience, humour, and storytelling ability are key elements in newsjacking. Virality and creativity were also identified as important characteristics. Little research had been conducted on the influence of newsjacking on social media engagement, so the study used the COBRA Model to examine this relationship. The study identified specific levels of social media engagement induced by newsjacking characteristics, contributing to the empirical understanding of this practice in the Sri Lankan context. The findings highlight specific characteristics that influence social media engagement, allowing marketers to develop comprehensive strategies aligned with their objectives. The study's insights are applicable to brands targeting younger demographics, as they are heavy users of social media platforms. This study also would be beneficial for content creators who produce video commercials. These findings would be applicable to brands that target younger demographics because most of the insights are received from the younger demographic category. Public relations teams also have useful details from this study because they are working to make a person, an event, or an object under users' attention within a short period.

The three key steps in understanding consumer engagement with newsjacking campaigns - consuming brand-related content, contributing to brand-related content, and creating brand-related content - offer valuable insights into the dynamics of consumer behavior in the digital age. First, consumers' engagement with brand-related content is driven by curiosity and further amplified when campaigns are linked to trending incidents. Curiosity, a fundamental driver of knowledge acquisition, plays a pivotal role in this process. Additionally, creative brand messages are preferred, as they capture attention and enhance brand memorability, aligning with modern marketing strategies. Furthermore, humor within campaigns fosters like-mindedness and strengthens relationships, fostering the formation of a specific community of engaged users. Moving beyond consumption, the contribution to brand-related content involves consumers who actively engage by posting comments and sharing such content. The level of creativity in brand messages becomes a critical factor, encouraging users to comment and motivate their peers to engage. Users also derive satisfaction from being among the first to share exciting content, emphasizing the role of emotional and rational cues in content sharing.

Finally, the creation of brand-related content represents the highest level of engagement, with consumers actively generating content and product recommendations. Creativity within newsjacking campaigns significantly impacts consumers' willingness to create content, with intrinsic factors like social recognition and community interactions driving this process. However, it's noteworthy that, particularly among younger demographics, a reduced motivation to write reviews may be observed, potentially due to perceived effort constraints. These findings underscore the importance of creativity, humor, and aligning campaigns with trending incidents to enhance consumer engagement. Additionally, marketers should recognize the evolving landscape of content contribution, where efforts must be balanced against the perceived effort required, especially among younger audiences. To optimize consumer engagement in newsjacking campaigns, a strategic blend of creativity, trend alignment, and understanding of consumers' social motivations is imperative. In terms of further research, the study noted that consumers exhibited a favorable attitude toward brands that implemented newsjacking campaigns. Therefore, it would be intriguing to explore consumer perceptions toward such brands and examine the effects of social media engagement.

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Impact of Social Media Influencer Characteristics on Consumer Purchase Intention of Beauty and Personal Care Products in Sri Lanka

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Abstract

Social media influencers (SMIs) have started replacing conventional promotional strategies by creating content and accessing a massive audience. Undoubtedly their ability to persuade people is greater than the traditional modes of communication used by marketers. Influencer Marketing is a form of social media promotion that incorporates the promotion of products and the placement of influencers' endorsements. These influencers are known for having a high level of expertise and attractiveness. It is common for people to misunderstand this and confuse Influencer Marketing with celebrity marketing. There may be some overlap, but a person's perceived popularity alone is insufficient to create successful influencer marketing. Many influencers have built huge communities access to a large audience to whom they promote an agreed product or activity. Different SMIs' characteristics may lead consumers to have positive purchase intentions towards the products in which they are promoting. However, such effects of influencer characteristics on the purchase intention of various products in the Sri Lankan market have not been adequately researched. Moreover, it appears that SMIs who play a vital role in the current Sri Lankan Beauty and Personal Care (BPC) products market and their characteristics have not been investigated as well regardless of their high persuasion ability. The BPC product market has not been investigated as well. The purpose of this study is to bridge this research gap by examining the impact of SMIs' characteristics on the purchase intention of BPC products among Sri Lankan consumers, with an emphasis on identifying if there is a significant impact on the consumers' attitudes towards the influencers as well. The data was obtained using a self-administered structured questionnaire from 202 consumers who use social media in Sri Lanka. Data was analysed using descriptive and inferential statistics to test the hypotheses. The findings demonstrated that credibility has a significant and larger impact on the purchase intention of BPC products promoted by SMIs compared to their attractiveness. The findings also revealed that consumers' attitude towards the has an impact on the purchase intention of BPC products promoted by SMIs through significant complete mediation.

Keywords: Social Media Influencers, Characteristics of Social Media Influencers, Consumer Purchase Intention, Beauty and Personal Care, Consumer Attitude, Sri Lanka

1. Introduction

Social media has changed the way people do marketing and products are now looking to trendy social publishing platforms and networks like Instagram, YouTube, and

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Snapchat to achieve competitive marketing advantage by reaching millions of new consumers (De Almeida, 2019). With the COVID-19 outbreak people started to shift into online modes to satisfy their needs and to do day-to-day activities. The size of the influencer marketing industry reached \$9.7 billion in 2020 and is expected to grow to \$15 billion by 2022 (Statistica, 2021). This industry also witnessed a rapid growth of more than 50% during a single year from 2015 onwards. Social media influencers can be defined as non-dependable third-party people in various social media and have ability to influence the decisions taken by the consumers or their followers through the content they share (Freberg et al., 2011). Not every person is suitable as an endorser to create influence on consumers' purchase decisions. People who are considered as trustworthy (Kvchová, 2021) and attractive are seen as suitable spokespersons (Bekk & Spörrle, 2010). Influencer Marketing is a type of marketing that uses influencer product recommendations to boost sales. Its goals are to capture potential customers' attention, produce word-of-mouth effects, and establish customer connection with a brand or a product. The importance of partnering with the appropriate SMIs is critical to the success of influencer marketing (Radey, 2015). Interview based preliminary study conducted using five respondents who are undergraduates and working people within age 20 to 25 years (Refer Appendix A). Found that if the SMI is providing convenient information, looking sexy and attractive, whether friends have bought products after their recommendations, trustworthy, knowledgeable, assurance given on brand name by the influencer is high that made them to purchase products promoted by the respective SMI.

1.1 Problem Statement and Research Question

Recent studies have conducted using various social media platforms specifically and impact of influencer characteristics and attitude on celebrity endorsements done on them (Kim & Kim, 2021; Ladhari et al., 2020). further, existing extant literature highlights the differences among SMIs and celebrities and differences between them (Gräve, 2017; Schouten et al., 2020). Moreover, impact on social media on consumer behaviour, consumer attitudes (Grafström et al., 2018), brand images (Nurhandayani et al., 2019) were discussed in many articles in empirical contexts. Research have also found that there is a clear relationship between various influencer characteristics and purchase intention of various products (AlFarraj et al., 2021; Lin, 2021) through many studies. The importance on identifying the impact that the SMI characteristics are generating on consumers' minds and also on purchase intentions mainly in relation to Sri Lankan BPC products need to be discussed in a comprehensive manner. This paves the way to the following research problem.

Research Question and Objectives

Accordingly, the research question of the study is;

Do characteristics of a social media influencers impact Sri Lankan consumers' attitudes and the purchase intention of beauty and personal care products promoted by SMIs? Therefore, objectives are as follows:

1. To identify whether the credibility and attractiveness of SMIs have an impact on consumers' purchase intention of beauty and personal care products promoted by the SMI.
2. To identify whether consumers' attitude towards the SMIs mediates the relationships between credibility and attractiveness, and consumers' purchase intention of beauty and personal care products promoted by the SMIs.

2. Literature Review

2.1 Social Media

With globalisation, it can be seen that technology has a significant part in almost every area of modern society and due to that people's lifestyles has changed a lot. Social media refers to the means of interactions among people in which they create, share, and/or exchange information and ideas in virtual communities and networks (Thilakarathne et al., 2017).

Products are looking to trendy social networking platforms like Instagram, YouTube, and Snapchat to achieve a competitive marketing advantage (De Almeida, 2019). 73% of marketers believe that social media platforms could assist them in performing their marketing campaigns effectively (AlFarraj et al., 2021). The worldwide trend in posting on Instagram is primarily focused on clothing, cosmetics, catering, travel, culture, and sports (Kvěčková, 2021).

2.2 Social Media Influencers (SMIs)

Influencer marketing is a rapidly growing concept as it attempts to promote products/services and increase brand awareness through content spread by SMIs (Carter & Wamba, 2016). Around 49% of customers take social media influencer suggestions into consideration when making a purchase choice (AlFarraj et al., 2021). There are numerous SMIs who promote their lifestyles using various platforms. YouTube and Instagram are proven to be the two most popular platforms for this purpose (Glucksman, 2017).

Celebrities Vs SMIs

SMIs are ordinary people who became influencers due to a growth in their social media platforms' follower base (Khamis et al., 2017). SMIs are viewed as more relatable and approachable than celebrities which is considered similar to having a long-distance companion (Djafarova & Rushworth 2017). This happens due to the fact that SMIs frequently address their followers directly in their messages, conveying a feeling of closeness and causing followers to regard them as peers (Erz & Christensen 2018; Gannon & Prothero 2018). Hence, for the purpose of this study, the focus is given to SMIs and their characteristics.

Success of Influencer Marketing

Many SMIs cultivate their own reputation in order to achieve opinion leader status, they are viewed as more approachable and homophile types of individuals by customers (Johansen & Guldvik, 2017). Through influencer marketing and attracting their target audience, marketers can engage with customers more naturally at large by enhancing their messages (Talaverna, 2015). There is a high possibility for them to succeed in partnership goals with marketers and products while prompting or influencing customers to purchase what they are promoting (Kim & Kim, 2021).

2.3 Source Credibility

“Credibility is the degree to which a target audience evaluates an advertising message source, in order to determine the expertise and knowledge of the source who recommends a product or service” (Lin, 2021, p.58). There is a considerable amount of SMIs on Instagram who became influencers by merely buying fake followers and engagements through third party online tools (Amarasinghe, 2019). Through credibility, advertising effectiveness and conversion rates can be boosted. Different studies have identified different dimensions of credibility, such as studies by Almeida

(2019); Pereira (2018) and Rebelo (2017) who have considered attractiveness, trustworthiness and expertise as dimensions of credibility, while more recent studies elaborate that source credibility has primarily two dimensions namely speaker expertise and speaker intent (Eisend, 2004; Ladhari et al., 2020) whereas according to Eisend (2006), intention has also been mentioned as trustworthiness and sincerity. Additionally, Kim and Kim (2021) study specifically suggests that influencers' intentions can be operationalised as authenticity too. Accordingly, this study is mainly focusing on the recent dimensions of expertise and authenticity under source credibility.

Expertise

For an endorser, being an expert on what they are posting and having a clear knowledge of them will lead to prompt customers and ultimately drive the purchase intention of consumers (Ohanian, 1991). Expertise can be defined as "the degree to which the endorser is perceived to have the adequate knowledge, experience or skills to promote the product" (Van der Waldt et al., 2009, p.104). So, for a SMI, when posting sponsored posts on their accounts, influencers with high expertise tends to gain more effective consumer awareness (AlFarraj et al., 2021) while changing purchase intentions in a positive manner.

Authenticity

In social media marketing, authenticity is defined as an influencer's genuineness and relatability with their followers (Glucksman, 2017). Many influencers take different routes of maintaining authenticity while selling products by either not having the sponsored content stand out, or being transparent about products they work with. Whichever they choose, as long as they "maintain consistency in presentation of their selves, they can also maintain their authenticity" (Driel & Dumitrica, 2020, p.11).

Source Attractiveness

The physical beauty of social media influencers is thought to have a strong influence on the rate of acceptance of advertising (Lim et al., 2017). "Fitness influencers" can also market beauty products, and it may not be a poor fit because they are already seen as attractive endorsers (Schouten et al., 2020) by the followers. When a communicator is attractive, the audience may be willing to like and accept the communicator's message. Although there are various classifications under attractiveness in the context of SMIs, physical attractiveness and homophily are the often-used dimensions (Kim & Kim, 2021).

Physical Attractiveness

Advertisers frequently consider physically attractive influencers when planning and executing promotional campaigns because they have a greater impact on customers' attitudes about the products they are promoting (Wang & Scheinbaum, 2018). The physical attractiveness of social media influencers is thought to have a significant impact on the rate of advertising acceptance (DeBono & Telesca, 1990) and people will attribute a variety of personality traits to that person, including social intelligence, inspiring people, concern for others, and integrity (Till & Busler, 2000).

Homophily

Homophily refers to the perceived similarity in beliefs, values, experiences, and lifestyles of the communicator by the receiver (Gilly et al., 1998; Lazarsfeld & Merton, 1954). This concept aids followers in developing greater trust in the SMI (Kim & Kim, 2021). Homophily plays an important role in the study of vloggers and bloggers (Lee & Watkins, 2016; Li & Du, 2011) and high homophily also leads to favourable electronic Word of Mouth (eWoM), pleasant social interactions, and positive attitudes, all of which influence product purchase intent ultimately (Ladhari et al., 2020). Most

studies have examined it as a unidimensional concept. Hence, this research is also conducted by taking homophily as a unidimensional concept under source attractiveness.

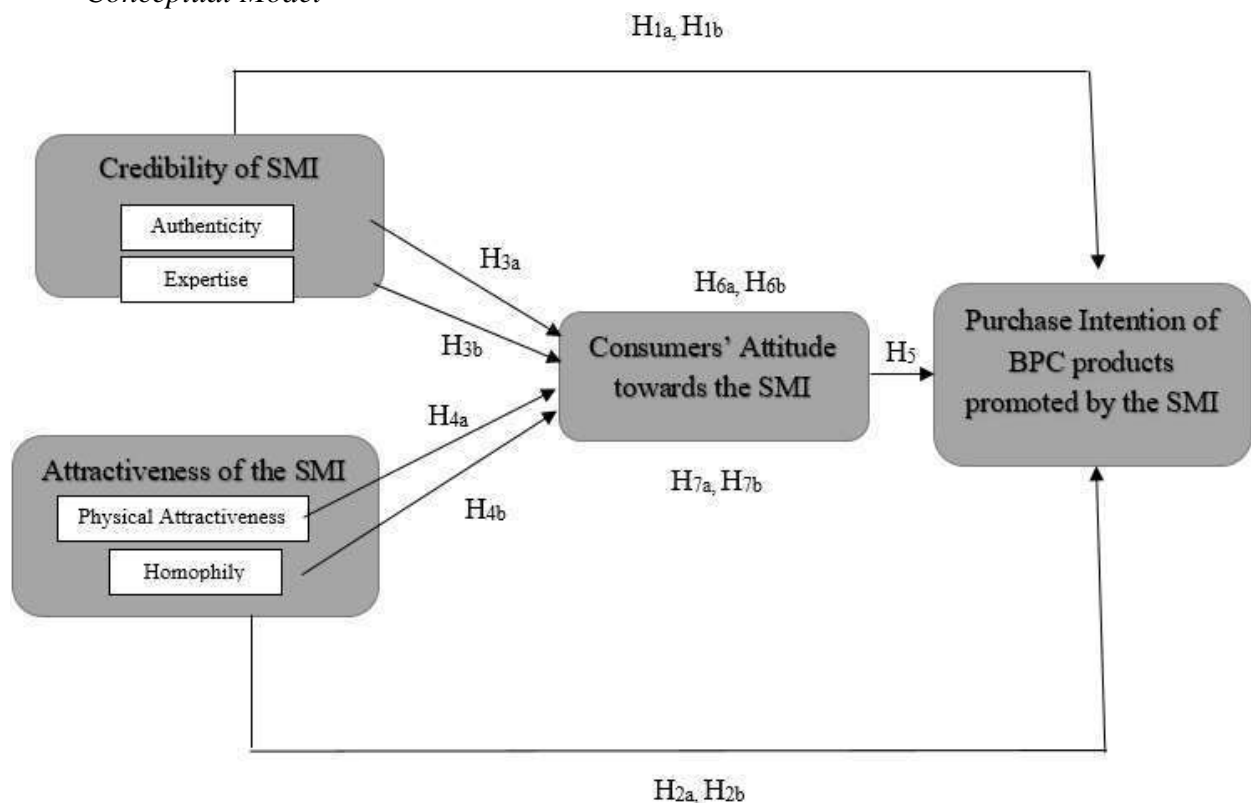
2.4 BPC Industry and SMI Characteristics

With rising consumer wealth and the contemporary lifestyles of people, it is evident that the beauty and personal care business is set to develop significantly (Łopaciuk & Łoboda, 2013). According to Statista (2021), BPC market amounts to grow annually by 4.76% from 2021 to 2026. 23.6% of the total revenue of the BPC industry will be generated through online sales by 2021 which has direct implications for SMIs. Moreover, BPC industry influencers are not engaging with the followers through face-to-face interactions (Cano, 2019) he/she is being attractive and credible is considered to be vital. Examining whether influencer characteristics have an impact on the purchase intention of BPC products and consumers' attitude is in need massively as no research paper could be found in this regard. This could provide useful insights to marketers, allowing them to create promotional strategies to influence customers' decisions in a better and more effective way. With globalisation and technological advancement, digital marketing has become the most effective mode of marketing at present. With that, influencer marketing can be seen as a new marketing method that leads to successful conversion rates. Accordingly, this study aims to investigate the impact of SMIs' characteristics on consumer attitudes and the purchase intention of beauty care products promoted by SMIs.

2.5 Theoretical Framework and Conceptualisation

Figure 1

Conceptual Model



2.6 Hypotheses Development

Credibility and attractiveness of SMI were the independent variables of the conceptual model. The study focused on the impact of SMIs on the purchase intention of BPC products. Although many studies have been conducted on SMI characteristics, only limited studies are there focusing on BPC brand specifically. Kim and Kim (2021) argue that SMIs with a high level of attractiveness are more likely to give rise to their followers' buying intent. According to Baker and Churchill Jr (1977), it can be argued that attractive models do have a positive impact on purchase intentions too. Consumers' viewpoint on SMIs' trustworthiness, attractiveness and idea of similarity to themselves which is the homophily is having a favourable effect on consumer trust in relation to influencer's content (Lin & Xu, 2017; Lou & Yuan, 2019). Therefore, by considering the above arguments in the previous literature this paper suggests,

H₁: (a) Authenticity and (b) Expertise of the SMI have a positive impact on the purchase intention of BPC products promoted by the SMI.

H₂: (a) Physical attractiveness and (b) Homophily of the SMI have a positive impact on the purchase intention of BPC products promoted by the SMI.

A study by Wang et al. (2017) suggests that information presented by a credible source can affect consumers' beliefs, opinions, attitudes and behaviours. Chu and Kamal (2008) investigated how the credibility of bloggers and blogs impact on consumers' attitude towards the brand mentioned in the blog. Their findings revealed that when consumers were exposed to high-quality content posted by a trustworthy blogger, they were more likely to have a strong attitude towards them.

Next, the attractiveness of the SMI is also a main determinant which is essential in influencing consumers' attitude towards an influencer. Usually, many articles give out the idea that physically attractive influencers have positive feelings more than unattractive influencers (Joseph, 1982). In addition, a pleasing endorser plays a significant role as a brand spokesperson who can revive consumers' positive beliefs (Atkin et al., 1984; Freiden, 1984). Moreover, Social media influencers with pretty good appearance are more likely to get the attention from their followers (Lim et al., 2017). And hence this research suggests,

H₃: (a) Authenticity and (b) Expertise of the SMI positively influences consumers' attitude towards the SMI

H₄: (a) Physical attractiveness and (b) Homophily of the SMI positively influences consumers' attitude towards the SMI

Mediating Role of Consumers' Attitude Towards the SMIs

Consumer attitude towards the SMI has been identified as a dependent variable and most commonly as a mediator variable in many studies (Bekk & Spörrle, 2010; Jatto, 2014; Singh & Banerjee, 2018; Wang et al., 2019). There is a positive interrelationship between credible endorsers with purchase intention followed by their attitude towards them (Chan et al., 2013). Consumer attitude towards an endorsement can be boosted by the attractiveness of the endorser (Chekima et al., 2020). Additionally, Freiden (1984) states that a well-liked endorser act as a leading role as a brand spokesperson and they also have the ability to inspire consumers' positive attitude or viewpoint which

sequentially affect their purchase decision. According to above arguments the present study proposes that,

H₆: Consumers' attitude towards the SMI mediates the relationships between (a) Authenticity and (b) Expertise of the SMI and purchase intention of BPC products promoted by the SMI

H₇: Consumers' attitude towards the SMI mediates the relationships between (a) Physical attractiveness and (b) Homophily of the SMI and purchase intention of BPC products promoted by the SMI

2.7 Operationalisation

In this study, variables of the conceptual framework were operationalised by using well established measurement instruments stated in the previous literature in order to ensure the validity and reliability of the measurements. Credibility of the SMIs is having two sub variables of authenticity and expertise as mentioned previously. Authenticity will be measuring using characteristics of 'Dependability, Honesty, Reliability, Sincerity, and Trustworthiness' (Kim & Kim, 2021) and seven-point semantic differential scale is used. Then to measure the expertise of the SMI, 'Expertise, Knowledgeability, Qualification to offer and Skill' will be used (Kim & Kim, 2021) with the seven-point semantic differential scale. Next, the attractiveness of the SMI is having physical attractiveness and homophily as sub variables. To measure physical attractiveness, 'Attractiveness, Beauty, Sexiness, Elegance' (Kim & Kim, 2021) with the seven-point semantic differential scale and to measure homophily items of 'Have similar interests, have similar enthusiasm and Have similar values' (Wangenheim & Bayon, 2004 as cited in Kim & Kim, 2021) are used. For this seven-point Likert scale with "1" being strongly disagree and "7" being strongly agree is used.

Furthermore, consumers' attitude towards the social media influencers is measured using five items related to 'good, interesting, informative, believable, trustworthy' (Jatto, 2014) nature of the influencer endorsements using five-point semantic differential scale (1 = Strongly Disagree, 5 = Strongly Agree). Finally, as the scale of purchase intention of BPC products promoted by the SMI three items of "I will probably purchase BPC products promoted by the SMI", "I intend to purchase BPC products promoted by the SMI in the future" and "It is possible that I will purchase BPC products promoted by the SMI in the future" (Chai et al., 2015) is used. For this seven-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree) will be used. This study was conceptualised by analysing the existing literature. Four main variables and four sub variables under them are included in the conceptual model. Hypotheses were developed to identify different correlations between those variables. The variables were operationalised using appropriate and valid indicators from previous research in order to test the hypotheses.

3. Research Methodology

The purpose of this study is to identify whether the credibility and attractiveness of a Social Media Influencer (SMI) impact on consumers' purchase intention of BPC products promoted by the SMI. This study assumes that this relationship is affected by the consumers who purchase products through influencer promotions. The knowledge was produced through an objective collection of facts without considering subjective

opinions. Therefore, this study was based on the positivistic philosophy (Saunders et al., 2009).

3.1 Research Strategy

To identify consumers' attitude towards the social media influencer while observing variables like credibility and attractiveness of the SMIs along with purchase intention of BPC products require a considerable amount of data from a sample of different age groups, genders and locations or provinces. A Google form was used to create the self-administered questionnaire, which was then sent out to the potential respondents. Moreover, the survey strategy also enabled the researcher to collect data for quantitative analysis using descriptive and inferential statistics, which makes it suitable for the current study to test the hypotheses which were presented in the conceptual framework.

3.2 Methods

Unit of analysis and population: The population refers to the entire group of people, things or events that the researchers investigated (Investopedia, 2021). For this study, the research population was the individuals who use any type of social media platform in which the SMIs are engaged. The unit of analysis can be mentioned as the individual social media users.

Sample profile and sampling techniques: The sample of this study was 202 individual social media users who use social media platforms where SMIs are engaged. This study was conducted using people from any social class who live in any province, district, city or town in Sri Lanka. Additionally, the sample consisted of people of both genders who are in between the age group of 18 to 45 years who consume social media content. As the sampling technique for selecting the sample of social media users, the convenience sampling method was used. The convenience sampling method is simpler to implement and enables the collection of basic data regarding the research without the hassles that come with using a randomised sample (Johansen & Guldvik, 2017; Rebelo, 2017).

3.3 Quality Assurance Methods and Ethical Consideration

Data collected via questionnaires were analysed, employing various statistical techniques, using the statistical computer package SPSS 22. The study utilised regression and mediation analysis to study the impact and relationship between the predictor, dependent and mediator variables. Since this research is positivistic, ensuring validity and reliability is a main concern. Further, Cronbach's Alpha, a statistical technique, was used to assess the internal consistency of the summed-up scales that would be applied in this study (Tavakol & Dennick, 2011). Data was collected strictly for research/ academic purposes, and data was collected in such a way that no one responder was affected by another. To ensure ethics, anonymous questionnaires were distributed in order to ensure the privacy of the respondents. Respondents were given voluntary participation in the questionnaire too. This study examines whether the credibility and attractiveness of SMI have an impact on consumers' purchase intention of BPC products. Data was obtained in an ethical way utilising an online questionnaire. The data was analysed through regression and mediation analysis to derive conclusions, which will be explained in the following chapters.

4. Data Analysis and Presentation

4.1 Sample Profile

For the data collection purpose, 220 online questionnaires were distributed among various groups in the society. Only the questionnaires who answered as 'yes' to the filtering question of "Have you seen one or more of the above social media influencers or any other influencers on social media?" were taken into consideration.

Demographic composition

Table 1

Age composition of the sample

Age	Number	Percentage
Below 18	10	5.0
18 – 24	109	54.0
25 – 30	33	16.3
31 – 45	42	20.7
Above 45	8	4.0

Table 2

Gender composition of the sample

Gender	Number	Percentage
Female	154	76.2
Male	48	23.8

Table 3

Highest level of education of the sample

Education level	Number	Percentage
Advanced Level (A/L)	74	36.6
Graduate	79	39.1
Masters	15	7.4
Ordinary Level (O/L)	11	5.4
PhD	3	1.5
Professional qualification	19	9.4

Table 4

Province composition of the sample

District	Number	Percentage
Western Province	152	75.2
Southern Province	20	9.9
Central Province	13	6.4
Eastern Province	11	5.4
Other	6	3.1

Table 5

Monthly income level composition of the sample

Income level	Number	Percentage
Below 20,000	74	36.6

20,000 – 50,000	33	16.3
50,000 – 100,000	59	29.2
100,000 – 250,000	25	12.4
Above 250,000	4	2.0

Table 6

Representation of the platforms where SMIs can be seen - Platforms where SMIs can be seen

Platform	Number	Percentage
Instagram	173	85.6
YouTube	108	53.5
Facebook	101	50.0
TikTok	82	40.6
Twitter	22	10.9

5. Data Analysis

All the relationships between variables will be tested and discussed in relation to hypotheses given in Hypotheses development section (3.1.1) of the study. Regression and Mediation analysis have been used in this study. All the below stated tests were conducted based on assuming the significance level of 0.05 ($\alpha=0.05$).

Table 7

Regression Analysis and Mediation Analysis

No:	Hypotheses	Final result	P value
Regression analysis			
H ₁	<i>(a) Authenticity and (b) Expertise of the SMI have a positive impact on purchase intention of BPC products promoted by the SMI.</i>	Fully accepted	Authenticity = 0.001, Expertise = 0.000
H ₂	<i>(a) Physical attractiveness and (b) Homophily of the SMI have a positive impact on purchase intention of BPC products promoted by the SMI.</i>	Not fully supported	Physical Attractiveness = 0.130, Homophily = 0.000
H ₃	<i>(a) Authenticity and (b) Expertise of the SMI positively influences consumers' attitude towards the SMI</i>	Fully accepted	Authenticity = 0.005, Expertise = 0.000
H ₄	<i>(a) Physical attractiveness and (b) Homophily of the SMI positively influences consumers' attitude towards the SMI</i>	Fully accepted	Physical Attractiveness = 0.000, Homophily = 0.000
H ₅	<i>consumers' attitude towards the SMI has a positive impact on purchase intention of BPC products</i>	Fully accepted	0.000

Mediation analysis		
H _{6a}	Consumers' attitude towards the SMI mediates the relationships between (a) Authenticity of the SMI and purchase intention of BPC products promoted by the SMI	Significant partial Mediation
H _{6b}	Consumers' attitude towards the SMI mediates the relationships between (b) Expertise of the SMI and purchase intention of BPC products promoted by the SMI	Significant complete Mediation
H _{7a}	Consumers' attitude towards the SMI mediates the relationships between (b) physical attractiveness of the SMI and purchase intention of BPC products promoted by the SMI	Significant complete Mediation
H _{7b}	Consumers' attitude towards the SMI mediates the relationships between (b) homophily of the SMI and purchase intention of BPC products promoted by the SMI	Significant partial Mediation

From the data given, it can be explained that respondents have agreed on the purchase intention towards the BPC products promoted by SMIs. The practical aspect of the results generated in this chapter are expected to be discussed in depth in the next chapter.

6. Discussion and Conclusion

The findings will be discussed in relation to the research objectives and existing literature reviewed in the current study. The first objective would be **to identify whether the credibility and attractiveness of SMI have an impact on consumers' purchase intention of beauty and personal care products promoted by the SMIs.** This objective was attained through testing H₁ and H₂. As explained in the hypothesis's development section, the literature suggests that there is a positive relationship between the credibility and attractiveness of SMI and consumers' purchase intention of beauty and personal care products promoted by the SMI (Chan et al. 2013; Guo et al., 2018; Lin & Xu, 2017; Lou & Yuan, 2019; Van der Waldt et al., 2009; Wang & Scheinbaum, 2018). In this study also it was clear that there is a positive relationship between the credibility of the SMI and consumers' purchase intention of beauty and personal care products promoted by the SMI (H₁ was fully accepted). However it was also identified that the relationship between the attractiveness of the SMI and consumers' purchase intention of beauty and personal care products promoted by the SMI is not fully supported (H₂ was not fully supported). For this, previous studies also suggest that the source of attractiveness did not have any impact on consumers' purchase intention and also argued that attractiveness is not a powerful dimension to generate purchase

behaviour due to a substantially weak logical link between an attractive endorser and purchasing intention (Ohanian, 1991; Till & Busler, 1998, as cited in Lim et al., 2017)). Accordingly, from the results of this study which is related to the context of Sri Lankan consumers, it can be concluded that SMIs' characteristics of authenticity and expertise have a direct impact on consumers' purchase intention of beauty and personal care products promoted by the SMI while physical attractiveness and homophily is not. The second objective identified would be **To identify whether consumers' attitude towards the SMI mediates the relationships between credibility and attractiveness, and consumers' purchase intention of beauty and personal care products promoted by the SMIs.** Investigating whether consumers' attitude towards the SMI mediates the relationships between credibility and attractiveness, and consumers' purchase intention of beauty and personal care products promoted by the SMI is explained in this objective and was connected to H₃, H₄, H₅, H₆ and H₇. According to previous literature, it is evident that influencer characteristics of authenticity, expertise, physical attractiveness and homophily are positively related to the consumers' attitude toward the SMI (Atkin et al., 1984; Freiden, 1984; Joseph, 1982; Lim et al., 2017; McCroskey et al., 1999; Xiao et al., 2018). According to the findings of this study it was clearly shown that there is a positive impact between the consumers' attitude towards the SMIs and the credibility and attractiveness of the SMIs (H₃ and H₄ fully accepted). From the H₅ of the study, it was identified that the relationship between the mediator variable of consumers' attitude towards the SMI and the dependent variable of purchase intention of BPC products. It was suggested as a direct or positive relationship according to previous studies (Bahtar & Muda, 2016; Nurhandayani et al., 2019; Ohanian, 1990; Ting & de Run, 2015; Tarkiainen & Sundqvist, 2005). Accordingly, the current study also found out that there is a significant positive relationship between the above two variables which shows that it can be applied to the Sri Lankan context as well.

The mediation effect of the consumers' attitude towards the SMI on relationships between credibility (authenticity and expertise) and attractiveness (physical attractiveness and homophily) of SMIs and purchase intention of beauty and personal care products promoted by the SMI is clearly measured by using H₆ and H₇ of the current study. According to extant literature review it was clear that there is a mediation effect between those variables (Chan et al. 2013; Chekima et al., 2020; Kotler, 2005). From the findings of this study also it is clear that consumers' attitude towards SMI significantly mediates the relationship between above mentioned variables. According to Lim et al. (2017) it is evident that attitude plays a significant role in mediating the fit between a product, the celebrity and purchase intention for an advertised product. Interestingly, it was also found that from the data analysis, consumers' attitudes towards SMIs is having a more powerful impact with influencer characteristics than with the dependent variable of purchase intention.

Conclusion

SMI promotions are a concept that emerged recently to the world while it is newer to Sri Lanka as well. This study was carried out mainly to identify the impact of the characteristics of SMIs on the purchase intention of consumers. The literature review helps to get a clear understanding of how this area of study was discussed by previous recent studies. Credibility has a greater impact on the purchase intention of BPC products promoted by SMIs than their attractiveness of them. A structured

questionnaire was used in this study, which consisted of 202 respondents from Sri Lanka. Results were presented using descriptive statistics of mean and standard deviation followed by a clear explanation on the sample profile and the questionnaire conducted. Altogether there were seven hypotheses and regression, and mediation analyses were conducted using SPSS 22 statistical software. The findings of this study will be useful to many local marketers and businesses in their promotional campaigns done through social media platforms. It is also beneficial to foreign marketers who conduct promotions through influencers as it is currently a leading concept globally. The study highlights SMI characteristics with purchase intention of BPC products promoted by them and the mediating impact of consumers' attitude towards the SMIs.

Implications

The aim of this study has been to produce knowledge on how the credibility and attractiveness of SMIs affect the purchase intention of BPC products in Sri Lanka. Previous studies have focused on different characteristics of SMIs with the purchase intention. The current study empirically finds out how recently identified SMI characteristics (Kim & Kim, 2021) of authenticity, expertise, physical attractiveness and homophily affect the purchase intention of beauty and personal care products promoted by them in the context of the Sri Lankan market. Not only that, but the current study also aimed at finding out how attitudes towards SMIs affect influencer characteristics and the purchase intention of BPC products. Additionally, SMIs are leading and less discussed area when it comes to the Sri Lankan context therefore, this study has a significant implication for gaining more clarity in understanding the concept of SMIs while gaining theoretical knowledge on SMI characteristics along with purchase intention of BPC products promoted by them with the consumers' attitude towards SMIs. There are many practical implications and contributions found in this study. First, this study may be helpful to Sri Lankan businesses looking to use influencer marketing activities more. It is crucial for businesses to be where their customers are, which is on social media, as the number of SMIs and social media platforms is rising and traditional media is gradually vanishing (Althaus & Tewksbury, 2000; Meraz, 2009). As a result, this study adds to our understanding of how SMIs' impact on social media platforms may alter customers' ability to make purchasing decisions. As indicated by Freberg et al. (2011), this study will not only advance our knowledge of the influence that SMIs can have, but it will also help firms that choose to use influencer marketing to better understand how to collaborate with SMIs in the future. This study demonstrates that SMI characteristics have a noticeable impact on consumers' product consumption. As a result, using SMIs in marketing will help create a more economical and environmentally friendly society because businesses would no longer need to waste money, paper, and energy on printing flyers and making billboard advertisements. In addition, the usage of SMIs could help create a greener society in areas other than traditional marketing where people can get their news via social media rather than via printed newspapers.

Limitations and Avenues for Further Research

The responses were gathered using a convenient sampling technique which led to target Sri Lankans living in highly populated and tech-savvy provinces like Western, Central and Southern. Future research may consider expanding the geographical focus by conducting similar studies in other provinces to verify the generalisability of the current findings. Instagram and YouTube are the most popular platforms for SMI activities

(Statistica, 2021). Future research directions could concentrate on broadening the study topics to include different social media platforms. While SMIs' role is becoming prominent in many other product categories, future studies may delve into investigating other sectors such as fashion, food, fitness, etc.

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Sri Lankan Consumer Responses towards Online Behavioural Advertising (OBA) on Social Media (Facebook)

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Abstract

Online Behavioural Advertising (OBA) is the practice of tailoring advertising based on an individual's online activities such as searching keywords and visiting websites. The purpose of this study is to explore the Sri Lankan consumer's response towards OBA and to examine the privacy concerns of OBA. Facebook has been selected, as it is the most famous social media platform in Sri Lanka. Literature depicts privacy concerns had a significant trigger on OBA and personalization factor has also been an indigenous characteristic of OBA. As per Ducoffe's model (1996) on web advertising, entertainment, informativeness and irritation were considered as the perceptual dimensions demonstrating a relationship with attitude towards an advertisement and leading to consumer responses. Lee and Rha's (2013) extended model for OBA depicted privacy and personalization as two other important dimensions of OBA. Accordingly, the conceptual framework was developed and operationalised using previously used measures. Using data from 390 Sri Lankan respondents who are Facebook users in the age group of 18-34 years, the results show that entertainment, informativeness, and personalization had a positive relationship between attitudes towards OBA, whereas irritation and privacy concerns had a negative relationship. The results indicate that consumer's attitude towards OBA in fact has a positive impact on the consumer's response to clicking on an advertisement. The findings will be of utmost importance for advertising practitioners to not only develop information-rich and entertaining advertisements but also personalised content of the advertisements. This research study also contributes to an enhanced understanding of online behavioural advertising on Facebook. The findings of the research will be vital as a stepping stone to research in the area of OBA as it is an upcoming area in digital marketing and is known to be the future of advertising.

Keywords: Online Behavioural Advertising (OBA), Facebook, Sri Lanka, Privacy Concerns, Personalisation, Sri Lankan Consumer Attitudes

1. Introduction

The rapid growth of communication technologies and the use of internet have enhanced the spread of social networking in the last decade. The use of internet and social media has become a necessity for most Sri Lanka youth. As per Sri Lanka's key digital statistics published by HootSuite (2020) indicates that the total population in Sri Lanka is 21.37 Million out of which 10.10 million are internet users, out of which 6.4 million are monthly active Facebook users. 32.35% are female users and 67.75% users are male. Also, Internet users have increased by 8.3% and active Social Media users have

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increased by 30% since April 2019. As per Seven Media Group (2018) and HootSuite (2018) statistics in Sri Lanka indicate that there are 4.1 Million users who use Facebook within the age range of 18-34 years. According to this, it is evident that Sri Lanka is in a position of substantial growth in Internet connectivity and social media usage. Current trend indicates that social media marketing is one of the best ways of internet marketing in Sri Lanka. Facebook is outperforming all other social media and is the most popular Social media platform in Sri Lanka.

The main objectives of this research are to examine the relationship between the perceptual dimension of Online Behavioural Advertising (OBA) and attitude towards OBA and also to assess the relationship between privacy concerns and attitude towards OBA. Further, to find out the Sri Lankan consumer's response to OBA on Facebook. The current paper clearly mentions the research objectives, introduces the concepts and tries to justify the possible reasons behind the study through a brief review of literature together with the paper clarifying the data and methodology of the study. Finally, interprets the result and provides the conclusion.

1.1 Problem Statement

OBA could be perceived as invasive and inappropriate if they trigger consumers' privacy concerns because such adverts would likely make consumers more aware of advertisers' tracking and sharing of consumer online activity data. With the possibility of having both favorable and unfavorable impacts on consumer responses (Bleier & Eisenbeiss, 2015), OBA can be a double-edged sword. Therefore, with the arguments within literature and considering the fact that other contextual findings on the same research area cannot be applied to Sri Lanka, the research problem arises on what is the Sri Lankan Consumer responses towards Online Behavioural Advertising on social media especially to Facebook-related responses.

1.2 Research Objectives

The main objectives of this research are to examine the relationship between the perceptual dimension of OBA and attitude toward OBA and also to assess the relationship between privacy concerns and attitude towards OBA. Further, to find out the Sri Lankan consumer's response to OBA on Facebook. The paper clearly mentions the research objectives, introduces the concepts and tries to justify the possible reasons behind the study through a brief review of the literature together with the paper clarifying the data and methodology of the study. Finally, interprets the result and provides the conclusion.

2. Review of the Extant Literature

Scholars have mostly mentioned that users are not well aware of how this OBA works and how they are exposed to relevant advertisements based on their search history and online behavior. Scholars such as Smit et al. (2014) and Bennet (2001) explain that for this form of targeted advertising, data must be collected, usually by installing cookies. Cookies are small text files that are put on users' devices, such as laptops, notebooks or smartphones, to facilitate the functionality of a website (first party, session or functional cookies) or to collect profile information for targeted advertising (third-party or tracking cookies). While advertisers stress the utility of OBA in terms of relevant advertising, the use of cookies is heavily debated by policymakers in the US and Europe

because of its potential violation of the privacy of Internet users (Bennett, 2011). Almost every website that an individual visit usually collects cookies in order to analyze the profile of the customers. Third-party HTTP cookies are the main mechanism to enable behavioural targeting. By correlating which websites, the user visits, advertisers can build profiles of likely characteristics and interests, and present advertising most likely to lead to the purchase of a given product or service (McDonald & Cranor, 2009). This is the usual mechanism used by social media sites such as Facebook in order to present users with personalized advertisements based on their online behaviour. In 1995, Ducoffe introduced the concept of advertisement value and defined it as the consumers' perception of the utility or the relative worth of the advertisement.

Hamouda (2018) states that based on the uses and gratifications theory (UGT) and Blumler and Katz (1974), which suggests that users choose the media that best fulfill their cognitive and affective needs involving their personal needs and gratification-seeking motives, Ducoffe (1995) and Ducoffe (1996) developed the advertising value model. This model is based on three antecedents of advertising value: informativeness, entertainment and irritation and proposes a positive link between advertising value and attitude toward advertising. This advertising value model is the most widely used theory to explain user perceptions and attitudes toward advertising (Murillo et al., 2016). The main research that has applied this model across several contexts such as traditional advertising (Ducoffe, 1995; Logan et al., 2012), web advertising (Bennett et al., 2006; Brackett & Carr, 2001; Ducoffe, 1996; Lin & Hung, 2009; Logan, 2013), mobile advertising (Kim & Han, 2014; Liu et al., 2012; Xu et al., 2009) and social media advertising specifically also used in the context of Facebook (Dao et al., 2014; Logan et al., 2012; Murillo et al., 2016; Saxena & Khanna, 2013) and also in the context of OBA (Lee & Rha, 2013). Therefore, the researcher believes that the use of Ducoffe's advertising value model will add more theoretical value and significance. However, the predominant characteristics of OBA that were identified previously which are, personalization and privacy concerns have not been reflected in Ducoffe's advertising model. Lee and Rha (2013) also agreed that the model does not reflect the differentiated characteristics of OBA, which are its superior quality of individual personalized level targeting and user concerns on privacy and cannot explain the effect that attitude towards advertisement.

Lee and Rha's (2013) study further extended Ducoffe's model by adding privacy concerns and personalization aspects in order to match the special characteristics of OBA. The integration of web advertising effect model of Ducoffe (1996) and Lee and Rha's (2013) extended conceptual model will be used for the current research in order to captivate the perceptual dimensions of advertising along with prominent aspects of OBA-perceived personalization and privacy concerns. Literature has been gathered from recent scholarly articles with regard to relevant dimensions and areas such as entertainment, informativeness and irritation. Predominant characteristics of OBA which were reflected in Lee and Rha's model were personalisation and privacy concerns. In the instance of gathering literature on OBA, it was mostly demonstrated that the level of personalization and privacy concerns were discussed by many scholars. Literature suggested both positive and negative attitudes and consumer responses towards OBA. Based on the Web advertising effect model of Ducoffe (1996) and Lee and Rha's (2013) model, this study has developed an integrated framework for Facebook OBA. Ducoffe's (1996) model is representative of the theory that explains

the effect of online advertising which includes perceptual dimensions of OBA. Yet, this model does not reflect the special and differentiated characteristics of OBA, which is its superior quality of individual level targeting, and cannot explain the effect that attitude toward advertising can have on responses. Therefore, Lee and Rha (2013) proposed extending the model by adding privacy concerns and personalization as these are very important dimensions of OBA. This research's conceptual model (figure 1) proposes possible links between perceptual dimensions of OBA, personalization, privacy concerns, and attitude toward OBA and consumer responses to OBA. One of the most frequently used forms of online advertising is based on web analytics data, which enables advertisers to know what their current and prospective customers are interested in buying based on their past online search behaviours (Kim & Huh, 2017). Scholars have defined this area and has been identified as a trend in online advertising that deserves careful attention. By tracking consumers' Internet cookie data, advertisers can show each individual consumer advertisement messages regarding what she or he is actually interested in, instead of guessing what she or he might be interested in. This is called online behavioural advertising as defined by Kim and Huh (2017). Online Behavioural Advertising (OBA), which targets specific individuals for advertising based on their online activity, is spotlighted as a service that can provide benefits not only to businesses but also to the online users themselves (Beales, 2011; Dwyer, 2009).

A practical or an empirical example of how behavioural advertising might work is as follows: a consumer visits a travel website and searches for airline flights to Melbourne. The consumer does not purchase any tickets, but later visits Facebook and navigates the newsfeed. While on Facebook, the consumer sees an advertisement from an airline featuring flights from Colombo to Melbourne. Hence, Online Behavioural Advertising (OBA) is broadly defined as the practice of tracking an individual's online activities in order to deliver advertising tailored to consumer interests (Federal Trade Commission, 2009).

Although there has been a growing number of extant literature that has examined online advertising in Sri Lanka (Ajanthan, 2017; Ayoobkhan, 2016; Bulankulama, 2017; Jayasuriya et al., 2018; Farook & Abeysekara, 2016; Samarasinghe et al, 2016) limited research (Udadeniya et al., 2019; Wijenayake & Pathirana, 2019) has been conducted on online behavioural advertising on Facebook in the Sri Lankan context. There has been a number of researches conducted in other contexts such as the United States of America, South Korea, China, Belgium and Austria which have examined the effects of online behavioural advertising on consumers. However, scholars (Durvasula et al., 2001; La Ferla et al., 2008) believe that consumer attitude and behavioural responses toward social media advertising and advertising in general differ from one country to the other. Privacy concerns and knowledge to OBA among consumers will also differ from one country to another. Smit et al. (2014) study on OBA was mainly based on the European Union and the findings apply to other Western societies as well. He also states that research did not focus on other parts of the world such as Asia and Africa. Smit et al. (2014) specifically mention as privacy concerns and perceptions regarding online (advertising) practices might differ between cultures (Wang & Sun, 2010), and the internet is globally used, it is vital to know whether regulations regarding OBA disclosure influence knowledge, privacy concerns and online coping behaviour in a similar vein. Therefore, research findings from other country's contexts cannot be applied to Sri Lankan context.

Due to the fast-growing volume of OBA and its highly personalized nature raising criticisms, researchers in both industries (Criteo, 2015; eMarketer 2014) and academics (Bleier & Eisenbeiss, 2015; Boerman et al., 2017; Kim & Huh, 2017; Lambrecht & Tucker 2013; Smit et al., 2014; Tucker 2014) have examined consumers' knowledge and understanding of OBA, attitude toward OBA in general, the role of consumer trust in moderating the impact of different OBA features on consumer perception and ad click-through intention, and impact of regulations or privacy control options on consumer responses to OBA and other personalized ads. Wijenayake and Pathirana (2019) mention that even though the OBA is widely used by organizations to do better marketing, the reaction to OBA by customers has not been quite positive. Wijenayake and Pathirana (2019) further state that observations show that customers tend to avoid OBA and although there is a global trend of increasing ad block it has been very less in Sri Lanka.

Hence, the current understanding of OBA effects is quite limited, calling for more research. OBA is an interesting advertising practice that provides both benefits (relevant messages) and risks (privacy infringements) to consumers; thus, consumers have ambivalent and paradoxical attitudes toward it (Smit et al., 2014). Interestingly, results revealed that perceived risks of privacy infringement were generally seen as outweighing the benefits of having relevant advertisement messages through OBA (Ham, 2017). In contrast, Debatin et al. (2009), however, found that the benefits of using Facebook outweigh the potential risk of privacy infringement.

2.1 Operationalization

All measurements and scales are adapted from the existing literature as provided in the table below. To measure all these constructs, a *five-point Likert scale* has been used that ranged from 1- Strongly disagree to 5 – Strongly agree (Q7 – Q31) and 1- Definitely False – 5 Definitely True (Q32 – Q37). A pilot test has also been conducted prior to the survey. More details are provided in the next section.

Table 3

Operationalisation

Dimension/variable	Measures	Other studies - All Adapted from Existing Literature
Entertainment	<ol style="list-style-type: none"> 1. Online behavioural advertisements are entertaining to watch and read 2. Online behavioral advertisements are often amusing 3. I enjoy watching/reading content of Online behavioural advertisements on Facebook 	Lee and Rha (2013)

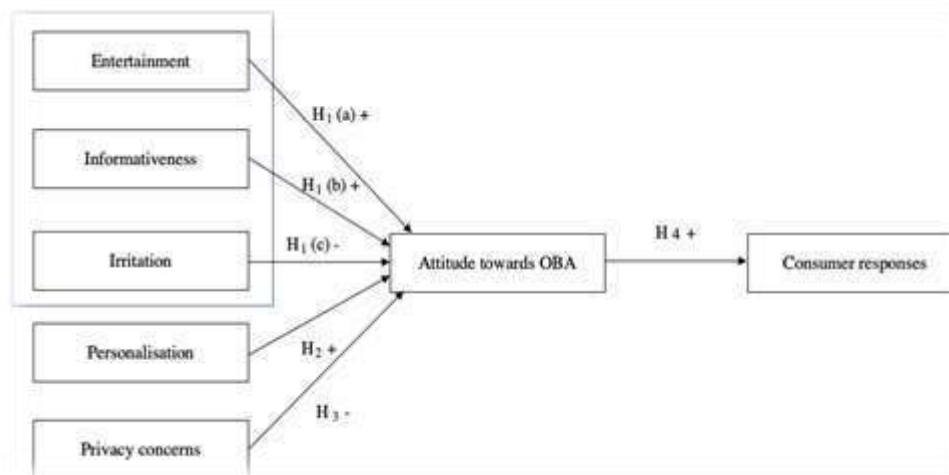
Informativeness	<p>4. Online behavioural advertising is a good source of product/service information.</p> <p>5. Online behavioural advertising provides timely information on products/services</p> <p>6. Online behavioural advertisements are a valuable source of information for keeping up to date with new products/services in the marketplace</p>	<p>Cheng et al.(2009)</p> <p>Lee and Rha (2013)</p>
Irritation	<p>7. Online behavioural advertising is annoying when scrolling through Facebook</p> <p>8. Online behavioural advertising is misleading</p> <p>9. Online behavioural advertising irritates me</p>	<p>Tran (2017)</p> <p>Lee and Rha (2013)</p>
Dimension/variable	Measures	Other studies - All Adapted from Existing Literature
Personalization	<p>10. I feel that Facebook online behavioural advertising is personalized for my usage</p> <p>11. I feel that Facebook's online behavioural advertising displays customized messages for me</p> <p>12. I feel online behavioural advertising on Facebook is tailored to my situation, needs, preferences and interests</p>	<p>Srinivasan et al. (2002), Lee and Rha (2013)</p>
Privacy concerns	<p>13. I am concerned that websites and Facebook are collecting too much personal information about me</p> <p>14. I am concerned about submitting information on the Internet, because of</p>	<p>Lee and Rha (2013), Dinev and Hart (2006),</p> <p>Baek and Morimoto (2012)</p>

	<p>what others might do with it.</p> <p>15. When I am online, I have a feeling that all my clicks and actions are being tracked and monitored.</p> <p>16. I am concerned about submitting information on the Internet because it could be used in a way I did not foresee</p> <p>17. I feel uncomfortable when personal data are used without permission</p> <p>18. I am concerned about the potential misuse of personal information, search history and online purchase activities</p>	
Attitude towards OBA	<p>19. I prefer when Facebook displays advertisements that are targeted to my interests and preferences.</p> <p>20. My attitude toward being subjected to online behavioural advertising is favourable.</p> <p>21. I think it is fine to see advertisements based on my Internet surfing behaviour.</p> <p>22. Being subjected to online behavioural advertising is a pleasant experience.</p>	Rodgers and Thorson (2000); Zeng et al. (2009), Lee and Rha (2013)
Consumer responses	<p>23. I pay attention to online behavioural advertisements displayed on Facebook</p> <p>24. I am willing to click and check the contents of online behavioural advertising</p> <p>25. I intend to use online behavioural advertisements on Facebook for shopping after I view it</p>	Lee and Rha (2013)

The following page will concentrate more on the Conceptual framework and the Hypotheses related to the study which are derived from the extant review of the literature.

Figure 1

Conceptual framework



List of Hypotheses

H₁ (a) – The entertainment of OBA is positively related to overall attitude toward OBA

H₁ (b) - The perceived informativeness of OBA is positively related to overall attitude toward OBA.

H₁ (c) - The irritation of OBA is negatively related to attitude toward OBA

H₂- The personalization of OBA is positively related to attitude toward OBA.

H₃- Consumers' privacy concerns regarding OBA would be negatively related to their attitude towards OBA

H₄- Attitude towards OBA is positively related to consumer responses to OBA

3. Research Methodology

Based on the statistics available in relation to this area, the population consists of all Facebook users have been 6.2 Million from which 4.1 Million have been in the range of 18-34 years. The sample size is selected from the Morgan table with the highest level of 384 respondents. Convenience sampling was used in order to distribute the questionnaire. As Saunders et al (2011) state convenience sampling involves selecting haphazardly those cases that are the easiest to obtain for the sample. As the population is high and the fact that Facebook users were conveniently available for the researcher, this sampling procedure was chosen.

As this study is a quantitative study, the main data collection tool used was a self-administered internet-mediated questionnaire. Other studies (Duffet, 2017; Ham, 2017; Hamouda, 2018; Kim & Huh, 2017; Lee & Rha, 2014; Li & Huang, 2016; Smit et al., 2013; Tran, 2017)) which have conducted research in the areas of Social Media

Marketing, attitude towards Facebook advertising, attitude towards OBA, consumer response towards OBA has also used online surveys.

Once the questionnaire was developed, the researcher conducted a pilot test for 36 respondents. Face validity was also carried out by distributing the pilot test among 10 individuals. Although the questions have been pre-tested in previous literature, as this is a new area for Sri Lankan consumers, the clarity and meaningfulness of the questions had to be tested. The collected 36 questionnaires were recorded and analyzed using the statistical package SPSS. As an analysis of the pilot test, the reliability of the measures was checked for each construct through Cronbach's Alpha. The satisfactory level of reliability can be attained through a Cronbach's alpha of 0.7 or above (Nunnally, 1978). Results of the pilot test depict that Cronbach Alpha values are higher than 0.7 for most, which reflects that there is a high internal consistency among the Likert scale items.

1. The online questionnaire was administered through Facebook itself for a period of 3 weeks. For this study, the reliability of all the variables under investigation was projected using Cronbach's Alpha coefficient for the internal consistency of the scale.

4. Data Analysis

This chapter consists of the data analysis conducted based on the questionnaire-based survey. SPSS 23.0 statistical software has been used. The reliability of the scales and data screening has been presented at the beginning of the chapter. Next, sample characteristics are presented based on the respondents' profile. Correlations testing for hypotheses testing has been conducted and the findings have been depicted. Multiple regression and simple linear regression models have been provided in the later part of the chapter with relevant findings and analysis as per the current research.

Data screening

Prior to initiating the analysis, the researcher conducted data screening and cleaning as data screening /purification is important prior to data analysis to ensure that the data is suitable for analysis. The following table 8 depicts the summary of the data screening undertaken by the researcher.

Table 4

Data screening results

Total number of questionnaires distributed	480
Total number of filled questionnaires collected	421
Removed the responses from other age groups	(21)
Incomplete questionnaires	(8)
Never been exposed to OBA	(2)

Total number of survey responses for the analysis 390

Out of the 480 questionnaires distributed, the researcher managed to collect 421 securing a good response rate of 87%. As the sample size age group was 18-34, 21 questionnaires were removed from the data set as they were from different age groups (13-17, 35-50, 51+) and 2 respondents have not been exposed to any OBA on Facebook. As the respondents had to be exposed to OBA on Facebook and had to be between the age of 18-34 the unsuitably filled questionnaires were removed before analysing the data.

Table 5
Reliability and Validity Performance

Dimensions and variables	Number of items	Cronbach Alpha	KMO value B Value
Entertainment	3	0.903	.880/000
Informativeness	3	0.855	.830/000
Irritation	3	0.803	.880/000
Personalisation	3	0.905	.935/000
Privacy concerns	6	0.863	.887/000
Attitude towards OBA	4	0.915	.787/000
Intention to Click / Consumer responses	3	0.936	.830/000
Knowledge about OBA	6	0.865	.877/000

Respondent's characteristics

The questionnaire (Questions 1 - 6) checked for demographics and usage frequency of the targeted respondents. The respondent's profile is provided below.

Table 6

Variable	Classification	Frequency	Percentage %
Age group	18-34	390	100
Gender	Male	245	62.8
	Female	145	37.2

Of these respondents, 62.8% are males and 37.2% are females which has a similarity to the actual composition of gender breakdown of Facebook users as SevenMedia Group (2018) reported that mostly male population uses Facebook in Sri Lanka. As depicted in figure 03 below a large proportion of the respondents (52%) had Facebook experience between 5-10 years. This depicts that the respondents who answered the questionnaire seem to have used Facebook for a long time period ranging from 1 year to 10 years. There were only 2% who have used Facebook for less than 1 year, which depicts that consumers prefer to stay with social network sites such as Facebook for a period of time.

Data Analysis

According to the main study results of reliability analysis Cronbach alpha for each of the dimensions and variables is higher than 0.7, it is concluded that all the scales and constructs used in the study were reliable, thus they can be used to measure the variables under study.

Normality Test

The normality test is used to determine whether or not a data set is well-modeled by a normal distribution and to determine how probabilistically and initially distributed a random variable is. The histogram should have a bell-shaped shape if the residuals are normally distributed. The data set's skewness and kurtosis value can be used to determine whether it is normal. The data set's skewness and kurtosis values are displayed in the table below.

Table 7

Dimensions	N	Skewness/SE	Kurtosis/SE
Entertainment	390	-.927/.137	-.591/.244
Informativeness	390	-.1.157/.137	-.222/.244
Irritation	390	-.1.127/.137	-.185/.244
Personalization	390	-.1.157/.137	-.226/.244
Privacy Concerns	390	-.1.063/.137	-.125/.244
Consumer Responses	390	-.1.056/.137	-.115/.244

In order to test the relationships between the dimensions of OBA and attitude towards OBA and the relationship between attitude towards OBA and consumer responses the researcher applied the correlation analysis. Results are provided below in the following Table.

Table 8
Correlation/Significance Figures on Attitude towards OBA

Dimensions	Correlation/significance
Entertainment	.777/.000
Informativeness	.594/.000
Irritation	-.228/.000
Personalization	.584/.000
Privacy Concerns	-.022/.000
Consumer Responses	-.877/.000

As per the above table, Entertainment, Informativeness and Personalisation are highly significant (< 0.001), which reflects that these constructs have a positive relationship as the coefficient correlation is positive. Irritation has a highly significant negative association with attitude toward OBA as the coefficient correlation is -0.228 . Privacy concern also has a highly significant negative association with attitude towards OBA with -0.022 . Furthermore, attitude towards OBA is significantly correlated with consumer responses positively as the coefficient correlation is 0.877 .

In order to test the effect of independent variables on the attitude towards the OBA dependent variable, a multiple regression model has been conducted from SPSS and is presented below

Table 9
Model Summary of Multiple Regression Model

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	of the Durbin-Watson
1	.812 ^a	.659	.655	.60234	1.779

The Durbin-Watson statistics is depicted as 1.779 which is between 1.5 and 2.5 which means that residuals are independent and that the model is valid. Overall, the multiple correlation is 0.812 which depicts that the independent variables which are the dimensions of OBA have a strong joint association with attitude towards OBA. Attitude towards OBA can be explained with the independent variables to 65% ($R^2 = .659$). As the value is more than 60% , model is depicted to be nicely fitted.

Table 10
ANOVA Table

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	269.388	5	53.878	148.500	.000 ^b
Residual	139.320	384	.363		
Total	408.708	389			

Source: Survey Data

The probability of regression ANOVA presented in Table 5 is highly significant (.000) corresponding F test statistic is 148.5. As F statistic is highly significant all the dimensions are jointly influenced by the attitude. As the model is jointly significant multiple regression model is more appropriate. The individual effect has been analysed by the 'Coefficients' table below.

Table 11
Multiple Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1(Constant)	.425	.246		1.730	.084		
ENT	.515	.037	.548	13.753	.000	.560	1.786
INFO	.240	.048	.193	4.977	.000	.592	1.689
IRR	-.094	.042	-.074	2.263	.024	.828	1.207
PERS	.240	.038	.233	6.300	.000	.652	1.534
PRIV	-.162	.049	-.107	-3.302	.001	.839	1.192

According to the individual effect as depicted in Table 6, the probability of ENT is highly significant with a positive beta value. It has having 0.515 individual beta value and it indicates that ENT has a highly significant positive effect on ATT. INFO is also highly significant with a positive beta value corresponding to probability and coefficient of 0.000 and 0.240 respectively. PERS also has a highly significant positive effects on ATT. Whereas IRR and PRIV have significant negative effect on ATT. The individual beta values are -0.094 and -0.162 respectively. According to the standardized coefficients of beta, the most influencing dimension is ENT because ENT has the highest coefficient of beta. The second influencing factor is PERS and the third factor is INFO.

All the VIF values are less than 10, therefore regression model does not have multi-collinearity problem and it indicates that dimensions are not perfectly correlated. Hence, the model is appropriate.

Equation Model

From the multiple regression coefficients table, the following model can be developed;

$$ATT = .425 + (.515ENT) + (.240 INFO) + (-.094IRR) + (.240PERS) + (-.162PRIV)$$

In order to test the relationship between Attitude toward OBA (ATT) and consumer responses (CONR), simple regression model has been conducted and findings are presented in the following table.

Table 12
Simple Regression Model

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin-Watson
1	.868 ^a	.754	.753	.61425	1.819

The regression model depicts that Consumer responses can be explained by the attitude towards the OBA variable to 75% ($R^2 = .754$). As the value is more than 60%, the model is depicted to be nicely fitted. Durbin- Watson also depicts to be between 1.5 and 2.5 which means that residuals are independent and that the model is valid.

Table 13
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	448.195	1	448.195	1187.895	.000 ^b
	Residual	146.393	388	.377		
	Total	594.588	389			

The probability of this regression ANOVA is highly significant (.000), corresponding F test statistic is 1187.9. As F statistic is highly significant all the dimensions are jointly influenced on the attitude. As the model is jointly significant multiple regression model is more appropriate.

Table 14
Simple Regression Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.803	.208		3.863	.000		
	ATT	.689	.053	.554	13.100	.000	1.000	1.000

Source: Survey data

According to table 9 probability of ATT is highly significant with a positive beta value. It has having 0.689 beta value and it indicates that ATT has a highly significant positive effect on CONR. VIF value is less than 10, therefore regression model does not have multi-collinearity problem and it indicates that dimensions are not perfectly correlated. Hence, the model is appropriate. The following table depicts the hypotheses verification based on the findings that were analyzed above.

Table 15
Hypotheses Vs Findings

Hypotheses	Estimates	<i>p</i>	Result
H _{1(a)} The entertainment of OBA is positively related to attitude toward OBA	.777**	.000	Accepted
H _{1(b)} The informativeness of OBA is positively related to overall attitude toward OBA	.594*	.000	Accepted
H _{1(c)} The irritation of OBA is negatively related to attitude toward OBA	-.208**	.000	Accepted
H2 - The personalisation of OBA is positively related to attitude toward OBA	.584**	.000	Accepted
H3 - Consumers' privacy concern regarding OBA would be negatively related to attitude towards OBA	-.022	.000	Accepted
H4- Attitude towards OBA is positively related to intention to click OBA	0.877	.000	Accepted

5. Discussion

A main observation through the study was the respondent's characteristics which reflected that a large proportion of the respondents (52%) had Facebook experience between 5-10 years. Further, the majority of the respondents (89.5%) use Facebook daily as a day-to-day activity. Searching for products/services online is also quite popular among the Sri Lankan respondents as 35.9% and 34.1% of respondents search all the time and frequently. The key finding from the respondent's characteristics was that they responded to being exposed to OBA all the time (47%) and frequently (40%).

These findings from the respondents demonstrate that consumers are aware of OBA and are exposed to online behavioral advertisements when using Facebook.

Correlations test results confirmed that entertainment, informativeness and personalization are highly significant and have a positive relationship with attitude towards OBA. Data analysis findings reflected that irritation and privacy concerns seem to have a negative association with attitude towards OBA. Whereas attitude towards OBA is significantly correlated with consumer responses positively. All the hypotheses proposed were accepted and in reference to the past literature findings it will be further discussed in the following sections.

The first objective of the research is to examine the relationship between perceptual dimensions of OBA and attitude towards OBA. The findings of the data analysis (correlation) depicted interesting results. Entertainment, Informativeness and Personalisation dimensions of OBA proved to have a positive relationship between attitude towards OBA and irritation proved to have a negative relationship between attitude towards OBA, which is in line with the previous findings (Brackett & Carr, 2001; Kim et al., 2010; Lee & Rha, 2013; McDonalds & Cranor, 2009; Taylor et al., 2011) . This also confirms the applicability of Ducoffe (1995) and Ducoffe (1996) model on web advertising value and confirms Lee and Rha's (2013) extended model on OBA.

As for Entertainment, it was stated in previous chapters that most Sri Lankan Facebook users use the site as a distraction to keep away from stressful situations and to enjoy virtual life and as Muntinga et al. (2011) correctly mentioned that users perceive enjoyment, relaxation by using social media sites such as Facebook. This could be one of the reasons why the Entertainment aspect of OBA contributed to a stronger positive relationship between attitude towards OBA as Sri Lankan users seem to enjoy advertisement which is found to be humorous, has colorful content or uses a specific celebrity. For example, some users may even specifically remember an advertisement if it is 'relatable' or humorous compared to a generic advertisement. Boerman et al. (2017) explained that when an advertisement usually addresses entertainment motives it is automatically believed to increase the attention, memory and attitudes toward the advertisement. As for Informativeness, it was stated previously that consumers are more willing to read and watch content that provides more information about products and services. Specifically, when it comes to OBA, this information about the products will be mostly related to the products they have searched for, so it will be more useful. Petrovici and Marinov (2007) mentioned that one of the main roles of advertising is to reshape the attitude towards advertising with the use of information delivered, as for the Facebook respondents in this survey reported that they consider the informativeness of advertisement be quite important. Logan et al. (2012) in their study on the comparison of Facebook advertisements and TV advertisements, found a contrasting result where respondents agreed that TV advertising is a better source of information. Yet, in other contexts such as social media sites in general (Saxena & Khanna, 2013) and on specific social media sites such as Facebook (Dao et al., 2014; Logal et al., 2012) and to OBA context specifically (Lee & Rha, 2013) it was found out that informativeness has been a strong prediction of attitude towards advertising. Thus, in consistency with these prior studies, this research also highlights that particular

attention given to the information content of an OBA is an important predictor of a positive attitude towards OBA.

Personalization also reflected a significant positive relationship between attitudes towards OBA, which is also in line with Lee and Rha's (2013) OBA survey findings. Aguirre et al. (2015) also agreed that the level of personalization of an advertisement can bring about positive attitudes and increase OBA outcomes as well. As Campbell and Wright (2008) rightly mentioned, consumers show more favorable attitudes toward advertising and the target product of advertising if the advertising is related to them. It was also found that consumers think the biggest benefit of OBA is 'better target or right person' (Ur et al., 2012). In contrast to this finding, Ham (2017) study implied that consumers seem uncomfortable and irritated with highly personalized advertisements as they are targeted based on behavioral tracking. The findings of this research are in contrast to Ham's (2017) as Sri Lankan consumers have a positive attitude towards OBA as the advertisements are more personalized and customized to them.

As per the findings of this research, it was apparent that there is a component of negative attitude towards OBA as irritation was proved to be negatively related to the attitude of consumers towards OBA. This is in line with Smit et al. (2014) findings which also state that consumers get irritated when there is an excessive repetition of OBAs within a short amount of time. In contrast to the findings of OBA creating positive attitude towards OBA, there are other certain scholars (Lee & Rha, 2013; Sun & Wang, 2010) who have found that irritation had a negative relationship with attitude toward OBA. However, the strength of the relationship is quite weak ($-.208^{**}$) which implies that even though there is some irritation component involved, it is not solid and strong. Lee and Rha (2013) state that it can be predicted that repeat exposure to OBA or excess technology usage will negatively affect attitudes towards OBA and hence the reason for irritation, which is also on par with the current research.

Objectives Vs Findings

The first objective of the research has been met as the findings prove that entertainment, information and personalization dimensions of OBA have a positive relationship towards attitude towards OBA. Whereas, irritation has a negative relationship towards attitude towards OBA. Overall, the hypotheses developed were accepted.

The second objective of the research is to find out the relationship between privacy concerns and the attitude of OBA. Privacy concern was considered as a separate section as it is a highly important characteristic and dimension that hand in hand with OBA. As already known, OBA uses personal search history and online behaviour of individuals to target and provide personalized advertisements to users on Facebook. This triggers privacy concerns among individuals.

Agreeing with all previous research findings (Baek & Morimoto 2012; Kim & Huh, 2017; Lee & Rha, 2013; Phelps et al., 2000; Tucker 2012) this research is also in line with the finding of privacy concerns being negatively related to the attitude towards OBA. However, there appears to be a privacy paradox as stated by Norberg and Horne (2007) that people say they care about privacy and do not intend to share personal data, but in reality, they provide their data in exchange for small benefits or conveniences. The finding of this research will also contribute to this as there is a weak negative relationship between privacy concerns and attitude towards OBA ($-.022$) than

personalization and attitude towards OBA (.584^{**}). This demonstrated the privacy paradox which has been explained by other researchers where people are quite concerned about their private data being used for advertisements, yet they are also fine with being exposed to personalized advertisements based on their personal data. Compared to findings from developed countries such as U.S., U.K where OBA research is conducted and privacy was flagged to be one of the most controversial concerns, it was noticed that the relationship between privacy concerns and attitude is quite weak. It implies that Sri Lankan consumers may not be significantly concerned towards their privacy being violated.

The third objective of the study was to find out the Sri Lankan consumer responses to OBA on Facebook. As per the estimates (0.877) and mean value of 4.1, it was apparent that there is a very strong relationship between attitudes towards OBA and consumer responses. As previously identified, consumer response outcomes of OBA are either a click intention or purchase intention. In this study, the researcher has considered the intention to click outcome as stated in previous chapters. Therefore, the findings of the results are that if there is a positive attitude towards OBA there will be a favorable consumer response to clicking on the advertisement and if there is a negative attitude towards OBA there will be an unfavorable consumer response and will not be considered clicking on the advertisement. Although some of the perceptual dimensions of OBA such as entertainment, informativeness and personalization proved to have a positive relationship towards attitude, there were 2 other dimensions which were privacy and irritation had a negative relationship towards the attitude towards OBA. Therefore, the attitude toward OBA has been a mixed response, this is also in line with many of the research findings (Aguirre et al., 2015; Lee & Rha, 2013; McDonald & Cranor, 2010; Smit et al., 2014; Ur et al. 2012). This can be mainly due to the fact that there is a privacy paradox where consumers are not certain whether they want their private data to be shared or whether they actually prefer personalization. However, as per the response rate from the questionnaire for the relevant questions on consumer responses indicated a mean value of 4.1 which a good response rate is and depicts that it is a favorable response. Respondents have agreed that they will consider paying attention, are willing to click and intend to use OBA on Facebook. It can be determined that although there are various dimensions that will give a mixed attitude toward OBA, the overall consumer response tends to be favorable. It was also discovered that a positive attitude towards OBA has led to favorable responses to OBA by Sri Lankan Facebook users.

Managerial Implications

From a theoretical perspective, research with regard to novelty areas such as targeted advertising or OBA is essential to explore consumer responses based on the type of advertising. From the findings of this survey, it was evident that privacy and tracking of data were considered by most users on Facebook. Yet, it has not been a very strong factor that influences attitudes toward advertising. Personalization played a more prominent part in contributing to the attitude towards OBA. As this research area is gaining attention from other developed countries, it is also relatively important for emerging economies such as Sri Lanka to shed light on this research area as well. From a practical perspective, the results of this study provide implications for marketing and advertising practitioners. The implications for advertising practitioners are that companies should pay great attention to providing entertaining, informative and

personalized advertisements to the consumers can increase their attitude towards OBA. In order to lessen the gravity of consumers being irritated and avoid the advertisement, in order to attract more consumers, it is essential for OBA to provide information that is useful for the customers and also to make the advertisement campaigns entertaining and worthwhile to remember. Marketers and advertising agencies should attempt to take full advantage of the unique features of OBA (Ur et al., 2012) and provide customized advertising suited to the targeted consumers interests, because increased relevancy of information should reduce consumers' annoyance or irritation (Beales, 2011). As consumers themselves it is better to be more concerned about privacy violations to be more vigilant on the happenings with data that is entered into the internet. For practitioners, it should be kept in mind that privacy concerns should be carefully dealt with in order for OBA to be successful. Fair Trade Commission (2012) states that in order to reduce consumers' concern about the use of personal information, companies should incorporate the privacy by-design model in their business activities. Furthermore, practitioners should make proactive efforts to protect consumer privacy to increase the acceptance of OBA such as providing easy-to-use tools that give consumers meaningful control without interfering with their online behavior. Consumers' privacy concerns should not be taken lightly, and advertising practitioners should make efforts to understand and alleviate consumers' privacy concerns towards OBA. It is also recommended that advertisers should develop effective tools for educating consumers about myths and facts about online advertising and data-tracking practices.

Limitations and Suggestions for Further Research

There are some limitations associated with this current study that open avenues for future research. Considering new avenues of advertising such as OBA and conducting research in the Asian context is important due to various cultural factors that will have an impact on the consumer's attitude, response and knowledge levels specifically in Asian countries. The role of culture could be taken into consideration by future researchers for these perceptual dimensions of OBA. An average American social media user may respond to an advertisement or any privacy issue differently than a Sri Lankan media user. Specifically, in Sri Lanka, some users may not be aware of the privacy regulations and privacy infringement policies. One of the main reasons for this indifference could be the level of knowledge and understanding of how OBA works, due to this it seems that the role of culture may have a great impact on the response of the user. It is important to consider the role of culture may take part in privacy concerns and the use of Facebook. Future research in this area can consider the role of culture and how it will have an impact on consumer responses.

Further, a specific product category can be used in order to further narrow down the research in the future. This study is limited to applying attitude and behavior intention as dependent variables, other variables such as brand equity, and brand engagement can be considered in future research. Also, the phenomenon of OBA can also be tested on other social media platforms such as Twitter, and Instagram due to the popularity of these platforms among Sri Lankan social media users.

6. Conclusion

The purpose of this research was to explore the Sri Lankan consumer's response to online behavioral advertising on Facebook. The significance of this study was for academic purposes and advertising practitioners. The objectives of the study were to examine the relationship between the perceptual dimension of OBA and attitude toward OBA, to assess the relationship between privacy concerns and attitude towards OBA, and to find out the Sri Lankan consumer's response to OBA on Facebook. Two models namely Ducoffe's web advertising model and Lee and Rha's extended model for OBA were tested in the Sri Lankan context as the other empirical findings are not applicable due to the cultural factors that have an effect on the consumer's attitude and behavioral intentions. An extensive literature review was conducted in order to explore similar and contrasting findings with regards to the context of OBA and hypotheses were formed between the relevant variables. Data were analyzed as per the objectives and critical discussions have been presented in previous chapters. It was apparent that entertainment, informativeness, and personalization has a positive significant relationship towards attitude towards online behavioural advertising. Whereas, irritation and privacy concerns had a negative impact on the attitude towards online behavioural advertising. It was concluded that Sri Lankan consumer's attitude toward online behavioural advertising has mixed responses as they prefer to be exposed to advertisements targeted to them, personalized as long as they are entertaining and of informational value. However, consumers will also have a negative perception due to irritation and privacy concerns triggered by online behavioural advertising. Nevertheless, the consumer responses seem to be favourable and positive as per the findings of the questionnaire and seem to have a positive relationship with attitude towards online behavioural advertising. Implications of online behavioural advertising were provided for advertising practitioners to spread awareness of privacy and to secure consumers' privacy in order to avoid negative responses and attitudes. It was also stated that advertising practitioners should also be aware that Sri Lankan consumers who use Facebook are more willing to be exposed to entertaining, informative and personalised advertisements. The results of this study confirm that OBA can be a powerful marketing tool for businesses and a favorable advertising mode for consumers by increasing the level of personalisation and privacy concerns while lowering the level of irritation.

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Viewer Responses to Clickbait on YouTube: A Marketing Perspective

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Abstract

With YouTube becoming popular as a money-making endeavour, content creators (YouTubers) are increasingly resorting to ‘clickbait’ – attractive, yet misleading, titles and thumbnails to lure content seekers (viewers) to click on their videos. With the increase in this practice, there is also greater scholarly interest in it; however, this interest seems to be limited to identifying methods of detecting clickbait. From a marketing perspective, this is a deceptive marketing practice, and we contribute to the literature by identifying and theorising, using the expectation disconfirmation framework, how content seekers respond to clickbait. We used an interpretive, qualitative approach utilising focus group discussions to collect data from 21 young YouTube viewers and analysing the data using thematic analysis. The findings indicate that when the videos match with content seekers’ expectations based on the title and thumbnail (confirmation) they are satisfied and generally respond with a ‘like’ (👍) and a positive comment. When what is delivered exceeds expectations (positive disconfirmation), especially with an element of surprise, there is delight and it is rewarded with subscribing to the channel (loyalty) and sharing the content through other social media (positive word of mouth). When there is a mismatch between what is promised and delivered, especially if it is due to reasons other than click-baiting, content seekers are dissatisfied (negative disconfirmation) and respond with a ‘dislike’ (👎) and a negative comment. Click-baiting results in extreme negative disconfirmation – disgust – caused by the negative surprise of being fooled, and content seekers retaliate by unsubscribing from the channel (disloyalty) and spreading negative word of mouth through other social media. The findings imply that though click-baiting might increase short-term revenue, it is counterproductive for YouTubers in the long run.

Keywords: YouTube, clickbait, expectation disconfirmation, online deception

1. Introduction

YouTube has been one of the most popular video-sharing social networking websites for many years (Balakrishnan & Griffiths, 2017; Global Media Insights, 2022), and it has recently begun to be highly attractive for content creators, who upload over 500 hours of video every minute (Gamage et al., 2021). In addition to giving the opportunity to be popular among others (viewers of YouTube), creating and sharing content has also become a lucrative form of earning income: It has been noted that YouTube is soon likely to overtake traditional TV in terms of advertising expenditure (Pressman, 2021). Along with this trend, YouTube content creators (also known as Youtubers, Ashman et al., 2018; Buf & Ștefăniță, 2020) have begun to employ different tactics to attract viewers towards their videos. One such tactic is ‘click-baiting’ – using attractive titles

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and thumbnail pictures that provide misleading information about the contents of the videos to lure viewers into clicking on them (Gamage et al., 2021). There is rising research interest in this phenomenon; however, the attention of these scholars has been on various methods of detecting clickbait (see, for example, Gamage et al., 2021; Jain et al., 2021; Reddy et al., 2020; Varshney & Vishwakarma, 2021). From a marketing perspective, click-baiting is a deceptive practice, and it has been well established in the literature that deceptive online practices, in contexts such as retailing, can lead to consumer dissatisfaction (Riquelme et al., 2016; Román, 2010), which then negatively impacts on loyalty (Román, 2010), word of mouth (Riquelme et al., 2016). In the context of YouTube, YouTubers require their viewers to be satisfied with their videos and subscribe to their channels (which is a form of loyalty), if they want to earn money in the long term. Thus, the click-baiting practices seem counterproductive to their motive of earning popularity and money. Therefore, it is important to identify how viewers (also known as content seekers, Buf & Ștefăniță, 2020) respond to clickbait. In the burgeoning body of literature on clickbait, there appears to be a lack of research that address this aspect. The purpose of this paper is to address this gap.

We use the expectation disconfirmation framework of satisfaction (Oliver, 1980; Oliver, 2010) as the theoretical lens for exploring content seekers' responses to clickbait. This framework conceptualises satisfaction as an outcome of what consumers expect and what they experience in consuming the product or service. Since clickbait creates expectations regarding the contents of a YouTube video that are not delivered by the video, it leads to 'negative disconfirmation', and hence, dissatisfaction (Rogers et al., 1992). Therefore, this was a suitable theoretical framework for this study. We adopted a qualitative approach since we were exploring a phenomenon that has not hitherto been discussed in the literature (Bloomberg & Volpe, 2008).

The rest of this paper is organized as follows. In the next section, we outline the literature demonstrating the rise of click-baiting and the current state of related research, followed by an explanation of the suitability of the expectation disconfirmation framework for exploring content seekers' responses to clickbait. Then we present the methods adopted in the research, followed by the findings and a discussion. We conclude by highlighting the contributions we have made in this paper and their practical implications.

2. Literature Review

2.1 YouTube as a Content-sharing Platform

With technological advancements, the creation and sharing of 'User-Generated Content (UGC)' and 'User-Generated Media (UGM)' has increased rapidly (Balakrishnan & Griffiths, 2017, p. 364). UGC is a "specific type of media content produced and distributed over the web by individuals who belong to the general public" (Daugherty et al., 2008 as cited in Balakrishnan & Griffiths, 2017, p. 364). Most often UGM, whose content is made publicly available over the web, reflects some creative effort to some extent and is often created outside of professional routines (Shao, 2009). Over time, UGM like YouTube and Wikipedia have evolved to incorporate blogs, wikis, video-sharing, picture-sharing, social networking, and other user-generated websites (Balakrishnan & Griffiths, 2017). Content in UGM can be any mode (e.g., text, emoticons, pictures, videos, quizzes, etc.). Web Based channels of UGM can be categorized into many different types including social networking (e.g., Facebook),

professional networking (e.g., LinkedIn), video sharing/video blogging (e.g., YouTube), knowledge-blogging (e.g., personal blogging), and micro-blogging (e.g., Twitter) (Balakrishnan & Griffiths, 2017).

Among these, YouTube is known as the most popular video-hosting service in the social media domain; everyday millions of user hours are spent on YouTube, resulting in billions of views of the videos (Balakrishnan & Griffiths, 2017). YouTube allows users to upload and share videos in various categories such as music videos, film trailers, ability, sports, video game play, program recording, and user content (vlogs) (Balakrishnan & Griffiths, 2017), and users can rate or review what they have watched and express their opinions through comments (Khan, 2017; Zickuhr & Madden, 2012). This means that there are two main types of YouTube users – the viewers or content seekers and content creators or YouTubers (Ashman et al., 2018; Balakrishnan & Griffiths, 2017; Buf & Ștefăniță, 2020). Many users play in both roles (Balakrishnan & Griffiths, 2017).

2.2 YouTubers and the Gratifications They Seek

Anyone who is in content seeker status can effortlessly become a YouTuber due to the tools offered by YouTube. YouTubers can upload or transfer any kind of video by using its facilities as long as it is original and legitimate and does not violate any copyright or legal rights (Balakrishnan & Griffiths, 2017). Literature notes that by uploading content, YouTubers expect two kinds of gratifications, remunerative and emotional (Buf & Ștefăniță, 2020). The emotional gratifications include those such as the need to be famous (Bughin, 2007), and even improve self-confidence by getting likes, comments, and followers for the content published (Snelson, 2015). Though some early scholars have argued that benefitting financially is not a key motivator for becoming a YouTuber (Stoekli et al., 2007), with recent initiatives of the platform providers for monetizing the content in different ways such as sharing advertising revenue (Kopf, 2020), content creators are increasingly earning more money – some channels earning billions of dollars annually (Pressman, 2021).

2.3 ‘Clickbait’ on YouTube

Whether it is remunerative or emotional, to get some benefit from uploading videos, YouTubers have to attract content seekers. Particularly for earning money, the number of ‘clicks’ is important (Anand et al., 2017; Gamage et al., 2021; Gothankar et al., 2021). This has given rise to the practice of click-baiting (Anand et al., 2017; Gamage et al., 2021; Gothankar et al., 2021). “Clickbait exploits an attractive title and thumbnail to incite the audience to click on a video; however, the actual content does not match the published title or expectation” (Gamage et al., 2021, p. 2665). Many well-recognized YouTube figures perceive adopting clickbait as inevitable; because YouTube is a highly competitive platform by now on which YouTubers increasingly face the problem of their content being lost among all other catchy content (Qu et al., 2018). Thus, click-baiting has become a marketing tool for some (Gothankar et al., 2021). Given its increasing use, click-baiting has become an important threat on YouTube (Qu et al., 2018; Vadde et al., 2020). Because of this, many scholars in ICT have introduced various methods of detecting clickbait (see, for example, Anand et al., 2017; Gamage et al., 2021; Gothankar et al., 2021; Jain et al., 2021; Reddy et al., 2020; Varshney & Vishwakarma, 2021).

It has been noted that for content seekers click-baiting results in a disappointing experience (Gothankar et al., 2021; Jain et al., 2021). In this kind of situation, the content seekers could respond in different ways. Unlike in conventional media, the YouTube audience is not passive (Balakrishnan & Griffiths, 2017). There are many different ways in which viewers can respond to videos, such as rating the videos and commenting on them (Khan, 2017; Zickuhr & Madden, 2012). While some viewers are content to be mere ‘consumers’ of videos, others are more active ‘participators’ (Shao, 2009). Participating viewers respond to the videos they watch by engaging in either user-to-user or user-to-content interaction, such as adding videos to playlists, sharing with others, or posting comments (Shao, 2009). Viewers can also respond to videos by ‘liking’ (👍) or ‘disliking’ (👎), and ‘subscribing’ to channels if they wish to continue watching content from a particular YouTube channel (Snelson, 2015). It is also possible to report a YouTuber to the platform administrators in the event of misconduct (Gothankar et al., 2021). Therefore, in any situation when a viewer has a dissatisfying or disappointing experience on YouTube, there are many response options available for them to express their displeasure.

As previously noted, click-baiting is a deceptive marketing practice. In marketing, there is a well-established body of literature that has identified deceptive online practices as leading to consumer dissatisfaction (Riquelme et al., 2016; Román, 2010). It is also established that such dissatisfaction leads to behaviours such as low loyalty (Román, 2010) and, a negative impact on positive word of mouth (Riquelme et al., 2016) in areas such as retailing. However, there appears to be a lack of studies that examine consumers’ (i.e., viewers’ or content seekers’) responses to the deceptive practice of click-baiting although some scholars note that the negative experience resulting from click-baiting can lead to negative ramifications for the YouTubers (e.g., through reporting the video to the platform), and for YouTube as a platform through harming its trustworthiness (Gothankar et al., 2021). Therefore, in this paper, we explore how consumers (viewers or content seekers) of YouTube respond to the deceptive practice of click-baiting.

2.4 The Theoretical Lens: The Satisfaction Disconfirmation Framework

We use the satisfaction disconfirmation framework of Oliver (1980) and Oliver (2010), for theorising our findings. According to this view, customer satisfaction has three main antecedents: expectation, perceived performance, and disconfirmation (McKinney et al., 2002). Customer expectation is defined as consumers’ “pretrial beliefs’ about a product” (McKinney et al., 2002, p. 299). According to our findings, customer expectation is what content seekers expect from a YouTube video based on the value promises of the metadata. These expectations could be based on many factors, including vendors’ marketing efforts (McKinney et al., 2002). In the case of our study, content seekers form expectations based on the titles and thumbnails of videos. Perceived performance is defined as “customers’ perception of how product performance fulfils [customers’] needs, wants, and desires” (McKinney et al., 2002, p. 299). In our study, this is the content seekers’ evaluation of how well the video delivers what they want. Disconfirmation is defined as “consumer subjective judgements resulting from comparing their expectations and their perceptions of performance received” (McKinney et al., 2002, p. 299). In our study, this is the congruence or the incongruence between what is promised by the thumbnail and title, and what is delivered by the videos.

Accordingly, satisfaction is the outcome of confirmation (getting what you expect) or positive disconfirmation (getting something better than what you expect), and dissatisfaction is the result of negative disconfirmation (getting something worse than you expect, Rogers et al., 1992). In this research, if there is congruence between what is signalled by the title and thumbnail and what is delivered by the video (confirmation), the content seekers would be satisfied with the content. If there is incongruence between what is signalled and what is delivered by the video (negative disconfirmation) as in the case of click-baiting, then the content seeker would be dissatisfied.

Since this research explores the responses of customers of YouTube videos, it's important to identify how this framework has been used in related areas. It has been found that web customers' satisfaction with a website is affected by their prior expectations (formed by their prior experiences and exposure to vendors' marketing efforts), and possible discrepancies (e.g., disconfirmation) between such expectations and the perceived performance of the Website (McKinney et al., 2002). Similarly, Lankton and McKnight (2012) explain using the expectation-disconfirmation theory in an IT context, how technology satisfaction is created as users form initial technology expectations, use the technology, and compare technology performance against initial expectations. In deceptive marketing, the expectation disconfirmation framework has been used as the basis for hypothesising the negative impact of perceived deception on satisfaction in online and traditional retailing (Riquelme et al., 2016). Thus, this is a suitable framework for exploring how consumers respond to YouTube clickbait.

3. Research Design

This paper was based on part of a broader study on consumer experiences of and responses to YouTube metadata such as the title and thumbnail of videos (among others such as keywords). We adopted an interpretive philosophy with a subjective ontology and a qualitative methodology (Saunders et al., 2009). To obtain rich data, we decided to collect data from content seekers who use YouTube for multiple different purposes because such viewers are likely to have greater experience with different kinds of metadata. Therefore, the key criterion in selecting participants was that they should use YouTube for multiple different purposes such as entertainment, information, and education (Shao, 2009). Initially, we purposively selected a few participants who were then asked to give us referrals of others, thus leading to snowball sampling (Saunders et al., 2009). We used snowball sampling for two practical purposes. First, facilitated our decision to to use pre-existing groups (Mishra, 2016) for our focus group discussions (see details given below). Second, the data collection was done in the immediate post-COVID period when Sri Lanka was experiencing severe political and economic turbulence with severely restricted travel, which made contacting people difficult. Using referrals made it easier to find participants with the required characteristics.

We used focus group discussions for data collection. We opted for focus group discussions instead of a method such as personal interviews because discussion and group interaction facilitate exploring and clarifying participants' views which stimulates thinking (Freeman, 2006). This is further supported by the use of utilising homogeneous (Freeman, 2006) pre-existing (Mishra, 2016) groups. The groups comprised 4 – 5 participants. There were 21 participants in total, comprising undergraduate students (13), middle managers and/or professionals (6), and Advanced

level students (2); their ages ranged many from 18 – 30 years. The sample size was determined based on a saturation principle, where we collected data that was felt adequate to generate rich findings (Kvale, 2007).

The focus group discussions were conducted through the Zoom platform and were moderated by the first author using a discussion guide prepared considering the thematic and dynamic requirements of interviews (Kvale, 2007). The discussions were conducted in Sinhala, the first language of the moderator and the participants. They lasted for 1 – 2 hours. We used the NVivo software for analysing the data. The focus group discussions were transcribed verbatim and uploaded to the software. Then we used the tree node facility of the software to identify different patterns, moving from data-driven codes to themes as prescribed by the thematic analysis technique (Braun & Clarke, 2013). We employed Tracy's (2010) big tent criteria for ensuring the quality of our project and followed the ethical principles of obtaining informed consent from participants and using pseudonyms to protect their privacy.

4. Findings

Although the key purpose of this paper is to identify viewers' responses to click-baiting, in line with the expectation disconfirmation framework, we will present the viewers' responses to different scenarios: when content seekers receive what they expect based on the title and the thumbnail and when there is a mismatch or incongruence between what they expect and what they receive.

The general premise of the expectation disconfirmation framework is that consumers are satisfied either when they get what they expected, or when they get something better than expected. They are dissatisfied when they do not get what they expect. As will be shown in this section, our findings indicate that YouTube viewers' satisfaction/dissatisfaction resulting from the match or mismatch between what is promised in the title and thumbnail and what is delivered by the video is not straightforward. Starting with the first impression of a video, their satisfaction changes through the course of watching the video. As a result, their responses to the videos also differ.

In the beginning, if viewers feel they are receiving what they expected (i.e., they are satisfied), it makes them continue to watch the video to the end. If, in the beginning, they are not satisfied with what they get, they may stop watching the video, or continue to watch in anticipation that it will get better towards the end. When they continue to watch to the end, there are four possible outcomes at the end of watching a video: satisfaction, delight, dissatisfaction, and disgust. Their feelings at the end of the video and their actions based on those feelings differ somewhat depending on the first impression.

The above findings are summarised in Table 1. The subsequent sub-sections explain each of the different instances of satisfaction/dissatisfaction and the responses of content seekers in each instance.

Table 1*Content seekers' responses to congruence and incongruence*

Congruence and incongruence	Responses
<u>Good first impression</u> (Satisfied at the beginning)	Often 'like' (👍) while watching the video
Watch further:	
• Satisfied at the end	'Like' (👍); Positive comments
• Dissatisfied at the end	'Dislike' (👎); Negative comments - if there is implied click baiting
• Delighted at the end	'Like' (👍); Positive comments; Share on other social media platforms; Recommend to others; Subscribe to the channel; Click the bell icon; Save to watch list
<u>Poor first impression</u> (Dissatisfied at the beginning)	Stop watching further; Dislike
Watch further:	
• Dissatisfied at the end	'Dislike' (👎); Negative comment
• Satisfied at the end	'Like' (👍); Positive comment
• Disgusted at the end	'Dislike' (👎); Negative comment; Share on other social media platforms giving negative feedback; Give bad recommendations to others; Unsubscribe the channel, select the YouTube response 'don't recommend the channel'; Report as 'misleading' or 'inappropriate'

The first impression

If the content seekers feel that the video matches what they expected from the title and thumbnail, then they are satisfied at the beginning, and sometimes they tend to respond to the video by liking (👍) the video due to the satisfaction:

Charith: I 'like' the video as soon as I feel the video delivers what I expected. (Focus Group No. 1)

Charith doesn't wait until the end of the video; instead he 'likes' (👍) the video if he feels it will deliver the expected content. However, usually, content seekers are not in a hurry to give positive comments or respond in any other way based on initial satisfaction. The more common response is continuing to watch the video.

Sometimes the first impression is negative; however, according to our participants, the mismatch between what they expect based on the title and thumbnail, and what they receive from the video is not always a result of clickbait:

Anju: Not always because of clickbait. Sometimes I get dissatisfied, thinking that this person doesn't know how to put across what s/he wants to say, or communicate [in the title and thumbnail]. Some people just haphazardly put together some pieces of video [as the thumbnail] and post them. Then I wonder whether even this man [the Youtuber] knows what he has shown in the video.

(Focus Group No. 3)

Anju explains how the expectations can be different from what the video delivers due to reasons such as the poor creative ability of the YouTuber or the careless nature of the creation of the thumbnail and title. This is a reason other than click-baiting which can cause the video to deviate from delivering what was promised.

When there is an incongruence between what is promised and delivered, content seekers are dissatisfied at the beginning, and they tend to respond to the video by deciding whether or not to watch the full video until the end. See for example the following focus group excerpts:

Rasika: If I feel like I swallowed the bait, then I get angry and stop watching the video.

(Focus Group No. 2)

Ajith: Youtubers from M and N [two countries] clickbait a lot. For example, when you try to watch match highlights [cricket], the thumbnail would have a proper screenshot of the match. But the video is just something recorded from the TV. That really pisses me off [uses a few swear words]. Then I just stop the video.

(Focus Group No. 3)

Based on responses from Rasika and Ajith, it can be seen how some content seekers tend to respond when they are dissatisfied at the beginning due to incongruence between what is promised and delivered. They don't comment or 'dislike' (👎) when they are dissatisfied. They just stop watching the video. As an exception to this, some content seekers tend to stop the video and 'dislike' (👎) the video when they are dissatisfied at the beginning. On rare occasions, they might give a negative comment at the beginning, and this happens if they feel that the incongruence has been caused by click-baiting. See for an example the following focus group excerpt:

Thushara: Usually I never 'dislike' the video. But, if I feel it's clickbait, then, I check the comment section whether someone has put a negative comment saying what I need to say then I won't put comments again. Just close the video. [Otherwise, I would put a comment]

(Focus Group No. 2)

According to Thushara, he would put a negative comment if he identified that the reason for dissatisfaction is clickbait activity.

Viewers do not always stop watching if they are not very satisfied at the beginning. Sometimes, they continue to watch the video:

Jeewaka: If the content is not very satisfactory, I give a 'dislike', but don't stop watching. I just skip parts in the middle to see if there would be anything good later on.

(Focus Group No. 4)

Satisfaction at the end of the video

Irrespective of whether they were satisfied or dissatisfied at the beginning of a video, viewers are sometimes satisfied with the content when they reach the end, and the responses to videos that deliver such satisfaction have similarities and differences depending on the first impression. As shown below, in both cases they tend to give a like; they also give positive comments, albeit less readily, if the video had not been satisfactory from beginning to end.

If the content seeker is satisfied at the start and the same level of satisfaction remains at the end as well without a difference, they tend to give a positive comment for the video. If someone does not put a like (👍) at the beginning due to initial satisfaction, then they would 'like' at the end of the video if the satisfaction remains even at the end. See for an example the following quote:

Anjalee: Sometimes I do comment at the end of the video. I'm not going to comment at the beginning of the video. Because it distracts me from the content. ... If I feel the video is as good as I thought, then I give a 'like' as well.

(Focus Group No. 5)

The content seekers also give likes (👍) at the end of a satisfactory video even though the first impression had not been very favourable. However, they are a little more reserved in terms of writing a positive comment:

Narada: I 'like' the video... sometimes I may write a comment as well, but only if I feel enough 'good' at the end.

(Focus Group No. 1)

As per Narada's comment above, if the first impression had been negative, the video has to give an extra feeling of 'good' to receive a positive comment. This indicates the importance of the first impression. Even though the initial poor impression may be remedied later, the positive responses tend to be somewhat reserved.

Delight at the end of the video

Delight is a special feeling of high satisfaction (Oliver et al., 1997). In our study, this feeling occurs only when the content seekers have a positive first impression that continues to the end, and also has some other characteristics. The first of these characteristics is a perfect match between what is promised and delivered, and fitting the requirements of the content seeker:

Geethika: I feel really happy when I can find the exact video when I search during exam time.

(Focus Group No. 1)

The second is when the content seeker is pleasantly surprised:

*Thushara: I'm delighted when I find something amazing at the end.
(Focus Group No. 2)*

Somewhat ironically, sometimes this pleasant surprise could result from the poorly constructed thumbnail, which doesn't do proper justice to the content of the video:

*Thushara: Most people [Youtubers] edit something from the video and give us a separate image [as an attractive thumbnail]. But some [Youtubers] just give something from the video as it is. That is when we feel it won't be of much quality. But in situations like this, [sometimes] there is far better quality in the video than we expect when you watch to the end.
(Focus Group No. 2)*

A noteworthy finding is that if the first impression had been bad, even if the end is surprisingly good, the content seekers don't appear to be delighted:

*Kishan: Mmm... I don't think I will be delighted even though I get something more than I expected, since I was dissatisfied at the beginning of the video.
(Focus Group No. 4)*

When content seekers are delighted, they reward the videos with more than simply commenting and liking. In this kind of situation, content seekers tend to add value to the Youtubers by subscribing to the channel, sharing it with others through other social media, and recommending it to others; sometimes they click the bell icon to get notifications from the channel so as not to miss even a single video.

*Jeewaka: I click the bell icon as well when I feel that I should not miss any future content from that channel if the video I'm currently watching gives something extraordinary.
(Focus Group No. 4)*

Most of the time content seekers don't click on the bell icon as Jeewaka does though they are delighted. Because some believe getting notifications is disturbing, most content seekers simply subscribe to the channel. See, for example, the following focus group excerpts:

Amali: I put a 'like' and comment, then subscribe to the channel. I have never clicked the bell icon. Most of the time I forget the existence of the bell icon.

*Nimali: I subscribe to the channel and include it in my saved lists.
(Focus Group No. 5)*

In addition to subscribing to the channel, Nimali also includes it in her saved lists.

Many content seekers go beyond liking (👍), commenting, and subscribing to the channel. They tend to share the video through other social media platforms and recommend it to others as well. See for example the following focus group excerpts:

*Sahani: If I'm more delighted than I expected, then I share it on WhatsApp status.
(Focus Group No. 5)*

*Thushara: I often share songs on Instagram stories or share with my friends
If I'm happy with the song.
(Focus Group No. 2)*

*Ajith: I share on WhatsApp groups if it is really great fun, or if there is something highly informational
(Focus Group No. 3)*

*Anju: There are many times when I have formed a very positive impression, that I have shared the videos through WhatsApp status and given compliments. For example, when A & B's [Names of two Youtubers who create videos together] contents are super, I have done that. I rarely comment. I share them saying they are super, more than commenting.
(Focus Group No. 3)*

Once again, the importance of a positive first impression (i.e., getting what was expected from the beginning) is highlighted. Because, delight results only when the viewers are satisfied at the beginning and continue to be so to the end. However, even in such situations, an element of surprise that delivers something better than expected is required in addition to the good first impression and sustained satisfaction to the end.

Dissatisfaction at the end of the video

The response to dissatisfaction at the end of a video differs according to the first impression. Sometimes content seekers are dissatisfied at the end even though they are satisfied at the beginning. When they experience this kind of situation, they get less frustration due to initial satisfaction. See for an example the following focus group excerpt:

*Kavindu: There are situations where I enjoyed the beginning of the video, but not the end of the video. But it doesn't make me angry enough to 'dislike' the video. Because I think the end might be not so good to me, but it may be good to someone else...I'm okay as long as I feel that I'm not misled by click-baiting activities.
(Focus Group No. 3)*

According to Kavindu's response, it seems if content seekers are dissatisfied at the end in a situation where they have been satisfied at the beginning, they tend to believe that they are dissatisfied at the end due to poor content creation ability of YouTubers and not because of click-baiting. Kavindu does not take any action as long as he is not dissatisfied due to click-baiting. He doesn't want to hurt their efforts. Similarly, some other content seekers also refrain from putting any 'dislikes' (👎) or negative comments.

However, even if the first impression had been good, if the content seekers realize at the end that they have been misled purposefully by click-baiting, then they tend to make negative comments. See for an example the following focus group excerpt:

Samitha: Usually I don't do anything when get dissatisfied. But I feel serious about being misled by the thumbnail or title, then I put a 'dislike' or negative comment.

(Focus Group No. 2)

If the first impression is bad and the dissatisfaction remains to the end, the responses are not very forgiving, even if the content seekers do not suspect click-baiting:

Geethika: I give a 'dislike', thinking in vain, I should never have watched it. But usually, if I think the video is no good, I give a 'dislike' at the beginning. If I forget, then I give it at the end after watching, when I realize it is bad. I would give a scolding comment too. But that depends on the mood.

(Focus Group No. 1)

This section highlights the importance of proper expectation management, even when the YouTuber has not employed click-baiting. If the satisfaction levels are poor from beginning to end, i.e., viewers feel they did not get what they expected, they respond negatively, even though click-baiting has not been employed. However, it is also noteworthy that the responses are more severe when click-baiting has been employed even when the start of the video seems promising.

Disgust at the end of the video

If the first impression of a video had been poor, and after watching it until the end, content seekers realise they had been misled by click-baiting, the feeling is an extreme form of dissatisfaction, which we will call 'disgust' (Alexander, 2012). It appears that the initial dissatisfaction is reinforced by the disappointed feelings at the end, which causes to feel disgust towards the video and the channel. Content seekers become frustrated about their decision to watch the video until the end even after being dissatisfied at the beginning; they also feel fooled by the YouTubers. See for example the following focus group excerpts:

Kavindu: There are many times that I've felt really stupid about watching some standup comedy videos after clicking on them because of the thumbnail. They are done so cleverly. For me, the really disappointed feeling comes when I get caught by this kind of clickbait.

(Focus Group No. 3)

Keerthi: In looking for information, there are times I try to find out whether something truly happened or not. Then if some videos that come up have something like 'what really happened' on the thumbnail or the title, I watch it. If they also end the video with a question such as 'this is still a mystery' – a question mark like that, then it's really bad. Then I feel, I should never have

watched it. Then I get angry. Many people comment angrily, saying not to do this kind of thing to get views.

(Focus Group No. 4)

Earlier, it was noted that sometimes the videos don't deliver what the title and thumbnail promise, simply because of the YouTubers' poor creativity in creating the thumbnail and the title. The responses of Kavindu and Keerthi indicate that a mismatch between what is promised and delivered due to such a lack of creativity does not lead to disgust. Both their comments clearly indicate that content seekers get this disgusted feeling usually when they experience clickbait situations.

In this kind of situation, the content seekers respond harshly:

Hashan: When that happens, I unsubscribe and report the channel. There is a channel named ABC. In that, there was a thumbnail saying a mermaid had been found on the beach. But there is nothing like that in the video. So, I unsubscribed.

(Focus Group No. 3)

Keerithi: I mostly use the response 'Don't recommend this channel'. Because I think I don't want this to happen to me again.

(Focus Group No. 4)

Kishan: I mainly report as 'Misleading' or 'Inappropriate'.

(Focus Group No. 4)

Some content seekers share their disappointment with others too.

Sahani: When I'm really disappointed, there are times I have shared on other social media and put them up as 'status'.

(Focus Group No. 5)

Nimali: Often if there is nothing worthwhile in 'teaching channels' I tell my friends that this channel is not as good as it claims.

(Focus Group No. 5)

Anju: When looking for entertainment or something, if I come across something, for example, some terrible content of XX Production [name of a channel], I would take a screenshot and share it on WhatsApp status, commenting it's useless.

(Focus Group No. 3)

Disgust is the most negative form of feeling in the continuum, and as shown in this section, this extreme feeling of dissatisfaction in the event of a mismatch between what is promised and what is delivered results only when click-baiting is utilised. Further, when viewers are disgusted, they respond in correspondingly harsh ways.

Overall, our findings indicate that depending on the match or congruence between what is expected based on the thumbnail and title of a video and what is delivered in the video, a range of satisfaction/dissatisfaction outcomes can result, from an extreme form of satisfaction – delight – to an extreme form of dissatisfaction – disgust. From the perspective of this paper, what is most important is that when there is a mismatch or incongruence between the promise and the delivery, viewers are dissatisfied

irrespective of whether clickbait has been used or not. However, disgust can result only when there has been click-baiting; further, if dissatisfaction has not reached the level of disgust, viewers tend to respond more harshly when clickbait has been used than when the incongruence has been caused due to other reasons such as poor construction of title or thumbnail.

5. Discussion

Since there appears to be no literature on how content seekers respond to the match or mismatch between what is promised by the thumbnail and the title and what is delivered in a YouTube video, it is not possible to discuss our findings in relation to YouTube literature. Therefore, we discuss these findings primarily in relation to the concepts of our chosen theoretical lens, namely, the expectation disconfirmation framework, and some literature on online marketing and consumption.

We explained in the findings that satisfaction can change throughout the video based on the congruence/incongruence of what is promised by the thumbnail and the title and what is delivered by the video. Some content seekers are satisfied at the beginning due to congruence between what is signalled and delivered. This initial satisfaction can be known as confirmation (Oliver et al., 1997; Rogers et al., 1992), although sometimes all outcomes – better-than-expected, same-as-expected, and worse-than-expected have been discussed as forms of disconfirmation (Oliver, 2010). Since the content seekers have positive expectations based on what is promised by the thumbnail and title, and their perceptions of performance agree with the expectation, there is confirmation of expectation.

Then, after the content seekers watch the video to the end, there are three possible end outcomes.

1. Satisfied at the end – Confirmation (Oliver et al., 1997; Rogers et al., 1992)
2. Dissatisfied at the end – Negative disconfirmation (Oliver, 2010; Rogers et al., 1992)
3. Delighted at the end – High level of positive disconfirmation where the content seekers are satisfied to a level where they are joyful and surprised by getting something far better than what is expected (Alexander, 2012; Oliver et al., 1997).

The outcomes and the related responses in this instance are similar to how the disconfirmation literature discusses (Oliver et al., 1997; Oliver, 2010). Similarly, in the online deception literature, it has been identified that perceived deception has a negative influence on satisfaction (Riquelme et al., 2016; Román, 2010), and perceived non-deception has a positive influence (Limbu et al., 2011). Interestingly, though literature suggests that satisfaction leads to both loyalty (Limbu et al., 2011; Román, 2010) and positive word of mouth (Riquelme et al., 2016) in the online context, our study indicates that with YouTube, both loyalty (e.g., subscribing to a channel) and positive word of mouth (e.g., sharing through other social media) result only when the consumers are delighted, and not merely satisfied. This is probably due to the complexity of the dynamics between satisfaction and loyalty, and word of mouth (Kumar et al., 2013), and between delight and loyalty (Oliver et al., 1997) which seem to differ in different contexts.

When content seekers are initially dissatisfied due to incongruence between what is signalled by the thumbnail and title, and what is delivered, there is negative disconfirmation and therefore dissatisfaction (Oliver, 2010; Rogers et al., 1992). Due to this dissatisfaction, they sometimes stop watching the video. In most consumption and purchasing situations, if consumers *perceive* deception in advertising, in the offline context (Olson & Dover, 1978), or a website, in the online context (Sathasivam & Wijetunga, 2017), they decide not to purchase (measured in terms of purchase intention). This decision thus happens *before* they identify deception for certain. Our findings show that in the YouTube context, there is a difference because consumers can try the videos for a few minutes and stop consuming them as soon as they recognize deception through click-baiting.

There are also situations when content seekers decide to continue watching a video even though the first impression is not very satisfactory, especially if they attribute (Oliver, 2010) the discrepancy to a genuine mistake on the part of the YouTuber (and not to click-baiting). Then there are three outcomes at the end.

1. Satisfied at the end – Confirmation (Oliver et al., 1997; Rogers et al., 1992)
2. Dissatisfied at the end – Negative disconfirmation (Oliver et al., 1997)
3. Disgusted (Alexander, 2012) at the end – High level of negative disconfirmation, especially when they attribute (Oliver, 2010) the discrepancy to clickbait. The literature explains this type of feeling as the negative counterpart of delight (Alexander, 2012).

At the end of the video, if the content seekers are satisfied with the content, even if the first impression had not been good, there is confirmation of expectations since they get what was promised through the thumbnail and title (Oliver et al., 1997; Rogers et al., 1992). It is noteworthy that if the first impression had been unfavourable, delight does not result, even when the end is satisfactory. The dissatisfaction at the end is one of negative disconfirmation, where the performance perception of the video is worse than the initial expectations created by the thumbnail and the title (Oliver et al., 1997; Rogers et al., 1992). Further, the negative disconfirmation seems higher than the dissatisfaction experienced when there had been a good first impression. This is probably because the content seekers would have been exposed to a dissatisfactory video for a longer period.

From the perspective of this paper, what is most important is the final category of ‘disgust’. Although delight has been discussed quite extensively in the literature, the concept of ‘disgust’ has not received much attention (Alexander, 2012). Referring to this concept as the negative counterpart of delight, Alexander (2012, p. 117), conceptualises disgust as the “negative feeling and negative surprise that forms during a retail transaction”. When we replace the ‘retail transaction’ with the situation of watching YouTube videos, this conceptualisation seems to be applicable to click-baiting. It was clear in the findings that the sense of being fooled into watching the video (a negative surprise) was a reason for the extreme dissatisfaction caused by clickbait.

Similar to previous literature that has identified a negative impact of perceived deception on loyalty (Román, 2010), and the negative responses to disgust such as refraining from repurchasing (Alexander, 2012), the disgust resulting from click-baiting leads to actions such as unsubscribing from the channel and selecting options

such as ‘don’t recommend the channel’. There is less direct evidence in the literature regarding deception and negative word of mouth. However, a negative impact of deception on positive word of mouth (Riquelme et al., 2016) and negative word of mouth resulting from negative disconfirmation of expectations (Arruda Filho & Barcelos, 2021) has been identified previously. Our study demonstrates that click-baiting can lead to disgust, which results in the active spreading of negative word of mouth.

6. Conclusion

This study contributed three bodies of literature: the literature on YouTube, deceptive online marketing, and satisfaction in the online context. Though the practice of click-baiting has captured the attention of scholars of social media, how viewers respond to the practice is markedly lacking in the literature and we contributed to this literature by conceptualising click-baiting as a deceptive marketing practice (Gothankar et al., 2021) and examining content seekers’ responses to it through the expectation disconfirmation framework (Oliver, 1980; Oliver, 2010). Through this we identified that click-baiting leads to an extreme form of dissatisfaction, namely, disgust (Alexander, 2012), which results in strong retaliatory actions such as not watching the video in full, unsubscribing the channel, and spreading negative e-word of mouth (e-WOM).

Our key contribution to online deceptive marketing literature is in clearly identifying that deception leads to negative word of mouth. To the best of our knowledge deception has not been directly linked to negative word of mouth; for example, two recent literature reviews on e-WOM (Donthu et al., 2021; King et al., 2014) do not identify deceptive practices as a determinant of e-WOM. We also contribute to the literature by showing that, at least in the context of YouTube, what leads to positive word of mouth and loyalty is delight and not mere satisfaction. This adds to refines the satisfaction–loyalty (Hult et al., 2019; Kumar et al., 2013; Román, 2010; Shankar et al., 2003) and satisfaction–positive word of mouth (Kumar et al., 2013; Riquelme et al., 2016) links discussed in previous literature.

Our study has some clear implications for YouTubers. Although clickbait has become an increasingly popular tactic for luring content seekers to YouTube videos, our findings show that it does not pay in the long run. It could result in not mere dissatisfaction but disgust towards the channel which in turn could lead to strong retaliatory actions as discussed above. The study also indicates that YouTubers need to pay attention to creatively constructing thumbnails and titles (Wickramasinghe & Wijetunga, 2023). If a poorly constructed thumbnail or title (though not clickbait) results in a poor first impression caused by a mismatch between what the title/thumbnail promises and what is delivered, even if the content seeker is later satisfied with the video, it rarely leads to delight other than in rare occasions. YouTubers can get the best responses from content seekers by delighting them, and therefore, poorly constructed titles and thumbnails could be lost opportunities for strong positive responses. In short, though increasing the number of ‘clicks’ through click-baiting could result in a short-term increase in earnings, if a YouTuber wants to make regular income through the channel, the tried and tested methods of providing what the consumers want and capturing their attention through creativity (while being truthful) seems to be the best option.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and publication of this article.

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