UNIVERSITY OF COLOMBO
FACULTY OF GRADUATE STUDIES

ANNUAL RESEARCH
CONFERENCE
2023

Sustaining Excellence through Multi-Disciplinary Research

24th of November 2023

PROCEEDINGS

Conference Co- Chairs:

Dr. Mayuri Atapattu

Dr. Rushan Abeygunawardana

Managing Editor:

Mr. W. M. S. R. Weerasekara

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MESSAGE FROM THE VICE CHANCELLOR

Senior Professor (Chair) H. D. Karunaratne
University of Colombo, Sri Lanka

I am delighted to extend my congratulations on the occasion of the Annual Research Conference (ARC, 2023) organised by the Faculty of Graduate Studies (FGS), University of Colombo. Research and its dissemination are crucial responsibilities of any institution of higher learning. Aligned with the University of Colombo Annual Research Symposium, the theme of the FGS conference is "Sustaining Excellence through Multi-Disciplinary Research." The FGS Conference provides a distinctive platform for researchers, scholars, and professionals to convene, exchange ideas, and cultivate collaborative efforts across a diverse range of disciplines.

The sustained provision of a scientific forum that encourages staff and students to deliberate on an evidence-based approach to policy formulation, planning and implementation of multiple disciplines is a key objective of your conference. This year brings forth an added purpose to formulate a cohesive strategy to ensure time-appropriate, economic and development processes are put in place during the threat of disease and disruption of all sectors. I am confident that this conference will enable appropriate discussions for recommending to the government and corporate sectors, a scientific and pragmatic approach to mitigate the economic and social impacts on the most vulnerable sectors of our society.

I take this opportunity to thank the Dean and Faculty for encouraging our university community to develop an ethos of networks across multiple disciplines and ensure our University of Colombo products are the "best of the best" in the related fields. I wish you happy and fruitful deliberation and discussion and a highly successful scientific session in parallel with effective knowledge dissemination.

MESSAGE FROM THE DEAN

Professor A. A. Azeez

Faculty of Graduate Studies, University of Colombo, Sri Lanka

I am delighted to send this message for the Annual Research Conference (ARC - 2023) of the Faculty of Graduate Studies at the University of Colombo. The ARC 2023 marks a significant milestone as the faculty hosts the conference in person, returning to a conventional platform following the challenges posed by the prevailing pandemic. Reflecting the current economic climate, the conference has been themed around "Sustaining Excellence through Multi-Disciplinary Research," with the Keynote speech aligned with this overarching theme. Moreover, ARC 2023 includes a notable event—the Policy Discussion.

ARC 2023 comprises six diverse tracks, encompassing Education, Teaching, Learning and Assessment; STEM (Science, Technology, Engineering and Mathematics); Arts, Humanities and Social Sciences; Business, Management and Economics; Health and Medicine; and Law, Policy, and Governance. These tracks offer a comprehensive exploration of various academic fields, fostering interdisciplinary collaboration and providing a valuable platform for research students to present and discuss their work. Additionally, the conference incorporates a Policy Discussion event, facilitating participants in addressing policy implications arising from their research.

I am confident that this conference will play a pivotal role in nurturing a much-needed research culture among Sri Lankan academics and practitioners, fostering interactions among researchers to exchange ideas on recent advances in the field of management. I extend my sincere gratitude to the conference co-chairs, track coordinators, reviewers, the organising committee, the conference secretariat, and, most importantly, the authors for their invaluable contributions to the successful organisation and management of this conference.

We eagerly anticipate a rewarding and enlightening conference experience that will contribute to the advancement of knowledge across various multidisciplinary research domains. I wish ARC 2023 a resounding success.

MESSAGE FROM CO-CHAIRS OF THE CONFERENCE

Dr. Rushan Abegunawardena
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We extend a warm and enthusiastic welcome to you for the Annual Research Conference (ARC-2023) organised by the Faculty of Graduate Studies of the University of Colombo.

This year, we unite under the theme of "Sustaining Excellence through Multi-Disciplinary Research." Given the prevailing economic uncertainty stemming from macro-level economic challenges, we believe that this theme is more pertinent than ever. ARC 2023 will encompass a diverse array of full paper-driven parallel sessions, where cutting-edge research across multiple disciplines will be showcased, including Education, Teaching, Learning and Assessment; STEM (Science, Technology, Engineering and Mathematics); Arts, Humanities and Social Sciences; Business, Management and Economics; Health and Medicine; and Law, Policy, and Governance. These sessions will be followed by a plenary session, aimed at inspiring engaging discussions and fostering knowledge exchange among our participants.

It is our distinct honor to introduce Professor Khang Tsung Fei, a distinguished figure in Mathematical Sciences from the University of Malaya, Institute of Biological Sciences, Malaysia, as our keynote speaker. Joining him are esteemed panelists representing various universities, whose presence promises to enrich our conference.

We wish to express our heartfelt gratitude to the multitude of individuals whose unwavering dedication has been instrumental in making this year's conference a reality. We extend our sincere thanks to the conference delegates, secretaries, track chairs, track coordinators, session chairs, the panel of reviewers, editors, members of the organising committee, and plenary speakers for their invaluable contributions. We are also grateful for the support provided by the Dean of the Faculty and our colleagues at the Faculty of Graduate Studies, University of Colombo, whose contributions have been vital to the successful launch of this conference.

As we embark on this intellectual journey together, we anticipate that ARC 2023 will prove to be a memorable event, one that challenges, excites, and inspires all participants.

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PROGRAMME

Agenda - 24th November 2023	
09:30 a.m.	Registration and Morning Tea
10:00 a.m.	Commencement
10:05 a.m.	Welcome Address by Professor A. A. Azeez, Dean, Faculty of Graduate Studies, University of Colombo
10.10 a.m.	Address by the Chief Guest, Senior Professor (Chair) H. D. Karunaratne, Vice Chancellor, University of Colombo
10.15 a.m.	Keynote Speech by Professor Tsung Fei Khang, Institute of Mathematical Sciences, Faculty of Science, University of Malaya, Malaysia
11.00 a.m.	Research Policy Dialogue, moderated by Dr. Seuwandhi B. Ranasinghe, Faculty of Graduate Studies, University of Colombo
12.30 p.m.	End of the Morning Session and Lunch
01.30 p.m.	Commencement of the Parallel Sessions
04.30 p.m.	Plenary Session
05.00 p.m.	Evening Tea and End of the Conference

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03	The Impact of Human Resource Management Practices on Job Performance and Job Satisfaction of Surveyors N. M. Ajas Faloomy, O. L. D. Silva, and N. F. G. R. Atha
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INTRODUCTION TO THE KEYNOTE SPEAKER

Dr. Tsung Fei Khang
Associate Professor
Institute of Mathematical Sciences
Faculty of Science, Universiti Malaya, Malaysia.

I am delighted to extend my congratulations on the occasion of the Annual Research Conference (ARC, 2023) organised by the Faculty of Graduate Studies (FGS), University of Colombo. Research and its dissemination are crucial responsibilities of any institution of higher learning. Aligned with the University of Colombo Annual Research Symposium, the theme of the FGS conference is "Sustaining Excellence through Multi-Disciplinary Research." The FGS Conference provides a distinctive platform for researchers, scholars, and professionals to convene, exchange ideas, and cultivate collaborative efforts across a diverse range of disciplines.

Track One: **01**

Education, Teaching, Learning and Assessment

Usefulness of the Human Library Programmes: A Literature Study

Y. W. N. D. Amarasooriya[1] and M. G. H. K. Wijerathne[2]

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Abstract*

The Human Library Programmes have emerged as innovative initiatives aimed at promoting empathy, challenging stereotypes, and fostering understanding among individuals from diverse backgrounds. This literature study examines the usefulness of Human Library Programmes in achieving these goals. Through a comprehensive review of scholarly articles, books, and reports, this study analyses the impact of Human Library Programmes on participants and society. Findings indicate that Human Library Programmes are highly effective in breaking down barriers and promoting dialogue between people with different experiences and perspectives. Participants report increased empathy, reduced prejudice, and improved understanding through conversations with "human books." These interactions facilitate personal growth and expanded worldviews by challenging biases and preconceptions. Additionally, Human Library Programmes provide safe spaces for marginalised individuals to share their stories, empowering them to challenge stereotypes and contribute to societal change. However, scalability, long-term impact assessment, and inclusivity pose challenges that require further research. In conclusion, this literature study confirms that Human Library Programmes effectively promote empathy, challenge stereotypes, and foster understanding. Ongoing evaluation and research will enhance our understanding of long-term impact and potential improvements, ensuring the continued success of these programmes in creating a more inclusive and tolerant society.

Keywords: Human Library, Literature study, Human Library Programmes, Sharing information, Human book

Introduction

The Human Library programme has emerged as an innovative approach to promoting dialogue, understanding, and empathy among individuals from diverse backgrounds. Inspired by the concept of a traditional library, where books can be borrowed, the Human Library introduces 'human books' - individuals who have experienced marginalisation or stigmatisation based on their identities. Participants in Human Library events engage in one-on-one conversations with these "human books," allowing them to gain firsthand insights into the lived experiences of others.

The usefulness of Human Library programmes has gained attention from scholars and practitioners seeking to explore their impact on attitudes, beliefs, and behaviours. This

literature study aims to examine existing research and scholarly articles to understand the outcomes and potential of Human Library initiatives. It explores the reported effects of these programmes, such as increased awareness, reduced stereotypes, improved interpersonal skills, and enhanced empathy among participants. By delving into the existing literature, this study seeks to provide valuable insights into the usefulness of Human Library programmes, identify factors contributing to their success, and highlight potential limitations and areas for further research. Understanding the impact of Human Library programmes can inform the development and enhancement of initiatives aimed at fostering inclusivity, understanding, and social cohesion in diverse communities.

Literature Review

More often, training is confused with development, but both are different in certain respects yet components of the same system. Training may be described as an endeavor aimed to improve or develop additional competency or skills in an employee on the job one currently holds in order to increase performance or productivity. While development implies opportunities created to help employees grow (Management study guide, 2018).

Chung and Tasha (2022) confirmed the usefulness of a human library intervention in improving Mental Health Literacy (MHL). The human library intervention specifically reduced the stigma towards and perceived social distance from people with mental illness. As an innovative form of intervention to enhance MHL, it is suggested that the planning of the programme adhere to the overall goals of improving the acquisition of knowledge about mental illness and reducing stigma and social distance. Further studies are recommended to further develop the content of the human library intervention and to validate the constructs and related measurements of MHL.

Kara et al. (2018) observed that the concept of human library, successfully engages students, staff, faculty, and the Camrose community in a learning experience that benefits both readers and human books. The human library provides an opportunity for unique information literacy assignments that increase students' engagement with relevant topics and demonstrate the importance of consulting a variety of source types during the research process.

Pathak (2021) discovered human books and readers of human books both, are beneficiaries in this process. Reading session organised by the Human Library is mostly one-to-one. The ideal method of the Human Library can be quite difficult to implement in academic institutions. Resource persons/ experts are busy and getting their time for individual readers is difficult. Library may plan to provide an opportunity to more readers in a single reading session as per the availability of the experts/resource persons which we also call now as 'Human Book'. Human Book/s will be respected by the academic community when they deliver the services to the readers.

Wong and Lin (2023) examined Human libraries are special libraries that give access to real persons known as 'human books'. Readers 'check out' human books by attending reading

sessions organised by the human library. The majority of previous studies focus on reporting the achievement of human libraries, especially on reducing prejudice and promoting social inclusion. There is a dearth of research to investigate how a human library serves and interacts with society.

Methodology

This literature study utilised a systematic approach to examining the usefulness of Human Library programmes. The literature study methodology encompasses the use of quantitative techniques on data. The research data was obtained from Google Scholar advanced search tool. The keywords "Human Library", "Human book", "Information Sharing" and "Human Library programme" were used in the data filtering procedure anywhere in the article. The search was conducted for articles published in the 2012–2022 range. From the search, a total of 58 articles were published. Relevant articles published in the English language were selected for analysis. The data extracted from the selected articles were synthesised to identify common themes and outcomes. The methodology focused on analysing and synthesising existing research to provide an overview of the current state of knowledge regarding the usefulness of Human Library programmes. Excel package was used to analyse and visualise data in the study.

Results/Analysis and Discussion

The study found that the major objective of human libraries is to share knowledge, arrange opportunities to gather, promote understanding and respect different cultures. Moreover, human libraries aim to combat prejudice and bridge differences through social dialogue. The study also shares the barriers and benefits of managing human libraries.

Many Human Library Programmes are designed to challenge stereotypes and prejudices by allowing individuals to engage in meaningful conversations with people from different backgrounds or with different life experiences. Research may examine how effective these programmes are in changing attitudes and reducing biases.

The analysis of the literature on the usefulness of Human Library programmes reveals consistent and positive outcomes. Participants in Human Library events experience increased awareness, empathy, and understanding of diverse perspectives. The personal narratives shared by "human books" challenge stereotypes, break down prejudices and foster meaningful connections. These programs have shown success in promoting social cohesion, reducing stigmatisation, and enhancing intergroup relations.

The usefulness of Human Library programmes can be attributed to the authentic and interactive nature of the experiences. By engaging in direct conversations with individuals from different backgrounds, participants have the opportunity to humanise and empathise with others' experiences. The open dialogue and safe space provided by these programmes facilitate genuine connections and transformative learning.

While the existing literature provides promising evidence, further research is needed to explore the long-term effects of Human Library Programmes and their impact across diverse populations and settings. Additionally, studies investigating the specific mechanisms through which these programmes lead to attitude and behaviour changes would provide deeper insights into their usefulness.

Conclusion and Implications

In conclusion, the literature on the usefulness of Human Library programmes demonstrates their significant impact in promoting understanding, empathy, and challenge. The findings consistently indicate that participation in Human Library events leads to increased awareness, reduced prejudices, improved interpersonal skills, and enhanced empathy among participants. The personal interactions with "human books" create a safe and transformative space for dialogue, fostering connections and breaking down barriers. These programmes offer valuable opportunities for individuals to engage with diverse perspectives, challenge their own biases, and contribute to building inclusive communities. Further research and evaluation are necessary to deepen our understanding of the long-term effects and potential of Human Library Pogrammes.

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Evaluating Awareness and Knowledge of Sustainable Development Goals among Technology Curriculum Developers of General and Higher Education in Sri Lanka

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Abstract*

The Sustainable Development Goals (SDGs), which are intended to be achieved by the year 2030, were built after the Millennium Development Goals (MDGs), which were set to expire in 2015. This is a universal call that is comprised of 17 goals that are focused on People, Prosperity, Planet, Peace, and Partnership. Leaders from 193 countries around the world came together to reach this universal agreement. Sri Lanka is also a member of the Sustainable Development Summit. It is required to shift towards a more innovative, knowledge-based economy. As education plays a major role in uplifting the economy, technology education should be strong enough to support the SDGs. The objective of this research is to evaluate awareness and knowledge of SDGs in developing technology curricula for general and higher education in Sri Lanka. This is a survey-based study which was conducted in two stages. Stage 1 is defined as evaluating awareness and knowledge of sustainable development goals in developing technology curriculum for general education, while the stage 2 evaluates higher education in Sri Lanka. Data has been collected through focus group discussions, semi structured interviews, and a curriculum review. A thematic analysis was done in both inductive and deductive ways, and the collected data was analysed under five identified themes for both general and higher education. As a result, it was found that the SDGs should be addressed as much as possible through the curriculum as they are global requirement. And also, it is highlighted that Education Policies should be strong enough to achieve this global requirement. Through the curriculum review, it is also revealed that the SDGs are already addressed indirectly through existing curriculum. Both general and higher education are engaging with on-going curriculum revision process, and programme learning outcomes (PLOs) are being mapped with SDGs. Finally, the findings suggest that curriculum developers in both general and higher education are engaged with achieving the aims of sustainable development as they consider this is a global requirement.

Keywords: Curriculum developers, General Education, Higher Education, Sustainable Development Goals (SDGs), Technology Curriculum

*This abstract has been published in the proceedings of the Annual Research Symposium 2023, University of Colombo.

Introduction

In the year 2015, leaders from 193 countries of the world came together to take an action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity at the United Nations Sustainable Development Summit (SAD) in New York. This universal call created a plan named 'The Sustainable Development Goals (SDGs)' (Akinlolu et al., 2017; Jati et al., 2019; United Nations, 2015)

The SDGs have been built after the Millennium Development Goals (MDGs), which were set to expire in 2015.The MDGs are eight targets that focus on the reduction of extreme poverty from 2000 to 2015. Whether considerable progress has been achieved regarding the MDGs, the achievements are uneven. But the SDGs maintain the thematic work on poverty eradication targeted by the MDGs as well as their focus on international development and sustaining human life on this planet (Status of Sustainable Development Goals Indicators in Sri Lanka : 2017, 2017)

Leaders from 193 countries around the world came together to reach this universal agreement. Sri Lanka is also a member of Sustainable Development Summit. The Sustainable Sri Lanka 2030 Vision says, Sri Lanka will become a sustainable, upper middle-income Indian Ocean hub that is economically prosperous, competitive and advanced, environmentally green and flourishing, and socially inclusive, harmonious, peaceful and just (Abhayaratne et al., 2019).

Education plays an important role in achieving the SDGs. The education system should be oriented to ensure national development while achieving sustainable development goals. Technology education supports increasing the GDP by shaping up the young generation.

Sri Lanka faces several challenges in the case of implementing SDGs. It is required to shift towards a more innovative, knowledge-based economy. The government has proposed several measures to improve the technology and digitalisation. As education plays a major role in uplifting economy, technology education should be strong enough to support the SDGs. So, curriculum developers' responsibility is to focus curriculum on SDGs. The government has also made several efforts to raise awareness about the SDGs (Ministry of Sustainable Development, Wildlife and Regional Development Sri Lanka, 2018)

The main objective of the study is to evaluate awareness and knowledge of SDGs among technology curriculum developers of general and higher education in Sri Lanka

Methodology

This is a survey-based study that was conducted in two stages. Stage 1 is defined as evaluating awareness and knowledge of SDGs among technology curriculum developers of general education, while stage 2 defined as evaluating awareness and knowledge of SDGs among technology curriculum developers of higher education in Sri Lanka.

A participatory and interactive approach was adopted for the research study. When considering stage 1, the research population of this survey represents 10 curriculum developers in Department of Technology Education, National Institute of Education, where the technology curriculum is developed for general education. Data has been collected through focus group discussions, semi-structured interviews, and a documentary review.

In the case of stage 02, the research population of this survey represents 30 curriculum developers in technology faculties in Sri Lanka. Data has been collected through semi-structured interviews and a documentary review.

Results and Discussion

In this research, a thematic qualitative analysis was conducted to execute the study with an appropriate approach, and theme analysis involves coding and classifying collected data to highlight the important messages,

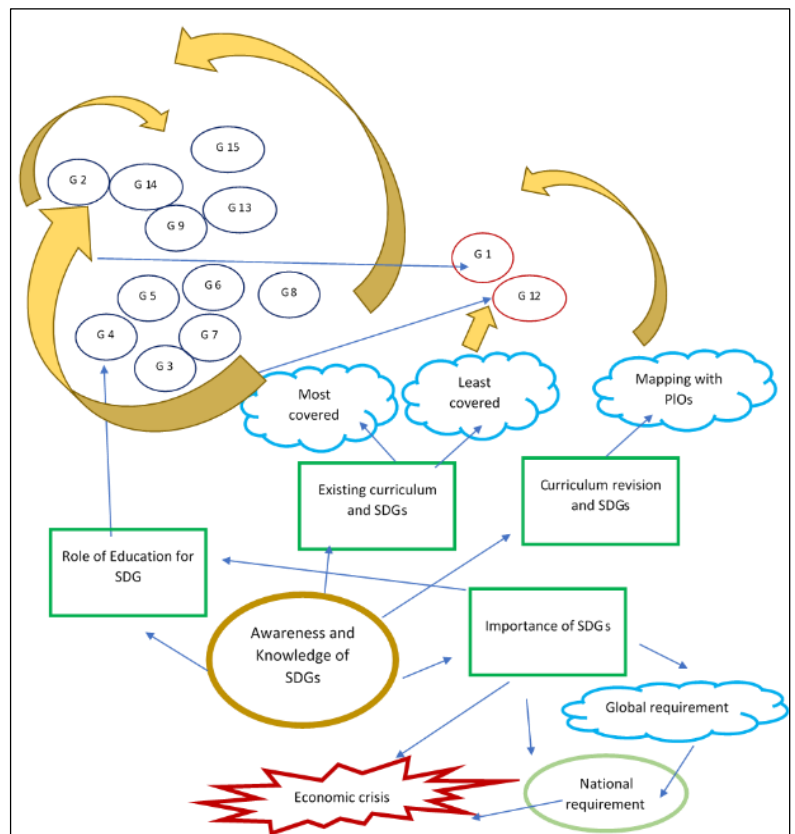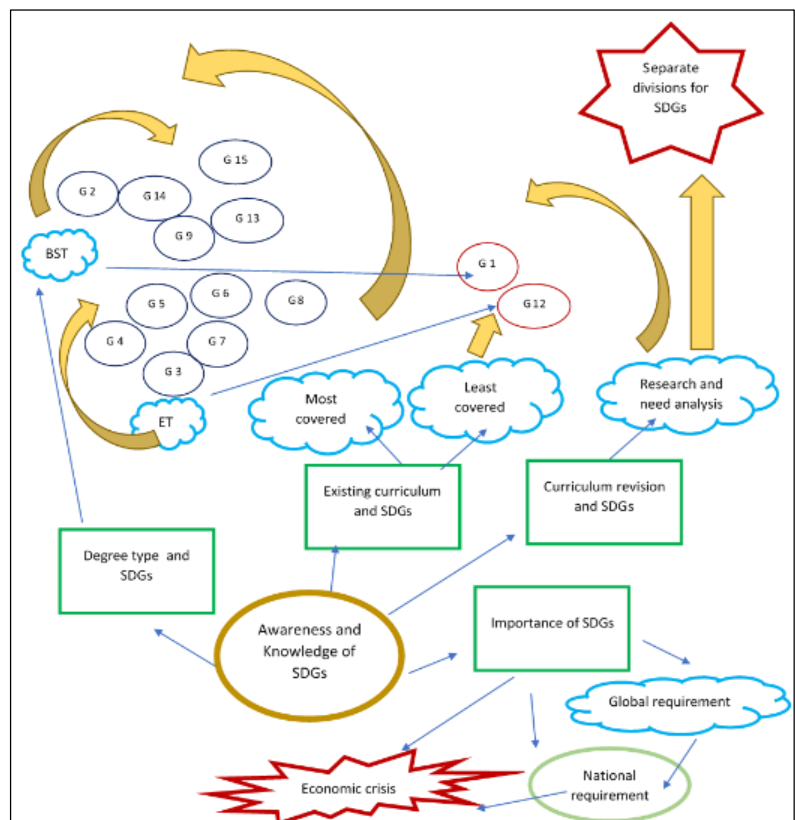**Figure 1**:
Thematic map for General Education

Figure 2:
Thematic map for Higher Education

features, or findings. Mapping was done for both general and higher education which shows in Figure 1 and 2 respectively (Novieastari et al., 2022)

Thematic analysis was done in both inductive and deductive ways and identified five themes for the analysis for both general and higher education (Dawadi, 2020).

Theme 01: Importance of SDGs - In the case of general education, it is highlighted that SDGs are important as they contribute to social and economic growth, where economic crisis is being faced by today's population, and they are a national requirement as Sri Lanka is a partner of Sustainable Development Summit (SDS). So most of the curriculum developers' idea was that the SDGs should be addressed as much as possible through the curriculum as they are a global requirement.

When considering higher education, it is also highlighted that, as a partner of sustainable development, the Sri Lankan education system should address SDGs in appropriate manner, considering them not only as a national requirement but as a global need.

Theme 02: Role of education for SDGs - This theme was born out of the ideas of general education. It is highlighted that the education system has a responsibility to address SDGs as quality education represents SDG 04. So, Education policies should be strong enough to achieve the requirement. The National Curriculum Framework (NCF) has been developed in consideration of this goal.

Theme 03: Existing curriculum and SDGs - Each and every curriculum developer generates this theme. All of them highlighted that SDGs are already addressed indirectly through existing curriculum. It is also revealed through the documentary review. Most of the SDGs covered are identified. Those are represented under the Table 01.

Table 1

Existing curriculum and SDGs

Areas that existing curriculum addressed SDGs indirectly	SDGs
Food security, food safety, nutrition, etc.	Zero hunger
Environment conservation, bio diversity conservations conservation, waste water treatment, irrigation and water resource management, disaster management, environmental auditing, environmental impact assessment, environmental planning and modelling, environmental policies, cleaner production practices	Climate action, Life on Land, Life below water
Appropriate decisions in procurement of goods and services	Responsible production and consumption

Entrepreneurship	Decent work and Economic development
Maintain a pleasant living environment, Maintain an optimal living environment for the sustainable well-being	Sustainable cities and community
Well- planned meal, good health and hygiene practices during agricultural works, prevent malnourishment, occupational Health and safety	Good health and well-being
Waste management	Life on land
Renewable energy systems	Affordable clean energy
Innovations and Entrepreneurship	Industry Innovations and Infrastructure

Theme 04: Curriculum revision and SDGs- Both general and higher education engaging in the on-going curriculum revision process. PLOs are being mapped with SDGs. In the case of higher education, 75% of faculties introduced separate division or separate causes for sustainable development while addressing SDGs in other subjects as well in an appropriate manner.

When considering general education authentic approach going to be introduced to practice sustainable concept with learning by doing activities and National Curriculum Framework also addresses SDGs.

Theme 05: Degree types and SDGs- This theme was born with the ideas of higher education. Most of them highlighted that the bio system technology (BST) degree curriculum can be addressed more SDGs than engineering technology (ET) subjects. But it is revealed that the most of the goals can be and already addressed through both BST and ET curriculum.

Conclusion

Thus, it can be concluded that, for a better and sustainable future, the objectives of sustainable development are needed to focus on by each and every curriculum developer as they are responsible for the guidance for future leaders. It is required to achieve SDGs in curriculum revision. With the help of the findings of this study, it can be analysed that sustainable development goals, such as good health and well-being, quality education, affordable and clean energy, life on land, life below water, decent work and economic development and innovations are indirectly address in existing technology curriculum of both general and higher education. According to the conclusions of this study, curriculum developers believe that SDGs should be incorporate with each subject areas of ongoing

curriculum. Finally, it is revealed that all most all curriculum developers are aware about Sustainable Development Goals. Moreover, the findings of this research contribute to the ongoing educational reforms in Sri Lanka and provide valuable insights for policymakers, educators, and stakeholders involved in shaping the future of general education and higher education to ensure national development while achieving sustainable development goals.

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A Linguistic Stylistics Analysis of the Poem 'Breakfast' by Jacques Pervert in the English Language Teaching Context

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Abstract*

Stylistics is an essential linguistic approach and is often considered a sub-branch of Applied Linguistics. This paper aims to investigate the poem at four distinct linguistic levels of stylistic analysis: graphological, lexical, morphological and syntactical. The poem 'Breakfast' by Jacques Pervert was selected for this study as it is one of the important poems in the curriculum of the GCE (O//L) literature in Sri Lankan secondary education. English as a Second Language (ESL) learners and teachers think that understanding poems is challenging and are reluctant to learn and teach in the classroom as a regular activity. Analysing the text stylistically in linguistic layers, the readers grasp the relevant information from each aspect to increase their comprehension and the faculty of interpreting poems. The study is significant in analysing a framework of the author's writing style for easy comprehension for the readers. The collected data were analysed with the application of mixed methods. Leech and Short's heuristic checklist of linguistic and stylistic models was used. The findings reveal that identifying the insights of the writer's language style, structure, theme, and the poet's intention and attitude. Further, the study addresses that text analysis helps ESL learners interpret the text's meaning, explain the content structure, and analyse the style at the communicative or discourse, lexical, textual and morphosyntactic levels. Stylistics is closely related to linguistic and literary criticism, which examines how language and the meanings of texts are communicated. Therefore, analysing the poems at various linguistic levels gives the learners linguistic expertise and a better understanding of the poem.

Keywords: ESL learners/teachers, Linguistic devices, Poems, Stylistics

Introduction

Stylistics is a study concerned with linguistic style in texts and literary works. It is called literary linguistics, which focuses on figures, images, and other devices like rhetorics in different texts. However, because of the linguistic complexity and sphinx nature, English as a Second Language (ESL) teachers and learners are reluctant to teach and learn in the typical classroom, and teachers explain grammar and reading comprehension passages. According to Denman (1988, as cited in Khan, 2020), most teachers are reluctant to consider poems as language teaching components in the Sri Lankan context. Stylistic analysis recognises linguistic elements, classifies them, and interprets any potential literal meanings in a text.

Teaching and learning poems in the English Langauge Teaching (ELT) context can introduce or practice new lexical, syntactical, morphological and orthographical aspects in writing. Compared to a short story or essay, shorter poems enable English Language Learners (ELLs) to comprehend the idea as they are manageable amounts of text (Khan, 2020) explains that poetry is a tool for enhancing language abilities and acting as a language model.

The study signifies how language structures can be learned through a poem and by dissecting the language in the style-based linguistic aspects, which seems inadequate in the Sri Lankan context as most ESL learners and teachers are reluctant to learn and teach poems as it is challenging. The objective of the paper is to analyse the text of Jacques Prévert's 'Breakfast' at four levels of linguistic stylistics analysis: graphological, lexical, morphological and syntactical to learn the language and linguistic skills.

Research question: How does stylistic analysis of a poem explore the language nuances and the structural patterns at the various linguistic levels to comprehend the text in the ELT context?

Literature Review

Stylistics is an analytical science covering all the expressive aspects of language phonology, prosody, morphology, syntax and lexicology (Khan et al., 2014). Style can be considered as a way in which a writer utilises the linguistic means at his disposal to produce a definite effect on the reader (Pretorius, 1982, as cited in Imran et al., 2021).

According to Birch (2005), stylistic analysis of a poem reveals how poetic style provokes the effects and meanings of the poem. Stylistic analysis reveals different poets' styles instead of how the poet chooses specific patterns and vocabulary in a stanza, such as drawing the poem's meaning using linguistic properties. Leech (2014) points out that style is how something is spoken, written or expressed. Short and Leech (1981) have the considerations that the writers use style according to the context, and it has definite meanings. According to Carter (1996), stylistics is a method that examines the text deeply from different perceptions. Short and Leech (1981) argued that style is a school of thought. Carter and McCarthy (2014) state that stylistics bridges linguistics and literature. Hedge (2000) asserts that poems work as authentic material and can be used to enhance the receptive skill of reading.

Methodology

The researcher chose the poem 'Breakfast' by Jacques Pervert for analysis as it is one of the poems in the GCE (O/L) literature curriculum. The researcher analysed the poem at various linguistic levels, such as graphological, lexical, morphological and syntactical. The words from different parts of speech, phrases, clauses and sentences were categorised, coded and labelled manually by reading the poetry. The heuristic checklist of linguistic and stylistic models presented by Leech and Short (2007) was used to analyse the data. The qualitative method was mainly used to analyse the collected data to make the analysis more

comprehensive. However, the researcher used the Warsito (1992) formula P = (F/N x100) to quantitatively analyse the probability and percentage.

Data Analysis, Findings and Discussion

Graphological level

The lines of the poem vary in length, symbolising the specific uneven nature of the situation. The poet does not pay much attention to punctuation, which gives the idea of no end to this dispute of the couple in the poem 'Breakfast'. The poet uses the full stop only once in the poem, symbolising the end of the relationship, and there are no other punctuation marks to express the different moods of the characters in the poem. The poetic lines start with simple letters except for three places: He poured, Put the sugar, *And lit a cigar*. It is observed that there is no stanza division in the poem, and it constantly moves at a stretch from the beginning to the end. Therefore, the poet used the graphological devices of stanzaic pattern, spacing, lineation, punctuation, and capitalisation to express the depth of the meaning.

Lexical level

The lexicons like *emptied, ash, buried, cried, raining, and smoke* indicate the sad and conflicting mood of the scene. The poet uses the preposition *without* four times, which expresses the negative attitude and deprivation. Since the poet mentions the pronoun *He* repetitively, it seems the wife releases her feelings and emotions about her husband inwardly. The poet uses only adverbial phrases to reveal factual information. The poet uses phrasal verbs lavishly, such as *put on, got up, put down, put back and look at,* to indicate actions and bring the natural, casual conversational effect in the poem and, in words, *stir, pour, smoke, blew rings, lit, and put,* revealing the imagery motion. The writer repeatedly uses the objective personal pronoun 'me' in the lines, *without speaking to me* (2) *without looking at me,* to show how the husband ignores his wife. The poet simplifies the language without harsh words while portraying the sorrowful, rigid situation.

Morphological level

The poem consists of three free compound morphemes, endocentric compounds such as *ashtray, teaspoon, and raincoat*, a great indicator for introducing morphology. The poet uses functional compound morphemes, such as *into* and *without,* four times to emphasise his idea and the empty feeling of the wife when the husband ignores her. Inflectional morphemes –'ed' is used to indicate the past tense—the reason the poet has purposely used the past tense to bring up the past incident. The minimal units of meaning are known as morpheme (Krott, 2001). The author uses many free morphemes in the poem, though there are some inflectional bound morphemes such as –ing, -s,-es and –ed, the minimal units.

Syntactical level

The poet uses precisely the same sentence structural patterns repetitively, and it has eleven simple sentence patterns, only four compound sentences, and no complex sentences. The

SVO patterns in the poem emphasises the doer rather than the action. In the clauses *He poured, He put the milk, put the sugar, and stirred* the pronoun *He,* a repetition usage of the pronoun *He, indicates how vital* the doer is in the poem. The use of inverse word order in a few occurrences is a unique feature in the lyrics. Considering the poetic line, 'It was raining', 'It' is an indefinite nominative of an impersonal pronoun, a dummy subject that is a syntactic feature with no semantic function. So, the verb 'raining' is called an impersonal verb. This sentence is ostensive, pointing at the rain. As a matter of grammar that would separate agent and action, the rain is raining.

In addition, the noun *ash* suggests the death of a relationship. The writer's lines are very plain with heavy meanings; however, the poet creates an emotional atmosphere. Though he has not targeted any emotional words directly, the readers who dive into the poem can identify the depth of the internal meaning. Through syntactic structures, the poet has brought up the semantic feature successfully.

Table 1

Sentence pattern found in the poem 'Breakfast'

SN	Sentences (taken from the poem)	Sentence Pattern
1	He poured the coffee into the cup	SVOA
2	He put the milk into the cup of coffee	SVOA
3	He put the sugar into the coffee with milk	SVOA
4	With a small spoon, he stirred	(A) SV
5	He drank the coffee, and he put down the cup	SVO + S VO
6	Without speaking to me, he lit the cigarette	(A)SVO
7	He emptied the coffee with milk	S V O A
8	And he put down the cup.	SVO
9	He lighted (Cigarette)	SV(O)
10	He made circles	SVO
11	He shook off the ash into the ashtray	SVOA
12	He got up because it was raining.	SVintr +SVintr
13	And he left	SVintr
14	And I buried my hands into the face.	SVOA
15	And I cried	SVintr

Figure 1

The sentence patterns used

Figure 2

The phrases used

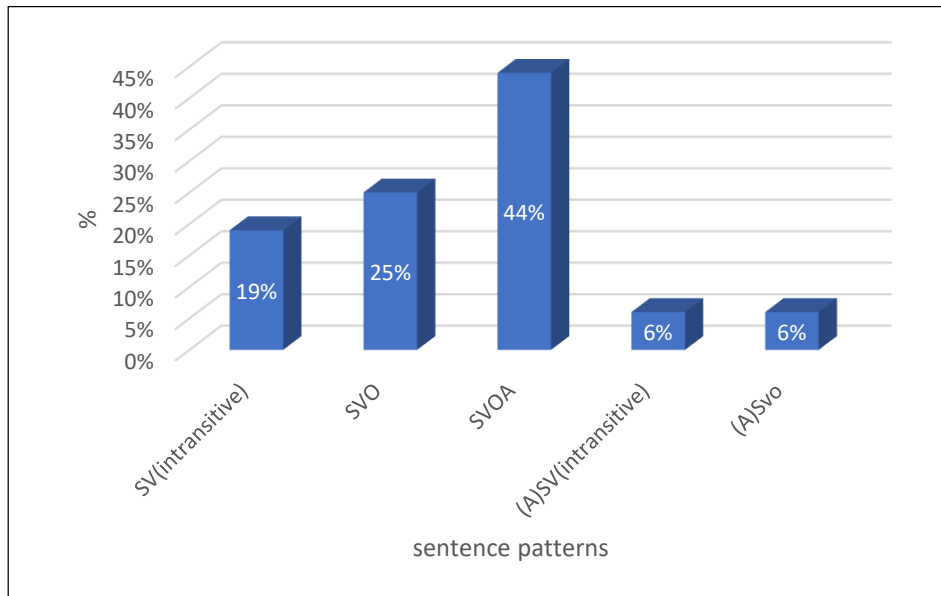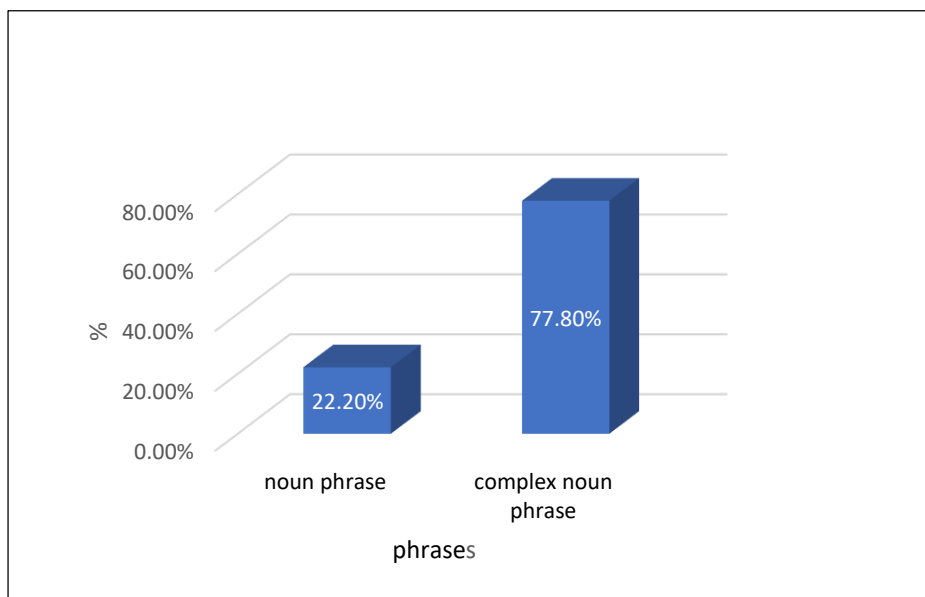Figure 1 illustrates that 38% of the sentences are SV, 24% of the sentences are SVO, and 38% of the sentences are SVOA. According to the statistics, SV and SVO are equal amounts. Figure 2 illsutrates the complexity of noun phrases embedded with the prepositional phrase. Though the words seem simple, the multiple embedding forms the noun phrase complexity, and many of the phrases are exocentric.

Conclusion

Stylistic linguistic analysis evokes the unfathomable hidden meanings and language nuances at various linguistic levels, such as graphological, lexical, morphological and syntactical; ESL learners develop the skill of comprehending the authors' writing philosophies underneath the poem. Further, the analysis helps ESL learners improve their language skills in critical and analytical thinking as it is one of the effective techniques to master a second language. Moreover, "poems can also be used to build writing skills by making students rewrite, report or translate the poem" (Sheila et al., 2007, p. 805). Stylistics is closely related to linguistic and literary criticism, which examines how language and the meanings of texts are communicated. Therefore, analysing the poems at various linguistic levels gives the learners linguistic expertise and a better understanding of the poem.

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A Comparison of the Philosophies of Education of Rabindranath Tagore and John Dewey

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Abstract*

Rabindranath Tagore and John Dewey were two prominent thinkers in the field of education. Tagore advocated for a holistic approach to education, where students are encouraged to explore their creativity and individuality. On the other hand, John Dewey emphasised the importance of learning through experience and believed that education should be focused on the development of critical thinking and problem-solving skills. The aim of this research is to analyse the philosophies of education of Rabindranath Tagore and John Dewey and compare the attributes of their Philosophies of education. Data for the research was collected from primary and secondary sources and analysed qualitatively. Primary data was collected from original texts written by Tagore and John Dewey. Secondary data was collected from research articles, journals, and e-papers written by scholars about Tagore and John Dewey. comparative analysis was used as a research methodology. Dewey and Tagore believed that education should be responsive to the needs and interests of the individual student. They also believed in the importance of community and social interaction in the educational process. However, while Dewey emphasised the importance of democracy and social responsibility, Tagore emphasized individual self-realisation and creativity. In conclusion, a comparative analysis of the educational philosophies of Rabindranath Tagore and John Dewey reveals distinct themes and attributes in their approaches to education. While Tagore's philosophy is deeply rooted in cultural and individual development, Dewey's philosophy focuses on experiential learning and societal progress. Analysing these attributes helps us gain a deeper understanding of their potential applications in modern education. Applying a blend of their philosophies in Sri Lanka could create a balanced system that combines experiential learning and a culturally sensitive curriculum, enabling students to develop critical thinking skills and contribute to society's progress.

Keywords: Philosophy of education, Holistic development, Social responsibility, Experiential learning, Critical thinking

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Introduction

Education can be seen as the dissemination of a society's values and collective wisdom. It is comparable to what social scientists refer to as socialisation or enculturation in this regard. The Latin term 'Educare', which means 'to bring forth, to lead out', is the source of the English word 'education' (Seetharamu, 2004). The term's definition has evolved through time to

nowadays cover teaching knowledge and skills to people of all ages in a variety of official and informal contexts.

The educational vision of Rabindranath Tagore served as the foundation for the three institutions he founded in India: Santiniketan (1901), Visva-Bharati (1921), and Sriniketan (1922) (Chinthakindi, 2018). Tagore's system of education lays stress on the intellectual, physical, social, economic, moral and spiritual aspects of life. Tagore believed that education should help make every individual a complete human being (Ravi, 2015). Tagore's experience in Jorasanko gave him lasting confidence in the importance of freedom in education (Ahmed Shah, 2018).

Tagore favoured education that fosters students' creativity, imagination, and moral awareness over modern mechanical learning, which only emphasises the development of the individual's mind. It was held that education should be for 'illumination of the heart' and instilling a spirit of compassion, service, and self-sacrifice in the individual in order for her/him to rise above egocentrism and ethnocentrism to a state of global consciousness or world centrism rather than simply 'success' or 'progress'. Education reformers in India and around the world continue to be inspired by Tagore's educational ideals, which significantly impacted a significant impact on the development of the Indian educational system (Das Gupta, 1961).

Rabindranath Tagore's educational philosophy, grounded in idealism, sought to create a well-rounded individual who was not only intellectually enriched but also spiritually awakened, creatively expressive, and deeply connected to both nature and culture. Tagore's ideas continue to influence educational thinking, particularly in India, and have left a lasting legacy in the field of education.

On the other hand, the most significant American philosopher and educationalist of the 20th century, John Dewey (1859–1952) changed the way that educational procedures and thought were approached. Most notably, Dewey thought that the kid was at the center of all of academia and fought for changes in the pedagogical aspects of teaching and school curricula. Dewey's educational philosophy and reforms were primarily focused on the child.

John Dewey is recognised for creating the 'pragmatism' school of thought, and his theories on education and learning have had a lasting impact on society at large. Dewey believed that education should cultivate thoughtful, critically reflective, socially involved people rather than just making people passive consumers of preexisting knowledge. Dewey disapproved of the curriculum-driven rote learning approach that was the norm at the time in schools (Navaratnam, 1958).

Dewey's notion of progressive education should include socially engaging learning activities that are age-appropriate for children (Dewey, 1938). Dewey believed that schools and classrooms should be realistic representations of real-life situations, allowing children to engage in learning activities interchangeably and adaptable in a range of social contexts (Link, 1961).

Dewey's work, according to learner-centered educators, supports a lot of their ideas about how students learn (Schiro, 2012). Several of John Dewey's educational principles and social learning theory can be observed in action in learner-centered classrooms. He saw the classroom as a place where children can come together to learn and solve problems as a group.

The Responsive Classroom strategies aid in fostering good interpersonal connections between students, teachers, and other students. Morning Meeting is a Responsive Classroom technique that promotes Dewey's theories of social-emotional development and community-building (Williams, 2017). Meeting is a planned period of the school day that 'creates an environment of trust' and sets the tone for 'respectful learning' (Kriete, 2003).

Literature Review

Brooke and Frazer (2013) in their book, focus on John Dewey's writings and give close attention to educational philosophies from the late nineteenth and early twentieth centuries. Education theory and practice continue to be influenced by Dewey's progressive views on democratic education, experiential learning, and the integration of theory and practice.

Singh and Rawat (2013) describe Tagore's educational philosophy, educational practice, and educational goal, focusing on his unexplored ideas on the philosophy of education as represented in his writings, such as essays, speeches, and letters. In their conclusion, they claimed that although Tagore's influence on education has been felt no more, neither scholars nor educationists have been able to describe it.

Tirath's (2017) research paper, discusses Tagore's contributions to educational philosophy, such as intellectual development, natural growth in natural circumstances, learner freedom, self-realisation, and love of humanity. It also touches on physical development, practical and real teaching methods, the place of fine arts, the use of the mother tongue as a medium of instruction, moral and spiritual growth, social development, and education for rural reconstruction. The study also pointed out the importance of education for a strong connection between education and society and it explores how it gives a nation's background its shape and substance.

Halakeri (2017) examines how Tagore seeks to foster the international partnership he has proposed in his educational philosophical thought and to build a global citizen through his educational philosophical concepts. Additionally, he elaborates on Tagore's plans for contemporary education that Santiniketan and Visva-Bharati developed.

Dewey (1938) identifies theories on the relationship between experience and education. Dewey makes the case for the fusion of experience and education in the first chapter, emphasising the significance of tying what is learned in the classroom to practical experiences. It is suggested that in order to encourage meaningful and transformative learning, education should be based on learners' everyday experiences. The second chapter makes the argument that education should be an ongoing process that allows students to make connections

between diverse concepts and topics. In the third Chapter, Dewey argues that education should be viewed as a process of social and personal development rather than just a means of preparing students for the future. It emphasises the value of conversation, teamwork, and social engagement in the learning process in the fourth chapter. According to Dewey, education should foster critical thinking and problem-solving abilities among students by encouraging active participation and interaction.

Research Objectives

01- To analyse the philosophies of education of Rabindranath Tagore and John Dewey

02-To compare the attributes of Tagore and John Dewey's Philosophies of education

Research Methodology

Data collection

Data for the research was collected from primary and secondary sources and analysed qualitatively. Primary data was collected from original texts written by Tagore and John Dewey. Secondary data was collected from research articles, journals and e-papers written by scholars about Tagore and John Dewey.

Methodology

Comparative Analysis was used as a research methodology. It was used to analyse the primary and secondary sources within the framework, systematically comparing and contrasting the educational philosophies of Tagore and Dewey across the identified themes. this methodology was used to highlight areas of convergence and divergence between their philosophies, emphasising key ideas, beliefs, and values that differentiate them

A Comparative view of the philosophies of education of Rabindranath Tagore and John Dewey

Rabindranath Tagore and John Dewey were two prominent thinkers in the field of education. Both Tagore and Dewey believed that education should be a tool for the development of the individual and society. Tagore believed that education should focus on the development of the whole person. Tagore advocated for a holistic approach to education, where students are encouraged to explore their creativity and individuality. Moreover, Tagore believed that education should be grounded in the local culture and traditions, and should be relevant to the needs and interests of the students.

On the other hand, John Dewey emphasised the importance of learning through experience and believed that education should be focused on the development of critical thinking and problem-solving skills. Dewey believed that education should be student-centered, and that students should be encouraged to take an active role in their own learning.

Aim of Education

Rabindranath Tagore and John Dewey had different perspectives on the aim of education, but both shared the belief that education should be a holistic and transformative process that develops the individual's potential to the fullest.

Tagore, education should be a joyful and creative process that fosters a love of learning and cultivates the individual's aesthetic, emotional, and spiritual sensibilities. In contrast, Dewey emphasised the importance of education as a tool for social change and democracy. Dewey believed that education should prepare individuals to be active and engaged members of society who can participate in shaping their own future. Dewey saw education as a means of developing critical thinking skills, problem-solving abilities, and democratic values.

Curriculum

In terms of the curriculum, both believed that education should be practical and focused on preparing students for the real world. Their approaches to curriculum differed significantly. Tagore's curriculum was characterised by flexibility, arts, nature, cultural identity, and community, while Dewey's curriculum focused on experiential learning, integration of subjects, democratic values, critical thinking, and practical application. Understanding these differences provides valuable insights into their respective philosophies of education and their contributions to the field of education.

Methods of Teaching

Tagore and John Dewey had different approaches to education, and as such, their methods of teaching differ. Tagore's educational philosophy was rooted in the ancient Gurukul system of India, which emphasised a close relationship between the teacher and the student. In this system, students lived with their teachers, who were considered to be their mentors, guides, and friends. Tagore believed that nature was the best teacher and that students should be encouraged to learn from it. On the other hand, Dewey believed that learning should be hands-on and that students should engage in real-world problem-solving. Project-based learning involves students working on projects that are relevant to their lives, which helps them understand how what they are learning applies to the real world.

Role of the Teacher

Tagore and John Dewey had similar views on the role of teachers in education, emphasising the importance of student-centered teaching and the need for teachers to be facilitators of learning rather than just dispensers of information. Both Tagore and Dewey believed that the role of the teacher is to create an environment that encourages creativity, critical thinking, and collaboration. They saw the teacher as a guide and mentor, rather than an authority figure who simply tells students what to do. For both, education was about fostering the development of the whole person, rather than just imparting information.

Conclusion and Implication

The educational philosophies of Rabindranath Tagore and John Dewey have left a profound impact on the field of education worldwide. However, both Tagore and Dewey believed that education should be a tool for the development of the individual and society. They also believed in the importance of community and social interaction in the educational process. However, while Dewey emphasised the importance of democracy and social responsibility, Tagore emphasised individual self-realisation and creativity.

Combining Tagore and Dewey's theories could be advantageous in the Sri Lankan educational system. A balanced system can be produced by honouring Dewey's experiential learning while embracing Tagore's holistic perspective. Teachers in Sri Lanka should function as facilitators, encouraging students to pursue their interests while offering practical knowledge and experiences. Dewey's emphasis on problem-solving and critical thinking can help Sri Lanka's curricula.

The purpose of education in Sri Lanka should encompass both Tagore's focus on individual development and Dewey's goal of creating responsible citizens. If the Sri Lankan educational system constructs an educational system that promotes holistic development, critical thinking, and responsible citizenship within its distinct cultural and socioeconomic framework by combining the best elements of Tagore's and Dewey's beliefs, this strategy can assist in addressing the unique opportunities and difficulties.

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A Proposal for a State Policy for Education in Sri Lanka

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Abstract*

Human resources of a nation are considered the most valued and important resource. Education is the key factor in developing the human resource element of a society and thereby directly linked to the prosperity of a country. Sri Lanka introduced a free education model in 1940 to set herself in an ideal situation to derive maximum gains through this far-reaching initiative. However, the country has not been able to achieve the desired objectives through its education policies over the years. This qualitative study focuses on formulating a state policy for education and skills development in Sri Lanka. Accordingly, most of the data gathered are secondary in nature. Further, it is widely accepted that the education and skills development strategies in Sri Lanka have failed to meet the labour market requirements thus affected negatively towards the sustainable development of the country. In effect, the country's education system is mainly focused on examinations where rote learning methods are used to meet the challenges posed. The students produced from this education system often lack the skills and capabilities to meet the challenges expected of them in the job market. Although successive governments have allocated substantive resources towards a free education model, it is evident that free education has failed to deliver the expected outcomes. Two modern approaches to education, including the Finnish education system are considered in this study to guide and information on the education policy and strategy of Sri Lanka.

*Keywords***:** State, Policy, Education, Skills development, Labour market

Introduction

It is universally accepted that the most valued asset of a nation-state is its human resources. The development of human resources of a country depends primarily on the level of education that it provides to citizens from early childhood

to professional level. According to Alawattegama (2020), producing competent graduates, professional or technical experts and responsible citizens enriched with social and cultural values, eventually enhances the quality of a country's workforce. This is one of the vital ways the education system contributes to the development of a country. In fact, education is considered an effective investment in shaping the present and future of a wealthy nation.

Sri Lankan society has been developed through Buddhist ideology for generations and education has been an integral part of the country's rich heritage and culture. However, during the colonial era, the traditional Buddhism-based education system at Pirivenas (Temple education) had a difficult time to sustain. The British rulers introduced a separate system of education focusing on urban elites. The education minister of the then State Council of Ceylon, Hon. Cristopher William Wijekoon Kannangara in the 1940s created a paradigm shift in the education sector in the country through a series of reforms.

The concept of free education and the establishment of Central Colleges throughout the country were a few of those far-reaching concepts introduced by this exceptional individual, who is considered the father of free education in Sri Lanka. The enactment of Education Ordinance No. 31 of 1939 was a step in the right direction to enhance the education sector. Subsequently, successive governments introduced more valuable policies towards the betterment of students such as a free text book programme, free midday meal programme, and free uniform programmes. Further, the grade five scholarship concept that gives smaller school children access to the Central Colleges, the transportation subsidy programme, and the Mahapola scholarship programme were important policies introduced later to make free education accessible to all. The Navodya school development programme, which was commenced in 1997 and the Mahindodaya laboratory and development programme are also considered major policy decisions toward the betterment of the education system. The establishment of the National Institute of Education in 1985 and the National Colleges of Education in 1986 brought desired end results. Further educational reforms were introduced as policy decisions with a view to developing the educational sector. The enactment of compulsory Education Regulations in 1998 was considered a major step towards converting society into a knowledge-based society.

However, unfortunately, Sri Lanka has failed to capitalise on these early initiatives and is at present faced with a series of issues with regard to its sustainable development in achieving economic stability. As per the Presidential Task Force on Sri Lanka's the national education system must necessarily move beyond its current rigid framework, towards encouraging critical and innovative thinking and the development of 21st-century skills and competencies, in order to build a more resilient population.

Research Objectives

The specific objective of the research is to propose an inclusive state policy for the education sector in Sri Lanka with a view to enhance the human resource element of the country, and thereby, fast track economic development. Developing modalities to meet labour aspirations to the fullest potential is the general objective of the research.

Methodology

The research team used qualitative data to answer the research questions. Systematic desk research was the main tool used in this regard. The already published journal articles were

reviewed extensively while other secondary sources such as books, papers and web articles were also perused accordingly. This paper discusses prominent issues relevant to the educational sector in Sri Lanka with special reference to existing education policy. Therefore, the publications of the Ministry of Education of Sri Lanka and the annual reports of the National Education Commission of Sri Lanka were valuable during the process. The information gathered in the research was analysed in order to draw valid, reliable, and credible conclusions.

Results and Discussion

The formal education system in Sri Lanka is divided into four categories (Ministry of Education, 2018). They are as follows:

- Early Childhood Development
- Primary and Secondary Education
- Tertiary Education
- Vocational Training

The general organisational structure of the education system in Sri Lanka (Figure 1) is considered to be in line with developed countries. Nursery to pre-school is considered the early childhood development period. Primary education is from Grade 1 to 5, whilst Grade 6 to 9 is classified as junior secondary education. The Grades 10 to 13 are categorised as senior secondary level. The university, professional and postgraduate levels are identified as the tertiary level of education. Further, the categories of vocational, technical and advanced technical learning have been included in the vocational education sector in the general organisational structure.

Figure 1

General organisation structure of the education system in Sri Lanka.
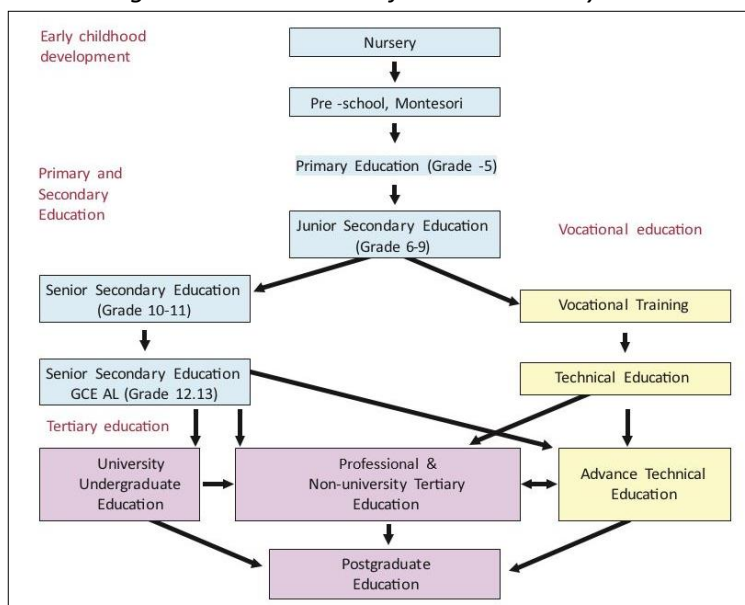
Note. Adapted from Ministry of Education official website. Sri Lanka Ministry of Education (2014), www.moe.gov.lk.

While it influences the wellbeing of the society in many ways, the education system of a country, plays a crucial role in improving the quality of human resources that directly influences the quality of the workforce that adds value to the economy (Alawattegama 2020). Successive governments in Sri Lanka after independence have taken various policy decisions for the betterment of education in the country. Especially due to progressive and far thinking initiatives of early post-colonial era leadership, Sri Lanka has now reached a literacy rate of 93%, high rates of primary school enrolment and gender parity at the primary education level (Alawattegama 2020). According to Alawattegama (2020), the student teacher ratio in Sri Lanka (STR) stands at 16.3 in 2020 and shows a declining trend compared to 16.5 reflected in 2019.

Figure 2

Administrative and management structure of education in Sri Lanka
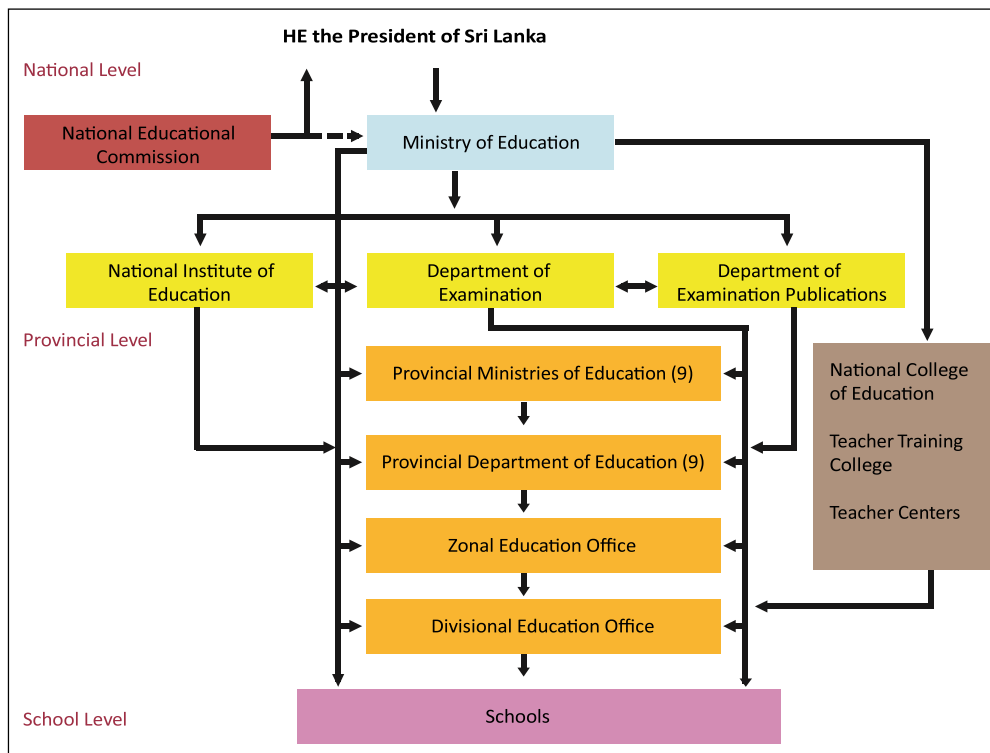
Note. Adapted from Ministry of Education official website. Sri Lanka Ministry of Education (2014), www.moe.gov.lk.

The administrative and management structure of education in the country (Fig.2) has been categorised as school level, provincial level and national level. Accordingly, many roles and functions have been delegated to the provincial level of education for better implementation. Further, at the national level, the main policy making institutions are empowered to initiate the decisive strategic decisions for the betterment of education.

At present, the regulated compulsory education for a child in Sri Lanka is 5 to 16 years. At the General Certification of Education (GCE) Ordinary Level (O/L) exam, 60% of students qualify to attend GCE Advanced Level (A/L) classes. Of the students who sit the A/L exam annually,

60% reach the pass marks yet only 15 % are admitted into Universities. In 2021, 236,035 students sat for the GCE A/L exam and 149,946 (65.53%) reached the eligible marks to enter university. However, Sri Lanka's gross enrolment ratio in tertiary education is below the South Asian average and the lowest among all middle-income countries (Presidential Task Force on Sri Lanka's Education Affairs, 2020).

Planned education reforms

The general policy of education in Sri Lanka is to introduce reforms every eight years. Accordingly, it has been planned to introduce the latest such reforms in 2024 and 2025. As per the Department of Research and Development at the National Institute of Education (NIE) of Sri Lanka, in 2024, these reforms will be introduced to Grades 1, 2, 6, 8 and 10. In 2025, Grades of 3, 4, 5, 7, 9 and 11 will be subjected to these reforms. As per the Ministry of Education, the key aspects of the intended reforms will be as follows.

A new vocational subject stream

It is intended to introduce a new set of vocational subjects to the A/L stream specially targeting the dropouts from the O/L exam. The results of the O/L exam would not be a barrier to following the vocational subjects.

G.C.E. advanced level subject stream to align with the university subjects

Further qualified professional teachers are to be inducted into these classes to derive maximum output.

Six core subjects at the G.C.E. (O/L) stream

This is in line with international standards and allows more time to concentrate on co-curricular and other programmes, which are conducted at schools.

Emphasis on self-learning

The reforms have given more opportunities to self–learning at various stages of the school career. This could bring a positive learning culture amongst students.

School life will be shortened to eight months

Accordingly, a student will be able to complete the school career in a shorter time compared to the present time duration. As per the reforms, the two-year preparation period for G.C.E. O/L students will be reduced to one and a half years.

Additional optional curriculum

This would enable students from Grade six onwards to select additional subjects of their choice.

Issues and challenges in the educational sector of Sri Lanka

As per the literature survey and interviews done in this regard, it was evident that the education sector in Sri Lanka is faced with number of a vital issues and challenges at this juncture. It was found that fundamentally, education is divided into three categories; informal, formal and non-formal (Ruberu, 2003). The initial learning that a child acquires the in early stages at home is considered informal education. Subsequently, the child will be channeled through formal education at the school and led through primary, secondary and tertiary education. Non-formal education systems pave the way for those unable to access higher education as well as those with different learning objectives (Little & Hettige, 2015). While the Sri Lankan education system does provide these resources and options, according to Little and Hettige (2015), the highly academically oriented school system in the country prepares students for certificate-oriented exams without equipping them with life skills and practical capabilities; educated youths were not prepared for skills-oriented jobs. This deficiency has created many issues in the social fabric of society over the years.

Many researchers have highlighted the importance of a strong government will to implement reforms in the education sector. As per Little and Hettige (2015), "There is no doubt that education reforms in several developing countries have been driven by strong political will from the highest level." Sri Lanka at certain stages has undergone a backward trend in this respect. Besides, the lack of equal access to education has been another major fact that has hindered the progress of education in the country (Little & Hettige, 2015). According to Alawattegama (2020), it seems that political executives seek to change and implement new education policies on an ad-hoc basis as and when the ruling party gets changed in the country. This phenomenon has severely hampered the progress and development of the education sector in the country.

The National Education Commission (NEC) of Sri Lanka has already identified a number of issues and challenges faced by the education system in the country. The main issues that need immediate attention are as follows.

Deficient national education policy

Over the years, successive governments in Sri Lanka have failed to formulate a proper education policy to meet the modern-day global challenges. The national policy, which was created in 1986, needs a complete overhaul at this juncture. This deficiency is considered the main hindrance to uplifting the education of the country in all pillars. The vision and the foresight that set the goals and strategies for the entire gamut of education is the most vital aspect that is missing in the context of Sri Lanka's education. This has resulted in successive governments not allocating sufficient budgetary resources to the education sector over the years.

The demand of the professional bodies is to allocate at least 6% of the GDP to the education sector through the Annual Budget. However, successive governments have turned a blind eye

to this important aspect. The increased allocation of Rs. 157.6 billion (7.51%) from the annual budget 2022 (from Rs. 126.5 billion in 2021) has been to reduce salary anomalies and is a one-time allocation.

Education and skill development curriculums formulated based on examinations and without concern for economic, labour market or industry demands

It was revealed that the national core curriculum at all levels of sectors needs immediate revamp. After school tuition culture has also flourished over the years due to the exam-based education system. The fundamental concepts of modern education have not been duly incorporated thereby the students lack the confidence and skills to meet the challenges faced in the job market that is employable skills. Specifically, students are not in a position to obtain employment opportunities in the private sector due to the mismatch of skills. Most undergraduate programmes have been designed without considering this vital aspect. Hence, the unemployment rate for graduates in the country was found to be comparatively high (Ruberu, 2003).

Do not foster critical learning skills in students

The exam based education system has damaged the natural skills and potential of the country's student population to a large extent. The method of Rote Learning i.e. learning through memorising is the most encouraged method of learning at all levels of students even at the Tertiary level. Thereby the students lack the essential skills relating to analytical thinking, problem-solving abilities, innovation and creativity. Even after graduating, these student populations fail to gain suitable employment in a modern environment given the lack of competitive skills. Further, the confidence level and the soft skills are also lacking among the students in all segments of Sri Lankan education.

Lack of emphasis for upgrading the quality of principals and teachers

The professional competency level of most teachers and principals in the country is found to be below par (Dissanayake, 2015). The efforts for continuous learning by teachers to improve their professional skills are much lower than the expected levels. Since the teachers lack modern training and teaching techniques, the students in turn receive a moderate quality of education at all levels. Successive governments have also contributed to this issue through various policy decisions taken to provide teaching appointments to unqualified individuals for short term gains.

Disparity of resources for education in the rural sector in comparison to urban society

Many rural sector children drop out of schools at early stages due to economic hardships and a lack of resources offered by the central to regional governmental machinery (Dissanayake, 2020). This disparity has created a number of issues thus discouraging rural students to a great extent. Ultimately, these students end up without employment opportunities or resort to minor jobs. Not only the lack of infrastructure facilities but also the low availability of teaching

facilities in the rural sector has created this disparity. This has a direct impact on the culture of popular schools in the country, which has contributed to another set of social issues. Further, parents resorting to tuition classes to address the lack of proper teaching facilities has created other economic and social issues as well.

Education system of Finland

It is considered worthwhile to critically analyse the education system of Sri Lanka with that of a country ranked top in the world for the quality of education that it provides. Finland was selected for this purpose. Besides, Sri Lanka is presently engaged closely with Finland in obtaining expertise related to developing the education sector of Sri Lanka.

In Finland, primary school education is fixed for nine years and a child starts primary schooling at the age of seven years (Ministry of Education, Finland, 2018). All people in the country are entitled to free comprehensive education from primary level to higher education. The culture of conducting exams to evaluate students has ceased. The progress of the students is measured through continuous assessments.

As per Figure 3, the education system has few similarities to Sri Lanka. However, Figure 4 indicates the prominence given to vocational training opportunities in Finland. Accordingly, a child could even obtain a basic degree on completion of vocational training and proceed up to a master's degree or doctorate level.

Figure 3

General organisation structure of the education system in Finland

Note. Adapted from Ministry of Education and Culture Finland 2018. https://okm.fi/en/frontpage
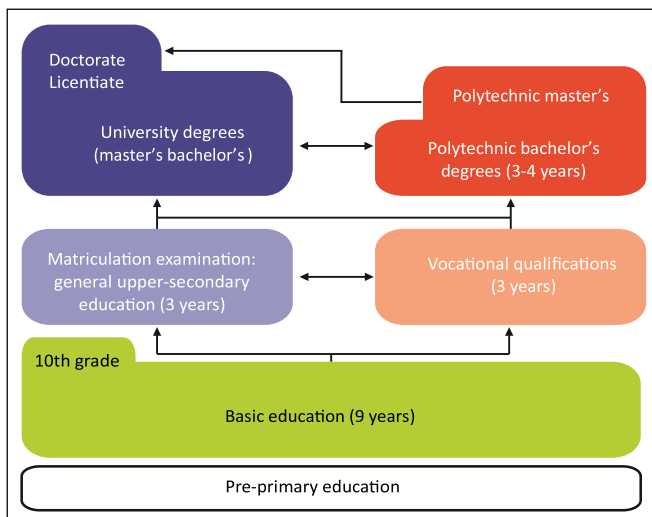
Accordingly, the analysis was considered based on under mentioned factors in order to identify the education practices, procedures and governing regulations in Finland.

Equality and equity

Finland's main policy in education is to ensure that all people irrespective of ethnicity, age, wealth, or residence area are given equal access to high-quality education and training. Education in Finland at all levels is free. It is only during adult education that financial expenses are involved. Text books, meals and transport facilities are also provided free of charge.

Pillars of education policies in Finland

In Finland, a child starts their primary education at 7 years and the compulsory education is from the age of 7 years to 18 years. The highlighting fact is that joyful learning and learning by doing is the cornerstone of Finnish education. Basic education is provided within a single structure. Every student has the right to educational support. In order to derive maximum results, education guidance plays a key role. The guidance and counselling help students to make correct decisions on their career path.

Vocational Education and Training

The system in Finland has no dead ends and it facilitates adult learning focused on the labour market. As per Figure 5, the new vocational education and training model has encouraged the adult population to enhance their skill levels. This model promotes learning environments while allocating flexible time schedules for studying.

Figure 4

Note. Adapted from Ministry of Education and Culture Finland 2018. https://okm.fi/en/frontpage
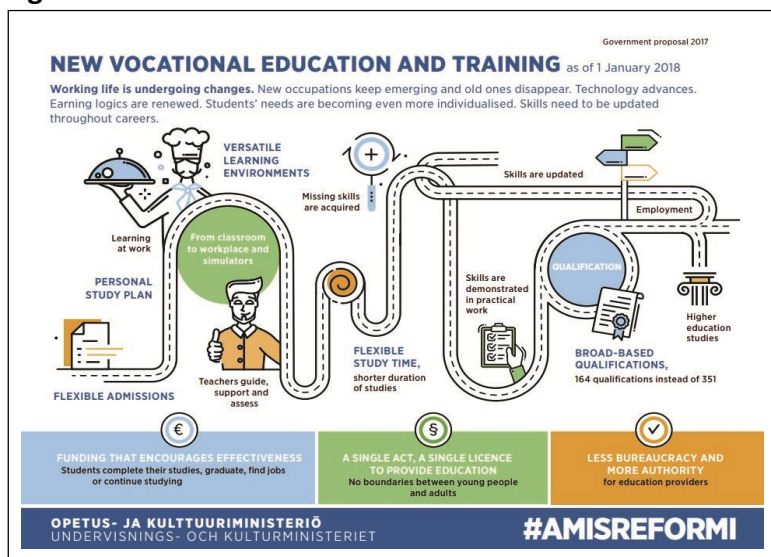
A few other vital aspects of the education system of Finland have also contributed to its success as per the Ministry of Education in Finland. These facts are summarised as follows.

- Performance and research-based education/assessment is part of daily school work where in the first six years of primary education, a child is guided by the same set of teachers.
- Quality of teacher training and exceptional teacher quality is maintained by requiring a Master's Degree as the minimum level of qualification for a teacher.
- Educational guidance has been given prominence.
- Examinations are rare and student evaluation is based on continuous assessments.
- Teachers have pedagogical autonomy in the classrooms such as to select relevant text books and other teaching methods.

In considering the education systems of Sri Lanka with Finland, the national strategy has been the key to the success story of the education system of Finland (World Economic Forum, 2021). Besides, the friendly and joyful learning environment has given students of Finland an exceptional advantage to concentrate on their education with total focus.

Recommended state policy for education and skill development of Sri Lanka

Based on the literature survey and observations from the educational model of Finland, the following recommendations for state policy for education and skill development in Sri Lanka are proposed.

Revising the education policy to develop curriculum

The revision of existing education policy to develop the curriculum is the most crucial need. Towards this, an equally accessible, holistic, integrated and streamlined education system should be formulated. In that, students should receive a holistic education, which would guide them to develop their individual talents and abilities with a view to meeting the national objectives in the labour market. Subjects relevant to vocational training should be introduced to both O /L and A/L streams where the results of the O/L exam would have no bearing on this particular stream. Besides, the introducing of innovative, creative and technological skills would be a key component of the education policy. Through entrepreneurship skills the student population could create more job opportunities and contribute immensely towards the economic development of the country. It is proposed to allocate at least 6% of the total GDP to the education sector annually from the national budget to meet these challenges as per the recommendation of professional bodies.

Introducing critical learning skills

The Terry Heick Model (Figure 5) is an ideal strategy that can be adopted in the context of education in Sri Lanka. The dialogic response, abstraction and creativity, play, community interaction, media literacy and self-directed learning are the vital components put forward by this model (Heick, 2020). Dialogic response is a tool used in developing critical thinking.

Abstraction is the process through which a child is trained to look for a number of solutions for a given issue. Play is a universally accepted factor in joyful learning. Community interaction is important in developing confidence levels. A child has more options to interact and enhance skills through media literacy. As highlighted by the Ministry of Education and Culture Finland, these critical learning skills have immensely contributed to the success of the Finnish education system.

Figure 5

Terry Heick Model

MODERN LEARNING STRATEGIES

Note. Six Channels of 21st Century Learning, 2021. https://www.teachthought.com/the-future-of-learning/modern-learning/

Continuous assessments are given more weightage over the written examination at both O/L and A/L examination

As used successfully in most countries, results of the final written exams should have limited weight in determining the future education opportunities of a student. Accordingly, more weightage should be given to continuous assessments conducted through the system. In that, the teachers and the principals have the main responsibility to conduct these assessments. Introducing a scientific and robust evaluation method would enable school systems to continue this method successfully. The method of Rote Learning that widely prevails in the country can be eliminated through proper implementation of this assessment model. With the student assessments conducted by the schools, the tuition culture would have a natural death in time to come. As the advantages that could be derived from tuition class culture will be reduced drastically, the society at large will benefit accordingly.

Enhancing the professionalism of principals and teachers

The recruiting of highly qualified teachers and providing them with professional training is of paramount importance in building a solid education system in the country. Upgrading their salary scales and improving their motivational levels would pave the way for better quality service. The recognition for teachers in Sri Lankan society has to be enhanced simultaneously to have the desired results. A model to improve teaching effectiveness would be the model put forward by Stronge (2018) (Figure 6). Professional knowledge, instructional planning, instructional delivery, assessment, learning environment and professionalism are the six main components included in this model. Further, the pedagogical methods (i.e. teaching approaches) are to be improved to be on par with the latest methods used in developed countries. In this context, the teachers are expected to be mentors for the student population and are expected to guide them closely when taking major decisions such as selecting individual subject streams and career paths.

Figure 6

Qualities of effective teaching
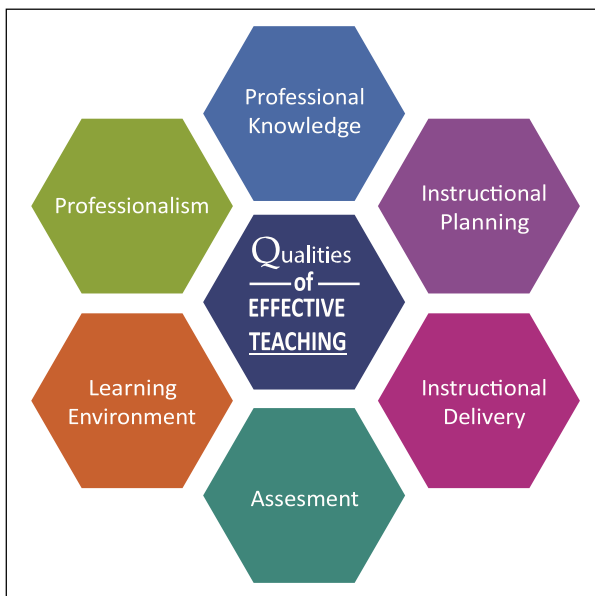
Note. Adapted from the 'Qualities of Effective Teachers' by Stronge (2018)

Well defined long-term strategy to improve rural schools

This long-term strategy will be formulated taking into consideration all issues and difficulties presently encountered. Proper utilisation of allocated resources along with a national vision could achieve the desired results in the long run. A proper strategy to utilise budgetary resources focusing on national policy would be of paramount importance. A separate institute would be created for the rural school sector with a view to implementing this long-term strategy under the Ministry of Education. In that, the assistance of global agencies and local entities would be sought to find the additional finances to achieve the overall mission. Special

attention should be given to improving the competency in the English language and soft skills of rural students.

Strategies for social integration, inter communal well-being and enhancing social fabric of the Sri Lankan society through school education

The school is the most suited entity in society to enhance mutual respect and enhance patriotism among different ethnicities in the country. Besides, it could minimise extremism of all kinds, which is fast deteriorating society at large. The human values, respect for other ethnicities and religions, enhancement of patriotism, developing soft skills and idea about the social fabric of Sri Lankan society has to be done through the intended revamping of the curriculum. The other important factors in preventing corruption, the use of dangerous drugs and other human qualities have to be inculcated at the early stage of childhood through schools. Besides, the student population should be more encouraged to engage in physical activities like recreational sports activities for their well-being and to have a balanced way of life. The sports activities also have to be enhanced at the school level focusing on building comradeship and developing leadership of the student population.

Conclusion

As per the critical analysis conducted with regard to the present state of affairs of the country's education sector, it is evident that urgent steps are required to be initiated without further delay to address these issues. Besides, the progress made by Finland in respect of education is considered an eye-opener for Sri Lanka to follow suit. It is expected that a holistic effort by the society at large will be the most viable method in bringing a paradigm shift in the education sector of Sri Lanka in addressing the present issues and challenges. Although the political authorities have a major role to perform, it would be the educationists in the country who would be the leaders in this endeavour. Besides, it is expected that each and every individual in society, who has immensely benefitted from the free education policy of the country, would come forward in this national effort mobilising all the resources available in the country. As such, a total commitment from the society to enhance education in the country could create an inclusive and economically developed Sri Lanka.

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Track Two: **02**

Arts, Humanities and Social Sciences

International Security Landscape of Sri Lanka: Since Covid-19 Pandemic

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Abstract*

The ripple effects of the COVID-19 pandemic have reshaped the three-way nexus between the pandemic, national and international security and international relations. When public health issues strain international security and international relations at the same time, states are compelled to take different approaches to mitigate the effects on national integrity or sovereignty. However, in the Sri Lankan context, the possible long-term consequences of the COVID-19 pandemic are particularly disturbing. According to Peiris (2021), pandemics go far beyond mere public health crises, leaving an indelible mark on the contemporary social fabric. In that sense, a deep analysis is required to identify the tangible as well as intangible factors resulting from such a catastrophe. Initially, COVID-19 impacted the social, economic and political pillars of Sri Lankan society and secondary effects were more on the global context.

In this context, this paper aims to identify significant traditional and non-traditional security threats faced by Sri Lanka in the context of international security since COVID -19 pandemic. This study is qualitative in nature. In that, in-depth interviews were conducted with a cross-section of professionals involving major disciplines that have a bearing on the traditional and non-traditional national security concerns. The NVivo was used in analysing the data gathered through in-depth interviews. This paper analyses the present applicability of Regional Security Complex Theory (RSCT) which is one of the most comprehensive frameworks that outline distinct variables necessary for regional security analysis. However, the paper proposes changes to RSCT from a 2023 and beyond context after analysing the international security landscape since the COVID-19 pandemic. It is concluded that Sri Lanka should establish durable political stability as the essential component in reaching its economic goals. Civil society cultivation and engagement are two key areas in which Sri Lanka should focus more in the present context. It is imperative that Sri Lanka preserve and augment its domestic/national defense / regional security freedom of manoeuvre among large states such as China, India, U.S. and Russia using the correct blend of foreign policy whilst upholding national interests.

Keywords: COVID-19 pandemic, national security, international security, traditional and non-traditional security threats.

Introduction

As emphasised by Buzan (2009) security is a relational phenomenon. Therefore, it is paramount to understand the international pattern of security interdependence in order to determine the national security of a state. In that, regions play a mediating role between the

states and the international systems. In security terms, region means a distinct and significant subsystem of security relations exists among a set of states whose fate is that they have been locked into geographical proximity with each other (Buzan, 2009). The overarching concept in determining the power relations therein is the amity/enmity pattern among states. Buzan and Waver (2003, p. 45) describe patterns of amity/enmity as "taking the form of sub-global, geographically coherent patterns of security interdependence". Simply, can be amity defined the possible protection whereas enmity speaks on suspicion and fear involved in such a relationship among states. The historical relations between India and Sri Lanka over centuries are a typical example of the principal elements of amity and enmity. This position leads to the concept of security complex in the international security landscape coined by Buzan (2009). Security complex means a set of states whose national security concerns are linked together resulting in their individual security concerns not being considered separately. Besides, the anarchic international system acts as the main cause of developing such security complexes.

In this context, an extreme level of threat and fear that is felt mutually between two or more major states is a defining factor in determining a security complex. The Indo-Pakistan rivalry is a typical example in this respect. However, geography plays a vital role in the phenomenon of security complexes. Although countries such as Bangladesh, Nepal and Sri Lanka are minor geographical entities in the South Asia security complex, their alliances with major powers may impact and become a threat to a larger power. Another interesting factor that disturbs the security complex is identified as the condition of overlay*.* The involvement or intervening of armed forces of a great power in an overlain area in such a manner that suppresses normal operations of security dynamics is termed as overlay. The colonial dynamics of European powers is the best example of this condition. This condition creates a situation where it is difficult to determine the local security dynamics due to the presence of the great power.

In this context, identifying the overarching security dimensions through RSCT, could frame a comprehensive analytical framework to determine the complexities of national and international security dimensions. The domestic security environment of individual states is the first line or the bottom line in this framework. Next comes the local security complexes followed by great power complexes. In analysing this framework, it is imperative to identify the distinguishing security dynamics at each level. There may be certain interplay as well as interferences mainly by great power complexes towards the other two complexes.

As per the Director of National Intelligence (DNI) USA, the COVID-19 pandemic has killed millions of people and disrupted life worldwide, with far-reaching effects extending well beyond global health to the economic, political, security and societal spheres. In this context, the COVID-19 pandemic has resulted in shifts in security priorities and perceptions around the globe. The subsequent budgetary reductions have paved the way for gaps in military training and preparedness, counterterrorism operations; and arms control monitoring, verification, and compliance. The definition of national security thus has faced further revisions and debates due to the advent of the pandemic.

Methodology

This study was qualitative in nature. In that, in-depth interviews were conducted with a cross-section of professionals involving major disciplines that have bearing on the traditional and non-traditional national security concerns. The experts in the field of security, international relations, medical and health, science and technology, geography, economy, rehabilitation and reconciliation, energy, crime prevention, and human security were consulted. The questionnaire had four clusters namely human security, civil society, social cohesion, transnational–domestic linkages of concern and emerging international security issues. The secondary data including authentic books, journal articles, conference proceedings and other on-line sources were also used. The NVivo was used in analysing the data gathered through in-depth interviews.

Results

According to Kevany et al. (2021), diplomacy and integrated international collaborations have played a vital role in effectively controlling the Ebola outbreak in the West African region during 2014 along with the decisive role of the military. However, it seems a difficult proposition to expect similar results in the current international environment. Soft power and international relations have been more effective in such circumstances as per Kevany et al. (2021). The military has been tasked with a more logistical role when it comes to addressing health security issues. The study by Kevany et al. (2021) shows that pandemics may contain regional expansionism, generate new military roles, or force countries to turn inward, they also have dramatic impacts on other aspects of international relations and security (Table 1).

Table 1

Pandemic issues as they relate to international relations and security

International Relations	International Security
• Secure essential resources and supply chains (e.g. pandemic supplies)	• Telework and exposure to cyber vulnerabilities
• Border closures	• Tighter border management
• Travel restrictions to and from affected countries	• Managing travel quarantine
• Citizen evacuation and airlift	• Monitoring foreign travel
• Expulsion of foreign workers	• International contact-tracing
• Cancellation of migration programs	• National hoarding and price hiking
• Suspension of visas	• Lack of transparency and denial
• Banning international travel from certain countries	• Geopolitical manoeuvring through opportunity exploitation

	• Blame gaming
	• Disinformation in an uncertain environment
	• Disease migration

Source: Security Nexus 2021

According to Fonseka and Ranasinghe (2022), the health and other challenges spawned by COVID-19 have engulfed Sri Lanka since 2020. The areas such as social fabric, reconciliation and governance have faced multiple challenges during the process. The initial response of the Government of Sri Lanka (GOSL) in this regard was to appoint a few Presidential Commissions to tackle the issues at hand. As per Fonseka and Ranasinghe (2022), these commissions were established in line with the Article 33 of the Constitution which has vested such powers under the President. The establishment of the National Operations Centre for Prevention of COVID-19 Outbreak (NOCPCO) under the Commander of the Army was considered a major action plan of the government to curb the pandemic. The subsequent appointment of Presidential Task Force with greater powers to coordinate government machinery in a number of districts supplemented the NOCPCO. However, a major criticism levelled against these authorities was the neglect of civilian administration during the process. It was highlighted that the expertise and mandate of the public officials are undermined through the process (Fonseka & Ranasinghe, 2022). Critics of the government's response towards the pandemic viewed the process as militarisation and securitisation. According to Satkunanathan (2021), the unofficial structures created through these processes acted as shadow states further to the already existing mechanisms. It was further emphasised that the democratic processes of the country are being eroded through the government's intentional activation of a parallel mechanism through the military.

The important aspect in this context is whether the pandemic disruptions are temporary in nature or have shaped the fundamental future scenarios. More importantly, non-traditional security threats have taken the centre stage more than that of traditional ones. In the Sri Lankan context, straining governance is a major consequence of the pandemic. The capacity of government mechanisms under difficult conditions went down further along with the public confidence. The entire government mechanism reached a standstill with the state losing its control over the people. Sri Lanka not being an economically resilient country had to face major issues with regard to its sovereignty. In historical terms, the plague that devastated the city state of Athens during the Peloponnesian War with Sparta is an interesting phenomenon. Therein the unbearable losses of lives and economic conditions affected the Athenians as a major factor in their subsequent defeat at the hands of the Spartans. In that sense, the pandemic could be termed as a major non-traditional security aspect that needs the highest level of preparations to counter effectively.

Discussion

The concept of globalisation and the emergence of economic power has brought new insights to security discourse. Ballin et al. (2020) contended that security encompasses more than protecting the state's territory against military aggression by another state. The non-state actors have also played a prominent role in this regard. These authors have mentioned the role of geographical, danger, substantive and reference dimensions as the four main pillars or dimensions of security**.** According to Niruthan (2023) terrorists, pirates, organised crime rings (including drug trafficking, human trafficking and routine crimes), activist disruptors and hackers could be considered as the main non –state actors who pose severe threats. As per Niruthan (2023), the worldwide debate on political rights and law and order is due to the major activist disruptions that have crippled the nation states since of late. Initially, those who protest may have legitimate reasons for their course of action. However, these protests blown out of proportions thus becoming severe threats to the national security. The Black Lives Matter Movement in USA, Mahsa Amini protests in Iran in 2022 and Nahel Merzouk riots during June 2023 in France along with Sri Lankan Aragalaya in 2022 are examples of such activist disruptions with major consequences. Further, as per Niruthan (2023), most of these non–state actors are international in nature yet have to be dealt with nationally. Besides, mostly they are unconventional in nature.

Figure 1

Four pillars or dimensions of security
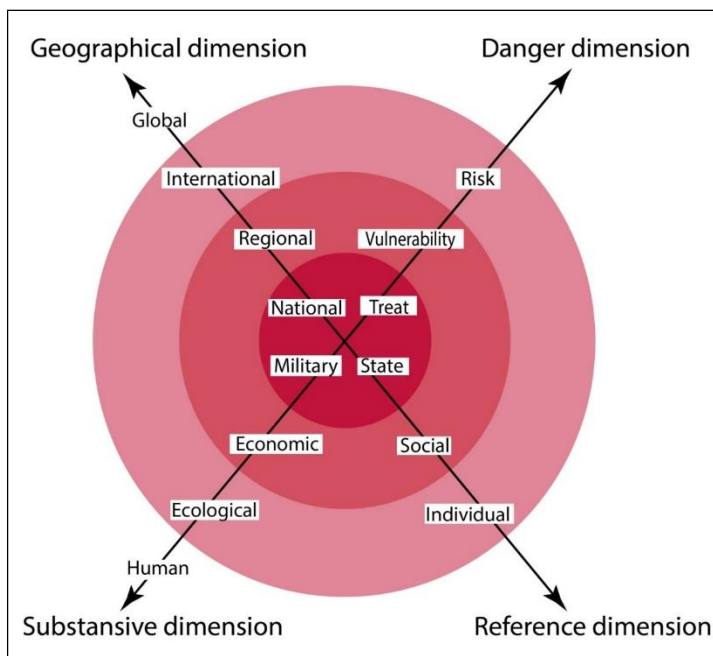
Source: Ballin et al. (2020)

Besides, the traditional security threats sphere headed by terrorism continue to pose severe danger to the globe while countries constantly determine on the counter measures to be affected. In that, the Four Waves theory of modern terrorism is still very much applicable to

the present context. Rapoport in 1970s came out with this approach for terrorism highlighting the implications of religious driven activities. As per Kaplan (2021) wave theory relates strongly with Schlesinger's theory of political generations which posited 40-year generational cycles. According to Kaplan (2021), each has a precipitating event, signature tactics and weapons, and an inevitable gradual decline that culminates in the birth of another wave. The four waves according to Rapoport (1970) are the anarchist wave (1878–1919), the anti-colonial wave (1920s–early 1960s), the new left wave (mid-1960s–1990s), and the religious wave (1979–onwards).

Figure 2

Deaths from terrorism by country, 2022
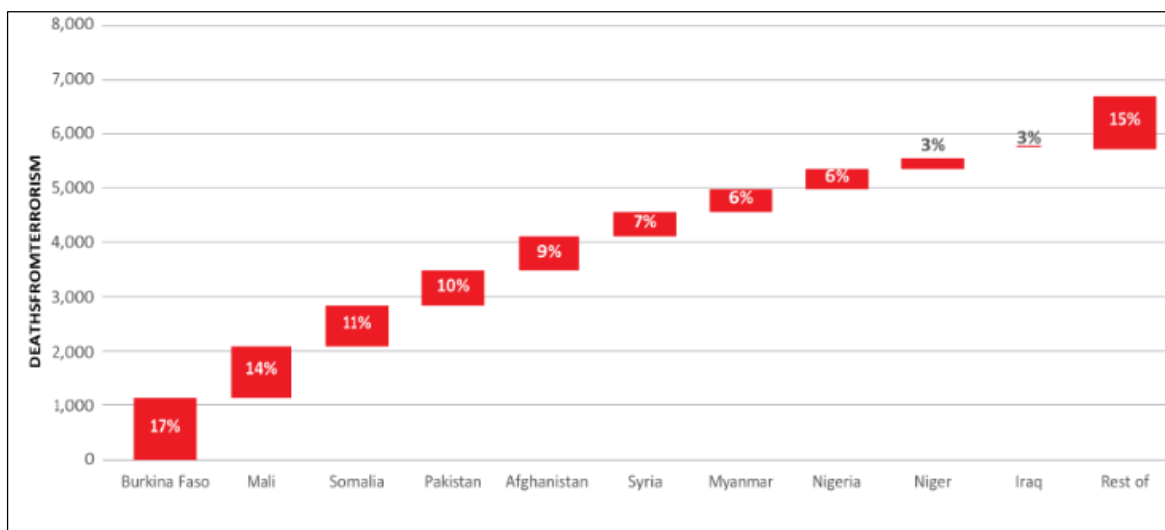
Source: Dragonfly Terrorism Tracker

According to the Global Terrorism Index (GTI), Afghanistan continues to be the country impacted mostly by terrorism. Besides, violent conflict has been the decisive course behind terrorism. Countries in conflict had suffered over 88% of attacks and 98% of terrorism deaths in 2022.

Another interesting development reflected through this study is the relationship between armed conflict and terrorism. All 10 countries most impacted by terrorism in 2022 were also involved in an armed conflict. Attacks in countries involved in conflict are seven times deadlier than attacks in peaceful countries. As per the GTI, Burkina Faso has recorded the highest number of deaths due to terrorism in 2022. Besides, suicide bombing has been the deadliest form of attack by the terrorists. The study has further confirmed that the Islamic State (IS) and its affiliates continue to be the deadliest terror group in the global arena as per the statistics. Al-Shabaab, Balochistan Liberation Army (BLA) and Jamaat Nusrat Al-Islam wal Muslimeen (JNIM) have been identified as other prominent terrorist groups in the global context.

Figure 3

Attacks and deaths from terrorism by region, 2007–2022
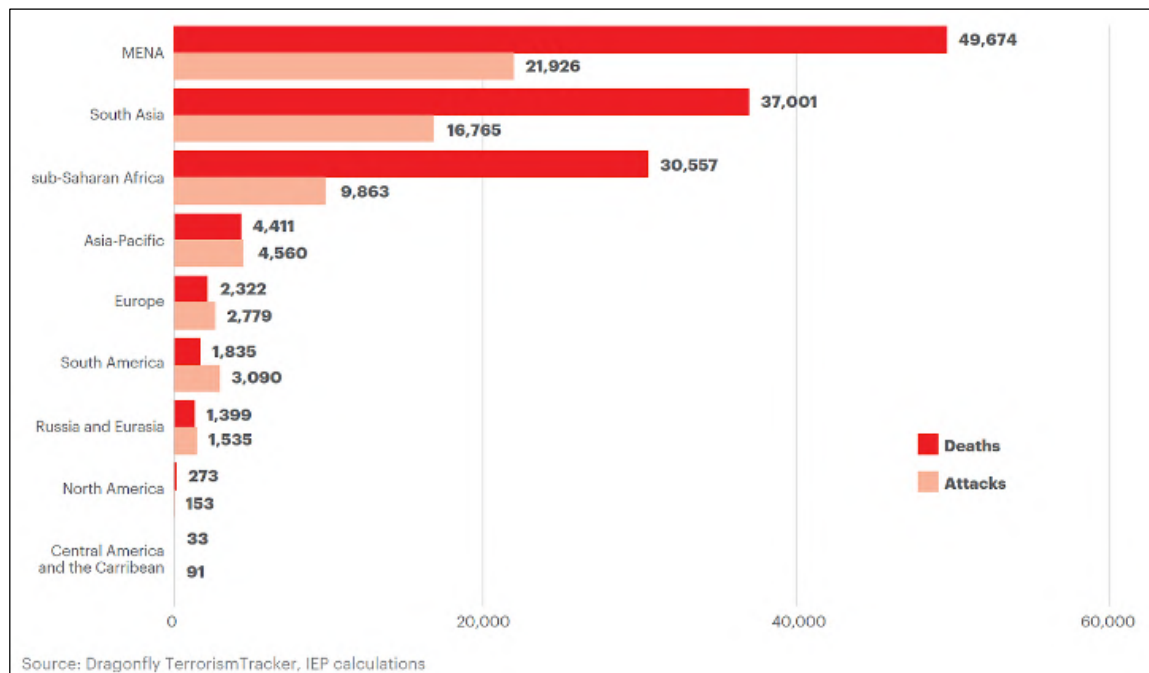
Source: Dragonfly Terrorism Tracker

In relation to the COVID-19 pandemic, Sri Lanka can derive valuable lessons with regard to the impact of health security challenges on national security and regional security. It is evident that the major impact of the pandemic was reflected in human security. Human security is a multi-sectoral approach to security that identifies and addresses widespread and cross-cutting challenges to the survival, livelihood and dignity of the people. Human security integrates three freedoms: freedom from fear, freedom from want and freedom from indignity. In that, economic security is a key component of human security. However, with Sri Lanka in dire straits with regard to economic security, the country faces numerous vulnerabilities in the coming years as far as national security is concerned. Energy security has become one of the biggest geopolitical factors in the present context. Sri Lanka at present struggles to find long term solutions in this respect. Besides, food/calories/human energy has been a totally neglected phenomenon in Sri Lanka over the years. Civil society cultivation and engagement are two key areas in which Sri Lanka has failed to achieve the desired long-term objectives. Further, Sri Lanka's diaspora relations are another vital area that needs course correction. Identifying and analysing possible transnational categories of criminal activities that could endanger the national security of Sri Lanka is paramount. Another important factor is how can Sri Lanka preserve and augment its domestic/national defence / regional security freedom of manoeuvre among large states such as China, India, U.S., Russia. It is imperative that Sri Lanka perform a comprehensive threat assessment to identify the possibilities of rivals or adversaries of the state using larger category of technology or non-lethal technology against her.

Conclusion

The study identifies two ways that COVID -19 pandemic and RSCT complement each other. Firstly, pandemic was treated as a threat and in many ways securitised by all countries. The discourse was often framed as a war/competition/rivalry, both between humanity and the pathogen, but also between states. COVID-19 did not recognise borders, natural obstacles, religion, culture, gender etc. This suggests that in such an interconnected, globalised world, 'regionalisation' of contemporary security threats can be overplayed. On the other hand, the very fact that different states dealt with the pandemic differently shows RSCT at play. For example, vaccine diplomacy fused with other regional security issues in the case of Chinese gifting vaccines to Sri Lanka and the desire by some in the UK to see Oxford-AstraZeneca produce a vaccine before Pfizer-BioNTech in order to vindicate Brexit. It is also the case that in different countries the populations securitise Covid to different levels. Climate change is securitised to greater levels in Europe whereas Pacific countries consider infectious diseases/pandemic a greater threat. This again reinforces RSCT at play. The study emphasises that Sri Lanka needs to navigate its geopolitical setting in a professional manner through a solid foreign policy. With the global powers engaged in a fierce competition to wrest control of the global balance of power, Sri Lanka should navigate its future in line with non-alignment policies.

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Assessing the Applicability of Anglo-Saxon Capitalism: Convergence Amidst Challenges and Diverse Economic Models- a Literature Review

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Abstract*

Anglo-Saxon liberal capitalism, characterised by a free market and neoliberal policies, is considered a standard model observed in countries like the USA, UK, Australia, Canada, Ireland, and New Zealand. However, the success of Scandinavian countries with the social democratic capitalist model challenges the applicability of the Anglo-Saxon model to other states. The global economic crisis in 2008 and the COVID-19 pandemic in 2020 have further raised doubts about the Anglo-Saxon model's suitability. This study examines whether the states are still converging toward this model. A systematic literature review was used to find a range of earlier studies to analyse indicators such as government expenditure, welfare sector size, employment protection, and product market regulations in China, the Scandinavian, and European countries. Results reveal that increased inequality, the concentration of wealth, and declining social and public services are the outcomes of the Anglo-Saxon model due to the neoliberalism profit maximisation principles. Countries like Germany and China are unlikely to adopt the Anglo-Saxon model. Germany has closer state-business relations and sustainable stakeholder institutions that promote long-term economic prosperity. Scandinavian countries prioritise welfare and equality, making it improbable for them to converge. In conclusion, convergence towards the Anglo-Saxon model is unlikely for Germany, Scandinavian countries, and China. Each country has unique economic, historical, societal, and cultural characteristics that make it challenging to adhere to a specific imported economic model. The study emphasises the importance of considering diverse economic models and tailoring them to fit individual countries rather than pursuing a universal model of capitalism.

Keywords: Anglo-Saxon Capitalism, Convergence, Neo-liberalism

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Introduction

The direct intervention of the state in the economy takes various forms, and capitalism is a popular political philosophy that allows for such intervention. State involvement is typically reduced in capitalist economies, and the private sector controls trade and industries (Konzelmann & Fovargue-Davies, 2011). The literature recognises different types of capitalist models worldwide, with some theorists highlighting dichotomies and others describing five to six models (Crouch, 2005). One prominent model is Anglo-Saxon liberal capitalism, which features a significant role in the free market and is observed in countries such as the U.S.A., the U.K., Australia, Canada, Ireland, and New Zealand (Crouch, 2005). While the Anglo-Saxon

model is associated with neoliberal policies, radical innovation, and new sectors of the economy, there has been a global debate on the most suitable economic model. Some theorists point to the success of Scandinavian countries with their social democratic capitalist model (Kenworthy, 2020). However, the economic crises of 2008 and the COVID-19 pandemic in 2020 have cast doubt on the applicability of the Anglo-Saxon model as the global economic hegemony. This research aims to explore the answer to the question of whether all states will inevitably converge to the Anglo-Saxon model of liberal capitalism or if there is potential for convergence or divergence. The discussion will consider specific country examples such as coordinated market economies (Germany, Scandinavian countries) and China.

Literature Review

Varieties of Capitalism (VOC) has been a long debate in the capitalism literature. In his book 'Three Worlds of Welfare Capitalism', Esping-Anderson (1990) introduced three such models. The social democratic model originated the welfare states, highlighting class mobilisation as a political agent (Esping-Andersen, 1990). Two kinds of market economies, Liberal market economy (LME) and Coordinated market economy (CME), are discussed by Feldmann (2018). The Anglo-Saxon model can be introduced as LME rooted in neoliberalism and emerged in the 1970s as a response to the limitations of Keynesian theory in addressing unemployment and inflation (Konzelmann & Fovargue-Davies, 2011). It emphasises minimal state intervention while facilitating the functioning of the economy (Milker, 2012).

Liberal market economies (LMEs) within the Anglo-Saxon model prioritise short-term profits, intense competition, deregulated labour markets, and a distant relationship with the state (Milker, 2018). However, this model has had mixed outcomes. While the U.S.A. became a dominant force with multinational corporations, income inequality has increased, and wealth concentration among the elite has grown (Tiffen et al., 2020). The 2008 global financial crisis highlighted the vulnerabilities of the Anglo-Saxon LME model, with the U.S.A. and the U.K. experiencing significant economic impacts (Konzelmann & Fovargue-Davies, 2011).

The COVID-19 pandemic further revealed the shortcomings of the Anglo-Saxon approach, particularly in the U.S.A. and the U.K., where outsourcing and profit-oriented private sectors hindered effective governance (Geyman, 2021). Large corporations and industry associations play a significant role in global governance, influencing policies prioritising profit maximisation over fair global governance (Haufler, 2006; Seitz & Martens, 2017).

These outcomes are inherent to the Anglo-Saxon model, which has been perceived as a global capitalist 'best practice' (Milker, 2018). However, divergence from this model is also evident. Coordinated market economies like Germany and Scandinavian countries present alternative approaches with more robust welfare sectors, higher government expenditures, and more stringent employment protections (Mikler, 2012). As a distinct case, China demonstrates its own path of economic development.

Overall, the Anglo-Saxon model of liberal market economies has witnessed mixed outcomes, with increased inequality and economic vulnerabilities. Coordinated market economies and the Chinese model offer alternative paths, challenging the notion of a universal Anglo-Saxon capitalist model.

Methodology

The author carried out a systematic literature review as the methodology to investigate whether all states will converge to the Anglo-Saxon model of capitalism. During the systematic review process, a rigorous search strategy and inclusion criteria (keywords: ex Anglo-Saxon Model, Social Democratic model, Chinese economic model, Nordic countries) were used to obtain articles related to prevailing economic models. As the theoretical debates run back decades, a time frame of 1980-2022 was set in the search. A search of electronic databases like Google Scholar and Science Direct for titles and abstracts of potentially relevant studies was conducted. Given the vast number of materials available in the literature relating to this work, peer-reviewed articles were filtered. After the screening, fewer than 20 articles were chosen for the study. Economic indicators, including government expenditure, welfare sector size, employment protection, and product market regulations, were used to compare Anglo-Saxon and other selected countries (Scandinavian countries, Germany, and China).

Results and Discussion

Do Scandinavian countries and Germany have the potential to converge?

When assessing convergence or divergence from the liberal market economy, several indicators offer insights. Government expenditure as a proportion of Gross Domestic Product (GDP) is relatively higher in Germany than in Anglo-Saxon countries, although a slight decline is observed from 2000 to 2008 (Table 1) (Milker, 2018). The size of the welfare sector, measured by social expenditure as a percentage of GDP, is also significantly larger in Germany compared to Anglo-Saxon countries. Additionally, as Milker's (2018) comparison highlights, Germany demonstrates higher strictness in employment protection. If Germany tends to converge to the Anglo-Saxon model, we expect a decline in government expenditure in the above indicators, which has not been the case. However, a noteworthy trend towards a more neoliberal form of the state is evident in Germany. Data indicates a decline in product market regulations from 2000 to 2008, suggesting a convergence towards neoliberalism (Milker, 2012). This observation signifies a divergence within the overall convergence of Germany as a coordinated market economy.

Government expenditure as a proportion of GDP in Scandinavian countries, specifically Sweden and Denmark, is considerably higher than in Anglo-Saxon countries (Table 1). However, there was a decline in social expenditure as a percentage of GDP from 2000 to 2008 in both countries, although their values remain higher compared to Anglo-Saxon countries (Table 1). These data also indicate a high state intervention in the market in Nordic countries, implying the low possibility of converging into Anglo-Saxon capitalism. However, like Germany,

Denmark and Sweden exhibit a trend towards neo-liberalism regarding strictness in employee protection and product market regulations (Table 1).

When examining income inequality using the Gini coefficient data, Anglo-Saxon countries demonstrated significant growth in inequality and poverty from 1980 to 2013 (Tiffen et al., 2020). In contrast, Scandinavian countries, such as Denmark and Sweden, exhibit the lowest levels of inequality, reflecting their social democratic capitalist model (Kenworthy, 2020). Though we expect the neo-liberal market to reduce poverty, social democratic countries have successfully implemented a welfare state, resulting in sustainable equality and reduced poverty (Kenworthy, 2020) than Anglo-Saxon countries. Consequently, the likelihood of Scandinavian countries converging towards the liberal market economy model is minimal, given the effective implementation of their welfare state.

Table 1

Comparison of convergence/divergence factors

	U.S.A.		UK		Germany		Denmark		Sweden	
Year	*2000*	*2008*	*2000*	*2008*	*2000*	*2008*	*2000*	*2008*	*2000*	*2008*
Govt Expenditure as a Proportion to G.D.P.	33	37	38	48	45	44	51	52	52	53
Social expenditure as a % of G.D.P.	15	16	20	21	27	27	29	27	32	29
Strictness in employment protection	0.21	0.21	0.68	0.75	2.34	2.12	1.5	1.5	2.24	1.87
Product market regulations	1.283	0.841	1.070	0.842	2.062	1.328	1.933	1.302	1.589	1.057

Source: O.E.C.D. Statistics (Milker, 2018)

China's form of capitalism represents a distinct hybrid model that diverges from Western concepts (Peck & Zhang, 2013). With significant state intervention and economic control, the country has taken a gradual and path-dependent approach to its capitalist system (Breslin, 2012). Privatisation efforts coexist with a concentration of economic power in the hands of the state, hindering the transition towards a liberal market economy (Breslin, 2012). Cultural, historical, social, and political factors further complicate this shift, as China's communist configuration and non-elected government prioritise state objectives over market dynamics (Peck & Zhang, 2013). Bureaucratic obstacles and limited market freedom for investors reinforce the state's pervasive presence (Breslin, 2012). Overall, China's unique capitalist model and its characteristics make it unlikely to converge toward a liberal market economy (Peck & Zhang, 2013).

Table 2

Comparison of G.I.N.I. Coefficient and Poverty data

Country	Inequality (Gini coefficient-2013)	Poverty (% of the population living in relative poverty)
USA	0.381	17.2
UK	0.330	9.1
Germany	0.293	10.0
Denmark	0.249	5.7
Sweden	0.237	6.0

Source: Luxembourg Income Study database (Tiffen et al., 2020)

Conclusions

In conclusion, countries with coordinated market economies, particularly in Europe and Scandinavia, have shown some potential for convergence but are hindered by state intervention, social practices, and the presence of a welfare state. With its strong state influence and unique path dependency, China has minimal opportunity to transition to a liberal market model. In the aftermath of the global financial crisis and the COVID-19 pandemic, nations worldwide are reevaluating their approach to a liberal market economy. Anglo-Saxon countries like Australia and Canada are gradually enhancing their welfare sectors and moving away from the traditional model. Additionally, emerging economies such as the BRICS countries are developing their distinct models of capitalism. Lessons learned from past crises suggest a shift towards a new form of capitalism that retains significant state power, leading to divergence from neo-liberalism and the Anglo-Saxon model.

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Major Challenges Faced by the Teacher Counsellors in Sri Lanka
(A Study Conducted at the Badulla District, Welimada Educational Zone)

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Abstract*

The research study aimed to comprehensively investigate the challenges faced by teacher counsellors in Sri Lankan schools. These challenges are intricately tied to multifaceted factors, including socioeconomic disparities, psychological issues, and cultural influences. The Ministry of Education in Sri Lanka has embraced a distinctive approach by advocating the utilisation of teacher counsellors rather than recruiting specialised school counsellors. Consequently, this policy has ushered in a diverse cadre of individuals, encompassing teachers with diverse backgrounds and experiences, who assume the crucial role of furnishing psychosocial support to students. Employing a qualitative research methodology, this study delved into the nuances and intricacies of teacher counsellors' experiences and the obstacles they confront. The research encompassed a sample of 30 schools, deliberately chosen to represent both rural and urban settings, facilitating a comprehensive examination of the myriad challenges encountered by teacher counsellors. Within this school cohort, 30 teacher counsellors were meticulously selected through purposive sampling, ensuring a rich tapestry of perspectives included in the study's findings. Data were meticulously gathered through a diverse array of research methods, comprising individual interviews, which involve one-on-one discussions with teacher counsellors; focus group discussions, which entail group dialogues among teacher counsellors; documentary analysis, entailing scrutiny of pertinent documents and records; and casual conversations, which encompass informal exchanges with teacher counsellors. The findings of the study underscored the resolute commitment of teacher counsellors in Sri Lankan schools to their roles as dedicated advocates for students. Rather than adhering rigidly to conventional counselling methodologies, they demonstrated an appetite for pragmatic strategies aimed at instilling optimism and empowerment in students. However, these unwavering efforts met with substantial challenges, including an acute shortage of time and appropriate counselling spaces, indicative of onerous workloads and unsupportive physical environments within schools. Additionally, a noticeable deficiency in their knowledge and training pertaining to the effective addressing of students' psychological needs underscores the imperative for additional support and resources. Teacher counsellors themselves proposed a plausible solution to these challenges, advocating for the allocation of full-time roles. This implied that a heightened dedication of time and resources to counselling may empower them to more effectively support students grappling with psychosocial challenges. The study cast a spotlight on the teacher counsellors' roles within the Sri Lankan education system. Furthermore, it offers valuable insights that hold the potential to upgrade

the efficacy of teacher counsellors in their crucial mission of assisting students struggling with complex psychosocial issues.

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Introduction

Teacher counsellors are individuals in educational institutions, specifically in government primary or secondary schools, who provide psychological support to students. This support can encompass various aspects of emotional, social, and mental well-being. They are chosen based on specific criteria, which can include traits, expertise, or their existing workload. This means that schools might consider qualities like empathy, communication skills, or relevant training when selecting individuals for these roles. Alternatively, teachers who are already employed in the school might take on counselling responsibilities. The teacher counsellor positions are voluntary, implying that those who assume these roles do so willingly, without direct financial compensation. They might have other primary roles within the school, such as teaching or administrative duties and they typically do not receive additional incentives or rewards for taking on counselling responsibilities. Incentives could include financial bonuses or promotions, which are common in other professions. This highlights the altruistic nature of their service, as they are motivated by a desire to support students rather than personal gain. Further, they have a heavy workload due to their multiple roles within the school. This could include teaching classes, administrative tasks, and counselling responsibilities. Teacher counsellors might also be involved in organising and supervising extracurricular activities in the school, such as sports, arts, or other non-academic pursuits. The study intends to examine how this involvement impacts their ability to offer counselling services effectively. Counselling responsibilities are treated as distinct obligations within the school environment. This means that these responsibilities are seen as separate from other tasks such as teaching, coaching sports, or facilitating religious or therapeutic activities.

Literature Review

While all educators possess some capacity for counselling, institutions that prepare teachers often offer courses relevant to school counselling (Howieson & Semple, 2000). The importance of school counselling as a necessary service in educational settings has been emphasised, with teachers generally supportive of counselling services as a means to maintain a harmonious school community and assist students in overcoming challenging life circumstances and risk factors (Sun & Stewart, 2007; Yuksel-Sahin, 2009). School counselling addresses students' educational, vocational, emotional, social, and personal development (Paisley & McMahon, 2001). School counsellors also play a crucial role in informing parents and authorities about counselling services for students dealing with psychosocial issues, thereby reducing trauma and enhancing both learning and emotional well-being. Research conducted by Whiston and Sexton (1998) demonstrated the positive impact of counselling

services on students, while Sears and Granello (2002) highlighted that many challenges faced by school counsellors are context-specific. These challenges encompass ongoing debates about the roles of school counsellors, the lack of defined plans for school counselling, the need for a greater emphasis on preventive measures over corrective ones, limited accessibility to counselling services, and the necessity for technology-driven counselling services with adequate support from teachers and administrators. Insufficient counselling knowledge contributes to inadequate support, and school counsellors must continuously adapt to evolving objectives, job roles, and societal and cultural contexts. Consequently, it is not uncommon for job-related stress and dissatisfaction to affect school counsellors in the United States (Rayle, 2006), with professional burnout and unhappiness being potential consequences. Paisley and McMahon (2001) emphasise that school counsellors require positive personality traits and comprehensive pre-service and in-service training. They suggest viewing difficulties as opportunities for learning and advocating for transformative changes in school counselling and counsellor preparation programmes. Sears and Granello (2002) underscore the importance of school counsellors establishing a professional identity, joining counselling organisations, and collaborating with administrators to promote the significance of professional development in the field. Furthermore, they encourage counsellors in schools to take leadership roles, engage with stakeholders, coordinate programmes, utilise data and technology, and advocate for the well-being of all students. It is worth noting that the majority of research on counselling in schools has primarily focused on orphans and vulnerable children, with limited attention given to teacher counsellors (Whiston & Sexton, 1998). Consequently, one of the primary objectives of this study is to identify the key challenges faced by teacher counsellors in schools in Sri Lanka.

Materials and Methods

The selection of specific schools and teacher counsellors in this study was based on several criteria and considerations that aimed to ensure the collection of comprehensive and representative data for the research. The study sought to include schools from both rural and urban areas within the Badulla District, Welimada Educational Zone. This geographical diversity was important to capture a wide range of experiences and challenges faced by teacher counsellors. Urban and rural schools may have distinct characteristics and issues related to counselling services. The population for this study was secondary school teachers providing counselling services. These individuals were the primary focus of the research as they are directly involved in delivering counselling support to students. By focusing on this specific group, the study aimed to gather insights directly from those who are responsible for implementing counselling programmes. Purposive sampling was used to select the 30 teacher counsellors from the 28 schools included in the study. Purposive sampling is a non-random method where participants are deliberately chosen based on specific criteria. The criteria for the selection of the participants for this study included factors such as years of experience, level of involvement in counselling activities, and willingness to participate. This method allows researchers to select participants who are most relevant to the research objectives.

Two schools were utilised for pilot research. This is a common practice in research to test the research instruments and procedures before conducting the main data gathering. Pilot research helps identify and address any potential issues with the data collection process and ensures that the research methods are effective. Various data-gathering techniques were used, including individual interviews, focus group discussions, informal encounters, documentary analysis, and closed-ended and open-ended questions. This diverse set of techniques was employed to gather 'rich' data, as mentioned in the methodology. Each technique serves a specific purpose in collecting different types of information and perspectives. The collected data were analysed as follows. Recorded interviews, focus group discussions, and other data sources were systematically coded, which involves categorising information based on themes, concepts, or patterns that emerge from the data. The researcher identified recurring themes in the data that relate to the research questions or objectives. These themes were often derived from the coded data and once the themes were identified, the researcher interpreted the significance in relation to the research objectives. This step involved making sense of the data and drawing conclusions. The selection of schools and teacher counsellors in this study was guided by the need for geographical diversity, a focus on the interest of the teacher counsellors, the use of purposive sampling to select relevant participants, the conduct of pilot research for methodological validation, and the use of multiple data collection techniques to ensure comprehensive data gathering. These criteria and considerations were designed to enhance the quality and depth of the research findings and to provide a well-rounded understanding of the challenges and experiences of teacher counsellors in the selected educational context.

Results and Discussion

Key Successes of Teacher Counsellors

The implications of having teacher-counsellors who lack formal training in counselling while providing crucial psychosocial support to students are multifaceted and demand careful consideration. Firstly, we can highlight the importance of recognising the vital role teacher-counsellors play in the emotional well-being of students. Their enthusiasm, friendly demeanour, and natural empathy were undoubtedly assets, but without proper training, they face different challenges. One key implication was the risk of inadequate support. While some teacher-counsellors excel at recognising students' emotional needs and providing essential interventions, others may struggle to do so effectively. This discrepancy in skills resulted in inconsistent support, potentially leaving some students without the help they desperately require. Moreover, relying on teacher-counsellors without formal training inadvertently places an undue burden on them. The demands of teaching were already significant, and adding counselling responsibilities can lead to increased stress and burnout. Overburdened teacher-counsellors might struggle to maintain the high level of enthusiasm and effectiveness that initially made them appealing for the role. To address these implications, a comprehensive approach is necessary. First and foremost, providing teacher-counsellors with formal training in counselling techniques is essential. This training should cover a range of topics, including

active listening, crisis intervention, and understanding the emotional and psychological needs of students. Ongoing professional development and support should also be offered to ensure that teacher-counsellors continue to enhance their skills and knowledge. Additionally, schools should establish clear guidelines and expectations for the roles and responsibilities of teacher-counsellors. This can help ensure that teacher-counsellors do not become overwhelmed with their dual roles as educators and counsellors. Adequate resources, such as counselling supervision, should be available to teacher-counsellors to assist them in handling challenging cases and maintaining their own mental well-being. Furthermore, collaboration between teacher-counsellors and professional counsellors or mental health experts within the school is crucial. This partnership can provide teacher-counsellors with access to additional expertise and resources, allowing them to refer students to specialised help when necessary. While teacher-counsellors possess valuable qualities that make them well-suited to provide psychosocial support to students, their lack of formal training in counselling necessitates a thoughtful approach. Training, clear guidelines, resources, and collaboration with mental health professionals are essential steps to ensure that teacher-counsellors can effectively address students' emotional needs while maintaining their own well-being.

Reasons for Assuming Teacher Counsellor's Role

The implications of teacher counsellors being primarily motivated by their dedication to assisting students and their well-being are significant and multifaceted, carrying both positive and negative aspects. Firstly, having individuals who genuinely care about students' welfare in these roles is a clear advantage. Their passion and commitment can foster a supportive and nurturing environment for students, which is crucial for their emotional and academic development. High job satisfaction can also lead to increased motivation and effort, resulting in better outcomes for the students they serve. However, there are potential challenges associated with this motivation-driven approach. For some, the choice to become a teacher counsellor might stem from a desire for lighter workloads or the perception that it involves less demanding responsibilities compared to traditional teaching roles. This could lead to a mismatch between expectations and the actual demands of the position, potentially resulting in suboptimal performance or job dissatisfaction if the role proves more challenging than anticipated. Moreover, some teacher counsellors might have been selected for the role based on the belief of their school principals in their ability to excel in this capacity. While this can be a positive indicator of potential success, it also raises concerns about whether selection processes are objective and based on merit or favouritism. Favouritism can undermine the credibility of the teacher counsellor role and lead to issues within the school community. Additionally, the link between motivation for taking on the role and the quality of instruction raises questions about teacher counsellors' preparedness and training for their counselling responsibilities. If individuals take on this role primarily for reasons unrelated to counselling, they may lack the necessary skills and knowledge to provide effective counselling services, potentially compromising the well-being of the students they are meant to support. To address these implications, several measures can be implemented. Firstly, it's essential to

ensure that individuals pursuing the role of teacher counsellor receive comprehensive training in counselling techniques and psychosocial support. This training should equip them with the skills and knowledge needed to effectively meet students' emotional and psychological needs. Furthermore, selection processes for teacher counsellors should be transparent, objective, and based on qualifications and experience rather than favouritism. This can help to ensure that the most qualified individuals are chosen for these critical roles. In terms of motivation, it is important to foster a culture of genuine commitment to students' welfare within the teaching profession as a whole. This can be achieved through professional development programmes, recognition of the importance of counselling in education, and creation of a supportive and collaborative work environment where educators understand the value of their roles beyond academics. Regular performance evaluations and feedback mechanisms can help identify areas where teacher counsellors may need additional support or training, allowing for continuous improvement in their ability to provide effective counselling services.

Major Challenges of Teacher Counsellors

The teacher counsellors who took part in this study were dealing with a lot of difficulties. The following categories represent how the challenges are divided.

Learners' Lack of Faith or Trust in Counselling

Teacher counsellors were primarily motivated to pursue this career due to their dedication to assisting students and their welfare. Job satisfaction is essential for employees to give their best effort. Some counsellors chose this path due to lighter workloads or related duties, such as teaching life skills. Some were also chosen because their school principals believed in them. The motivation for taking on the role of teacher counsellor was linked to the quality of instruction, with teachers who did not voluntarily provide counselling services expressing more irritation and receiving unfavourable feedback from students. To ensure that teacher counsellors are well-equipped for their roles, schools and educational institutions should provide comprehensive training in counseling techniques and psychosocial support. This training should be mandatory for all teacher counsellors, regardless of their initial motivations. It should cover active listening, crisis intervention, understanding emotional needs, and providing effective support to students. This training helps standardise the skills and knowledge required for the role, ensuring that all teacher counsellors can effectively assist students. Establishing clear and standardised role definitions and expectations for teacher counselors can include specifying their responsibilities, workload, and the balance between teaching and counseling duties. Clear role definitions help prevent potential misunderstandings and ensure that teacher counselors are aware of what is expected of them. The assessment can help to identify individuals whose motivations may not align with the core objectives of counseling, allowing for targeted training or support to bridge any gaps in their commitment to student welfare. Offer ongoing professional development opportunities for teacher counselors. This helps them continually improve their skills, stay updated on best practices, and remain engaged and satisfied with their roles. Professional development can

also address any shortcomings in their abilities and ensure that they are better prepared to meet students' needs. Ensure that the selection of teacher counselors is based on objective criteria, qualifications, and experience rather than personal preferences. Transparent selection processes help to maintain the credibility of the teacher counselor role and ensure that the most qualified individuals are chosen for these critical positions. Foster collaboration between teacher counselors and professional counselors or mental health experts within the school. This partnership can provide teacher counselors with access to additional expertise and resources, allowing them to refer students to specialised help when necessary. It provides a support system for teacher counselors facing challenging cases. Implement regular performance evaluations and feedback mechanisms for teacher counselors. This can help to identify areas where improvement is needed and provide opportunities for professional growth. It also ensures that teacher counselors are accountable for their roles and the impact they have on students. Encourage a holistic approach to education that values both academic achievement and the emotional well-being of students. This includes recognising the importance of teacher counsellors in creating a supportive and nurturing learning environment.

Insufficient Space, Time, and Appreciation for Teacher Counsellors' Role

One significant challenge highlighted is the lack of suitable spaces for counselling within schools. The growing student population has resulted in schools using every available space for teaching, leaving no private rooms for counselling. This lack of private and confidential spaces can be detrimental to the effectiveness of counselling sessions as students may be hesitant to discuss personal issues in public settings. The teachers have to conduct counselling sessions outdoors, under trees, or in open spaces, which can compromise the privacy and confidentiality of these sessions. This unideal setting can make it challenging for both students and teacher counsellors to engage effectively in counselling discussions. It was noted that teacher counsellors often provide counselling services on a voluntary basis, meaning they may not have dedicated time and resources for counselling. This can lead to a lack of consistency and may limit the availability of counselling services to students. The teacher counsellors often lack support from school management. The priorities of the schools mostly focused on academic subjects than on counselling, which can lead to a lack of resources and recognition for counselling services within the school. There is a lack of common understanding among both staff members and students about the objectives and approaches of counselling. This suggests a need for improved communication and education regarding the role and purpose of teacher counsellors. Many teacher counsellors feel the need for schools to appoint full-time teacher counsellors or reduce the workload of counsellors. This reflects a desire for more dedicated and structured counselling support within schools. A critical issue was the lack of acknowledgment of the role of teacher counsellors within the school system. Some teachers and school management undermine the work being done by counsellor teachers, which can lead to feelings of frustration and disempowerment among these professionals. The teacher

counsellors may face expulsion from schools if they do not consult with other staff members. This suggests a lack of recognition and inclusion within the broader school community.

Teachers Who Served as Counsellors Felt Helpless to Defend Students

Teacher counsellors are confronted with the difficult task of addressing harmful practices within schools. These practices include corporal punishment, bullying, sexual harassment, and the use of inappropriate language. These issues were not only detrimental to students' emotional well-being but also ran counter to contemporary counselling approaches and the Code of Conduct for Teaching Services. This underscores the importance of teacher counsellors in promoting a safe and supportive learning environment. It is suggested that decision-making processes and policies may not be inclusive or transparent, potentially contributing to the persistence of harmful practices. This lack of inclusivity can hinder the effectiveness of teacher counsellors' efforts to bring about positive change. Teacher counsellors face coordination challenges between school management and counselling committees. Effective communication and collaboration between these entities are essential for implementing and enforcing policies related to student well-being. Without coordination, the impact of counselling efforts may be limited. Teacher counsellors often feel powerless to protect students. This powerlessness is further highlighted by their exclusion from disciplinary committees. This exclusion not only reflects a lack of equity but also indicates that the role and contributions of teacher counsellors are not fully acknowledged within the school system. The rigidity can impede the adaptability and responsiveness of schools to changing needs and challenges. Teacher counsellors may struggle to enact meaningful change within such rigid environments. It is suggested that school managers should attend counselling training conducted by senior Ministry of Education officials. This recommendation underscores the need for professional development and capacity-building, especially for those in leadership positions within schools. It implies that training can help school managers better understand the importance of counselling and create a more supportive environment for teacher counsellors. The challenges include addressing harmful practices, navigating school governance, dealing with power imbalances, and advocating for change within rigid structures. To address these issues, comprehensive training, improved communication and coordination, and a shift in school culture toward inclusivity and recognition of the counselling role are crucial steps. Additionally, involving school administrators in counselling training can foster a more supportive and collaborative environment within schools.

Teacher Counsellors Thrashed to Deal with Cultural Issues

Teacher counsellors face challenges in addressing culturally-related issues, such as parental support for counselling, customary practices that compromise schooling, and practices related to death and bereavement. Respondents believe contemporary counselling is far away from their cultural realities. Marriage is not about whom the girl loves, but what her father decides. Teacher counsellors cannot advise a learner to complete school and consider marriage afterward, as the husband has the final say over whether the learner will remain in school or

not. Additionally, some cultures have lengthy mourning rites following the death of a family member, extending the time a learner will miss on academic responsibilities. In some situations, death results in children being distributed among family members, leading to siblings being split. The school system rarely recognises these changes as imposing impediments to learning. Teacher counsellors are the only ones trying to support the learner in a system that seems to ignore possible changes in a learner's life.

Teacher Counsellors' Need for Training Regarding Legal Issues

This delves into the significant challenges faced by teacher counsellors when dealing with legal matters, particularly cases involving sexual abuse. These challenges have several layers of implications and highlight areas where improvements are urgently needed. The teacher counsellors encountered difficulties when handling legal issues of such gravity. Cases involving sexual abuse and rape are legally complex and emotionally taxing. Teacher counsellors were often at the forefront of reporting such cases, given their role in student welfare. There is a concerning aspect of the challenges faced by teacher counsellors reporting the cases to the police often leads to legal consequences against the counsellors themselves. This highlights a critical gap in support and protection for these professionals. They may face legal action without the necessary assistance from their administrators or institutions, which can be a severe detriment to their own well-being and job security. Moreover, this situation emphasises the pressing need for specialised training for teacher counsellors in handling legal matters, particularly cases of sexual abuse. Legal issues require a specific skill set and understanding of due process, confidentiality, and victim support. Without proper training, teacher counsellors may struggle to navigate the legal complexities of these cases, potentially compromising the pursuit of justice and the well-being of the victims. The challenges these counsellors face can have a profound impact on their mental health and job satisfaction, making it crucial for administrators and institutions to provide the necessary resources and emotional support to help them cope with their challenging roles.

Suggestions for Making Their Job Less Stressful

The suggestion to appoint a full-time school counsellor and social worker underscores the importance of having dedicated professionals to address the emotional and psychological needs of students. This recommendation recognises that teacher counsellors, while valuable, may have other teaching responsibilities, and thus, having specialised staff can provide more focused and comprehensive support. The call to sensitise other teachers to support students in need of emotional support is crucial. It acknowledges that counselling is not the sole responsibility of dedicated counsellors but should be a collective effort within the school community. Raising awareness among teachers can create a more inclusive and supportive environment for students facing emotional challenges. The proposal to conduct workshops before and after school to accommodate counsellor attendance without fear of missing classes is a practical solution. It ensures that counsellors have the opportunity for professional development while not compromising their teaching responsibilities. This approach promotes

a balance between counselling and teaching roles. Recommending that the government appoint a full-time school counsellor demonstrates a recognition of the need for systemic support. It suggests that a top-down approach can help ensure that schools have the necessary resources and expertise to address students' emotional well-being effectively. The principals should attend counselling training is essential as school leaders play a pivotal role in setting the tone for the school environment. Equipping principals with counselling knowledge can foster a more supportive and empathetic school culture, which, in turn, benefits both students and teacher counsellors. Proposing the integration of counselling training into the teacher-education curriculum is forward-thinking. It recognises that equipping future educators with counselling skills from the outset can create a more holistic and prepared teaching workforce, reducing the burden on teacher counsellors. This acknowledges the emotional toll of the role and the importance of ongoing support to maintain their well-being and effectiveness. These recommendations aim to create a more effective and supportive environment for addressing students' emotional needs while also safeguarding the well-being of teacher counsellors. They reflect a holistic approach to improving the counselling system within schools.

Discussion

The Ministry of Education in Sri Lanka has opted to appoint teacher counsellors to provide psychosocial support to learners in schools. These counsellors are ordinary teachers who provide counselling services to learners. Despite challenges such as a lack of incentives and support, most counsellors are happy with their work and provide understanding and compassion. Training in counselling skills has sensitised many counsellors to the psychosocial needs of learners and increased their empathy. However, most interventions are practical and focused on motivating learners not to become disheartened. Teacher counsellors face challenges such as needing more training in counselling, addressing sensitive issues, and working with learners in different developmental stages. They also struggle with ethical considerations and legal issues. To improve their support, training school management in counselling, integrating counselling training into the teacher-education curriculum, and providing regular visits and information from Senior School Counsellors can be recommended. Teacher-counsellors need support from dedicated staff members who can provide skills to prevent and cope with difficulties. Teacher counsellors struggled to handle cases of domestic violence, sexual abuse, rape, and incest, especially in their communities. Cultural issues, a lack of proper counselling skills, and a culture of not opening up to outsiders made it difficult for counsellors to counsel learners. Learners were doubtful of the counselors and believed they would be punished if they disclosed their problems. Teacher counsellors were appointed on a voluntary basis, had limited time, and schools did not provide adequate space for counselling. The study also revealed that counsellors struggled to create a better school environment for learners, as corporal punishment, bullying, sexual harassment, and inappropriate language were common. Despite being aware of these issues, counsellors felt powerless to influence change in behaviour among teachers and principals. Similarly to this, teacher counsellors were

aware of the students' issues stemming from their families and other factors outside of the school system, but they felt unable to address them. For instance, it was challenging for them to prevent forced and young marriages among students.

Conclusion

Despite facing resource constraints and limited support, these professionals continue to provide counselling for students. This underscores their commitment to their roles and their recognition of the importance of addressing students' emotional needs. One of the challenges highlighted is that teacher counsellors are appointed on a voluntary basis. This implies that they may not receive formal training related to their counselling responsibilities. Furthermore, the unavailability of space for counselling sessions suggests that the physical infrastructure for providing emotional support to students is lacking. Additionally, the absence of remuneration means that teacher counsellors may have to balance their counselling duties with other employment to make a living. Enhancing the effectiveness of the counselling system in Sri Lanka is also very impressive. One key recommendation is to appoint either full-time school counsellors. This suggests the need for a more structured approach to counselling within schools. Additionally, principals should attend counselling training. This recognises the important role school leadership plays in creating a supportive and nurturing school environment for counselling. Good training or having particular workshops in counselling can enable them to have a better understanding of the challenges faced by teacher counsellors and provide the necessary support. The Ministry of Education has appointed full-time teachers to carry out counselling. This approach combines teaching and counselling responsibilities, with teacher counsellors providing additional support. This initiative reflects an effort to address the need for dedicated counselling services within schools in Sri Lanka.

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The Career Consciousness among Undergraduate Japanese Language Learners in Sri Lanka

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Abstract*

Choosing a career path is one of the most important decisions for an undergraduate. Most of the undergraduates after their graduation tend to be a teacher of the Japanese language. But the reality is, that there are diverse career opportunities both in Sri Lanka and in Japan related to various other industries such as airport and aviation, Information Technology (IT), tourism, diplomatic and foreign ministry, etc. Are the undergraduate Japanese language learners conscious about these career opportunities? The purpose of this study is to reveal the status of career consciousness among undergraduate Japanese language learners in Sri Lanka and to inculcate new knowledge and understanding of career consciousness in this particular group. This study was done by conducting a quantitative survey on their consciousness. The target population of undergraduates goes up to 1000. A Google form was circulated among 1000 undergraduates to which 152 (15%) responded. The results showed the majority of respondents prefer to be teachers. Further, the survey revealed that the majority of the students were not aware of the diverse career opportunities. The survey also revealed that the undergraduates who participated in the survey had not received career guidance about the diverse opportunities. Parallel to the above survey five entrepreneurs extracted by purposeful sampling were interviewed to elicit the status of recruited employees in the above field. This interview revealed two main issues. The first, it was very difficult to find the ideal candidates, and the other was, a lack of awareness of the world of work related to Japan. Universities need to adopt experiential teaching with practical activities from the early stages of their university life. The further linkage between undergraduates and entrepreneurs during university life could be suggested as an effective approach to getting better results.

Keywords: career consciousness, career opportunities, undergraduate Japanese language learners in Sri Lanka, the world of work related to Japan

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Introduction

Studies in the Japanese language at the tertiary level are offered in some state universities such as University of Kelaniya (UoK), Sabaragamuwa University of Sri Lanka (SUSL), Uva Wellassa University (UWU), University of Sri Jayewardenepura (USJ), and Rajarata University of Sri Lanka (RUSL). Vareckova (2018) showed that learning foreign language (FL) can lead to

diverse career opportunities with better salaries. There are diverse reasons to students in Sri Lanka to learn Japanese. It stated that students think Japanese people are kind (Lokugamage, 2022), Japanese as a foreign language (JFL) students have an enthusiasm in Japanese language study (Deldeniya et al., 2018). The perception of the public is that, the learning of Japanese language is economical and easy, also it makes the students who studied this field feel better because their anticipated careers are often well estimated (Karunaratne, 2022). The situation proves that the Japanese language has a high potential and prospects to provide diverse opportunities. But do learners have a consciousness of what type of career opportunities are available in Japan or Sri Lanka to match their Japanese proficiency?

Career Consciousness

In Fadale (1973) the term 'career consciousness' refers to career education. Keller (1972) defines career consciousness as a consciousness of the inter-relationships of self-education, positive work attitudes, role identification, exploration of clusters, and also as decision making skills. Gibson (1972) further suggests that attitudes evolving from experiences, associations, education, and understandings of self, human behaviour, the world of work and adjustment techniques are characteristic of career consciousness. Among those definitions, this study of career consciousness considers identification, decision making skills and adjustment techniques as main roles.

The following Table 1 refers to the number of teachers who taught the Japanese language full time and part-time during the last 15 years. The below statistics prove that the number of teachers are increasing in the Japanese language education field (Rathnayake, 2022).

Table 1

Japanese language teachers in secondary education

Year	Number of teachers fulltime and part-time
2006	41
2010	65
2015	78
2018	89
2020	112

However, the total number of teachers in Sri Lanka could not be calculated as above. Apart from government schools there are a lot of private language institutions and universities that offer Japanese courses that are conducted by Japanese language teachers and lecturers.

Problem Statement

Most of the Japanese language learners in Sri Lanka are lacking in proper career guidance and consciousness. The coexistence of learners and society has a mismatch in ensuring a smooth transition into good employment and higher studies. However, even after completing an unprecedented number of years of formal education, learners still have trouble of finding employment. There is a huge mismatch between what companies require and what educational systems provide. Nobody can claim that people do not have enough jobs. Jobs are available in the society. None can claim that there are no opportunities for higher education in Japan. Students, however, are generally unaware of the opportunities for higher study and employment. A very simple example is as follows. Recently four companies of the Board of Investment (BOI) in Biyagama were seeking interpreters for their companies with good salaries. Their basic required qualification was to have a Japanese Language Proficiency Test (JLPT) level two pass, with a good pass for the Japanese language at G.C.E. (A/L). However, those companies were unable to seek ideal candidates to fill out those positions though there are learners who have passed JLPT N2 as well as G.C.E. (A/L). According to the official worldwide Japanese Language Proficiency Test (JLPT) website which is operated by the Japan Foundation (JF) and Japan educational exchanges and services, applicants for JLPT N1 on 2022 December was 42, 2022 July was 45, in 2021 December 21. Meanwhile, Chandralal (2022) states the career opportunities are available in the field of airport and aviation, IT, tourism, hospitality, diplomatic and foreign ministry etc. both in Japan and in Sri Lanka. However, career consciousness has not been given adequate attention in the Sri Lankan context. So, the researcher's aim is to fill that knowledge gap. Are undergraduate Japanese language learners conscious about these career opportunities? This study aims at revealing the status of career consciousness among undergraduate Japanese language learners in Sri Lanka and to inculcate new knowledge and understanding of career consciousness in this particular group. As existing literature lacks empirical findings in Sri Lankan context, this study fills the gap in the literature by addressing undergraduate Japanese language learners in Sri Lanka.

Research Method

First, a quantitative survey method is used to extract career consciousness among undergraduate Japanese language learners in Sri Lanka. The target population of undergraduates goes up to 1000. A Google form was circulated among these undergraduates to acquire the basic idea of career consciousness. After a thorough review of related literature, a questionnaire was designed. The questionnaire has five questions with demographical factors such as age, gender and academic year and two open ended questions. The researcher developed some demographical questions to gather relevant knowledge related to the participant's back ground. First open ended question was, 'what is the job career that you intend to do after the university graduation?' and second question was 'why do you hope to select that career?' The data from the questionnaire was analysed and reconfirmed through interviews with several respondents from each university. The data obtained from the

questionnaire and the results of the interview were further analysed to answer the issues addressed in the study. As the next step qualitative research method was used to gather information from five entrepreneurs extracted by purposeful sampling in Japan and Sri Lanka to inculcate the status of recruited employees when adapting to the relevant career. Social networks and personal contacts were used to find respondents. Purposeful selection is a strategy that identifies and selects individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest (Cresswell & Plano Clark, 2011). Table 2 describes the details of the participants. The researcher used a written semi-structured interview guide to make sure that every question area is addressed. After conducting and recording each interview, the transcripts were typed.

Table 2

Participants of the interview

Participant	Location of the employment	Career category
1	Japan	Hotel industry
2	Sri Lanka	Education industry
3	Sri Lanka	IT industry
4	Sri Lanka	Board of Investment company
5	Japan	Airport and Aviation industry

Analysis

Quantitative survey

Though the target population of undergraduates goes up to 1000, the responded number was 152(15%). In analysing the demographical data, it was noted that the majority of undergraduates were female 127(84%) and 25(16%) were male. Around 70(46%) undergraduates were 23 years old, 36(24%) undergraduates were 22 years old and 46(30%) respondents were 21 years old. 68(45%) undergraduates were from 4th year, 54(35%) undergraduates were from 3rd year and 30 (20%) undergraduates were from 2nd year.

According to the objective of this paper the concept called career consciousness of undergraduate Japanese language learners in Sri Lanka was elaborated by using two open-ended questions. They were,

1.   What is the job career that you intend to do, after the university graduation?

90% answered: to be a teacher/lecturer and 10% answered: to be an employee in the animation industry, engineering, IT industry, tourism industry, graphic designing and candle making.

2. Why do you hope to select that career?

The answers are summarised in Table 3.

Table 3

Career category and the reason for choice of that career category

Career category	The reason chose that career category
Japanese Teacher/lecturer	I like teaching
	I love my school Japanese language teacher and want to be like that teacher
	I love teaching profession
Animation industry	Interesting
Engineering industry	Have a good demand for careers
IT industry	Good salary
Tourism industry	Interesting
Graphic designing	I like it
Candle making	I have that skill

In open ended questions, respondents were asked to mention their job categories intend to do in the future. The answers obtained from these open-ended questions were then grouped into seven job categories: (1) Japanese Teacher/lecturer (2) Employee in animation industry (3) Employee in engineering industry (4) Employee in IT industry (5) Employee in Tourism industry (6) Employee in Graphic designing (7) Employee in Candle making and others that are not included in the previous seven categories. Each respondent could state one job category. Around 137 respondents (90%) have stated to are a Japanese teacher/lecturer because of their admiration for the teaching/ teaching profession. Among them, majority of them are female respondents. Meanwhile, fifteen respondents (10%) have stated to be an employee of the animation industry, Engineering industry, IT industry, Tourism industry, Graphic designing, and Candle making.

The data proved that to be a teacher/ lecturer is the main objective among undergraduates in Sri Lanka. Only 10% of undergraduates aim for other professions. This result showed that most undergraduates are less conscious about diverse career opportunities and they have paid

attention only to being a teacher/ lecturer as a role model. It showed the same with the study of Lokugamage (2015) and that suggested more attention should be drawn to Japanese professions when designing curriculum.

Qualitative interview

By both Japan and Sri Lankan entrepreneurs' interviews revealed that (Pareek, 2020) Japanese world of work culture knowledge is much needed to remain with the company/institute after their recruitment. It was observed as per the studies by Rajapaksha (2014), currently Multi-National Companies (MNC) in Sri Lanka are facing many issues due to cultural differences. Moreover, Pareek (2020) stated workforce diversity is the biggest challenge in MNCs. In addition, entrepreneurs' interviews revealed that working harmoniously with each other, mutual understanding of responsibility, good communication, speaking ability of the Japanese Language, diligence and perseverance are needed. Also, Marte (2006) has highlighted creating a work culture in an MNC is a great challenge. This was proven by Kolambage (2016) study on cultural differences in work place (2016). Kolambage (2016) has chosen an MNC belonging to Japan to investigate the role of cultural differences among workers. In Kolambage (2016) study it was mentioned that both countries of Japan and Sri Lanka are totally different countries in culture. Japanese people think first about their service to the country as well as to the company and next about their personal life. But compared to Japan, Sri Lankans do not commit to the job. They are biased toward their personal life and prefer to be with their family members. Moreover, Kolambage (2016) has mentioned that Japanese people are very hard-working. They do not waste time even one second in their life. They do the work very systematically. Moreover, Sri Lankan workers do not know how to work together cooperatively. They do not know how to behave as a team member to keep great importance on politeness, personal responsibility and working together. Therefore, they do have competition with the others.

Findings and Discussion

As Vareckova (2018) showed learning a foreign language (FL) can lead to diverse career opportunities and better salaries. As Karunaratne (2022) suggested the perception of the public is that, the learning of the Japanese language is economical and easy. It also makes students who study this field feel better because their anticipated careers are often well-estimated (Karunaratne, 2022). The situation proves that enormous potential and possibilities are available in providing diverse opportunities for Japanese language learners.

Therefore, to find the reality, a quantitative survey on the career consciousness was done. This research has analysed collected data on the career consciousness of undergraduate Japanese language learners in Sri Lanka and the sample is undergraduate Japanese language learners 152 (15% of the population). As the next step qualitative research method was used to gather information from five entrepreneurs extracted by purposeful sampling in Japan and

Sri Lanka to inculcate the status of recruited employees when adapting to the relevant career. This study used a quantitative survey to explore the career consciousness of undergraduates. This study has identified undergraduate Japanese language learners are less conscious of Japanese career opportunities, Japanese career paths, and Japanese job descriptions. The majority of undergraduate learners indicated that they like to be a teacher/lecturer as their own teacher/lecturer. Looking at the interview data from entrepreneurs two main issues were revealed. One was, that entrepreneurs find it very difficult to find the ideal candidates they want. The other was a lack of awareness of the world of work related to Japan. The findings of this research suggested that it may be necessary for future research to focus on implementing experiential teaching with practical activities from the early stages of university life. Furthermore, a linkage between undergraduates and entrepreneurs during the university life could be considered as an effective approach to getting better results. This study has provided the element for further research into students' Japanese career consciousness.

When children grow up and become adults, they also will be working members of society. Therefore, learning and thinking about the availability of different jobs, diverse working ways and various other works are important components of the curriculum. These aspects should not be considered as extracurricular activities. Universities need to adopt experiential learning which includes activities such as teaching with practical activities from the early stages of university life. Furthermore, a linkage between undergraduates and entrepreneurs during university life could be considered an effective approach in producing an undergraduate who is well aware of career consciousness in the field of Japanese language learning.

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Association of Smartphone Addiction with Depression and Anxiety in Sri Lankan Young Adults

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Abstract*

Smartphone addiction is a growing concern in modern technophilic society. The main objective of the present study was to explore the association of smartphone addiction with depression and anxiety in Sri Lankan young adults. The secondary objective of the study was to translate the Smartphone Addiction Scale – Short Version into Sinhala and do a partial validation to adapt it to the Sri Lankan context. A cross-sectional study was conducted using 786 Sri Lankan young adults between the ages of 18 and 25 years who were active smartphone users. Data were collected exclusively online and the participants were recruited through convenience and snowball sampling techniques. A systematic and standard procedure was followed to translate the SAS-SV into Sinhala and the content and consensual validity of the scale were established using the Delphi process. The translated SAS-SV Sinhala version demonstrated high internal consistency reliability. The Pearson correlation coefficient was computed to assess the strength and direction of the linear relationship between smartphone addiction, depression, and anxiety. A multiple linear regression analysis was conducted to determine the proportion of variance in smartphone addiction that could be explained by depression and anxiety. The results of the correlation analysis indicated that depression and anxiety were significantly correlated to smartphone addiction. The results of the multiple regression analysis indicated that depression and anxiety significantly predicted smartphone addiction. The findings of the present study indicate that smartphone overuse is a prevalent negative coping mechanism among young adults and hence it is important to educate the youth to use smartphones effectively.

Keywords: Addiction, Anxiety, Depression, Smartphone, Young Adults

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Introduction

In modern technophilic society, smartphones are essential devices in the daily lives of people with the unique features they bring. According to the most recent statistical reports, the number of smartphone users globally has increased from 2.5 billion to 3.8 billion from 2016 to 2021. Currently, 48% of the world population are smartphone users, with the highest reported from China (Turner, 2021). 93% of smartphone users in the world are between the ages of 18-24 years (Statista, 2021) which puts them in the category of young adults who are stepping into society after their secondary education. Smartphone addiction is emerging as a

growing social concern and has gained increased attention from researchers in recent years due to the outcomes that have resulted throughout the globe.

The extant literature on smartphone addiction has largely focused on adolescents (Chung et al., 2018; Mac Cárthaigh et al., 2020; Zhou et al., 2021), and specific contexts like schools (Buctot et al., 2020; Lin & Liu, 2020, Wang et al., 2019) and universities (Demrici et al., 2015; Zhai et al., 2020; Zhang & Wu, 2020). To date, there is a distinct lack of research on smartphone addiction among young adults in general (context-free), who are the advocates of cutting-edge technologies. Also, to the researcher's knowledge, no previous study has been conducted in Sri Lanka to investigate the association of smartphone addiction with depression and anxiety in Sri Lankan young adults. Furthermore, the majority of the past research on smartphone addiction and psychopathology has discussed depression and anxiety as consequences of smartphone addiction (Winkler et al., 2020; Yang et al., 2020), not as predictors of smartphone addiction. This gap in the extant literature provides the rationale for the present study.

In order to bridge the gap in the extant body of literature, the present study sought to answer the following research question.

How depression and anxiety are related to smartphone addiction in Sri Lankan young adults?

The main objectives of the present study were to investigate the association of smartphone addiction with depression and anxiety in Sri Lankan young adults and to translate the Smartphone Addiction Scale – Short Version (Kwon et al., 2013) into Sinhala and partially validate it among Sri Lankan young adults between the ages of 18 and 25 years.

Based on the past literature, the following hypotheses were formulated.

H₁: Depression is related to smartphone addiction

H₂: Anxiety is related to smartphone addiction

Smartphone addiction is widely defined as the overuse of smartphones characterised by maladaptive dependency and a tendency to use the smartphone without being separated from it which results in functional impairments (Chen et al., 2019; Cho & Lee, 2017; Harwood & Anglim, 2019). Depression characterises "the presence of sad, empty, or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function" (American Psychiatric Association, 2013, p. 155). Anxiety is an emotional response (fear, tension, uneasiness, or restlessness) to the anticipation of future threats (American Psychiatric Association, 2013).

Methodology

The study adopted a cross-sectional and quantitative research design. The study population was Sri Lankan young adults aged 18-25 years (World Health Organisation [WHO], 2007). Participants were recruited through convenience and snowball sampling techniques. The

sample consisted of 786 Sri Lankan young adults. Sri Lankans aged 18-25 years who were literate in either English or Sinhalese languages, and who were using a personal smartphone (a smartphone which was not merely used for work) were eligible to take part in the survey. A few screening questions were used to ensure that only the individuals who fit the study's target population would respond to the survey. Data were collected exclusively online and the web link for the survey was shared through social media platforms.

Smartphone addiction was the dependent variable and depression and anxiety were the independent variables. Smartphone addiction was assessed using the 10-item Smartphone Addiction Scale - Short Version (Kwon et al., 2013). Participants had to rate their response for each item on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). The cut-off score is 33 for boys and 31 for girls where scores range from 10-60. The original SAS-SV was translated into Sinhala using a standard and systematic procedure (Sumathipala & Murray, 2000) and the Delphi method (Jones & Hunter, 1995) was used to assess the content and consensual validity of the scale using a panel of experts. The original SAS-SV has reported high internal consistency reliability of Cronbach's alpha 0.91. Both the original English version and the translated Sinhala version were used in the study.

Depression and anxiety were assessed using the depression and anxiety subscales of the Depression Anxiety Stress Scale (DASS-21) developed by Lovibond and Lovibond (1995). Each subscale has 7 items and participants had to rate items on a 4-point Likert scale ranging from 0 (did not apply to me at all) to 3 (applied to me very much or most of the time). Scores for depression and anxiety subscales were calculated by summing the scores for each subscale and multiplying the total score by two to calculate the final score. The Sinhala version of the DASS-21 has reported good internal consistency of Cronbach's alpha 0.83 and 0.76 for depression and anxiety respectively, and validated among Sri Lankan adults (Aththidiye, 2012). Both the original English version and the Sinhala version were used in the study.

Correlation analysis and multiple linear regression analysis were the main data analysis techniques used in the present study. The correlation analysis was run to assess the strength and direction of the linear relationship among variables. A reliability analysis was conducted to find the internal consistency of the translated SAS-SV scale, DASS-21 Sinhala version, the original SAS-SV English version and the original DASS-21 English version in the present study. The Cronbach's alpha for each of the scales was computed. A multiple liner regression analysis was conducted to determine the proportion of the variance in the outcome variable that can be explained by the predictor variables.

Results

A total of 786 responded to the survey and out of them 577 responded to the Sinhala survey and 209 responded to the English survey. The mean age of the participants was 21.8 years (*M* = 21.8, *SD* = 2.56). 49.5% of the participants were males and 50.5% were females. 30.2% of the participants were studying A/L and 37.4% of the participants were following an undergraduate degree or an equivalent qualification. More than half (58.3%) of the

participants were unemployed. A significant percentage of the study sample (60.7%) used their smartphone mainly for using social media.

The mean smartphone addiction score in the sample was 34.09 (M= 34.09, SD = 10.24), where scores ranged from 10-60. The mean depression score was 10.78 (M = 10.78, SD = 10.96) and the mean anxiety score was 6.57 (M = 6.57, SD = 8.72) where sum of the scores ranged from 0-42 for each subscale (Table 1).

Table 1

Means, Standard Deviations, the Minimum, and Maximum Scores of smartphone addiction, depression and anxiety

Scale/subscale	M	SD	Min	Max
Smartphone Addiction Scale[a]	34.09	10.24	10	60
Depression subscale[b]	10.78	10.96	0	42
Anxiety subscale[b]	6.57	8.72	0	42

All the scales demonstrated high internal consistency reliability by yielding Cronbach's alpha over 0.80, where the translated SAS-SV Sinhala scale indicated a Cronbach's alpha of 0.87 (Table 2).

Table 2

Internal consistency reliability of the SAS-SV and DASS-21 English and Sinhala scales and subscales

Scale/Subscale	Cronbach's alpha
SAS-SV Sinhala scale	0.87
SAS-SV English scale	0.83
DASS-21 Sinhala depression subscale	0.92
DASS-21 English depression subscale	0.88
DASS-21 Sinhala anxiety subscale	0.89
DASS-21 English anxiety subscale	0.84

As indicated in Table 3, there was a significant moderate positive correlation between smartphone addiction and depression (r = 0.58, p < 0.01) and smartphone addiction and anxiety (r = 0.45, p < 0.01). Also, there was a strong positive correlation between depression and anxiety (r = 0.70, p < 0.01).

Table 3

The correlation matrix for smartphone addiction, depression and anxiety

		1	2	3
1	Smartphone addiction	(0.89)		
2	Depression	0.58**	(0.91)	
3	Anxiety	0.45**	0.70**	(0.88)

The results of the multiple regression analysis indicated that the regression model accounted for 58% of the variance in smartphone addiction ($R^2 = 0.58$, $F(2, 783) = 197.47$, $p < 0.001$). Furthermore, the results indicated that depression ($\beta = 0.48$, $t(783) = 12.72$, $p < 0.001$) and anxiety ($\beta = 0.10$, $t(783) = 2.12$, $p = 0.034$) significantly predicted smartphone addiction, at 95% confidence level (Table 4.12).

Discussion

As stated in **H$_1$**, the results of the correlation analysis indicated that there was a significant relationship between depression and smartphone addiction ($r = 0.58$, $p<0.01$). Therefore, hypothesis 1 was supported. This is consistent with the findings of the past research. The findings of Demrici et al. (2015) showed depression and anxiety were associated with smartphone overuse among Turkish university students. Similarly, the findings of Elhai et al. (2020) showed that depression and anxiety were correlated with problematic smartphone use among American undergraduates. Also, Jin et al. (202) found that depression and anxiety were associated with problematic smartphone use among Chinese undergraduates. The findings of Rozgonjuk et al. (2021) showed that depression and anxiety were associated with problematic smartphone use among college students in the United States.

As stated in **H$_2$**, the results of the correlation analysis indicated that there was a significant relationship between smartphone addiction and anxiety ($r = 0.45$, $p<0.01$). Therefore, hypothesis 2 was supported. This is consistent with the findings of past research (Demrici et al., 2015; Elhai et al., 2020; Jin et al., 2021; Rozgonjuk et al., 2021).

The generalisability of the findings of the present study is high as the study used a large sample size which is representative of the population. Another notable strength of the study is all the scales indicating high internal consistency reliability. Collecting data exclusively online was the major limitation of the study.

Conclusion

The findings of the present study reveal that depression and anxiety are significantly related to smartphone addiction among Sri Lankan young adults between the ages 18-25 years. Results of the Delphi process indicate that the translated SAS-SV Sinhala has high content and consensual validity. The Sinhala SAS-SV demonstrated high internal consistency reliability of

Cronbach's alpha 0.87 in the study sample. The results of the exploratory factor analysis revealed that item 3 and item 8 of the Sinhala SAS-SV were not strongly correlated with other items in the scale. There were no statistically significant differences in the mean smartphone addiction scores, mean depression scores and mean anxiety scores between males and females. The results of the multiple linear regression analysis revealed that smartphone addiction is significantly predicted by depression and anxiety.

The findings of the present study emphasise the importance of addressing the underlying psychological issues of smartphone addicts such as depression and anxiety with appropriate assessment and intervention, in order to prevent young adults from getting addicted to smartphones. Furthermore, the present study emphasises the importance of using smartphones productively instead of using them as a negative coping mechanism to relieve psychological distress. Also, the findings of the present study will help future researchers expand their knowledge on this research area, and possibly pave the way to other large-scale studies based on this topic.

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Usability Evaluation of Statistical Website: User Perspective

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Abstract*

The Department of Census and Statistics (DCS) disseminates timely data, statistics, and development indicators to the public using the official website. Periodic evaluation is essential for websites to provide efficient and effective services to patrons. A few studies have been carried out globally and Sri Lanka and also there is a dearth of published studies on usability evaluation of statistical websites. The study aims to evaluate the level of usability of the main website of the DCS with regard to effectiveness, efficiency, and satisfaction and to identify the association between the user context and website usage. The population consisted of data requesters of the DCS main website which was 861 and the sample size was 273 (Krejcie & Morgan, 1970). A stratified random sampling technique was used to draw the sample. Usability testing followed by a questionnaire was administered as the main method of data collection. The response rate was 90.84%. The overall effectiveness of the DCS website which was measured from the number of task correctly completed during the usability testing were reported as 82.72% whereas the overall efficiency which was measured from the time taken to complete each task correctly during usability testing, was 1.45 minutes. Users were moderately satisfied with the content and the design of the DCS website (3.03). Problematic areas of the DCS website were revealed as terminology issues of using census "jargon" which confused the users, malfunctioning of the internal search facility, content arrangement, and lack of downloadable file formats. The chi-square test revealed a significant association between user category and the age of respondents with the DSC website usage (p = 0.000). The present study recommended redesigning the DCS main website to be more usable by enhancing effectiveness, efficiency, and user satisfaction. By re-designing and resolving usability issues of the DSC website will facilitate the user community with easy access to timely and accurate statistical information.

Keywords: Usability evaluation, user satisfaction, statistical website, web evaluation

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Introduction

Accurate, reliable, and timely statistics directly impact the growth of transparency and accountability in economic policy-making and decision-making processes. With the vision 'to be the leader in region in producing timely statistical information to achieve the country's development goals', the Department of Census and Statistics (DCS) disseminates timely data, statistics, and development indicators complying with international recommendations, to the

public using their official website as one of the main sources (Department of Census and Statistics, 2023). The main website of DCS provides a vast amount of information under various categories; Separate subject pages; Statistical Abstracts; Press Releases; Advance Data Release Calendar; Statistical Pocket Book; LankaSIS; LankaDatta; and LankaStatmap.

Usability is a key aspect of user-centered websites. Periodic evaluation of websites is essential to provide efficient and effective services to patrons to acquire information and services with satisfaction. Although evaluation of web portals is essential, it was revealed that few studies have been carried out globally and also there is a dearth of published studies on usability evaluation of statistical websites in Sri Lanka. The main website which is aimed to provide easy access to internationally compatible up-to-date statistics of Sri Lanka collected produced and analysed by the DCS is also in need of quick evaluation. Hence, the present study aims to fulfill the existing research gap by evaluating the level of usability of the main website of the DCS with regards to effectiveness, efficiency, and satisfaction thereby facilitating the management to redesign the website by user preferences and to identify the relationship between the user context and website usage.

Literature Review

Usability which plays an important role in human-computer interaction has a multidimensional view and consists of multiple attributes. In literature, usability was defined variously and has no universally accepted definition. Dubey and Rana (2010) identified 37 formal definitions of usability with 152 attributes that fell under 22 categories. International Standard Organisation - ISO 9241-11 defines usability as "the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use" (p. 2) and has a user focus.

There are two types of user-centered evaluation formative evaluation and summative evaluation. Usability test the 'thinking aloud protocol' has been typically applied in many studies to evaluate the usability of websites (Alhadreti & Mayhew, 2017; Fan et al., 2020). In the think aloud protocol, actual users state their thinking process loudly when they complete various tasks on the system interface and facilitate learning of the users' cognitive and behavioural processes (Fan et al., 2020).

User satisfaction with the website was evaluated by the content and design features. Content-related features authority, purpose, coverage, currency, accuracy and attributes related to design, ease of use (Campbell & Aucoin, 2003), accessibility, responsiveness, learnability, aesthetics (ISO 9126, 2001), and flexibility were used in this study.

Few studies evaluated the usability of the statistical website in the global context. The Statistical Research Division of the U.S. Census Bureau (2007) conducted a usability evaluation on the statistical abstract incorporating think -aloud method and questionnaire to measure the effectiveness, efficiency, and user satisfaction. Furthermore, UNECE Statistical Division published a methodological material as 'best practices in designing websites for the

dissemination of statistics'. However, in the Sri Lankan context there is a dearth published studies on the evaluation of statistical websites and the present study attempts to bridge the research gap.

Methodology

The research used a mixed-method approach which is a combination of qualitative and quantitative approaches to provide a more complete understanding of a research problem than either approach alone. The population consists of all data requesters of the DCS main website which was 861. Based on Krejcie and Morgan (1970) the sample size was 273. A stratified random sampling technique was used to draw the sample.

Usability testing followed by a questionnaire was administered as the main method of data collection. Think-aloud protocol which is a usability testing was used for the study. Usability testing reveals the user performance by effectiveness and efficiency of task performance and user satisfaction is revealed by the post-test questionnaire. 10% of the sample was purposively selected for usability testing. In the usability testing users were given 11 tasks to accomplish by using the website. While performing the task all users are encouraged to speak aloud, verbalising their opinions, process, and the justification behind the decision. If the subject was unable to complete any task after five minutes they were informed to move to the other task. The post-test questionnaire collects data on demographic characteristics such as user category, age, gender, education level, website usage, and computer experience. Furthermore, subjects were requested to indicate their level of satisfaction with content and design using a five-point Likert scale ranging from unsatisfied to very satisfied. Data analysis was conducted by using SPSS (Version 22) by incorporating descriptive statistics and bivariate analysis.

Results and Discussion

The response rate was 90.84% and among them, 56.5% were Statistical Officers/ Statistical Assistants, and 62.05% were female, and 41.94% were in the age group of 46-55 years. 60.07% of the respondents have postgraduate qualifications and 91.13% and 86.69% were using computers and the Internet for more than 10 years respectively.

Effectiveness and Efficiency

The definition given by ISO for effectiveness which is ''accuracy and completeness with which users achieve specified goals'' (ISO 9241-11, p.2) was used in the present study. Table 1 depicts that a respondent can correctly achieve goals 82.72% by using the DCS website and overall effectiveness is 82.72%.

Efficiency is "resources expended in relation to the accuracy and completeness with which users achieve goals" (ISO 9241-11, p.2). Efficiency was measured from the time taken to complete each task correctly during usability testing. The average amount of time spent on each task was 1.45 minutes and overall efficiency was 1.45 minutes.

All the respondents who participated in usability testing were able to correctly complete Tasks 2 and 6. Since all the respondents were frequent users of the website and the contact details were in an invariably focused area on the homepage all the respondents were able to complete Task 2, which was on 'find the contact information of the DCS'. Task 6, 'finding the CCPI index 2021' was also easily found by the respondents because it remained on the latest reports and bulletins section on the homepage throughout the period of data collection.

The majority of respondents failed to complete Task 3 on finding the 'Lanka Datta - database of micro-data sub-website of DCS which revealed that the respondents were not aware of sub-websites owned by DCS. Similarly, task 8, 'find the report of the household survey on computer literacy 2006/07'. 60% was on the 'computer literacy' sub-tab on the 'subject' main tab, which was confusing to find since the mismatching of the report name with the link label. The highest average time (2.08 minutes) was spent on Task 10 '*Find the Report on* 'the status of Sustainable Development Goals indicators in Sri Lanka: 2018'. Since the task should be completed by going to a sub-website (http://www.statistics.gov.lk/sdg/index.php) through the main website, it was indicated as the most problematic task and area of the DCS website.

Table 1

Level of effectiveness and Efficiency of DCS website

Task No	Task	No of respondents completed the task	Percentage of correctly completed tasks	The mean value of time spent (Minutes)
Task 1	Find the annual GDP	17	85%	2.17
Task2	Find the contact information of the DCS	20	100%	1.02
Task 3	Find the sub-website (database of micro-data), Lanka Datta"	11	55%	1.44
Task 4	Find the pre- announced dates for data release	17	85%	1.08
Task 5	Find the application of data dissemination.	18	90%	1.04
Task 6	Find the CCPI index	20	100%	1.5
Task 7	Find the district statistical handbook	17	85%	1.1
Task 8	Find the report of the Household survey on Computer literacy 2006/07.	12	60%	2.01
Task 9	Find the final report of Census of Population and Housing-2012.	18	90%	1.37

Task 10	Find the Report on 'The Status of Sustainable Development Goals indicators in Sri Lanka: 2018.	16	80%	2.08
Task 11	Find the index of industrial production – 4th quarter of 2018	16	80%	1.23
Total Mean value			**82.72%**	**1.45 Minutes**

Satisfaction

Satisfaction is defined as the "freedom from discomfort and positive attitudes towards the user of the product" (ISO 9241-11, p.2).

Table 2

Level of satisfaction with the content of the DCS website

Category	Criteria	Mean	Std deviation
Authority	Display the vision and mission of the department	3.4355	1.09280
	Information on the postal address of the Department.	3.4315	1.13615
	Information on the Act and policies	3.3145	1.17922
	Location map	3.1210	1.19779
	Contact details of the department and the divisions	3.0363	1.06218
	Information on organisational structure	2.4637	1.14119
	Information on the history of the Department	2.4274	0.83616
Purpose	General description of services	3.1089	1.17336
	Information on functions and responsibilities division	2.4153	0.99842
Coverage	Access to index publications (CCPI, NCCP)	3.2863	1.32046
	Access to Special Notices	3.1855	1.22304
	Links to the international websites	3.1371	1.15471

	Access to electronic resources (e-journals/databases)	3.0444	1.12122
	Links to social media – Twitter, Facebook	2.9234	1.10857
	Links to the Ministry Home page	2.9153	1.02839
	Links to the national/international records/archives	2.9032	1.02139
	Access to Annual reports/ Quarterly bulletins/ Newsletters	2.8669	0.95360
	Information on the dissemination of microdata	2.8589	1.03004
	Links to sub web sites of DCS (SDG/NADA/LankaSIS/StatMap/LankaStat mobile app)	2.8105	1.12046
Currency	Service provided to send user comments or suggestions	3.5565	0.95487
	Current awareness regarding the latest releases	3.3992	0.81355
	Provide the last update date of the website	3.3508	1.12477
	Provide up-to-date information	2.9516	0.79324
Accuracy	Provide relevant definitions	2.8427	1.01181
	Text without spelling and grammar errors	2.8387	0.99299
	Presence of accurate information	2.7863	0.97680
	Content published in 3 languages (Trilingual facility)	2.4677	0.98930

Users were moderately satisfied with the authority, purpose, coverage, and accuracy (mean 2.46-3.31) of the DCS website for 'currency', other than 3 out of 4 features indicated mean values above 3.33 which means respondents were very satisfied with the currency of the DCS website.

Table 3

Level of satisfaction with the Design of the DCS website

Category	Criteria	Mean	Std deviation
Ease of Use	Multiple Links for important or frequently used resources	3.6290	1.13443
	Meaningful labels for Links	3.3790	1.44588
	Use of familiar terms/words	3.3145	1.08629
	Link to Navigate back to the home page from other pages	3.1935	1.21180
	Provide a search option on each page	3.1734	.99705
	Use of the government logo and Departmental Logo	3.1694	1.06639
	No use of jargon	3.1573	1.00780
	Logical organisation of information	3.1492	1.03673
	No horizontal Scrolling	3.1331	1.08095
	Provides a Site map	3.1250	1.22247
	Headings and Sub-headings on the page	2.9839	1.09828
	Screen length of the Home page	2.9234	1.01715
	Title of the page indicative of the content	2.9032	1.01343
Accessibility	Image map (clickable graphic with hyperlinks) on page	3.7177	1.18739
	Minimum time to load a selected page	3.3589	0.82732
	Use of relevant images	2.8750	1.02425
Learnability	Clear and concise sentences	2.9435	1.09694
	Readable font size	2.9234	1.01316
Aesthetic	Standard colors are used for links and visited links	3.3105	1.09672
	Minimum time to load a selected page	2.9234	0.72977

	Important information is placed at the top of each web page	2.9234	1.01316
	Use of few colors and minimal graphics	2.8750	1.07063
	Group related items	2.8589	1.03787
	No confusion about the arrangement of pages/content	2.8589	1.03004
Flexibility	Mobile friendly view	3.1411	0.86792
	Good rendering with different browsers	3.0806	0.78546
	Provide downloadable file formats	1.5484	1.01690

Respondents were very satisfied with meaningful labels (3.62) and multiple links for frequently used resources (3.37) while moderately satisfied with other features. Respondents were very satisfied with the image map. All respondents were moderately satisfied with learnability, aesthetic, and flexibility other than downloadable file formats (1.54). When considering the overall level of satisfaction, they were moderately satisfied with the DCS website (3.03). Thus, it was revealed that all respondents were moderately satisfied with the content as well as the design of the DCS main website.

Several issues regarding the DCS main website content and design were identified not only while doing usability testing but also in the user satisfaction survey. The users experienced confusion by the terminology or Census 'jargon' used on the website of DCS and a respondent stated that "*even though I am an internal user I am also confused with the name ADR Calendar*" (Statistician, 2019). Furthermore, users experienced redirecting their requests to the Google search engine due to the malfunctioning of the internal site search. In addition, one of the major issues in the DCS website is non-grouping related content as well as grouping unrelated content. A respondent stated that "*it will be better to re-arrange the content into separate subject pages instead of using the division-wise content organising*" (Statistician, 2021). The lack of downloadable file formats was also revealed by users as a problematic area of the DCS website.

Identify the association between the user context and website usage

The study used the Chi-square test to observe the association between user context and website usage. Table 4 shows a significant association between user category and age with the DSC website usage (p = 0. 000).

Table 4

Association between the user context and the website usage

Demographics		Website usage %	*p*-value
User group	Local Universities	12.5	0.000
	Foreign Universities	6.45	
	Local Government Organisations	2.82	
	Local Private Agencies	2.41	
	International Agencies	3.22	
	Individual Researchers	0.81	
	Media and journalists	1.61	
	SSTN and STN (Head office + District Offices)	13.7	
	SO and SA (Head office+ District Offices)	56.45	
Gender	Male	37.5	0.056
	Female	62.5	
Age	18-25 years	6.45	0.000
	26-35 years	8.47	
	36-45 years	38.3	
	46-55 years	41.93	
	56 and above	4.83	
Highest Education Level	A/L	0.81	0.274
	Graduate	39.11	
	Post Graduate Diploma	16.53	
	Masters	35.89	
	PhD	7.66	

Conclusion and Implications

The overall effectiveness of the DCS website is 82.72%, and its efficiency is 1.45 minutes. The respondents were moderately satisfied with the content and design of the existing website. Used terminology, malfunctioning of the internal search facility, content arrangement, and lack of downloadable files were revealed as problematic areas of the website. Age and user category showed significant association with the usage of the DCS website. It would be advantageous to reorganise the website content by re-wording some link labels; logical arrangement; fixing all broken links and orphan pages; and matching the title of the page with the content. In addition, providing downloadable file formats such as PDF or html format as much as possible is also recommended. Moreover, the fixing of internal site search issues is also suggested. The present study recommended redesigning the DCS main website to be more usable by enhancing effectiveness, efficiency, and user satisfaction. By re-designing and resolving usability issues of the DSC website will facilitate the user community with easy access to timely and accurate statistical information

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The Role of Social Media in Communicating Protests among Sri Lankan Youth (Specific to the Galle Face Struggle)

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Abstract*

Recently, social media have become the main means of communication in public struggles, protests, and people's uprisings around the world. Social media functions as a catalyst for organising the people, as a tool to spread the word about it, and finally as an ideological forum where the results are discussed. Regime change processes are carried out through social media based on the leaders and parties of countries with long-term dictatorial rule. The Galle Face struggle of 2022 was a massive protest linked to social media in Sri Lanka. It is a struggle built by civil citizens against the existing socio-political trend. The purpose of this research was to study the role of social media in communicating protests among youth during the 2022 Galle Face protests. The research was conducted as a mixed research method based on both qualitative and quantitative methods as the study methodology. To collect data related to the research, 100 students who use social media at the University of Kelaniya were given a questionnaire and 10 of them were interviewed and data was collected. Accordingly, the research findings revealed that social media played an important role in mobilising and organising the youth. Also, social media has been extremely influential in motivating the youth to protest, sometimes creating violent situations among the youth through false propaganda and hate speech, and sometimes creating peace among the youth. It was also revealed that Facebook live streaming played the main role among other social media.

Keywords: Protest communication, Role of social media, Public opinion, Galle Face struggle

Introduction

Media evolution in recent years has changed audience behaviour around the world. Social media has become an integral part of modern communication and has changed the way people interact and share information. The impact of social media on mass struggles, protests and uprisings around the world has been a topic of recent discussion. It is no secret that with the popularity of social media, there has been a clear change in protest and struggle activities around the world. Millions of social media users have become involved in the rapid and widespread production and circulation of activist materials, including everything from protest hashtags, second-hand rumours and photoshopped images, to first-hand eyewitness reports and video evidence (Poell & van Dijck, 2018).

Social media has become the main means of communication to carry out the regime change process through struggles, especially in countries where the same person or group has been the leader of the state for a long time. In 2011, the removal of Hosni Mubarak, who had been a leader of Egypt for more than 30 years, and the removal of the then president of Tunisia, Zine El Abidine Ben Ali, from the government in 2011 was done through the use of social media. In 2012, regional protests against Muammar Gaddafi in Libya turned into a horrific armed conflict because of social media information sharing. Also, the protests that started in Ukraine in November 2013, known as 'Euromaidan', can also be called a social media operation.

In Sri Lanka, the most massive protest linked to social media was the 2022 Galle Face struggle. By April 2022, the protracted informal economic policies of the government led to the accelerated collapse of the country's economy. Accordingly, due to the growing economic recession in the country, the increase in commodity prices, the increase in daily electricity supply cuts, the shortage of essential goods, gas and fuel shortages, people had to wait in highway queues for hours. The people affected by these reasons turned the Galle Face ground into a 'struggle ground' with the aim of finding solutions to them. That struggle was reorganised into a struggle built by civil citizens against the existing socio-political trend and that struggle was called Gota Gogama struggle, Galle face struggle etc. The main demand of the protesters was that then President Gotabhaya Rajapaksa and then Prime Minister Mahinda Rajapaksa should resign from their positions. Also, the main slogan of the protesters was 'Gota Go Home'.

Social media was the prominent media during the Galle Face struggle. The contribution made by social media to get foreign attention, inspire the youth to struggle, influence the youth and change their public opinion, until the process of ousting both the president and the prime minister, represents a sociological basis. Although there has been previous research on the behaviour of social media in various protests, it is important to study the behaviour of social media specifically on the Galle Face struggle. Because protests are different according to the situation and dynamics. Accordingly, the problem of this research is to study the role of social media in protest communication among Sri Lankan youth during the Galle Face struggle. This research is done through three main questions.

1. What social media platforms were most used to communicate and share information about the Galle Face protests?
2. To what extent did social media play a role in mobilising and organising youth participation during the Galle Face protest?
3. How did social media platforms influence the mobilisation and organisation of youth participation during the Galle Face protest?

These research questions were formulated according to the research objectives.

Literature Review

According to the Digital 2022 report, by 2022 there will be 11.34 million people using the internet in Sri Lanka. This is 52.6% of the total population of Sri Lanka. Also, the number of social media users in Sri Lanka in 2022 is 8.20 million. It is 38.1% of Sri Lanka's population. The 19-24 and 25-34 age groups are the most user media, social media. That is, the 19-24 age group is 73% and the 25-34 age group is 72%. Kepios analysis reveals that between 2021 and 2022, social media users in Sri Lanka will increase by 300,000 (+3.8 %) (Kemp, 2022). Facebook is the most popular social media platform among Internet users in Sri Lanka accounting for 88% of active users. YouTube and Instagram have become the second and third most popular social media platforms accounting for 81% and 43% of active users respectively (Digital Outlook Sri Lanka, 2022).

Methodology

The research was conducted as a mixed research method based on both qualitative and quantitative methods as the study methodology. To collect data related to the research, 100 students who use social media at the University of Kelaniya were given a questionnaire and 10 of them were interviewed.

Analysis and Discussion

Table 1

Social media mainly used by youth during Galle Face protest

Variables	Frequency	Percent
Facebook	71	71%
Twitter	4	4%
Instagram	3	3%
YouTube	15	15%
TikTok	2	2%
WhatsApp	5	5%
Total	100	100%

According to the data in the table above, Facebook was the most used social media during the protest. Its percentage is 71%. The second most used social media is YouTube with 15% and the third is WhatsApp with 5%. It is shown that 4% of Twitter media, 3% of Instagram and 2% of TikTok were used in the struggle. The interviews revealed that Facebook content became a popular medium during the struggle because it had all the necessary facilities to communicate information. It was also revealed that Facebook live streaming was the most used social media content during the protest.

Table 2

Role of social media in mobilising and organising youth participation during the protest.

Variables	Frequency	Percentage
Played an important role	78	78%
Played a neutral role	17	17%
Played a minimal role	5	5%
Did not play any role	0	0%
Total	100	100%

As illustrated in Table 1, most people indicated that social media played an important role in mobilising and organising the youth during the Galle Face protest. Its percentage is 78%. Around 17% said that they played a moderate role and only 5% said that they played a minimal role. No one says no work done. The interviews revealed that social media provided the best platform to share information and raise awareness about the issue, organise protests and meetings, share personal experiences related to the Galle Face struggle, and amplify the voices of the protesters.

Table 3

The impact of social media in mobilising and organising youth participation during the Galle Face protest

Variables	Frequency	Percentage
Very influential	69	69%
Somewhat influential	23	23%
Neutral	8	8%
Not very influential	0	0%
Not influential at all	0	0%
Total	100	100%

The data presented in the table shows that the influence of social media in mobilising and organising youth participation during the Galle Face protest was very powerful. Its percentage is 69%. Around 23% say that its effect is quite strong and only 8% say it is moderate. The interviews revealed that social media had a great influence on the opinion of the youth. At times, through hate speech on social media, youths have been influenced by violence, and at other times, to create peace. Also, during this protest, it was revealed that sometimes false information was spread on social media, distorted photos and videos were spread, and personal insults were made.

Conclusion

The role of social media in the Sri Lankan Galle Face struggle was identified through the study. Facebook live streaming has been mostly used to communicate information among the youth during the Galle Face struggle. It was revealed that social media played an important role in mobilising and organising the youth. Also, it was revealed that social media was extremely influential in motivating the youth to protest, sometimes creating violent situations among the youth through false propaganda and hate speech, and sometimes creating peace among the youth. Accordingly, the suggestion made from the research is that the young generation should be empowered to use social media effectively by understanding the role of social media during protests and preventing some violent situations.

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A Review on the Influence of the Role of Election Commission towards the Voting Behaviour of Sri Lankan Youth

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Abstract*

This research aims to assess the impact of the Election Commission's initiatives on the voting behaviour of Sri Lankan youth. The Election Commission is considered an independent institution with constitutional recognition for conducting election management activities such as voter registration, voter awareness and conducting elections in Sri Lanka. At present, the key issue faced is the declining the interest of younger generation regarding the electoral process in Sri Lanka. Since 17.7% of Sri Lankan youth do not exercise their voting rights and/or participate in any political activity, understanding youth voter behaviour is crucial. The research was conducted as a quantitative analysis carried out using an online self-administered questionnaire distributed among a random sample of 150 youth voters. The data was analysed using descriptive statistics presented using Microsoft Excel. The findings revealed that although a majority of youth voters are positively influenced, some segments still have doubts regarding the effectiveness of the Election Commission. Therefore, the Election Commission of Sri Lanka should pay special attention to emerging youth voters while ensuring their faith in the democratic voting process through a strong awareness mechanism and robust voter registration. Furthermore, it is concluded that youth voters can be motivated by using modern technology and social media platforms and by holding the elections in a timely manner.

Keywords: Election Commission, Youth Voter Behaviour, Perception on elections

Introduction

In most of countries, there are election management bodies, responsible for the voter registration process and holding free and fair elections. For this purpose, some countries have established Election Commissions (Singh & Mishra, 1991). Election Commissions are politically insulated bodies which help to administer the elections and on certain occasions Election Commissions act as the agents of electoral law reform (Elemendorf, 2006). Accordingly, the Election Commission is a non-partisan body that determines the election procedures and district boundaries and oversees the conduct of the elections (Mclean & Macmillan, 2009).

In Sri Lanka, the youth population is 4.64 million, however, 17.7% of youth do not exercise their voting rights and/or participate in any political activity (Asian Electoral Resource Centre, 2023). At present, the key issue faced is the diminishing interest of the younger generation

regarding the electoral process, active voter participation and voting at elections in Sri Lanka. Being the key organisation, which aims to hold free and fair elections, it is a timely requirement to identify how far the Election Commission helps to shape the youth voting behaviour. Therefore, this research aims to assess the influence of the role of the Election Commission towards the voting behaviour of Sri Lankan youth.

Literature Review

In Sri Lanka there has been a debate about the need for independent commissions for establishing democracy over past decades. Election Commissions can be used as a constitutional tool for robust electoral democracy (Singh, 2021). Preserving democracy, while promoting good governance was considered as the long-term objective of establishing independent commissions (Samararatne, 2016). In the debate of the Seventeenth amendment to the Sri Lankan constitution, there was a notion that an independent election commission should be established but this was not successfully operated. However, the necessity of the election commission was again discussed through the nineteenth amendment to the constitution (Samararatne, 2016).

Accordingly, the first Election Commission of Sri Lanka assumed its duties on 17th November 2015 as per Article 103(2) and Article 104B (1) of the Constitution of the Democratic Socialist Republic of Sri Lanka (Sri Lankan Election Commission, 2023). The power was vested in the Commission for the matters pertaining to the updating of the electoral register and holding of free and fair elections.

Election Commission helps with voter education and structuring the budding voters towards the democratic path of voting (Elemendorf, 2006). Accordingly, the Election Commission conducts voter education and awareness programmes. They also conduct training programmes for the staff while planning for the future election with the updated electoral register. Currently, Sri Lankan young voters have the opportunity to use the online voter registration system induced by modern technology. Through this portal, young citizens born after 01.02.2005 can enroll on the electoral register in a more efficient manner. Through this mechanism, it is aimed to register all the young voters who have attained 18 years of age without unnecessary delay.

Furthermore, the contribution of the Election Commission for building a level playing field for the candidates and for preventing intimidation by safeguarding the electoral laws cannot be underestimated (Sri Lanka Election Commission, 2023). Likewise, the Election Commission of Sri Lanka has a massive and significant role when dealing with youth voters.

Methodology

Through this study, the influence of the Election Commission's role on the voting behaviour of Sri Lankan youth is examined. The survey method is carried out for the purpose of this research. The sample is randomly selected from the voter register of Sri Lanka. Primary data is collected by distributing an online questionnaire among randomly selected 150 youth voters

The questionnaire is a self-administered close-ended questionnaire with a five point Likert scale. SPSS version 16 is used for analysing the collected data while Microsoft Excel is used for presenting the analysed data in graphs.

Analysis and Discussion

As illustrated in Figure 1, when the respondents were questioned whether they were satisfied with the voter registration process carried out by the Election Commission of Sri Lanka following results were received. Around 25.5% agreed with the fact that the Election Commission's voter registration mechanism is satisfactory. However, 53.3% of the respondents were neutral about this statement. While 18.2% stated that the voter registration mechanism of the election commission is not satisfactory. Hence, these findings reveal that still the youth do not have a clear positive idea about the voter registration role of the election commission. Therefore, it is important to popularise online voter registration mechanisms among the youth voters in remote areas of the country as well.

Figure 1

Satisfaction about Election Commission's voter registration mechanism
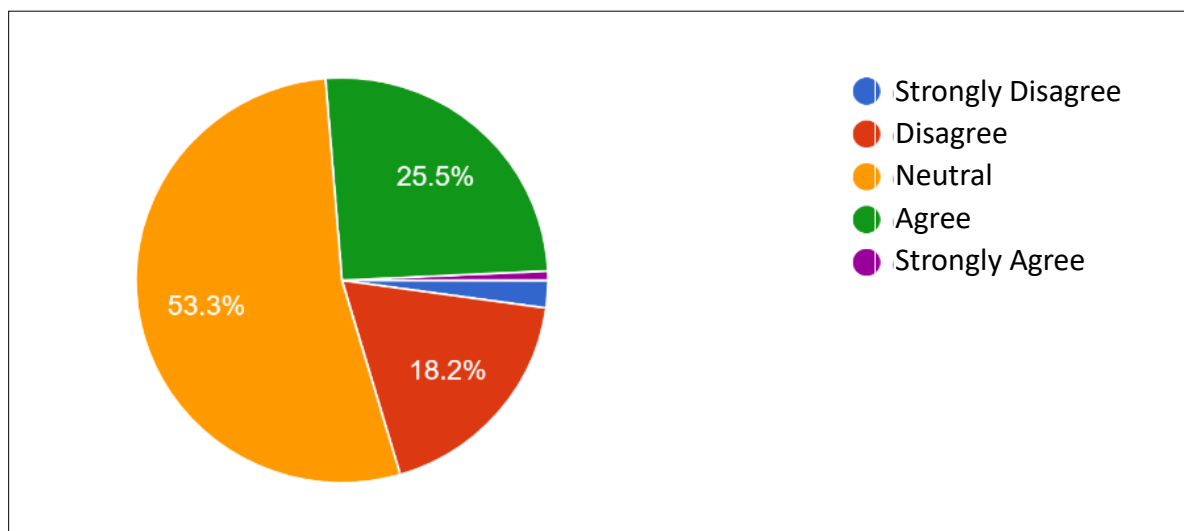
As Figure 2 indicates, when the youth respondents were questioned about the satisfaction level regarding voter awareness mechanisms, 62.6% were neutral about the success of these initiatives. While 18.7% agreed that the voter awareness mechanisms are satisfactory while 13.7% disagreed with that. This highlights that although the majority has embraced the initiatives by the Election Commission there are issues regarding the trust of young voters about the progress of awareness programmes launched.
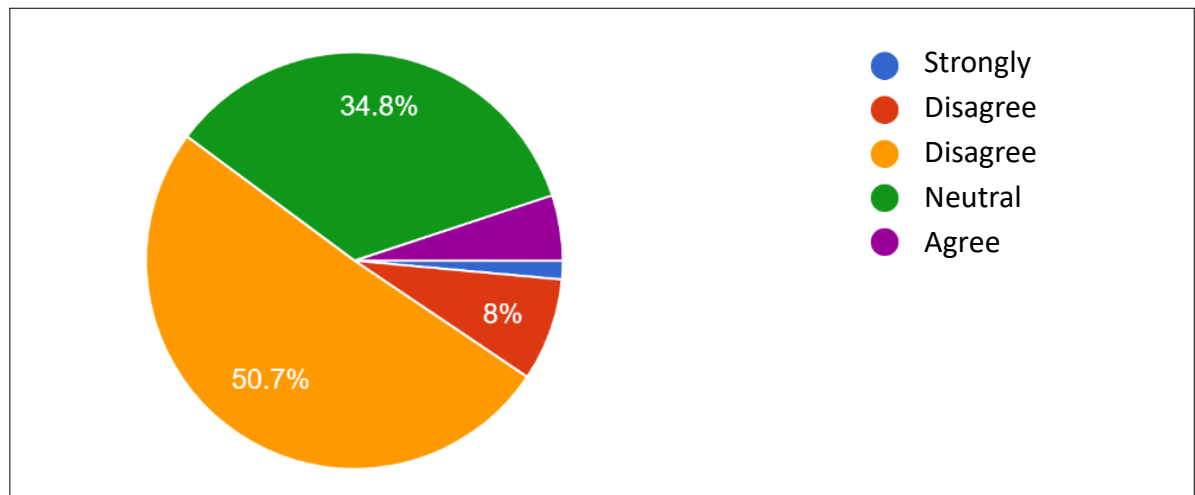
Figure 2

Satisfaction about the voter awareness mechanisms of Election Commission
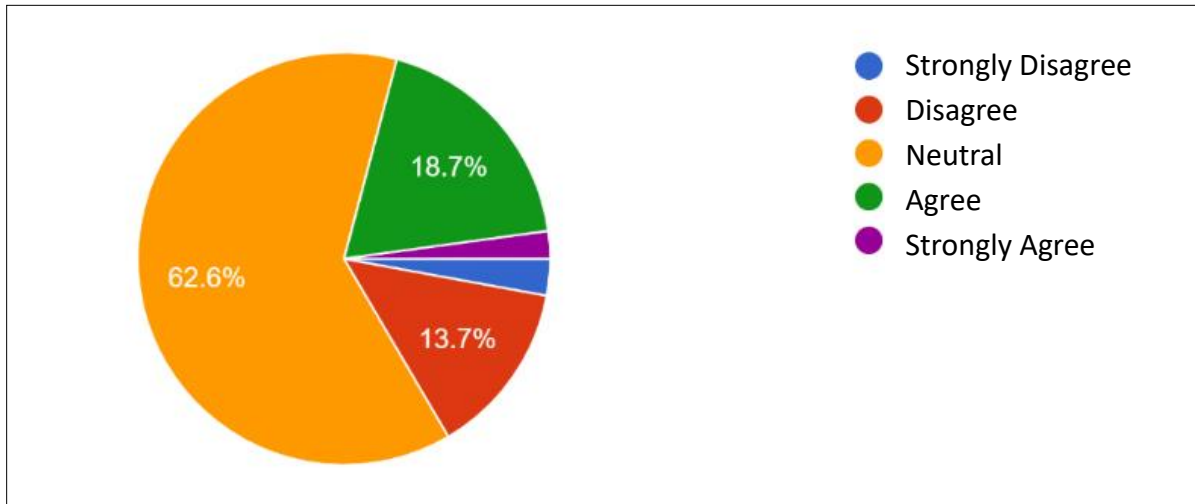
When the respondents were questioned about the performance of the Election Commission the results were as mentioned in Figure 3. Results indicate that although the majority agreed to the fact that there was a satisfactory performance by the Election Commission still a small segment of youth respondents have some suspicions about its performance.

Figure 3

Satisfaction about the performance of Election Commission

As demonstrated in Figure 4, when inquiring about the independence and impartiality of the Election Commission, 30.4% of young voters stated that they agree with the impartiality and independence of the Election Commission but 14.5% disagreed and this. Postponement of elections may adversely affect tarnishing the positive image among young voters regarding the Election Commission. Therefore, in order to uplift the trust among youth voters it is advisable for the Election Commission to adhere to an election calendar.

Figure 4

Impartiality and independence of Sri Lankan Election Commission
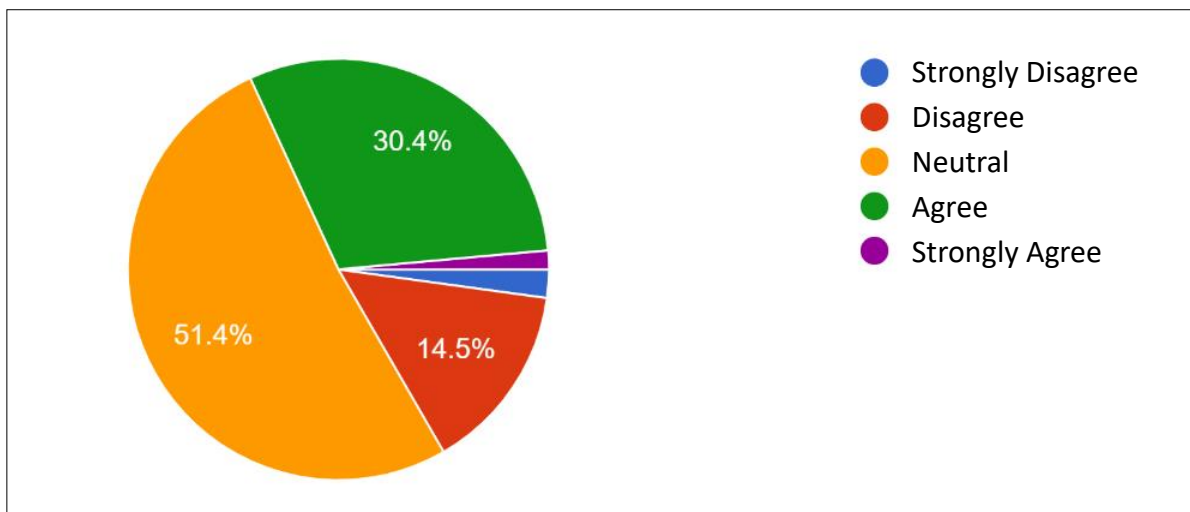
Conclusion and Implications

According to the findings, it is clear that undoubtedly the Sri Lankan Election Commission has the relevant constitutional capacity to work on the enhancement of youth voter behaviour. However, results indicate that the majority of the youth respondents have a neutral view on voter registration, voter awareness, overall performance, impartiality and independence of the Election Commission. Thus, it will be useful to divert this neutral opinion towards a positive opinion in order to make a significant impact on the youth voter behaviour in Sri Lanka.

It is recommended to promote the online voter registration mechanism among youth in different parts of the island to enhance their voter behaviour. Simultaneously voter awareness programmes can be conducted for Advanced Level students and school leavers in a more elaborate manner in order to educate them about the importance of casting vote and voter participation. The school curricula of the subjects such as Citizenship Studies, can be revised in a more attractive manner with the help of the practical lessons shared by resource persons of the Election Commission. Furthermore, properly conducting the student parliament programme which was initiated a long time ago together with the Ministry of Education will be very useful. Election Commission can also utilise trending social media platforms such as Tiktok and Instagram for the purpose of creating a positive impact on youth voters. These online hubs can be used by Election Commission officials to interact with the youth voters to discuss their election-related issues as well. Moreover, it can be concluded that if the elections are held in a timely manner the Election Commission can create a strong impact on youth voter behaviour.

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Social Impact of Farmers' Organisations on their Own Communities

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Abstract*

Famers' Organisations (FOs) were created during the decades of 1980s and 1990s in order to implement the Participatory Irrigation Management (PIM) policy in Sri Lanka. The main objective of this initiative was to reduce government expenditure and improve irrigation performance. Further, it was envisioned to give farmers a sense of ownership to irrigation they manage and empower the farming community through the FOs. There are multiple studies evaluating the FOs role in achieving the first objective. However, the impact of the FOs on their communities in terms of empowering them is the least explored. This study attempts to address this research gap by exploring the social impact of FOs on their communities. This study was designed as qualitative research in order to explore the views on FOs and perspectives of government officials on the role of the FOs in PIM. Polonnaruwa district was selected as the field work site as all the irrigation management models in Sri Lanka are in operation in the said district. Seven focus group discussions (one in each Divisional Secretariat division of the district) and 20 key informant interviews (with FO leaders, community leaders and government officials) were used to collect data. It was revealed that instead of empowering their communities, the FOs have become a repressive structure that disempower the community. With the high level of politicisation of the FOs, their leadership has become economically and politically powerful. They have emerged as a new social stratum and created a new power dimension within their communities. This study emphasises the need to depoliticising the FOs and making it a democratic structure in order to make it a structure that can be used to empower the communities.

Keywords: Farmers' Organisations, Participatory Irrigation Management, community empowerment, social strata, power relations.

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Introduction

Since 1978, Sri Lankan government has been trying to bring all the farmers in the country into Farmers Organisations (FOs) as part of their plan to reduce public expenditure on irrigation management by increasing the farmer's participation in water resource management. With the continuous pressure from the donor agencies, consecutive governments had to strive for the set target through policy approvals such as Participatory Irrigation Management (PIM) policy and legislation amendments such as the Agrarian Services Act and Irrigation Ordinance. It was a much debated and long term policy intervention which took over two decades to

complete. Millions of US Dollars under six loan schemes, obtained from the World Bank, Canadian International Development Agency (CIDA) and United States Aid for International Development (USAID), were spent to achieve the goal. As a result of this long term mission, at present, almost all the farmers in the country are organised into FOs and maintenance and operational duties of distributary canals and field canals are being carried out by these FOs. Apart from reducing government expenditure and improving irrigation performance, it was envisioned that FOs would give farmers a sense of ownership to irrigation they manage and empower farming communities by developing unity among the farming community members. There are quite a number of studies that have been carried out on the implementation of PIM and the role of FOs in PIM in Sri Lanka. However, the impact of FOs in farmer communities is a least explored area. This study attempts to address this lack of research on FOs' social role. Thus, this study intends to explore the social impact of FOs in rural communities in Sri Lanka.

Literature Review

There are four basic models being used under the PIM policy, under which FOs were created, i.e. Integrated Management of Agricultural Settlement Schemes (INMAS), Management of Irrigation Schemes (MANIS), Mahaweli Economic Agency (MEA) model and Bulk Water Allocation (BWA) Programme. In all these models, a similar FO structure has been implemented. All field canal beneficiary farmers are organised into field canal groups (FCGs); and all the FCGs which get water from the same distributary canal represent a distributary canal organisation (DCOs). All DCOs in a particular irrigation scheme are federated to a system level farmer organisation (SLFO). Although there are few variations within each model, the role of FOs in each model is relatively similar (Aheeyar et al., 2012). According to Jinapala et al. (2010) although PIM has a number of shortcomings, it has clear benefits and needs to be further strengthened. One key criticism against this structure is that although it brings all the farmers into a common structure through its bureaucratic structure, the government maintains tight control over FOs. Therefore, instead of becoming farmer managed, the irrigation systems have become increasingly State managed in their practice (Perera, 1985). On the other hand, the government has withdrawn from providing much needed extension service support for the FOs, creating adverse effects on irrigation management (Sivayoganathan & Mawjood, 2003). According to Wimalarathne and Ekanayake (2002), the success of PIM is greatly linked to the collection of water tax and the FOs' willingness to contribute to tax collection by encouraging their members to pay it.

Methodology

This study was designed as qualitative research since it focuses solely on the impact the FOs have had on respective communities. Data was collected from farmers as well as from identified key figures who are involved with the PIM from the side of the government. In order to maximise the validity of the findings, the Polonnaruwa district which has all the PIM operational models was selected as the field work site. One focus group discussion (FGD) was conducted in each Divisional Secretariat division in Polonnaruwa district (namely in

Hingirakgoda, Dimbulagala, Welikanda, Thamankaduwa, Elahara, Madirigiriya, and Lankapura). Around 8 to 12 FO members participated in each FGD. Sixteen (16) key informant interviews were conducted with the FO leaders, community leaders, irrigation project managers, irrigation engineers and officers in the Divisional Secretariats. Since all the interviewees were known persons in the field work site, purposive sampling was used to select the respondents. All the interviews were transcribed and thematic analysis was used to analyse the data.

Findings

Government officers expressed their satisfaction on the bureaucratic structure of the FOs which facilitates a well-managed water distribution system throughout farmlands in the paddy cultivated areas. This structure facilitates to implementation of the decisions taken at the Panel Meetings at the Water Management Secretariat at Gannoruwa which flows through SLFO, DCOs and FCGs; however, most of the farmers were in the view that the information flow within this system happens only in one direction, i.e. from the top to bottom. They do not feel that the FO is a structure through which they get a chance to convey their views and needs to the higher irrigation management anymore. Nowadays, seasonal meetings that decide the water distribution timetable in each particular irrigation system are conducted with the participation of government officials and office bearers of DCOs. However, in the past, all the members of the FCGs could attend the meetings and make their voices heard by the bureaucrats. According to the government officials, such meetings were in disarray, where farmers merely shouted without any discipline and challenged the decisions of the government. On the other hand, farmers think the present representative meetings have violated their right to contribute to democratic participatory decision making. The majority of the farmers expressed that the seasonal meetings at present have become just a session of presenting the water distribution schedule which was made at the national level to the DCOs and the only role of the DCOs is to convey the scheduled dates to the farmers through FOs. According to the majority of the farmers interviewed, the FOs do not represent them anymore. They were in the view that it is the same scenario they face in the representative politics in the government structures of the country. According to them, FOs are also a mirror image of the corrupted and distorted representative governance in the country.

The main argument behind this accusation against the FOs from their own communities is mainly based on the politicisation of the FO structure. A new social cluster has been created by the FO structure within the farmer communities. Within a very short period after their initiation, the FOs have been subjected to political influences. The level of politicisation is at its highest in MEA managed systems. With the close associations developed with the politicians and bureaucrats, the FO leaders could get a chance to win tenders of local level village development projects and earn money in order to become economically powerful within their communities. Because of the unlawful opportunities they have gained from the politicians and officials, they are not in a position to challenge any bureaucratic decision. Instead of becoming representatives of the farmers, they have become messengers of the

bureaucrats, communicating government decisions to the farmers. Thus, most of the FO leaders have lost legitimacy within their communities. Although the FOs are a democratic structure in which each farmer has one vote, it is not easy to challenge the leaders due to the power relations they have developed over their communities. Most of the FO leaders have got into paddy business with the money they earned through bureaucratic patronage and have become large scale farmers or harvest buyers. The researchers met FO leaders who own rice mills and large agro machinery. The political affiliation of a FO leader and the role they had played within their community in each election were clearly visible. Thus, the FO structure which was created to ensure a democratic participatory management of irrigation has become a mechanism that creates a new village level social cluster that contributes to suppressing their own community.

Conclusion

As several previous studies have revealed, the FOs continue to make an important contribution to the PIM's main objective of reducing government expenditure and improving irrigation performance. However, they have failed to give farmers a sense of ownership to irrigation from which benefit, and develop unity among community members. Instead, the FOs have contributed to dividing their communities and disempowering farmers by facilitating the rigid implementation of bureaucratic decisions. Patronage based economic activities of FO leaders and their political affiliations have enabled them to repress the farmers for their personal gains and maintain their authority over farmers through their political affiliations and networks. Therefore, a key step when making decisions for uplifting the livelihoods of the peasantry in Sri Lanka will be to address this issue in the PIM by depoliticising the FOs and making them a democratic structure where their members feel that FOs genuinely represent them. Without making these changes, FOs could not be used as a structure that can be used to empower their communities.

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An Analysis on the Potential of Religion in Preventing Violent Extremism

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Abstract*

This study delves deep into the intricate relationship between religion and the prevention of violent extremism, with a specific focus on its relevance in the context of Sri Lanka, a multicultural and multi-ethnic country. Recognising the diverse societal fabric of Sri Lanka, this study unravels the role of religion in countering the rise of violent ideologies within this unique context. Through a qualitative analysis of scholarly literature and an exploration of key research questions, it sheds light on how religious teachings, practices, and interfaith dialogue can shape attitudes and behaviours, fostering peaceful coexistence and mitigating the threat of extremism in Sri Lanka. By examining the specific mechanisms at play within the religious landscape of Sri Lanka, this study uncovers the capabilities of religions in promoting tolerance, understanding, and harmony among different ethnic and religious communities. It acknowledges the challenges and opportunities that arise in leveraging religion as a powerful force for positive change in a multicultural society, taking into account the complexities inherent in such endeavours. Furthermore, this study offers practical solutions and insights that are tailored to the Sri Lankan context, driving the discourse on countering violent extremism in the country. By highlighting the transformative role of religion and its potential for fostering a more peaceful and inclusive future, it provides hope and guidance for policymakers, religious leaders, and stakeholders in Sri Lanka who are committed to promoting interfaith dialogue, understanding, and social cohesion. In conclusion, this study contributes to the ongoing dialogue on countering violent extremism by specifically addressing the multifaceted nature of Sri Lanka.

Keywords: Religion, Sri Lanka, Violent Extremism

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Introduction

According to Stanford Encyclopedia of Philosophy (2022), [1]"the concept *religion* did not originally refer to a social genus or cultural type. [Rather] It was adapted from the Latin term *religion*, a term roughly equivalent to "scrupulousness". *Religion* also approximates "conscientiousness", "devotedness", or "felt obligation", since *religion* was an effect of taboos, promises, curses, or transgressions, even when these were unrelated to the gods." However, religion has no universal definition and it can only be interpreted and understood by perusing history, culture and other associated factors. May it be a reliance on a deity or not, when

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[1] The Editor-in Chief of FGS ARS 2023 has not considered this as a direct quote, given the unique nature of this statement

perusing the beliefs in society, religion plays a key driver of social cohesion, faith-building, reconciliation and community-resilient development due to its unique characteristics. Religion can soothe the mind, provide understanding, build perceptions, and guide toward harmony. In these ways, religion acts as a balm for disturbed or confused individuals. Nonetheless, religion can also be a drive towards extremism due to varied reasons.

An inevitable challenge in the society is violence. Such violence can be multifaceted whether it be based on religion, society or politics. As a result of extremism, which refers to a lack of moderation, violent extremism can take place resulting in repercussions. Violent extremism also has no universal definition, however, the term sparked interest and attention in the aftermath of the 9/11 attacks. Religion can ignite social disharmony due to interpretation by religious extremists and a lack of authentic translations. In light of this, it has become crucial to look into the bright side as to how to utilise religion to prevent violent extremism, the imperativeness of interfaith dialogue, etc. It is also important to understand that utilising religion in preventing violent extremism is not an easy task and this becomes an extra burden in countries such as Sri Lanka which is multi-cultural and multi-ethnic. The point is, diversity itself becomes both a blessing and a curse and there is a strong necessity to utilise religion for the betterment only.

Due to these reasons, it is pivotal to look into the potential composed in religion. Therefore, the research problem is to understand and explain the potential of religion in preventing violent extremism. The research questions are, what is violent extremism? What is the role of religion in preventing extremism? What are the challenges in utilizing religion to prevent violent extremism and what is the way forward in utilising religion to prevent extremism?

Literature Review

As stated by the United Nations Development Programme (UNDP), in its report titled, 'preventing violent extremism through promoting inclusive development, tolerance and respect for diversity', there are various forms of extremism, including religious extremism, extreme right-wing nationalism, extreme left-wing movements, and separatist groups, each marked by their rejection of peaceful coexistence, glorification of particular identities, violent ideologies, and aspirations for autonomy or independence. The researcher fully agrees with these observations. Furthermore, the researcher explores the potential of religion as a tool to prevent extremism by connecting the core teachings of various religions and how to utilise religion in varied settings.

Fuard (2020) has mentioned that violent extremist factions propagating radical ethno-religious and ethno-nationalist ideologies have significantly transformed the landscape of global warfare. Fuard (2020) identified the tragic 4/21 Easter Sunday attacks, executed by a homegrown Jihadist network inspired by the global Salafi Jihadist movement championed by ISIS, as an illustration. The researcher fully concurs with Fuard (2020)'s observations and will showcase how Zaharan, the alleged mastermind behind the Easter Sunday attack has utilised

extremist religious interpretation to justify suicidal bombings. This underscores the double-edged nature of religion, where it can serve as a potent force for both cohesion and conflict.

According to Patabendige (2023), religions have historically served as ethical guides, directing humanity toward compassion and benevolence. The researcher agrees with Patabendige (2023)'s statement that Christianity, Islam, Buddhism, Hinduism, Sikhism, and Jainism all share fundamental principles that promote social unity and mutual understanding even though terms and languages are different. Christianity's emphasis on loving one's neighbour, Islam's advocacy for brotherhood and compassion, Buddhism's encouragement of loving-kindness, Hinduism's stress on interconnectedness, Sikhism's advocacy for selfless service and equality, and Jainism's commitment to nonviolence and empathy collectively contribute to fostering a harmonious and inclusive society. These common values within diverse religious traditions underscore their potential to counter extremist ideologies and foster a more empathetic and cohesive global community. In line with this, the researcher attempts to display how to utilise religion to prevent violent extremism.

Mandaville and Melissa (2017) have stated how religion has become a driver of extremism. Accordingly, as a justification or 'moral warrant', religion can legitimise extremist acts, including violence. In some cases, nonreligious factors may have brought an individual or group of individuals to a point where they are willing to contemplate the use of violence, but need an additional impetus to convince them to engage in behaviour they might otherwise regard as unlawful or unethical. According to Mandaville and Melissa (2017), an individual may have suffered mistreatment or violence at the hands of the state but refrained from seeking revenge until provided with a theological basis for engaging in behaviour that they perceive as transcending prevailing law. This showcases the complexity of extremism coupled with religion where people are motivated to seek justice.

Methodology

The researcher has utilised a qualitative research method, where the researcher exclusively relies on available and existing sources rather than dealing with mathematical calculations and arriving at solutions. Researcher relies on secondary data over primary data such as books, journal articles and conference articles to showcase how religion can be utilised to prevent violent extremisms. Further, the researcher has cited lessons learned by countries to facilitate the argument which will serve as a ground reality rather than an assumption or foresight.

Discussion

Capabilities

Religions have facilitated the prevention of extremism as well as violent extremism in many ways. One such way is to heal and unify. One of the landmark examples would be, former President J.R. Jayewardene, in his moving speech on September 6, 1951, eloquently emphasised the spirit of the San Francisco Peace Treaty, that is, reconciliation, fairness, and

generosity, with the eternity of the truth phrased in "hatred ceases not by hatred, but by love", which was ennobled in the sacred scripture – the Dhammapada. The moving speech reflected the whole-hearted support of the friendly people of the beautiful island of Ceylon and continues to ring louder in the hearts of the Japanese people with profound gratitude (Dailynews, 2021).

Another impressive example that highlighted the power of religion in preventing extremism is the aftermath of the Easter Sunday Attack in 2019. Just as the Easter Sunday Attack 2019 was conducted by Zaharan who interpreted Islam in the wrong way, the anger outburst against Muslims was prevented by The Archbishop of Colombo His Eminence Malcolm Cardinal Ranjith. As reported by Ramanayake (2019), the Archbishop of Colombo His Eminence Malcolm Cardinal Ranjith urged those involved in violence against the Muslim community to immediately stop these attacks. The Archbishop also urged the Muslims not to get intimidated by these sinister elements and to act patiently and remain calm. Further, the Archbishop also urged the Muslim community to make an effort to be part of the Sri Lankan culture and not to isolate themselves by their customs.

When studying Islam, reconciliation is a spoken matter. Islam and reconciliation. Reconciliation is a vivid concept, which includes the mind as well as actions. It is about healing, transforming, understanding and forgiving. Even though reconciliation cannot lead to reinstatement, it is a path to harmony. The Quran (42:40) states that "the recompense of an injury is an injury the like thereof; but whoever forgives and thereby brings about a re-establishment of harmony, his reward is with God; and God loves not the wrongdoers".

These instances display the impact of religion as to how it is a driver of community and harmony and is capable of suppressing violence and escalation of conflict. Here religion has been utilised as a 'connector'. This proves how religion facilitates preventing and mitigating extremism. In addition, this showcases how religious leaders as well as country heads can play a crucial role in preventing violent extremism.

Challenges

As per the European Parliament (2016), religion may seem to be a key component in many violent conflicts around the world. It is highly difficult to distinguish between conflicts triggered by religious causes and conflicts in which religious differences have become salient over time. Hall notes that a distinction can be drawn between different forms of possible violence concerning religious groups. These are connected with, efforts to impose a correct interpretation of dogma, group boundaries, individual self-destructive behaviour, and even suicide attacks. This is true, for example, when perusing the Sri Lankan context, the lack of one authentic Quran translation has given rise to Islamist extremist activities where extremist Muslims justify their ill-motivated acts.

As reported by Beech (2019), "Mr. Zaharan said in one of his online sermons [has stated that there are], three types of people: Muslims, those who had reached an accord with Muslims,

and "people who need to be killed." Idolaters, he added, "need to be slaughtered wherever you see them." This statement is a clear depiction of utilising religions for their whims and fancies to promote violence and cause disharmony among each other. However, when looking at Islam, according to, the Yaqeen Institute for Islamic Research, "the Qur'an equates a single murder with the killing of humankind at large, and equates saving a single life with rescuing all of humanity. The Prophet Muhammad defined the faithful as 'those most restrained from violence'. Islam even forbids sports that use animals as targets, or involve striking the face of a fellow human being." This is a fine depiction of how a misleading interpretation is wholly inconsistent with the true doctrine of religion. This also proves how religion can facilitate violent extremisms when it is preached in the wrong way.

Another major hurdle is media and its reporting capabilities. As stated by, The All-Party Parliamentary Group on Religious Education, "When journalists and editors cannot understand complex events involving religion and belief, or the skills to communicate them effectively, big problems can arise. Reportage can be inaccurate, generalizations can be made and stereotypes can be reified. Religion may be seen as an irrelevant factor in the modern world and inappropriately ignored in analyses of current events. Alternatively, particular events or conflicts or actions of individuals may be interpreted as being primarily about religion, when there could be several other factors involved." Therefore, it is understandable that even though religion is a harmonising factor, it can be falsely interpreted, undermined, or overplayed due to a lack of media literacy as well as religious literacy, which are major hurdles.

Conclusion and Implications

Martin Luther King Jr in his acceptance speech for the Nobel Peace Prize stated, "I still believe that one day mankind will bow before the altars of God and be crowned triumphant over war and bloodshed, and nonviolent redemptive good will proclaim the rule of the land". This statement not only reaffirms solidarity but also provides hope. Therefore, religion can play a crucial role in preventing violent extremism by fostering togetherness, preaching harmony, invoking spirituality and fostering community engagement. Additionally, it is imperative to identify that religion can be twisted and manipulated by ill-motivated individuals for their benefit. Therefore, society as a whole has a crucial role in preventing extremism and using religion to strengthen unity by mitigating and preventing the challenges foretasted.

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Shade of Freedom Beneath the Flag of Three Lions – Free Ireland Amidst the Tenets of Separatism and Terrorism by Irish Revolutionary Army

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Abstract*

Amidst the competitive global order, separatism and terrorism have emerged as decisive concepts, which are discussed more and more towards the aspects of well-being and security of the Nation states. Accordingly, the legitimacy of sovereign states has been threatened by separatist and terrorist ideological contradictions upon achieving socio-economic, geopolitical and religious progression. Long driven conflict between Ireland and the United Kingdom has been a result of contradictory aspects such as exclusion and ideology of power which are empowered by the provisional and official Irish Republican Army (IRA) implementations. IRA, being a paramilitary organisation, has used notions of separatism and terrorism in order to achieve its socio-political aims, which focused on an independent Ireland. Secondary sources such as books, journal articles, and websites have been used to extract data due to the qualitative nature of the study. This study focuses on the military and non-military actions of the IRA, and how an organised fraction could achieve collective identity and legitimate socio-political aims based on separatist and terrorist implementations throughout unionist and nationalist Irish movements. It will explore the importance of assessing and preventing the negative impacts of separatism, terrorism and the importance of securing legitimacy and equity by futuristic policymaking. This study reflects the role of collective identity in conflict escalation and the role of policy makers and good governance in a multicultural society.

Keywords: Collective Identity, Paramilitary, Separatism, Sovereign States, Terrorism

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Introduction

Culture and independence are likely to become interactive concepts that directly influence a population upon achieving their collective identity. The deprivation of basic needs such as security, recognition, acceptance and fair political access of the Irish, led to protracted, long driven conflict that occurred midst the Irish Republican Army and England due to various submerged causes between 1969 and 1999. Some of these reasons are the will to achieve legitimate political power, social exclusion and the requirement of collective identity etc. Above reasons played a vital role in shaping the contradictions between the Irish Republican Army (IRA) and British armed forces. In order to achieve the collective identity, the IRA implemented separatist and terrorist tenets to reach their motive and it led to many complexities regarding the sustainability and the legitimacy of British ruling over their territory.

Therefore, this study seeks to find the causes behind this prolonged British-Irish contradiction and the extent of tenets of separatism and terrorism implemented there. Moreover, the evolution, escalation and de-escalation of conflict, rigid socio-political aim of both parties, Destructive consequences upon social, economic and political aspects via separatist and terrorist ideologies of IRA and the extent of succession in achieving goals of IRA are discussed and analysed within the study itself.

Research Problem, Research Questions and Key Contributions

Being an organised faction, it is important to find out how IRA implemented separatism and terrorism as a way of fulfilling their political aims within the United Kingdom? Due to notions of independence and home rule tenets, Ireland required a separate self-governance system due to the social, political and economic criticisms they have witnessed for a long period. Therefore, the Irish people demanded the requirement of a home rule system instead of a suppressed British ruling system.

What are the influential factors of separatism and terrorism, and how it becomes relevant to the aim of the IRA? They have to look at the reasons, that motivated the IRA to depend on terrorist and separatist notions upon achieving a separate governance and home rule system. IRA has used unconventional military means and methods against British armed forces. Then the usage of unconventional military means could violate the proportionality of the existing context at every cost, therefore we have to question whether the way towards the aim of IRA is legitimate and justifiable or not.

With much effort, Ireland gained their independence from the British. There were many challenges that were ahead of them to achieve sustainability as a country. Then it is required to assess, to which extent the IRA has been successful in presenting itself as an independent Ireland into the present global order.

Research Aims and Objectives

The aim of this study is to focus on, how a paramilitary organisation could achieve a free state and legitimate ruling power by implementing terrorism and separatism. This is relevant to the mechanism of the IRA on gaining a free Ireland and their legitimate ruling power as a sovereign country. The first objective of this study is to evaluate historical British interventions towards Irish socio-political aspects. It exposes the historical contradictory variables that existed between the two nations and elaborates on the historical chronology. The second objective is to assess the IRA's separatist and terrorist mechanism to achieve an independent Ireland. Hereby it analyses the process of using military and non-military measures to achieve their legitimate ruling system instead of conventional and traditional measures to achieve independence and a home-rule system. The third objective is to assess the succession of the IRA upon exposing Ireland to the present global order as a sovereign country. After a series of sacrifices, Ireland has entered into the modern multipolar global order. Hereby it analyses the opportunities and challenges they overcame as a country.

Literature Review

Among the pages of history, Anglo-Irish relationships were contradictory upon various interventions from socio-political, cultural and economic perspectives. It consists of deep roots from the era of King Henry II (Hahn, 1989). With the interventions of France and Spain, the British monarch clearly forecasted the requirement of gaining control of Ireland in order to stop an invasion. It led to systematic colonisation and resulted in a land loss for Irishmen (Congressional Research Service [CRS], 2019). Land alienation and the popular "potato famine" periods (1841-1851) caused a large number of deaths and starvation among Irishmen. These events created the Irish nationalist movements and led to the creation of the 'Irish Republican Brotherhood' in 1858 (Study et al., 1988). In order to combat the continued deprivation of Irish needs and exclusion, the Irish Republican Army evolved to nationalist and separatist motives on opposing the British forces and to achieve their own 'Home rule' in Ireland. Incidents such as the 'Easter Rebellion' and 'Bloody Sunday -1972', which highlighted the use of the British military to suppress the Irish uprising, have enlightened the popular support towards the nationalist movement (Bowlin, 1998). Later the Anglo-Irish war took place in 1921 as a result of the contradictory struggles and IRA has used their unconventional tactics against British military.

Separatism and terrorism have been inter-related notions in the modern world due to power struggles which motivated by various ideologies, identical issues and proxy warfare etc. By having motives on independent self-governance through an armed struggle, the IRA focused on the separation of Ireland from the United Kingdom. When terrorism and separatism linked together, it is much complex to counter above notions through a legitimate manner (Baysha, 2017). Additional to unconventional military means, the IRA was structured with their political wing 'Sinn Fein' parallel to their terrorism based activities. The Easter Rebellion highlighted the harsh British military activities on exception of the tenets of flexibility, integration, lethality, adaptability, depth and synchronisation (Jacobson, 2012) during the period of rebellion. Nationalist movement towards a separate Ireland and withdrawal of British troops emerged. Therefore, the IRA have fulfilled their weaponry requirements from Libya and USA in order to operate through a 'small team' concept so called 'Active Service Units' under a centralised command. Terrorism based tactics such as bombing government infrastructure, military and police installations, assassinating the security forces personnel, and large scale attacks took place against the British military (Study et al., 1988). All these activities were justified by interpreting the British forces as occupying power and making them legitimately vulnerable.

The political remedies were taken by the "Belfast Agreement" in order to reach a political stability. Power sharing became the core principle of that agreement and it was empowered by other adjacent concepts as securing human rights, demilitarisation of UK forces, and disarmament (CRS, 2019). Ireland has to focus upon many challenges relating to socio-political aspects such as reduction of paramilitaries, empowering legal framework, achieving reconciliation and economic perspectives such as long term economic development instead

of the effects on the 'Brexit'. In order to reach stability as a country, Ireland has to march together towards the international community through reconciliation and lessons learnt.

Research Methodology

This study has adopted a qualitative methodology using secondary data. Journals, publications, magazines, and websites are used to acquire data. The data is gathered from a variety of sources, including: I) various publications of foreign governments or international bodies and their subsidiary organisations, ii) various research reports prepared by research scholars, universities, economists, and others in various fields, iii) books by various authors, handbooks, theses, magazines, and newspapers, iv) various sources from university libraries, vi) technical and trade journals, vii) websites, and viii) public records and statistics. As a result, secondary sources have been used to collect the necessary data in order to ensure the quality of the study.

Analysis and Discussion

During the study it has been decisive to analyse how a paramilitary organisation could achieve legitimate ruling power through implementing separatism and terrorism. The study elaborated the causes and background of the struggle and its linkage with collective identity and culture. Moreover, study has been analysed the way on executing nationalist efforts and tactics of the IRA to achieve legitimate ruling power and sacrifices they have made on. Due to the discrimination, they have faced, the Irish people looked in to a separate self-ruling system where they expected equity and reconciliation. Ireland has been controlled by the British military, where it was equipped with the conventional military power. With the failed political resolutions for a free Ireland, the Irish were gathering around IRA, expecting an armed solution where they felt much safer than politics. Unconventional tactics against conventional British forces, such as small team concept, improvised explosive ordinance and weapons used by the IRA in order to eliminate British soldiers and monopoly.

It automatically diverted the IRA tenets in to terrorism, where the British soldiers were threatened with a maximum intensity. Nationalist IRA movements influenced young men, women and children to assist this campaign by not only through combat. Young women and children were involved in spying, transporting weapons and explosives and fund raising. It succeeded the death toll of British soldiers but IRA experienced few losses. Terrorism reduced the British military freedom of operation and awakened the British government for a political solution. Accordingly, the political wing of IRA had the sole solution of a separate state. It was the focal point where they wanted to focus on separatism through terrorism. The 'Belfast Agreement' was able to bring both parties in to a fair play on legitimate power-sharing. Now Ireland faces the challenges on dissident threat of paramilitaries, overcome economic challenges and achieving equality among Catholic and Protestant Irishmen in order to achieve reconciliation, economic stability and being independent as a country midst the global order.

Conclusion and Implications

Culture and independence play a unique role in symbolising the heritage of a nation. There each nation wishes to have their own legitimate governing system where they could preserve their own history, values and beliefs together. When a population faces deprivation of their needs by force, it generates the initial spark on nationalism. Irishmen felt the same under the rule of British and it has led to an unconventional warfare when peace and justice became blind. The British rule and deprived Irishmen led to creation of many paramilitaries against the British military. Unconventional warfare took place and their ultimate aim was independence for Ireland. Separation from the mainland and terrorism-based tactics have been used by IRA to gain their motives. Many countries suffer from terrorism under the justifications in deprivation of basic needs of minorities, especially on multicultural grounds. The Liberation of Tamil Tigers of Eelam (LTTE) in Sri Lanka used the same notion on justifying their nationalist movement as 'Tamil Eelam'.

Popular support becomes a decisive factor in an unconventional warfare. Nationalist concepts attracted more and more towards the IRA and they aimed to gain legitimate ruling power on their own land by an armed struggle. Structure of IRA became important in creation of military wing, fund raising network, training and development of cadres etc. The separate political wing 'Sinn Fein', has proven its validity within the contemporary legitimate governing system of Ireland. In the Sri Lankan context, LTTE followed the same steps on recruiting, training and development, fund raising and global propaganda with their sympathised popular support.

In the present context, Ireland proves us the importance of implementing equal power sharing, achieving reconciliation after a long driven conflict especially for multicultural societies. This study reflects the role of proper policy making and good governance in conflict prevention within the multicultural societies, the urge of establishing rule of law to keep control of paramilitaries and achieving a stable economy towards a competitive global order where justice, democracy, and equity take place.

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The Nature of the Relationship between Political Patronage and Public Sector Performance: A Perspective Analysis of Bureaucrats and Political Elite in Sri Lanka from 2000-2015

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Abstract*

Till the end of its 30-year civil war in 2009, Sri Lanka has shown considerably little progress in political development. This research investigated the relationship between political patronage and public sector performance based on the experience of Sri Lanka. It explored the impact of political patronage on the performance of the Public Sector of Sri Lanka (PSSL) between 2000 and 2015 by hypothesising that there is a negative relationship between the two. The study utilised snowball and purposive sampling techniques to discover the varying perspectives of Sri Lankan bureaucrats and political elite and further investigated the assumed dichotomy between the two groups. The study used thematic network analysis to unearth the perspectives salient in the research findings in the two groups. Complex systems theory and Easton's black box theory assisted in understanding the varying degrees and anatomy of these perspectives. Findings on the perceptions of the PSSL's performance among a majority of respondents was that it delivers its intended role satisfactorily albeit with room for improvement. However, the varying views on the exact role of the PSSL among both bureaucrats and the political elite make this view subjective. Developing and implementing policies, delivering public services, managing the economy respectively were most commonly defined by respondents as the main role of the PSSL. Although the expectations of the role of PSSL differed widely, a majority of respondents said that PSSL delivers its intended role satisfactorily albeit with room for improvement. Findings on the perceptions on the depths of political patronage in the PSSL indicate that the overwhelming majority of respondents find political patronage to be a prevalent feature of the PSSL. Findings prove that while there are minor divergences in some opinions, both groups seem to reiterate similar views. However, bureaucrats were a lot more reserved in their opinion sharing, while politicians were more open a few even chose to waive their anonymity. This indicates a privilege dynamic between the two groups that makes one group feel more secure and free to express their feelings than others. Perceptions on the relationship between political patronage and public sector performance in Sri Lanka indicate that a majority find there is a negative relationship between the two.

Keywords: Relationship, Impact, Political patronage, Performance, Public sector

Introduction

Since the end of its 30-year civil war in 2009, Sri Lanka has shown considerably little progress in political development (Athukorala et al., 2017). There is a widespread culture of political clientelism and elite capture within government institutions (Ratnasabapathy et al., 2019). The literature points to a lacuna in knowledge concerning the interplay between political patronage, and public sector performance (Andersen & Mikkelsen, 2018; Baracskay, 2016; Bearfield, 2009; Brierley, 2018; Colonnelli et al., 2018; De Alwis, 2009; Gordon, 2019). While a vast majority of the literature supports the notion of political patronage as having a negative impact on governance and development, several authors (Bearfield, 2009; Mamogale, 2015; Moynihan & Wilson, 1964; Toral, 2019) from over decades have argued the case for patronage as an effective governance tool. This paper investigated the relationship between political patronage and public sector performance based on the experience of Sri Lanka. It explored the impact of political patronage on the performance of the Public Sector of Sri Lanka (PSSL) between 2000 and 2015 by hypothesising that there is a negative relationship between the two.

Methodology

The study utilised snowball and purposive sampling techniques to discover the varying perspectives of Sri Lankan bureaucrats and political elite and further investigated the assumed dichotomy between the two groups. The study used thematic network analysis to unearth the perspectives salient in the research findings in the two groups. Complex systems theory and Easton's black box theory assisted in understanding the varying degrees and anatomy of these perspectives.

Results and Discussion

Findings on the perceptions of the PSSL's performance among a majority of respondents was that it delivers its intended role satisfactorily albeit with room for improvement. However, the varying views on the exact role of the PSSL among both bureaucrats and the political elite make this view subjective. Developing and implementing policies, delivering public services, and managing the economy respectively were most commonly defined by respondents as the main role of the PSSL. Although the expectations of the role of PSSL differed widely, a majority of respondents said that PSSL delivers its intended role satisfactorily albeit with room for improvement.

Findings on the perceptions of the depths of political patronage in the PSSL indicate that the overwhelming majority of respondents find political patronage to be a prevalent feature of the PSSL. Findings prove that while there are minor divergences in some opinions, both groups seem to reiterate similar views. However, bureaucrats were a lot more reserved in their opinion sharing, while politicians were more open—a few even chose to waive their anonymity. This indicates a privilege dynamic between the two groups that makes one group feel more secure and free to express their feelings than others. Perceptions on the relationship

between political patronage and public sector performance in Sri Lanka indicate that a majority find there is a negative relationship between the two.

Conclusion

The research concluded that there is a significant negative impact of political patronage on the meritocratic functioning of the PSSL and therefore has a negative impact on performance. Further findings show that many politicians, political appointees and bureaucrats treat political patronage as a political necessity and inevitability. The study found that political patronage remains a large, significant element of the complex system of the PSSL and concludes that this state of affairs is a product of complex interactions of many different historical, social, political, and cultural elements. This study adds to the conclusion established by De Alwis's (2015) research that the appointments to the higher strata of public service are still under political hands under the present Constitution and hence the lack of meritocracy in appointments and promotions procedures in the PSSL is a key issue to be addressed.

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Impact of Covid-19 on Subjective Wellbeing in the Western Province of Sri Lanka: A Cross-Sectional Study

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Abstract*

The COVID-19 pandemic created widespread personal and societal change. Studies emerged showing its impact on wellbeing indicators given its stressful nature. However, the psychological impact of COVID-19 is understudied in the Sri Lankan context. The study aimed to explore aspects of cognitive subjective wellbeing under such stressful conditions. The research used an explanatory cross-sectional study, with a correlational design on a sample of adults in the Western Province of Sri Lanka. The study also explored factors that determined the intensity of impact guided by the stress process model and stress-buffering hypothesis to explore possible intervention strategies.

Results were consistent with existing research regarding stress and its outcomes. It indicated that perceptions of stress and COVID-19 are related to decreased cognitive subjective wellbeing. The perception of stress and its impact were influenced by individual factors such as age, sex and socio-economic status. Women had higher wellbeing and perceived stress. Perceived family support was an effective coping strategy, especially in older ages. Perceived social support moderated the impact of stress and reduced how intensely it was perceived. The study highlighted the idiosyncratic nature of perception and the impact of stress and how coping resources are utilised. Contextually focused interventions are needed to overcome the impact of stressors.

Keywords: COVID-19, Perceived stress, Cognitive Subjective Wellbeing, Perceived Social Support, Gender, Age

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Introduction

COVID-19 was a global pandemic with high death and infection rates, causing countries to take drastic preventative measures, affecting daily life. Sri Lanka was among the top 20 affected countries by August 2021 (World Health Organisation [WHO], 2021). Long-term psychosocial interventions were thus considered essential. However, global and local research on the mental health impact due to the pandemic is limited. In keeping with the (WHO) definition of health, researching positive aspects of health i.e., cognitive subjective well-being (CSWB) comprising of life satisfaction is vital when considering stressors and mental health. This research aimed to explore the impact of COVID-19 on CSWB, a positive health indicator; given scarce local research on COVID-19 and mental health. Guided by the stress process model

(Lazarus et al., 1985; Pearlin et al., 1981), it explores the relationship among the pandemic impact, perceived stress, perceived social support and subjective wellbeing, along with the variability due to individual factors in a Sri Lankan context.

Literature Review

Subjective wellbeing refers to feelings and thoughts about one's life, a state of balance affected by life events or challenges (Eid & Diener, 2004). Cognitive wellbeing i.e., thoughts, is stable across time in comparison to affective wellbeing i.e., feelings and includes aspects of satisfaction and inner harmony (Kjell & Diener, 2020). Chronic stressors are uncontrollable and unpredictable and severely affect health and wellbeing. Lazarus et al.'s (1985) stress process model suggests that individual factors and perception of stress influence the outcome of stressors. COVID-19-related behavioural adaptations caused unfavourable changes in people across various life spheres with psychological impacts seen in both infected and uninfected populations. Higher perceptions of stress showed lower life satisfaction, where stress moderated the impact of COVID-19 on wellbeing (Achterberg et al., 2021). Factors such as unemployment, low income, family issues, being a woman, youth, and being a student, indicated higher perceived stress during COVID-19 (TMGH-Global COVID-19, 2021). It disproportionately increased women's unpaid work including household work and homeschooling, thereby needing gendered time–space arrangements (Chauhan, 2022). It was more challenging for women as work-from-home differs based on home and work. Domestic and professional work are separate domains integrated with work-from-home, needing simultaneous management of work and family commitments (Chauhan, 2022). Decreased gender inequality within some families was noted, with men taking on more household chores and child care (Centre for Poverty Analysis [CEPA], 2020), leading to the redefinition of roles for men. Regardless of gender, the challenges and demands of work-from-home caused reduced life satisfaction (Rigotti et al., 2021). COVID-19 related economic consequences led to reduced wellbeing, where non-standard workers, young workers and self-employed workers faced higher job loss risks, while low-income earners were likely to either lose their job or part of their income (Nieuwenhuis & Yerkes, 2021). Occupational risk and economic stress impact risk perception and sense of resource depletion, leading to poorer well-being (Sinclair et al., 2021). Social support, though understudied, plays a role in decreasing COVID-19-induced distress (Yu et al., 2020). It boosts youths' sense of wellbeing and has moderate behavioural impacts (Eryilmaz & Başal, 2021). Work-from-home and other pandemic-related changes cause social isolation, where neighbourhood support reduces psychological distress since quarantine compels individuals to spend time in their immediate neighbourhood (Chauhan, 2022). Support from friends/relatives plays a limited role, possibly due to its virtual nature rather than face-to-face interaction, which reduces its effectiveness (Chen et al., 2021).

Methodology

The study utilised an explanatory cross-sectional correlational design. It followed a two-step analysis process; firstly, adaptation and validation of translated scales using the International

Test Commission (2017) guidelines. Secondly, analysis of data using SPSS-21. Adapted and validated self-rated instruments that were administered include, the Satisfaction with Life Scale (SWL) and Harmony in Life Scale (HIL) (Kjell & Diener, 2020) to measure CSWB, Perceived Stress Scale (PSS) (Cohen et al., 1983), Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al., 1988) and Pandemic Emotional Impact Scale (PEIS) (Ballou et al., 2020) to measure pandemic impact. Only English and Sinhala scales were administered due to resource constraints, however, the sample included bilingual Tamil participants. Eight experts using an e-Delphi process established the content and consensual validity of translated scales. Exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and reliability analysis were conducted. Data was collected online using convenient and snowball sampling methods due to COVID-19 related curfew. The study was conducted in the Western Province of Sri Lanka given the occurrence of the highest number of positive cases. Participants were above 18 years old due to the nature of data collection and the ability to give consent.

Results

The research consisted of 759 participants, of which 495 were Sinhala responses and 60% were female. The mean age was 30 years. 67% were employed while 5% had lost their job due to COVID-19. Scales indicated good reliability Cronbach's Alpha ranging from 0.86 to 0.92. EFA revealed a single factor structure for HIL and SWL while CFA indicated good fit Comparative Fit Index (CFI) = 0.96. Similarly, MSPSS (CFI = 0.94), and PEIS (CFI = 0.96) showed adequate fit as per original instruments, indicating the scales were appropriate to be administered.

Perceived stress and impact of the pandemic [$r(757) = 0.68$, $p < 0.001$], along with CSWB and perceived social support [$r(757) = 0.36$, $p < 0.001$] were positively correlated. Pandemic impact and CSWB [$r(757) = -0.40$, $p < 0.001$] and stress and CSWB [$r(757) = -0.50$, $p < 0.001$] were negatively correlated. Mediation and moderation effect of perceived social support was examined on different outcome variables. Social support mediated the relationship between the impact of the pandemic and CSWB where the total effect of pandemic impact on CSWB was negative $\beta = -0.42$, $t(741) = -12.59$ $p < 0.001$, $f^2 = 0.47$, indicating pandemic impact reduced CSWB. Social support reduced the impact of the pandemic on CSWB by $\beta = -0.08$, 95% CI (0.112 to -0.056) the family subscale attenuating the relationship more $\beta = -0.09$ 95% CI (-0.124 to -0.064). The family subscale moderated the relationship between pandemic impact and stress. At low levels of family support, higher pandemic impact led to higher perceived stress and the inverse at higher family support.

Figure 1

Moderating effects of family support at different levels of PEIS
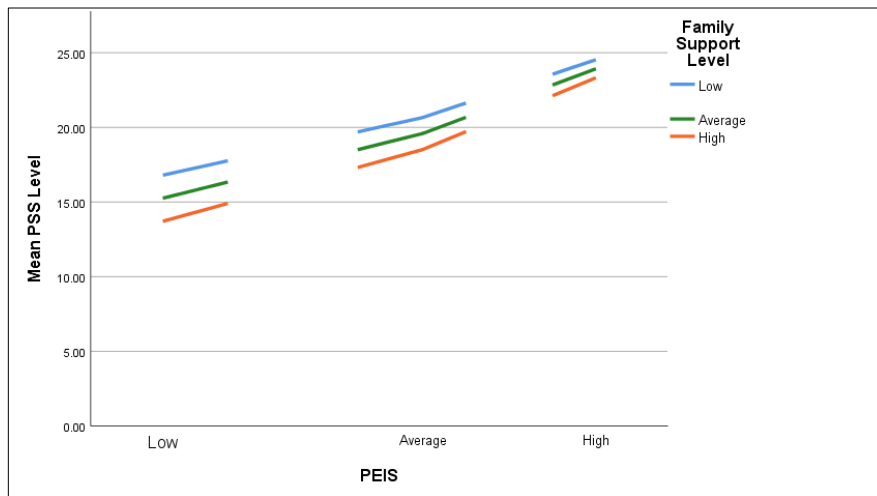
Women had higher stress scores $F(2,756) = 6.46$, $p = 0.003$. However, men had lower wellbeing scores $R^2 =0.29$ b = -1.32, $F(1,744) = 22.03$, $p =0.005$, $f^2 =0.64$ when exploring the relationship between pandemic impact and CSWB. Unemployed individuals had lower CSWB $F(3,755) =$ 10.74, $p < 0.001$. CSWB increased with age $R^2 =0.06$, b = 0.19, $F(1,757) = 47$, $p < 0.001$, $f^2 =0.26$. Older ages perceived more social support $R^2 =0.02$ b = 0.02, $F(1,757)= 11.04$, $p = 0.001$, $f^2 =0.14$ in the family subscale. Increase in age also led to lower stress scores $R^2 =0.09$, b = -0.21, $F(1,757) = 73.14$, $p < 0.001$, $f^2 =0.33$ and PEIS scores $R^2 =0.07$ b = -0.34, $F(1,757) = 55.91$, $p <$ 0.001, $f^2=0.28$.

Discussion

Consistent with global studies, the research indicated that perceived stress moderately rose as the impact of COVID-19 increased. Stress seemed to be more strongly related to CSWB than the actual COVID-19 impact as measured by PEIS, wherein an increase in both stress and pandemic impact led to a decrease in CSWB. Higher social support resulted in better CSWB outcomes and attenuated the impact of COVID-19. Family support also reduced the perception of stress despite explicit levels of COVID-19 impact. Friends' support was less effective in comparison to family support, possibly due to COVID-19 restrictions (Chauhan, 2022). Sex differences seem to indicate that women are disproportionately affected in terms of stress based on perceived stress scores, likely due to the added burden. However, when considering the direct impact of COVID-19, lower scores on CSWB postulate worse outcomes for men, possibly due to stigma and limited focus on men's mental health. Loss of one's job impacted CSWB, likely due to its impact on income. Impact on jobs and thereby loss of male identity may contribute to poorer wellbeing in men (Cassino, 2020). Being young indicated poorer wellbeing outcomes and higher stress, possibly youth experiencing more changes due to COVID-19, and older adults getting more care and focus given health concerns. The findings

elucidate the stress process model, where individual factors and coping resources determine the outcome of stressors.

Conclusions

Individuals are impacted in varying degrees based on demographics such as SES, sex, age, and available coping resources. Specialised interventions for specific groups during health crises are key (i.e., youth, men). Increasing social support is a preventative strategy against stressors. Strengthening family structures, especially in low-income earners is essential. The study emphasises community and systemic interventions.

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Track Three: **03**

Business, Management and Economics

Factors Affecting Young Adults' Intention to use Debit Card Services during Covid-19 Pandemic
(A Case Study on the Gampaha District in Sri Lanka)

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Abstract*

The global Covid-19 pandemic swiftly transformed various aspects of society, prompting shifts in consumer behaviour, particularly in the realm of financial transactions. As a result, consumers are shifting from cash-based to cashless and encouraging the use of debit cards for online transactions and e-payments. Notwithstanding the great advantages of debit card services, there is a lack of studies that examine the extent of their usage among young adults during the Covid-19 pandemic, particularly in developing countries. Hence, this study aims to identify the factors that influence young adults' intention to use debit card services during the Covid-19 pandemic situation in Sri Lanka's Gampaha district. Around 205 young adults were selected as the sample of the study using stratified sampling techniques in the area of Gampaha district in Sri Lanka. The Data were gathered using a Google Form-based questionnaire. The data was analysed using statistical techniques, including descriptive statistics and regression analysis. Binary Logistic Regression results indicate that performance expectation, social influence, and facilitating conditions exert significant influence on young adults' intention to use debit card services. However, the insignificant results obtained for effort expectation and price value warrant further investigation. The findings concluded that young adults in the Gampaha district have a high intention to use a debit card during the Covid-19 pandemic because of its usefulness in their daily transactions, the facilitating condition of online transactions and encouragement from other users.

Keywords: Covid-19 pandemic, Debit card services, Digital payments, Young adults, Sri Lanka

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Introduction

The Covid-19 pandemic has brought about unprecedented challenges and disturbances across the world, affecting various aspects of daily life, including how financial transactions are conducted. In Sri Lanka, like many other countries, the Covid-19 pandemic has enhanced the adoption of digital payment systems, as people try to find safer and more convenient alternatives to traditional cash transactions. According to the official report issued by the Central Bank of Sri Lanka, the quarterly analytical situation for the last three fiscal years (2021-2019) regarding debit card transactions in Sri Lanka noticed that there is a reduction in the total number of cards in use after the first quarter of COVID-19 pandemic situation (Mar,

2020). However, by the fact in the last 10 quarters, there was an increase in the value of the transactions carried out by means of debit cards, both on the electronic payments component or frequently increased at the Point of Sale (POS) as well as at the cash component at the ATM. The conclusion is also confirmed by the total value of the transactions as of the end of the second quarter of 2021 (Rs. 67 billion transactions). The Gampaha District, being one of the most populous and economically active districts in Sri Lanka, serves as an interesting case study to explore the factors influencing young adults' intention to use debit card services during the pandemic.

This study aims to fill the existing research gap by investigating the factors influencing young adults' intention to use debit card services during the Covid-19 pandemic in the Gampaha District of Sri Lanka. Hence, the main objective is to identify the factors that influence young adults' intention to use debit card services during the Covid-19 pandemic.

Understanding the factors that affect young adults' intention to use debit card services in the Gampaha District can provide valuable insights for policymakers, financial institutions, and service providers to design effective strategies to promote the adoption of digital payment systems. By identifying the key determinants that influence young adults' decision-making process, targeted interventions can be implemented to encourage the usage of debit cards, ultimately fostering a more resilient and cashless economy.

Literature Review

Factors affecting intention to use debit card services

A study examined by Zhao and Nor Othman (2011) indicated that intention can be described as a course of action that an individual aims to achieve. On the other hand, intention is an individual's subjective probability that is intended to be accomplished within a time period (Ajzen, 2005). In the same idea of lines, intention can be defined as the specified future behaviour (Venkatesh et al., 2003). It states the way an individual will act in the future. With the development of electronic commerce (e-commerce), debit card is a new form of e-payment services that is widely accepted and also in future it is expected to have a great expansion of debit card services in Sri Lanka (Rusniya & Nufile, 2020). Furthermore, many scholars detected positive and significant relationship between intention and new technology use (Baptista & Oliveira, 2015; Barry & Jan, 2018; Karim et al., 2020; Kim et al., 2008; Kissi et al., 2017; Özkan et al., 2010; Teo & Zhou, 2014; Thakur, 2013). According to the Thakur (2013), intention to use has positively and significantly affects actual usage. Venkatesh et al. (2003) was introduced an extended Technology Acceptance Model with four major constructs. The findings revealed that intention to use has a significant and positive influence on usage behaviour. The best analyst of behaviour is said to be intention. (Özkan et al., 2010) pointed that it is assumed to capture motivation factors that contribute towards behaviour.

Performance expectancy is the degree to which an individual believes that using debit card services will improve their work performance (Dospinescu et al., 2019). Using the Unified

Theory of Acceptance and Use of Technology (UTAUT) model Kissi et al. (2017) indicated that performance expectancy is highly significant on students' behavioural intention to use a debit card service. Baptista and Oliveira (2015) investigated the factors affecting individuals' behaviour in mobile banking. The findings revealed that performance expectancy is the strongest predictor of behavioural intention. Similarly, performance expectancy is expected to be one of the most important factors that clearly influence on behavioural intention to use mobile payment services (Thakur, 2013).

Effort expectancy is the degree of ease associated with use of debit card services (Venkatesh et al., 2003). Borzekowski et al. (2008) examined a study on the topic of 'consumers' use of debit cards: patterns, preferences, and price response' and they used nationally representative survey on payment use at the point of sale to investigate consumers' use of debit card. According to the results of this study they revealed that convenience is the cited overwhelmingly as a main reason for using debit cards. If people find debit card services easy to use, they become more willing to use it to handling their transaction activities (Baptista & Oliveira, 2015).

Social influence is the extent to which individuals perceive that other, especially family and friends, believe they should use debit card services (Venkatesh et al., 2003).

Kissi et al. (2017) examined university students' acceptance to use debit card services. They concluded that social influence is a significant influence of behavioural intention.

Furthermore, that is the inspiration from other users has an impact on consumers' behavioural intention to use debit card services.

Facilitating conditions refers to how people believe that administrative and technical structures exist to support the use of debit card services whenever necessary (Venkatesh et al., 2003).

Using debit card services requires some skills such as using a mobile phone or computer usage, internet connectivity and knowledge of debit card online service and security. People with these skills have a greater intension to use debit card services (Kissi et al., 2017).

Price value is the peoples' cognitive trade-off between the perceived benefits of using debit card services and the monetary cost of using it (Venkatesh et al., 2012). And also includes factors such as transaction fees, mobile internet charges, service costs and device cost where applicable. The price value is positive when benefits of using the debit card services are perceived to be greater than the associated monetary cost (Baptista & Oliveira, 2015; Foscht et al., 2010; Karim et al., 2020; Kissi et al., 2017; Özkan et al., 2010). Hoang and Vu (2020) provided a new perspective in explaining cardholders' willingness to use debit cards instead of cash by applying the transaction costs economic theory and also expanded the adoption of transaction cost economics theory in explaining consumer behaviour by investing the moderating effects of income and education on the relationship between perceived transaction cost and willingness to use debit cards. They found that asset specificity,

uncertainty and frequency of payment all positively contribute to the perceived transaction costs associated with debit card usage. Ozkan et al. (2010) suggested that customers use debit cards to avoid running up credit card balance.

As describe in previous findings, there is a dearth of studies conducted even despite the great advantages of debit card services among the usage with young adults in Sri Lanka. Especially during Covid-19 pandemic situation. Accordingly, the current study has chosen to adopt performance expectancy, effort expectancy, social influence, facilitating conditions and price value as the key determinants in order to understand the relationship of these variables with the intention to use debit card services.

Methodology

Research Design

Due to the Covid-19 pandemic situation caused in Sri Lanka it was impossible to collect data through physical communicating methods. Therefore, in order to carry out the research even between obstacles it had been to create a self-administrated questionnaire using an online survey tool called Google Forms in order to collect data from respondents. The questionnaire items were adopted from previous studies (Baptista & Oliveira, 2015; Kissi et al., 2017; Venkatesh et al., 2003, 2012)

Population and Sample

According to Erik Eriksons' stage of human development, a young adult is between the age of 19 and 39 while a teenager is between the ages of 13 and 18 (Karim et al., 2020). Therefore, population selected for this study was all the young adults in Gampaha district. Target population of this study was all the young adults in Gampaha district who had enough digital literacy to fill a Google form. According to the Department of Census and Statistics in Sri Lanka the total population of young adults in Gampaha district by the year 2012 is 769,485. Population of young adults in Gampaha district has divided into age groups as follows:

Table 1

Population of young adults in Gampaha district by age in 2012

Age Group	Population
19 - 24	218,897
25 - 29	183,337
30 - 34	198,046
35 - 39	169,205
Total	769,485

Source: Constructed by the researcher based on the data obtained from the Department of Census and Statistics (2012)

In order to select a representative sample through the respondents from the target population, it had been selected the size of the sample was by using simple random sampling technique. The sample was filtered based on the following criteria. Such as, only the completed google forms were considered, the respondents live in Gampaha district and Age group 19-39.

The sampling unit of the study is a young adult of Gampaha district. The sample size was determined by using Morgan's and Krejcie's formula of sample size.

$$s = \chi^2 NP(1-P) \div d^2(N-1) + \chi^2 P(1-P)$$
$$s = \frac{3.841 \times 769485 \times 0.5(1-0.5)}{0.05^2(769485-1) + 3.841 \times 0.5(1-0.5)}$$
$$s = 383.90$$
$$s = 384$$

Where,

s = required sample size

χ^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841)

N = The population size

P = The population proportion (assumed to be 0.50 since this would provide the maximum sample size)

d = the degree of accuracy expressed as a proportion (0.05)

Source: Krejcie and Morgan (1970)

According to the formula the required sample size was 384. Through the target population, the sample was selected using stratified sampling technique. Due to the Covid-19 pandemic situation caused in Sri Lanka, it was impossible to collect the required sample size from the respondents. Therefore, in order to carry out the research even between obstacles it had been implemented with a sample size of 205.

Variables Construction to Measure Factors

This study has been carried out in order to investigate the factors that influence young adults' intention to use debit card services. Intention to use is considered as the dependent variable in this study. The suggested factors affecting intention to use debit card services is totally derived from the literature review. The researcher used five independent variables which may affect the intention to use namely, Performance expectation, effort expectation, social

influence, facilitating condition and price value. On the basis of research purpose, this study has established a conceptual framework as shown in Figure 3.1.

Figure 1

Conceptual framework of the study
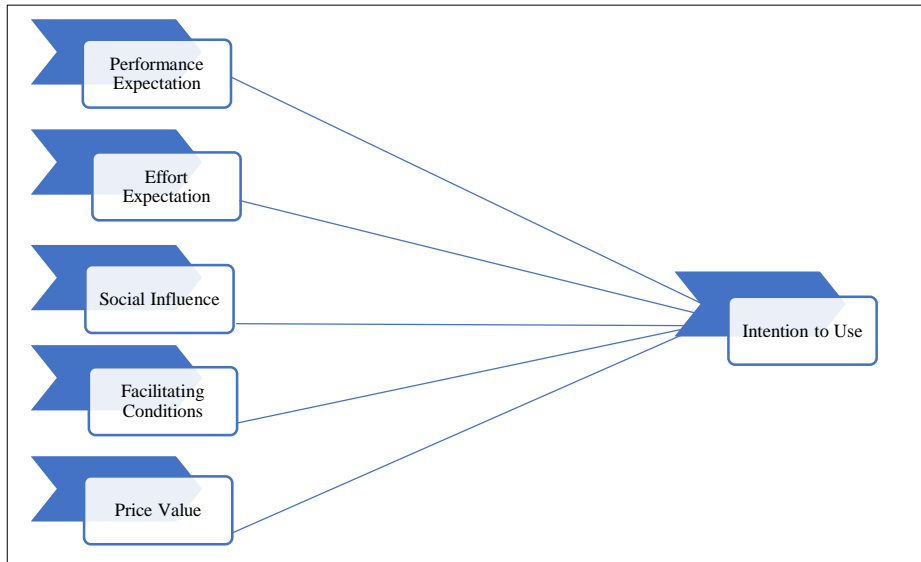
Results and Discussion

Analysis of Binary Logistic Regression

The main objective of this study was to find the influence of performance expectation, effort expectation, social influence and facilitating condition on intention to use debit card services. The usual regression analysis has described the mean of a dependent variable 'Y' as a function of a set of predictor variables. The logistic regression, however, deals with the case where the basic random variable 'Y' of interest is a categorical variable (dichotomous or with k categories). Binary logistic regression is the regression method we use when the Y (dependent) variable is a categorical variable with two categories The dependent (response) variable is status of intention to use (1=if yes, 0=No). The predictor variables are performance expectation, effort expectation, social influence and facilitating condition. When the response variable is binary (with values coded as 0 or 1), the mean is simply E(Y) = p{Y=1} = π.

Corresponding link function is called the logit function g (π) = $\ln\left(\frac{\pi}{1-\pi}\right)$ and regression under this model is called binary logistic regression.

$$g(\pi) = \ln\left(\frac{\pi}{1-\pi}\right)$$

$$g\,E(Y) = \eta$$

$$\ln\left(\frac{\pi}{1-\pi}\right) = \beta_0 + \beta_1 x_i + \ldots + \beta_k x_k$$

Binary logistic model considers log of odds of an event has a linear impact from the explanatory variables x_1, x_2, ..., x_k. Where for i = n observations, Y_i denotes the dependent variable, X_i represents independent variable, β_0 denotes intercept of the regression function and ϵ_i represents random error. The parameters β_0, β_1, β_2,..., β_k are called the regression coefficients. When all of the remaining independent variables $X_i (i \neq j)$ are held constant, the parameter $\beta_j (j = 1,2, \dots k)$ indicates the expected change in the dependent variable Y per unit change in X_j For this reason, the parameters are frequently entitled partial regression coefficients. Therefore, we are trying to fit a model such that,

$$\text{Log (odds)} = \ln \left(\frac{P}{1-P}\right) = \beta_0 + \beta_1 x_i + \dots + \beta_k x_k$$

Model Summary

Table 2

Model Summary

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	137.726[a]	0.508	0.677

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than 0.001.

Source: Constructed by the researcher, 2021

According to Table 4.1, Cox and Snell R square and Nagelkerke R Square indicate that the percentage of variance of dependent variable explained by the model. Based on those two values it can be concluded that the explained variation in intention to use debit card services based on the model is 67.7%.

Variables in the Equation

Table 3

Variables in the Equation

Variables in the Equation		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	PE	0.076	0.022	11.926	1	0.001	1.079	1.034	1.127
	EE	-0.044	0.024	3.461	1	0.063	0.957	0.913	1.002

SI	0.047	0.018	6.481	1	0.001	1.048	1.011	1.087
FC	0.125	0.033	14.095	1	0.000	1.133	1.062	1.209
Constant	-2.551	0.846	9.097	1	0.003	0.078		

a. Variable(s) entered on step 1: PE, EE, SI, FC

Source: Constructed by the researcher, 2021

According to the above Table 4.2, Since the *p* values of performance expectation (0.001), social influence (0.001) and facilitating condition (0.000) are less than the alpha value (0.05). Therefore, it can be concluded that performance expectation, social influence and facilitating condition have a significant relationship with intention to use debit card services. But the *p*-value of effort expectation (0.063) is greater than the alpha value (0.05). Therefore, it can be concluded that there is no significant relationship between effort expectation and intention to use debit card services.

The fitted model is:

$$\ln\left(\frac{P}{1-P}\right) = -2.551 + 0.076 PE + 0.047 SI + 0.125 FC$$

$$\ln\left(\frac{P}{1-P}\right) = e^{-2.551 + 0.076 PE + 0.047 SI + 0.125 FC}$$

The relationship between odds for intention to use and performance expectation, social influence and facilitating condition in above is nonlinear.

For a unit increase in performance expectation, the odd of a young adult being intention to use debit card services increased by $e^{0.076} = 1.079$. Furthermore, it can be concluded that the odds of a young adult being intention to use debit card services is 1.079 times higher compared to a young adult being not intention to use debit card services.

For a unit increase in social influence, the odd of a young adult being intention to use debit card services increased by $e^{0.047} = 1.048$. Furthermore, it can be concluded that the odds of a young adult being intention to use debit card services is 1.048 times higher compared to a young adult being not intention to use debit card services.

For a unit increase in facilitating condition, the odd of a young adult being intention to use debit card services increased by $e^{0.125} = 1.133$. Furthermore, it can be concluded that the odds of a young adult being intention to use debit card services is 1.133 times higher compared to a young adult being not intention to use debit card services.

Classification Table

Table 4

Classification Table

Classification Table[a]						
	Observed		Predicted			
			Intention to use		Percentage Correct	
			No	Yes		
Step 1	Intention to use	No	85	15	85.0	
		Yes	18	87	82.9	
	Overall Percentage				83.9	
a. The cut value is 0.500						

Source: Constructed by the researcher, 2021

As per the Table 4.3, it indicates that the overall percentage of correctly classifying is 83.9%. The corresponding percentage for intention to use and not intention to use groups are 82.9% and 85% respectively.

Conclusion and Implications

The analysis of the respondents' responses using binary logistic regression model revealed that facilitating condition is the most significant (β = 0.125) factor that predicts the use of debit cards during the Covid-19 pandemic particularly in Gampaha district. This suggests that people trust and accept the use of debit cards for those who have the resources necessary to use a debit card. These results are consistent with studies conducted by Kissi et al. (2017) when they point out that online payment has been accepted and adopted by users particularly those who have more access to a favourable set of facilitating conditions in online payment. In support, Teo and Zhou (2014) discovered that online purchase intention is influenced by the facilitating condition. Facilitating condition is an important factor of online transactions, mostly when it comes to consumers' electronic purchasing (Baptista & Oliveira, 2015; Shrestha & Tamang, 2018; Thakur, 2013).

Similarly, performance expectation (β = 0.076) has a positive influence on young adults' usage of debit cards during the Covid-19 pandemic particularly in Gampaha district. This implies that young adults find the debit card useful in their daily transactions, using the debit card facilitates young adults to accomplish tasks more quickly and using the debit card growths young adults' productivity in terms of the transaction that involves payment of money. These are in agreement with previous studies (Baptista & Oliveira, 2015; Kissi et al., 2017, 2017; Shrestha & Tamang, 2018; Teo & Zhou, 2014; Thakur, 2013).

Furthermore, social influence positively contributes (β = 0.047) to young adults' usage of the debit card during the Covid-19 pandemic particularly in Gampaha district. That means the encouragement from other users has an impact on young adults' intention to use debit card services. In the same manner, Kissi et al. (2017) simplify in their study that environmental factor can change the intention or action of human beings. For example, activities such as buying can be changed by the individual environment. Moreover, that is inspiration from other users has an impact on customers' intention to use debit card services. Thakur (2013) indicated that social influence has a significant impact on consumer intention to use a particular mobile payment service.

Accordingly, the key objective of the study was to examine the factors that influence young adults' intention to use debit cards during the Covid-19 pandemic in Gampaha district. It was revealed that young adults in Gampaha district have a high intention to use a debit card during the Covid-19 pandemic situation because of its usefulness in their daily transactions, the facilitating condition of online transactions and encouragement from other users.

Since the social influence has a positive effect on young adults' intention to use debit card services, debit card providers responsible for debit card usage and awareness should advertise more on the card in a wide range of different platforms on media. The advertisement could help to send more information to local, regional and international users which may change people's attitudes and perceptions of its usage. This could have a strong impact on users in society and in turn increase more usage.

It is important that debit card companies should expand the privacy and security features of the debit card and offer consumers with impartial information and recommendation concerning online transactions. When customers are provided with honest and trustworthy information, their loyalty towards the company products grows. As a result, users are more likely to use debit card services.

Debit card providers should educate young adults particularly in Gampaha district about the essence of using debit card services and improve the security of the online transaction in order to encourage more young adults to adapt and accept the usage of debit cards in their daily activities.

Since the study investigated young adults' usage in Gampaha district. Therefore, the results of the study would be strictly relevant to young adults in Gampaha. A survey with a large sample size that covers more than one district is recommended for future studies to revealed more findings on the young adults' adoption and acceptance of the use of debit card services.

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Determinants and Consequences of Crisis-Driven Brain Drain in Sri Lanka, Insights from Human Capital Flight Literature

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Abstract*

Brain drain is the emigration of highly trained or qualified people, considered detrimental to a country's economy or society. Brain drain, seen as an obstacle to economic progress, is commonly perceived as the depletion of developing countries' limited human capital resources. In 2022, Sri Lanka faced a severe economic crisis due to the COVID-19 pandemic and pre-existing structural issues. It resulted in an increased brain drain hindering the development of a sustainable economy. It is crucial to address its underlying causes, to alleviate the adverse effects of brain drain, and to retain skilled professionals in the country. A systematic literature review was carried out to identify the determinants and consequences of brain drain in developing countries that can apply to Sri Lanka. The results reveal that the 'Push and Pull factor theory' can be applied to identify the determinants of brain drain. Push factors include political instability, corruption, low remuneration, poor working conditions, low job satisfaction, civil disorder, misplacement of talent, and limited access to quality education in the home country. Better salaries, access to advanced technology, intellectual freedom, modern educational systems, and stable political conditions are some pull factors in developed countries that attract skilled professionals. Collapsing education and healthcare systems, decreasing innovation, and declining foreign investment are identified key consequences for developing countries. This research provides insights that guide policy decisions to minimise the negative consequences of brain drain. These insights further can inform targeted strategies aimed at retaining and utilising skilled professionals within Sri Lanka, thus fostering sustainable economic growth.

Keywords: Brain drain, Consequences, Determinants, Human Capital Flight

Introduction

Brain drain, also known as 'Human Capital Flight', refers to the migration of intellectuals from Europe to the USA and Canada in the 1950s and 1960s (Pop et al., 2018). Beine et al. (2008) defined brain drain as "the international transfer of resources in the form of human capital and mainly applies to the migration of relatively highly educated individuals from developing to developed countries" (p. 631). Though it also occurs in developed countries, the literature focuses on brain drain's negative impact on developing nations (Docquier et al., 2007). Brain drain, which can be seen as an obstacle to economic progress, is commonly perceived as the

depletion of developing countries' limited human capital resources. Thus, it is crucial to understand the driving factors behind it to assess its implications. Understanding its causes and consequences can facilitate policy changes to retain skilled professionals.

In 2022, Sri Lanka faced a severe economic crisis influenced by the COVID-19 pandemic and pre-existing structural issues, resulting in a devalued currency, high inflation, and mounting external debt. This crisis has profoundly impacted citizens, increasing poverty, unemployment, and difficulty accessing necessities. The brain drain has also increased, with over 300,000 highly educated professionals leaving the country for better opportunities abroad, significantly losing talent and human capital (Attanayake, 2022). This brain drain, challenges educational investment and hinders the development of a prosperous economy. To mitigate the adverse effects and retain skilled professionals, it is crucial to understand the underlying causes of brain drain. The factors causing brain drain could be exclusive to the country and crisis type. Accordingly, the brain drain during the economic crisis in Sri Lanka may possess a unique set of causal factors and consequences. Therefore, careful identification of those factors is critical for addressing the issue. However, no sufficient studies are available in the literature regarding the brain drain in Sri Lanka. As such, a study on the determinants and consequences of brain drain in Sri Lanka is vital to fill this gap. Moreover, this study will develop a broad understanding of the factors driving emigration from Sri Lanka and inform policy interventions to address these factors and consequences. Therefore, this research aims to examine the determinants and consequences of brain drain in Sri Lanka based on the question, What are the economic, social, and political determinants and consequences of brain drain in Sri Lanka during the economic crisis? Consequently, this study will develop a broad understanding of the factors driving emigration from Sri Lanka and inform policy interventions to address these factors and consequences.

Methodology

The author carried out a systematic literature review as the methodology. During the systematic review process, a rigorous search strategy and inclusion criteria (e.g.: keywords, time limit) were used to obtain articles related to determinants and consequences of brain drain/human capital flight in developing countries and articles related to the economic crisis in Sri Lanka. A search of electronic databases such as Google Scholar and Science Direct for titles and abstracts of potentially relevant studies was conducted. After the screening (about 50 articles), less than 15 closely related articles were chosen for the study. Research papers were divided and analysed into three main categories; articles related to theories of brain drain, articles related to determinants and consequences, and articles related to the economic crisis. The findings of these three categories were then combined to produce the results.

Results and Discussion

The analysis highlights three prominent theories applicable to brain drain in developing countries. Historically, scholars have regarded geographic mobility as a crucial strategy individuals and households employ to navigate economic challenges (Lafleur & Stanek, 2017).

This perspective forms the foundation of migration theories such as the Neo-classical Migration Theory, Dependency Theory and the Push-Pull Approach. The Neo-classical migration theory posits that individuals make rational decisions based on economic interests, with migration driven by wage disparities and employment prospects between regions or countries (Todaro, 1969). According to the dependency theory, the brain drain from developing nations stems from the dependency created by developed countries (Ndofirepi & Saungweme, 2014). Lastly, the prevailing 'Push and Pull' theory asserts that migration decisions are influenced by various factors, including the origin and destination regions and personal considerations (Elveren, 2018).

Determinants of Brain Drain

Table 1 summarises the findings from the literature on push and pull factors of brain drain in developing countries. Political instability, civil unrest, and corruption in Greece and Venezuela are similar political and social factors determining the brain drain in Sri Lanka during the economic crisis. In addition, poor working conditions and limited access to resources, including basic needs such as food and fuel, are other key determinants in the context of Sri Lanka. On the other hand, 'low wages' can be attributed to the recently increased income tax for professionals, which motivates them to migrate due to financial constraints. It can also increase 'job dissatisfaction'.

Table 1

Push and Pull factors related to Brain Drain

Author	Push factors	Pull factors	Related Country/ Region
Panagiotakopoulos (2020)	• Low wages • Poor working conditions • Political and ethnic issues • Civil unrest • Talent misplacement • Human rights abuses • Limited access to quality education and lack of security in the home country	• Better salaries • Access to advanced technology • Intellectual freedom • Modern educational systems • Stable political conditions	Greece

El Morabety and El Morabety (2022)	• Career development • Better job paths	•Attractive salaries •Improved quality of life •Favourable working environments •Experience abroad suitable lifestyle	Morocco
Garcia Zea (2020).	• Inadequate policy implementation • Ineffective management • Corruption • Socioeconomic and political turmoil		Venezuela
Lafleur and Stanek (2017)	• Global financial crisis 2008	• Higher salaries • New job opportunities • Access to advanced technology • Improved living conditions • Political stability • Religious freedom.	Southern Europe

Consequences of Brain Drain

Several studies have examined the impact of brain drain on developing countries, highlighting both negative and positive consequences. Garcia Zia (2020) emphasises the serious issues caused by brain drain, particularly in education and healthcare systems. Panagiotakopoulos (2020) also underscores the negative effects on developing countries' education and healthcare systems. It can be predicted that Sri Lanka, too, would have a collapse in those two sectors. It is urgent to take policy-level measures to mitigate the quantitative and qualitative

impacts of delivering these services in Sri Lanka. Furthermore, Beine et al. (2008) find that skilled emigration can hinder innovation and technological progress in developing countries. Bhagwati and Hamada (1974) demonstrate that brain drain can decrease foreign investment in developing countries. Similarly, this new wave of Brain drain in Sri Lanka may lead to decrease investments by reducing the availability of skilled professionals, weakening networks and connections, and creating a perception of instability.

On the other hand, some researchers argue that brain drain can have positive outcomes for developing countries. Gould (1994) suggests that the emigration of skilled workers can enhance economic growth through increased remittances. Schiff and Wang (2008) highlight how skilled emigration can stimulate foreign aid to developing countries. While there is some disagreement in the literature, most studies indicate that brain drain has more negative than positive consequences for developing countries.

Conclusion and Policy Implications

The push and pull factor theory could identify the determinants of the crisis-driven brain drain in Sri Lanka. Accordingly, corruption, political instability, low remuneration, poor working conditions, low job satisfaction, civil disorder, misplacement of talent, and limited access to quality education in the home country are primary push factors, while better salaries, access to advanced technology, intellectual freedom, modern educational systems, and stable political conditions are key pull factors in developed countries that attract skilled professionals. Collapsing education and healthcare systems, decreasing innovation, and declining foreign investment are identified key consequences for developing countries. This research deepens understanding of factors driving skilled professionals to emigrate, aiding policymakers and stakeholders in tackling the issue. It also reveals the consequences for the economy, society, and development prospects, informing policies to mitigate negative effects and maximise skilled migration benefits.

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The Impact of Human Resource Management Practices on Job Performance and Job Satisfaction of Surveyors

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Abstract*

This research aims to investigate the influence of Human Resource Management (HRM) techniques on surveying in Sri Lanka, focusing on work performance and job satisfaction. The study addresses the limited career opportunities, lower compensation, work-life balance, and job security concerns faced by surveyors. It highlights the importance of incorporating Information Technology (IT) skills and a deep understanding of land law and regulations into surveying curricula, as well as promoting stronger integration with Civil Engineering and Quantity Surveying. The findings, derived from a comprehensive approach that included a questionnaire survey, interviews, and literature review, reveal that 44% of participants express a desire to add IT skills, while 29% convey adding of land law and regulations. The results demonstrate that limited employment options and lower income significantly impact work satisfaction and future career prospects within the surveying industry. However, surveyors employed by the government report consistent support through Continuous Professional Development (CPD) programmes offered by the Survey Department. The research outcomes have implications for surveying professionals, educational institutions, and surveying related organisations, urging them to take preventive measures to address the lack of job opportunities, promote gender equality, and enhance skill development in the surveying sector. Key recommendations include creating diverse and equitable work opportunities, providing modern CPD programmes and fostering multidisciplinary collaboration. Implementing these suggestions can lead to improved skills, employability, and work satisfaction among surveyors. This article provides insights into HR strategies and practices in the surveying sector, promoting growth and advancement in Sri Lanka's surveying industry.

Keywords: Surveying**,** HRM practices**,** Job satisfaction**,** Job performance**,** Continuing Professional Development (CPD) programmes.

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Introduction

According to Qureshi et al. (2007), the investigation of Human Resource Management (HRM) practices is increasingly recognised as a crucial element in organisational development, influencing both overall organisational improvement and employee performance. According to Ayanda et al. (2014), HRM encompasses the processes and practices required to effectively manage the human resource aspect of a managerial role. These include tasks such as recruitment, job description, training, performance evaluation, compensation, career development, promoting employee involvement in decision-making, and providing mentorship to enable employees to advance to leadership positions. HRM is considered a critical factor in driving a company's growth, knowledge acquisition, and competitiveness. It is also recognised as a valuable tool for fostering innovation within the organisation. In a study conducted by Adrian et al. (2009), it was observed that HRM faces the complex task of balancing the needs and interests of employees with those of the organisation. Normala (2006), further suggested that HRM encounters numerous challenges due to the continuous changes in socioeconomic, technological, and political factors, as well as labour management. In Sri Lanka, the first department established was, the Department of Surveying in the 1800s but nowadays the efficiency in recruitment as well as the job market in Sri Lanka is diminished due to various reasons, such as adoption of new technologies, current economic crisis, etc. It is crucial for human resource managers in surveying firms to continually update their knowledge and adapt to the evolving environment in order to effectively manage both employees and the organisation. This research aimed to investigate the practices of human resource management in surveying firms, with the ultimate goal of enhancing human resource productivity. To achieve this objective, the study examined the extent of staff welfare and various staff training initiatives in surveying firms. Additionally, the research identified and evaluated different approaches to staff mentoring and succession planning within the surveying firms.

Literature Review

The origins of human resource management can be traced back to the industrial revolution in late eighteenth-century England, although it was not explicitly labeled as such (Loosemore et al., 2003). The concept of human resource management gained prevalence in the early 1980s, and since then, there has been increasing academic interest and research in this area (Normala, 2006). Today, human resource management is concerned with managing an organization's most valuable assets, its people, to gain a competitive advantage (Agbodjah, 2008). Armstrong (2003) identified key features of human resource management, including an emphasis on strategic management of people to align with the overall business goals and related factors.

According to Fitz-enz (2000), employees are considered 'Human Capital' as they contribute to the firm's productivity and play essential roles within the organisation. Appropriate human resource management practices are also believed to enhance motivation, commitment, and

job engagement (Agbodjah, 2008). The science of surveying has been practiced since at least ancient Rome. Ancient man created techniques for defining a property's borders as soon as he acquired a sense of ownership (Udagepola & Kodikara, 2002). According to the Survey Department of Sri Lanka, the surveying activities were formally initiated in 1800, and "Sir Frederic North" was the first Surveyor General. Surveying has been a key profession in the development of infrastructure and land, and it has significantly shaped Sri Lanka's terrain (Udagepola & Kodikara, 2002). Surveyors have always been in charge of measuring and charting land, making sure that borders are well defined, and aiding the planning and building of infrastructure projects. With the nation's fast urbanisation and economic progress, the profession's significance and demand have only grown (Gunathilaka & Prasanna, 2020). Despite the significance of the profession of surveying, surveyors in Sri Lanka encounter a number of difficulties in their day-to-day jobs. The importance of HRM strategies in promoting employee performance and satisfaction across various industries has been underlined in several studies (Guest, 2017; Jiang et al., 2012). HRM practices, including recruitment, training, performance management, compensation, and employee relations, can influence worker productivity, engagement, motivation, work output, and job satisfaction. Job satisfaction, encompassing factors such as work-life balance, pay, supervision, and growth opportunities, is crucial for employee well-being and is associated with higher levels of commitment, motivation, and retention (Judge et al., 2001). For surveyors, job satisfaction influences their dedication to the organisation, willingness to excel in their work, and intention to remain in the profession (Locke, 1976). While existing research has explored the relationship between HRM practices, job performance, and job satisfaction in various industries, the specific context of surveyors has received limited attention. Understanding the unique HRM practices that impact surveyors is crucial due to their specialised work and significant role in surveying, construction, and engineering projects. This study aims to fill this knowledge gap by identifying the specific HRM practices that have the greatest influence on the surveying industry. This knowledge can help organisations and individuals tailor their HR strategies to enhance surveyor job performance, job satisfaction, and overall project success.

Methodology

Figure 1
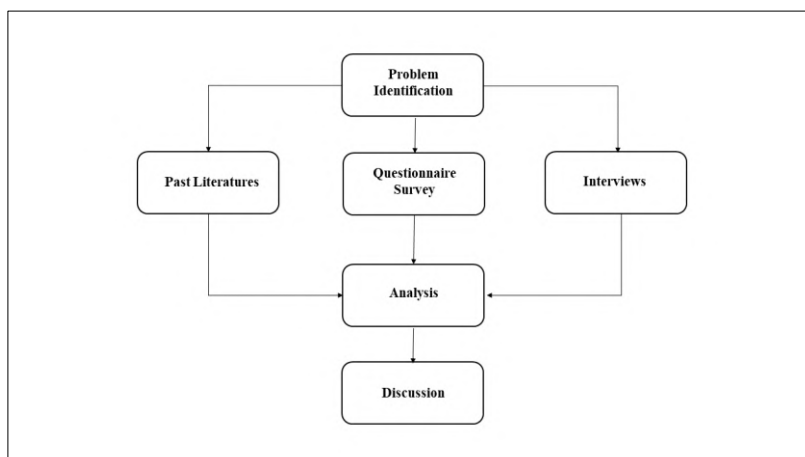
This quantitative research measures the impact of HRM practices on job performance and satisfaction using a cross-sectional design and structured questionnaires. The sample is divided into subgroups and selected using stratified random sampling. A questionnaire covering HRM practices, job performance, and satisfaction is developed, pre-tested, and administered electronically and through paper-based surveys. Limitations include potential limitations due to the specific context or organisation and potential social desirability bias.

Results/Analysis and Discussion

Analysis reveals that most participants expressed high levels of satisfaction with the Continuous Professional Development programmes (CPD) offered by their respective organisations, as well as the support provided for achieving a healthy work-life balance, ensuring job security, and implementing effective HRM practices. However, concerning specific aspects of organisational functioning, respondents indicated lower levels of satisfaction in the areas of recruitment and selection, performance appraisal, compensation and benefits, and the provision of opportunities for women employees. These findings suggest a need for further examination and improvement in these areas to enhance overall organisational effectiveness and employee satisfaction. 44% of respondents expressed a desire for the inclusion of knowledge pertaining to information technology and 29 % in law and regulations related to land, within the curriculum of the surveying field and CPD offered by their organisations. Additionally, a notable portion of participants also expressed an interest in incorporating subjects such as civil engineering and Quantity Surveying (QS) into their professional development initiatives. These findings indicate a clear demand among employees for acquiring competencies.

Conclusion and Implications

In conclusion, this study emphasises the need to address limited job opportunities and enhance skills for surveyors in Sri Lanka. The implementation of IT skills, knowledge of land law and regulations, and closer integration with civil engineering and QS in the curriculum are crucial. These measures will improve the competence, employability, and job satisfaction of surveyors. As well as surveyors can advance through management positions, valuation, emergency preparedness, agriculture, transportation, environmental monitoring, crime scene analysis, and plastic surgery. The implications of the study extend to surveying professionals, educational institutions, and policymakers. Proactive measures should be taken to align HRM practices with industry needs and promote the success of the surveying profession. By implementing these recommendations, surveyors can thrive in their careers and contribute to the overall growth of the industry.

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Enhancing Sustainable Practices in the Hospitality Industry:
A Qualitative Analysis of Green Initiatives in Sri Lankan Hotels

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Abstract*

Amid growing concerns regarding environmental conservation and resource efficiency, this research comprehensively examines the outcomes and challenges linked to green initiatives in a carefully selected group of hotels. The study's specific objectives are to evaluate the efficacy of green initiatives in promoting environmental conservation, enhancing resource efficiency, and positively influencing guest satisfaction within the hospitality industry. A qualitative research methodology is employed, primarily relying on in-depth interviews and observations as data collection methods. The research sample encompasses 10 tourists staying in these selected hotels, 10 hotel managers, and 2 government officers with expertise in sustainable practices. The implementation of energy-saving measures in the selected hotels results in an impressive 20% reduction in energy consumption. Concurrently, water conservation efforts led to a notable 15% decrease in water usage, contributing substantially to sustainable resource management. Waste management practices effectively curtail landfill waste volume by an impressive 30%, concurrently promoting environmental sustainability. Remarkably, the positive influence of these green initiatives extends to guest satisfaction, significantly enhancing the overall guest experience. Key recommendations stemming from this study encompass the establishment of dedicated sustainability committees, the institution of regular monitoring and evaluation protocols for green initiatives, the cultivation of collaborations with suppliers and local communities, and the seamless integration of sustainability into the hotels' overarching business strategies. In conclusion, this research underscores the favourable impact of green initiatives on environmental conservation, resource efficiency, and guest satisfaction within the hospitality industry. By adhering to the recommended strategies, hotels can elevate their sustainability performance, minimise their environmental footprint, and enhance the overall guest experience.

Introduction

The hospitality industry plays a pivotal role in driving economic growth, employment, and tourism development worldwide (World Tourism Organisation, 2020). Nevertheless, it confronts critical challenges, particularly in the realm of environmental sustainability. As global awareness of environmental issues continues to rise, there is an escalating demand for sustainable practices within the hospitality sector (Han et al., 2018).

In the context of Sri Lanka, a country renowned for its stunning landscapes and vibrant tourism, the hospitality industry grapples with unique challenges in embracing sustainability. These challenges include scarce resources, limited infrastructure, and a delicate ecosystem. Yet, despite these pressing circumstances, there remains a notable gap in peoples' understanding of the implementation and effectiveness of sustainable practices within Sri Lankan hotels (Fernando, 2020).

This research seeks to bridge this gap by shedding light on the distinct challenges faced by the Sri Lankan hospitality industry in adopting and implementing sustainable practices. It also explores the factors that have contributed to the dearth of research in this domain. In doing so, this study aims to provide a comprehensive assessment of the current state of sustainable practices in selected hotels across Sri Lanka.

The primary objective of this study is to assess the implementation and impact of sustainable practices within the Sri Lankan hospitality sector, with a specific focus on areas such as energy conservation, waste management, and water usage reduction. By thoroughly investigating existing practices and identifying areas for improvement, this research aspires to advance the cause of sustainable practices in Sri Lankan hotels.

The significance of this research extends to offering invaluable insights and recommendations to various stakeholders, including hotel managers, policymakers, and industry leaders. For hotel managers, a deeper understanding of the unique challenges in implementing sustainable practices can empower them to make well-informed decisions to enhance their environmental performance (Kim & Han, 2018). Additionally, for policymakers, this research can serve as a foundation for developing effective strategies and regulations that promote sustainability within the hospitality industry, thereby contributing to Sri Lanka's broader sustainability objectives (Gössling et al., 2017).

To further enrich the context of this study, the researcher has incorporated more recent literature, ensuring that our research remains at the forefront of sustainable practices in the Sri Lankan hospitality sector.

Literature Review

Sustainable practices in the hospitality industry have gained considerable attention in recent years due to the need for environmental responsibility and resource conservation (Jones & Lockwood, 2019). Energy conservation is a key component of sustainable practices in hotels. Research indicates that implementing energy-saving measures, such as Light Emitting Diode (LED) lighting and smart Heating Ventilation and Air-conditioning (HVAC) systems, can lead to significant reductions in energy consumption (Kim & Han, 2018). Waste management is another critical aspect of sustainability. Effective waste management practices, including recycling and composting, can reduce the environmental impact of hotels by minimising landfill waste volume (Gössling et al., 2017).

Water usage reduction is also a priority in sustainable hotel operations. Hotels consume substantial amounts of water, making water conservation crucial for sustainable practices.

Studies have shown that implementing water-saving technologies, such as low-flow fixtures and efficient irrigation systems, can significantly reduce water usage without compromising guest satisfaction (Rahman & Reynolds, 2020).

The literature emphasises the potential benefits of sustainable practices for hotels. Implementing green initiatives can result in cost savings through reduced energy and water consumption (Brown & Miller, 2019). Sustainable practices can also enhance guest satisfaction by aligning with the values of environmentally conscious travelers (Han et al., 2018). Moreover, adopting sustainable practices can improve the brand image and reputation of hotels, attracting eco-minded guests and gaining a competitive advantage in the market (Font et al., 2019).

Overall, the literature highlights the significance of integrating sustainable practices, such as energy conservation, waste management, and water usage reduction, into hotel operations. The benefits range from cost savings and enhanced guest satisfaction to improved brand image and competitiveness. This literature review provides a foundation for understanding the key arguments and research gaps in the study of sustainable practices in the hospitality industry.

Methodology

This research study employs a qualitative research approach to examine the implementation and impact of green initiatives on sustainable practices in 10 selected hotels located in the Central Province of Sri Lanka. A sample size of 10 tourists, 10 hotel managers, and 2 government officers is purposefully selected from the 10 hotels in the region (Creswell, 2013; Kim & Han, 2018). In-depth interviews and observations are conducted to collect data on the participants' experiences and perspectives regarding green initiatives and sustainable practices in the hospitality industry. Thematic analysis is employed to identify key themes and patterns related to the implementation and effectiveness of green initiatives (Braun & Clarke, 2019).

The research study employs a qualitative research approach to thoroughly examine the implementation and impact of green initiatives on sustainable practices within 10 selected hotels situated in the Central Province of Sri Lanka (Creswell, 2013; Kim & Han, 2018). This methodology encompasses research design, data collection methods, analysis techniques, and participant selection criteria, ensuring a comprehensive and rigorous investigation. A qualitative research design is chosen for its suitability in exploring in-depth perspectives and experiences related to green initiatives and sustainable practices in the hospitality industry (Creswell, 2013). This approach facilitates the exploration of intricacies inherent in the topic.

Data collection primarily involves in-depth interviews and systematic observations. The research engages with 10 tourists, 10 hotel managers, and 2 government officers, all purposefully selected from the 10 hotels within the Central Province of Sri Lanka (Creswell, 2013). Semi-structured interviews are conducted to maintain consistency and reliability in data collection, alongside systematic observations of sustainable practices within the hotels.

Rigorous participant selection criteria ensure the diversity of experiences and insights (Creswell, 2013): Tourists selected have stayed in the selected hotels within the past year and have actively engaged with the hotels' sustainable initiatives during their stay; Chosen hotel managers possess a minimum of three years of experience in hotel management within the Central Province of Sri Lanka (Kim & Han, 2018); Government officers participating in the study are responsible for overseeing environmental and sustainability regulations in the region (Creswell, 2013).

Thematic analysis is employed as the primary technique for data analysis (Braun & Clarke, 2019). This method enables the identification, analysis, and reporting of key themes and patterns associated with the implementation and effectiveness of green initiatives within the selected hotels.

By adopting this comprehensive research approach, a nuanced understanding of the challenges and opportunities linked to green initiatives and sustainable practices in the Sri Lankan hospitality sector is sought after.

Results/Analysis and Discussion

The analysis of the collected data reveals several significant outcomes regarding the implementation and impact of green initiatives on sustainable practices in the selected hotels located in the Central Province of Sri Lanka.

Energy-saving measures have resulted in a notable reduction of 20% in energy consumption within the hotels. By implementing energy-efficient lighting systems, optimising HVAC operations, and promoting guest awareness of energy conservation, the hotels have achieved substantial reductions in their energy usage (Brown & Miller, 2019). This reduction not only contributes to the preservation of natural resources but also leads to cost savings for the hotels.

Waste management practices have led to a 30% reduction in landfill waste volume. The hotels have implemented strategies such as recycling programmes, composting of organic waste, and minimising packaging waste to divert a significant portion of their waste from landfills. This proactive waste management approach has not only reduced the environmental footprint of the hotels but has also helped them achieve cost savings by minimising waste disposal expenses (Gössling et al., 2017).

Water conservation efforts have shown a 15% decrease in water usage. The hotels have implemented water-saving technologies and practices such as low-flow fixtures, rainwater harvesting systems, and guest education programmes on responsible water usage. These measures have resulted in significant water savings while maintaining guest satisfaction and operational efficiency (Rahman & Reynolds, 2020).

The discussion focuses on how the research was instrumental in achieving the pre-specified aims of the study. The findings highlight the positive impact of energy-saving measures, waste management practices, and water conservation efforts on sustainable practices in the

selected hotels. The successful implementation of these initiatives showcases the potential of integrating sustainability principles into hotel operations and decision-making processes.

By integrating sustainable practices, the hotels have not only reduced their environmental impacts but also experienced benefits in terms of cost savings, improved guest satisfaction, and enhanced brand image. The adoption of green initiatives has not only aligned the hotels with the growing consumer demand for sustainable practices but has also provided them with a competitive edge in the market (Kim & Han, 2018).

Overall, the results and analysis of this study demonstrate the positive impact of green initiatives on sustainable practices in the selected hotels of the Central Province of Sri Lanka. The discussion highlights the importance of integrating sustainability principles into hotel operations and provides insights into the benefits of adopting green initiatives. These findings contribute to the advancement of sustainable practices in the hospitality industry and can guide hotel managers and policymakers in implementing effective measures to reduce environmental impacts and promote sustainability.

Conclusion and Implications

In summary, this study offers critical insights into the efficacy of green initiatives in advancing sustainable practices within the hospitality sector, particularly in the context of the selected hotels in Sri Lanka's Central Province. Notable reductions in energy consumption, landfill waste volume, and water usage highlight the potential of green initiatives in mitigating environmental impacts while fostering resource efficiency (Brown & Miller, 2019; Gössling et al., 2017; Rahman & Reynolds, 2020).

This research underscores the positive consequences of incorporating sustainable practices into hotel operations. These outcomes encompass not only environmental sustainability but also substantial cost savings for the hotels themselves. Such findings align with prior research emphasising the advantages of sustainable practices in hotels, including enhanced guest satisfaction, fortified brand reputation, and a competitive edge in the market (Brown & Miller, 2019; Kim & Han, 2018).

The implications of this research carry dual significance. Firstly, they provide pragmatic recommendations for hotel managers, enabling them to initiate and enhance sustainable practices. By embracing energy-saving measures, implementing robust waste management strategies, and endorsing water conservation, hotels can champion environmental sustainability while concurrently benefiting from cost reductions and enriched guest experiences.

Secondly, the study bears policy-level implications, advocating for the support and promotion of sustainable practices within the broader hospitality sector. Policymakers and industry stakeholders are encouraged to create a regulatory framework conducive to sustainable practices while offering incentives for hotels to embrace green initiatives. In doing so, they can expedite the transition toward a more sustainable and environmentally responsible industry.

Beyond the confines of the hospitality sector in Sri Lanka's Central Province, findings are extended to broader implications for policy at regional and national levels. The successful integration of green initiatives within the hotel industry can serve as a model for sustainable development across various sectors. Policymakers across the country can draw lessons from this study to foster sustainable practices in other domains, potentially influencing broader environmental conservation efforts.

However, it is crucial to acknowledge certain limitations in this study. These findings are specific to the Central Province of Sri Lanka and may not be entirely applicable to other regions or countries with distinct socio-economic and environmental conditions. Additionally, the study's focus on qualitative data limits its ability to provide quantitative metrics for sustainability impacts.

In conclusion, this research emphasises the pivotal role of green initiatives in advancing sustainable practices within the hospitality sector. These results illuminate the positive repercussions of energy-saving measures, waste management practices, and water conservation efforts on environmental sustainability, cost reduction, and guest satisfaction. By embracing sustainable practices, hotels in the Central Province of Sri Lanka can spearhead sustainability efforts and contribute to the holistic well-being of the region.

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A Study on Factors for Adopting B2C Digital Marketplace in the Colombo District Multi-Purpose Cooperative Societies Sri Lanka

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Abstract*

The cooperative sector holds a crucial role in Sri Lanka's economy. Within this sector, Multi-Purpose Cooperative Societies (MPCS) operate with an expansive trade distribution network. The growth of emerging technologies drives the competitors of MPCS to implement new technologies. However, due to the lack of digital transformation, MPCS gained competitive disadvantages. According to Bakos (1991) and Irina (2007), the introduction of a digital marketplace emerges as the optimal solution for organisations to attain competitive advantages. However, due to a lack of scholarly research in the cooperative sector, many MPCS are hesitant to invest money in the digital marketplace. Therefore, the primary objective of this study was to identify the factors for adopting B2C digital marketplace in the Colombo district MPCS Sri Lanka. Unified Theory of Acceptance and Use of Technology (UTAUT2) theory of Venkatesh et al. (2012) and the findings of Sarrab and Rehman (2013) were used to design the conceptual framework. Moreover, a well-structured Google form questionnaire was prepared to collect data. The sample size was determined as 188 and snowball method was used to select it. Descriptive analysis and partial least square structural equation modeling were carried out to analyse data. Performance expectancy, effort expectancy, hedonic motivation, social influence and perceived value show a positive significant effect on user adoption directly and indirectly through behavioural intention. Moreover, behavioural intention, facilitating conditions and quality of software show a positive significant effect on user adoption directly. Findings recommend MPCS implement B2C digital marketplace by considering all the significant factors in order to implement a successful digital marketplace.

Keywords: Digital marketplace, MPCS, UTAUT2, PLS-SEM, User adoption

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Introduction

The digital marketplace is one of the systems rapidly used by businesses which is not like conventional e-commerce sites and looks like the modern way of e-commerce, However, this study defines the digital marketplace as an information system which integrates multiple buyers and sellers into a centralised platform and make business transactions through the internet. This research is going to discuss Business to Consumer (B2C) marketplace model with the cooperative sector. The system of Co-operative sector is an important economic sector in Sri Lanka, which was commenced during British rule to uplift the rural agricultural

community (Department of Cooperative Development, 2018). This study aims at Multi-Purpose Cooperative Societies (MPCS). There are 303 MPCS running trade businesses across 9 provinces of Sri Lanka. This study chooses the Colombo district for the selection of MPCS. 11 MPCS are in the Colombo district, which run trade business in 124 coop city outlets including only 24 profitable outlets (Department of Cooperative Development, 2020).

All trade operations are done physically at MPCS coop city outlets through the physical interaction of customers and outlets. The customer might feel inconvenienced by this activity and show less attraction toward manual purchasing. Meantime, there are several digital marketplaces which are run by competitors of MPCS. This provides a better experience to the customers and increases the customer base of MPCS competitors. Due to the lack of digital transformation, MPCS gained competitive disadvantages and decreased its customer base. According to the findings of Bakos (1991) and Irina (2007), the digital marketplace gives competitive advantages to the organisation. Therefore, introducing a digital marketplace is the best solution for the MPCS to gain competitive advantages. It will help to increase their customer base. However, due to the research scope, the main objective is defined to identify factors for adopting a digital marketplace in the Colombo district MPCS in Sri Lanka.

Literature Review

Importance of Digital Marketplace

Bakos (1991) stated e-marketplace gives competitive advantages to organisations by reducing search cost. Lee and Clark (1997) identified that e-marketplaces generate economic benefits. To confirm that statement, Irina (2007) found that e-commerce contributes a lot to economic development. Moreover, e-commerce reduces transaction costs, improves market information and provides competitive advantages (Ghibutiu, 2003). Derave et al. (2021) found digital marketplace ontology to improve the transparency of decision making. Therefore, using a digital marketplace is important to sustain in a competitive market.

User Adoption and Theories

Unified Theory of Acceptance and Use of Technology extended – UTAUT2

UTAUT2 theory (Venkatesh et al., 2012) is a comprehensive theory as it is the extended version of UTAUT theory (Venkatesh et al., 2003), UTAUT2 enabled advanced predictive power in order to analyse technology acceptance and it is constructed by following variables.

Performance Expectancy (PE): Venkatesh et al. (2003) defined PE as user expectation of job benefits and stated that PE is the strongest predictor of BI and significant at all measurement points. The same results were also found in the research of Gaitan et al. (2015) and as well as the study by Subawa and Imaki (2020). **Effort Expectancy (EE):** According to Venkatesh et al. (2003) definition, EE is the degree of ease associated with a system. Subawa and Imaki (2020) analysed that EE was accepted with reliability and validity tests and had a significant positive effect on BI in adopting e-marketplaces among MSMEs. **Social Influence (SI):** Venkatesh et al.

(2003) defined SI as the degree of influence on using a system and important to the adoption. Further, Taiwo and Downe (2013) did a meta-analysis of the UTAUT theory which confirmed the relationship between SI and BI is slightly weak but significant. **Facilitating Conditions (FC):** According to the UTAUT2 theory FC has a direct relationship with BI and UB and is defined as the degree of support from the environment. Recently, Dakduk et al. (2020) studied the acceptance of mobile commerce in low-income users and confirmed that FC had a direct and positive influence on BI. **Hedonic Motivation (HM):** Venkatesh et al. (2012) defined this as the fun or pleasure derived from using the system. Brown and Venkatesh (2005) stated that fun and enjoyment were two key factors driving people to accept a new technology. **Price / Perceived Value (PV):** Defined as users' trade-off between the gained advantages of the applications and the monetary cost of using them (Venkatesh et al. 2012). The same results were found by Tak et al. (2016), Alalwan et al. (2017) and Kwofie et al. (2019) on e-marketplace usage and e-payment. **Habit (HB):** Directly and indirectly affected behavioural intentions to use technology (Venkatesh et al., 2012). **Behavioural Intention (BI):** Venkatesh et al. (2003) defined BI as an individual's subjective probability that he or she will perform a specified behaviour. To confirm UTATU theory, Taiwo and Downe (2013) did meta-analysis of UTAUT theory which agreed that the relationship between BI and UB is also reliable and significant. **Use Behaviour (UB):** UB was considered as the actual use and user adoption (UA) of the system. Here, UB was the dependent construct and depended on all other factors as mentioned in theory (Venkatesh et al., 2003).

Open source software selection for adoption based on software quality characteristics

Sarrab and Rehman (2013) analysed open source software selection for adoption based on software quality characteristics and they identified that the most relevant system qualities such as availability, reliability and usability, information quality such as maintainability, security and testability and service quality such as documentation and support motivates users in choosing their open source software products for usage.

Methodology

Figure 1

Conceptual framework
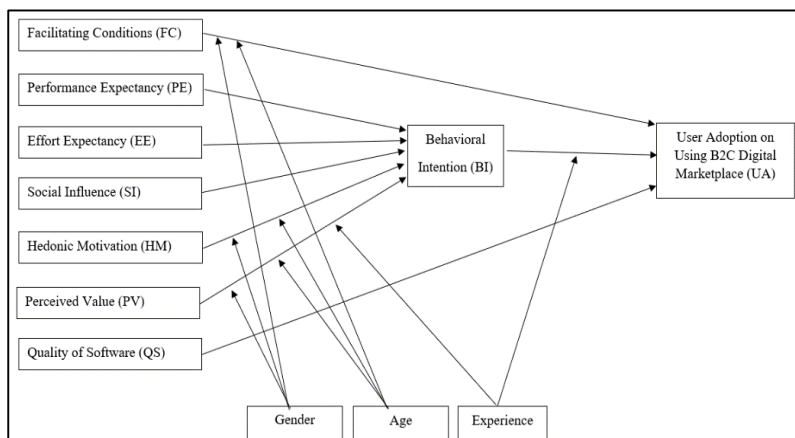
This framework was drafted by using the UTAUT2 theory of Venkatesh et al. (2012) and study of Sarrab and Rehman (2013).

Hypotheses

Hypotheses and testing results are briefly described in Section 4.

Research Methodology

According to the Cohen (1992) sampling table, the sample size was determined by the number of variables except for the dependent variable. The proposed conceptual framework derived 11 total variables including 7 independent variables, a mediating variable and 3 moderating variables. As per the Cohen (1992) table, considering a total number of variables of 11, a significance level of 5% and an R^2 value of 0.10, the sample size was selected as 156. A marginal error of 20% was important to add to the sample size to reduce error. The marginal error size was returned as 32. Finally, the total sample size was calculated as 188. Sample 188 members were chosen from Colombo district MPCS by using the snowball sampling technique. A well-structured questionnaire was prepared by using Google forms to collect quantitative data through questions which were generated by using indicators of variables. Operationalisation of variables was done as follows.

Table 1

Operationalisation of the Variables

Variables	Indicators
Performance Expectancy (PE)	Increasing productivity, brand recognition, competitive advantage, useful system
Effort Expectancy (EE)	Easy transactions, easy finding of products, easy payment, easy to understand, effectiveness
Social Influence (SI)	Subjective norms, social media influence
Facilitating Conditions (FC)	Computer facilities, internet facilities, online payment ability, legislations
Hedonic Motivation (HM)	Pleasure feeling, convenience
Perceived Value (PV)	Low price assurance, quality products, delivery service, packing products, after sales service
Quality of Software (QS)	Innovativeness, usability, reliability, accuracy, accessibility, availability, security, maintainability
Behavioural Intention (BI)	Intention, continuity, interest
User Adoption (UA)	Satisfaction, actual use, future adoption, recommending others, recommending MPCS

The questionnaire was distributed to five academics and five cooperative sector persons, received comments from them, modified, validated, and verified accordingly.

Results / Analysis and Discussion

Descriptive Analysis

Descriptive data analysis was done by the SPSS version 22 software application. According to the analysed results, female respondents are 53.72% and males are 46.28%. 70.75% of respondents are from 20 - 40 years of middle age group. 41.49% are from low-level occupations and 29.79% from middle-level occupations. Further, 52.13% have 1 – 4 years of digital marketplace experience and 47.87% have monthly digital marketplace experience. Also, considering the preference list of respondents, the majority of respondents prefer dresses, food and beverages, cosmetics, books and groceries to purchase via the digital marketplace. As a payment method, most of the respondents prefer cash on delivery and card payment options. Further, most of them like to use mobile devices and Android OS to access the digital marketplace. However, there are considerable respondents who mention iOS and Windows OS also. The majority of respondents wish home delivery options for their digital marketplace transactions.

This study used Partial Least Square Structural Equation Modeling Approach (PLS-SEM) to test validity, reliability and hypothesis. There are two ways of PLS-SEM analysis, namely the analysis of the measurement model (outer model and the analysis of the structural model (inner model). Smart PLS version 4 software was used to carry out PLS-SEM analysis of this research.

Analysis of Measurement Model (Outer Model)

The reflective measurement model is used to test the research instruments' validity.

Convergent Validity: To validate research instruments, first need to be checked convergent validity. In this model, all variables produced greater AVE values than 0.5 and were valid.

Discriminant Validity: According to the Fornell-Larcker table, the top of each variable's column outer loading value is higher than the below values of each column. Therefore, this research instruments' discriminant validity was established and all variables were validated.

Reliability: According to results, all the variables' Cronbach alpha values are higher than 0.7 except the SI variable. Since composite reliability (rho_c) values of SI and other latent variables are higher than 0.7. Therefore, internal consistency reliability was established in all latent variables of this research.

Analysis of Structural Model (Inner Model)

The structural model evaluation aims to describe the relationship or strength of estimates between latent or construct variables (Hair et al. 2015). A bootstrapping technique with two-tailed test type at 0.05 significance level was used to calculate.

Path Coefficient, *p* Values and *t* Statistics

Table 2

Bootstrapping procedures results

Variables	Path (H)	Hypothesis	Path Coeff.	*t* stat	*p* val	Result
Performance Expectancy (PE)	PE -> BI	H_1	0.513	10.993	0.000	Positive & Significant
	PE -> UA	H_{1a}	0.228	3.834	0.000	Positive & Significant
Effort Expectancy (EE)	EE -> BI	H_2	0.511	9.245	0.000	Positive & Significant
	EE -> UA	H_{2a}	0.269	3.887	0.000	Positive & Significant
Social Influence (SI)	SI -> BI	H_3	0.541	9.843	0.000	Positive & Significant
	SI -> UA	H_{3a}	0.272	4.272	0.000	Positive & Significant
Facilitating Conditions (FC)	FC -> UA	H_4	0.556	11.198	0.000	Positive & Significant
Hedonic Motivation (HM)	HM -> BI	H_5	0.513	8.682	0.000	Positive & Significant
	HM-> UA	H_{5a}	0.331	4.767	0.000	Positive & Significant
Perceived Value (PV)	PV -> BI	H_6	0.535	12.116	0.000	Positive & Significant
	PV -> UA	H_{6a}	0.269	3.883	0.000	Positive & Significant
Quality of Software (QS)	QS -> UA	H_7	0.586	12.551	0.000	Positive & Significant
Behavioural Intention (BI)	BI -> UA	H_8	0.767	21.191	0.000	Positive & Significant

According to Table 4.1, Hypotheses H1, H1a, H2, H2a, H3, H3a, H4, H5, H5a, H6, H6a, H7 and H8 show positive and significant relationship between their relevant variables path and reject their relevant null hypothesis. It explains PE, EE, SI, HM, and PV show a direct positive relationship with User Adoption (UA) and an indirect positive relationship with UA through BI. Further, FC, QS and BI show a direct positive relationship with UA. When considering the moderating effect, there are no moderation effects of age, gender, and experience between FC and UA. Also, no moderation effects of age, gender, and experience between PV and BI.

Moreover, there is no moderation effect of age between HM and BI. However, it explains male group shows a higher significant moderation effect than the female group between HM and BI. Also, the experience group shows a higher significant moderation effect than the no experience group between HM and BI. Further, the experience group shows a higher significant moderation effect than the no experience group between BI and UA.

Conclusion and Implications

According to the results, the majority of MPCS members in the Colombo district have computer education qualifications and high majority of MPCS members have computer experience and internet experience. Also, most of the MPCS members have more than one year of experience in the digital marketplace and most of them use the digital marketplace monthly. Further, they prefer dresses, food and beverages, cosmetics, books, and groceries to purchase through the digital marketplace. As a payment method, they prefer cash on delivery and card payment options. Further, most of them like to use mobile devices and Android OS to access the digital marketplace. However, some considerable members who mention iOS and Windows OS. And, they wish home delivery option for their digital marketplace transaction.

Performance expectancy has a direct and indirect positive significant relationship with user adoption. Here, MPCS members expect and receive higher performance advantages from using the digital marketplace. Ensuring high benefits from the system will increase behavioural intention toward using the digital marketplace. Effort expectancy has an indirect and direct positive relationship with user adoption. In this context, MPCS members expect and receive effort advantages by making transactions easier, finding products easier, making payments easier, learning and understanding the system easier and achieving effectiveness. Social influence has a direct and indirect positive relationship with user adoption. In this study, most of the members were influenced by family members, workplace staff, friends, social media and media. Influencing to use the system will increase behavioural intention toward using the system. Facilitating conditions have a direct positive significant relationship towards user adoption. If MPCS members feel that they have enough facilities, they will show more intention towards using the digital marketplace. Hedonic motivation has a direct and indirect positive significant relationship towards behavioural intention on user adoption. Perceived value has a direct and indirect positive significant relationship towards user adoption. Ensuring the monetary value of products and services will increase behavioural intention toward using the digital marketplace. Quality of software has a direct positive significant relationship towards user adoption of using B2C digital marketplace. MPCS members consider software qualities as important factors in using the digital marketplace. Behavioural intention has a relationship towards user adoption of using B2C digital marketplace in the Colombo district MPCS Sri Lanka. In this study, behavioural intention is determined by constructs of performance expectancy, effort expectancy, social influence, hedonic motivation and perceived value. User adoption is directly determined by constructs of behavioural intention, facilitating conditions and quality of software, and directly and indirectly determined by

performance expectancy, effort expectancy, social influence, hedonic motivation and perceived value. This study recommends MPCS consider the above conclusions when implementing the digital marketplace in the Colombo district MPCS in order to achieve a successful digital marketplace and enhance its adoption.

However, there are some limitations in this research. It targeted only registered members in the Colombo district MPCS. However, there are more societies throughout Sri Lanka. Therefore, doing this kind of digital marketplace research in future for all island cooperative sectors including registered members and unregistered walking customers, will generate more beneficial results to develop all island cooperative sectors through digital marketplace.

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Use of Artificial Intelligence in Hotspot Analysis for Sustainable Tourism Development

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Abstract*

Artificial Intelligence (AI) is being swiftly adopted by many industries, from manufacturing to healthcare, harnessing the many benefits offered. From Chatbots on websites to robot concierge services in hotels, AI has been inching its way into the tourism industry as well, mainly with improvements in services and convenience. However, being a heavy polluter, the incorporation of AI to reduce negative environmental impacts is viewed as a novel concept. Among many tools devised for sustainable tourism development, the hotspot analysis, developed as a part of the UNEP-Lifecycle Assessment Tool, takes a holistic view of the value chain, quantifies 'hotspots', and prioritises finite resources accordingly for pollution mitigation. Considering the freshness of the hotspot analysis, accompanied by the absence of AI in the arena, this research aimed to investigate the potentiality of adopting AI into the hotspot analysis for the tourism industry. A qualitative methodology through a desk review of reviewed journal articles, official websites, and reports was performed. The feasibility of incorporating AI into the 8-step methodological framework of the Hotspot Analysis developed as a part of the UNEP Life Cycle Assessment Tool, was conducted. Results indicate that the use of AI in the tourism industry has been explored in myriad ways, except research in relation to the incorporation of same into the Hotspots Analysis. Accordingly, for steps 1 (goal setting) and 8 (review), human involvement was required, but AI could be incorporated into data-driven decision-making and communication. For steps 2-7 (data gathering, validating hotspots, prioritising actions, identifying gaps, validating findings, and communication, respectively), AI can be utilised in myriad ways: identification of sources of pollution, comparative and impact analyses, enabling early warnings, validation of facts through research, graphical representation of findings, and language enhancements to reach a wider audience. Uses of AI for post-hotspot identification were observed to be more through food waste monitoring systems, chatbots for GHG emission reduction, and improved energy efficiency.

Keywords: Artificial intelligence, Hotspot analysis, Sustainable tourism development

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Introduction

Artificial Intelligence is being swiftly adopted by many industries, from manufacturing to healthcare, to harness the many benefits offered (Anyoha, 2017). From Chatbots on websites to robot concierge services in hotels ('Connie' of the Hilton chain), Artificial Intelligence (AI)

has been inching its way into the tourism industry. Increasing operational efficiency, revenue improvement, customer experience, and sustainable growth are key drivers for AI adoption (Infosys, 2018). This entrance to the AI era is considered to be the most powerful and transformative step by the tourism industry (Ivanov, 2019). However, in a context where the tourism industry has earned the reputation of being a heavy polluter, through greenhouse gas emissions, waste production, and water consumption, the integration of AI for the mitigation and reduction of negative environmental impacts of the industry is still viewed as a novel concept (Loureiro & Nascimento, 2021). Since the initial coining of the idea in the 1980s (Global Sustainable Tourism Council [GSTS], n.d.) many tools aimed at sustainable tourism development have been devised. The Hotspot Analysis developed as a part of the Life Cycle Assessment Tool of the United Nations Environmental Programme (United Nations Environmental Programme [UNEP], 2019), takes up a holistic view of the value chain and prioritises the finite resources at various quantified 'hotspots' of the value chain. Considering the freshness of the hotspot analysis accompanied by the absence of AI in the arena, this research aims to investigate the potentiality of adopting AI into the hotspot analysis for the tourism industry.

Literature Review

With technological improvements and novel innovations, Artificial Intelligence (AI) is now considered more than just a buzzword. With its initial mention during the 1950s, AI is becoming a powerful tool that is currently shaping the very existence of human beings (Anyoha, 2017). Sustainable tourism experienced a later entrance to the arena in the 1980s (GSTC, n.d.) and is still a much sought-after topic. The current tourism industry has earned the reputation of being a heavy polluter of the environment (Gössling, 2002), through emissions, energy use (Azam et al., 2018) and waste production (Saito, 2013). The unsustainable consumption and production of tourism products have also increased to reflect the development of the industry, which has led the World Tourism Organisation to highlight the importance of integration of sustainable production and consumption into tourism policies (United Nations World Tourism Organisation [UNWTO], 2019) (UNWTO, 2019). This is performed by the integration of sustainable concepts through the use of appropriate tools (Schianetz et al., 2007). The Hotspots Analysis developed by the United Nations Environmental Programme, the One Planet Network, and the Life Cycle initiative, in partnership with several other international organisations, is one such tool that assists in identifying the hotspot areas of unsustainable production and consumption and supports setting priorities in national sustainable consumption and production as well as climate policies (UNEP, 2019). A hotspot analysis is a methodological framework that allows the rapid assimilation and analysis of a range of information sources over the lifecycle, with an output that provides a comprehensive understanding of impacts, allowing to prioritise limited resources (Barthel et al., 2015). In a context where the tourism industry is regarded as remaining further away from being sustainable than ever (Hall et al., 2015, as cited in Saarinen

et al., 2017), the exploration into the possibility of integration of AI to achieve sustainability goals are timely and appropriate topics available for discussion.

Methodology

By adopting a qualitative methodology with the performance of a desk review of secondary sources (reviewed journal articles, official websites, and official reports), this research aims to investigate the potentiality of adopting AI into the hotspot analysis for the tourism industry. The feasibility of incorporating AI into the 8-step methodological framework (1- Define goal and Scope, 2- Gather data, seek expert insight, 3- Identify and validate hotspots, 4- Identify and prioritise actions, 5- Identify implementation gaps and recommendations, 6- Review and validate initial findings with key stakeholders and experts, 7- Present and communicate findings to a wider audience, and 8- Review and revisit hotspot analysis) of the Hotspot Analysis developed as a part of the UNEP Life Cycle Assessment Tool (One Planet, 2019) was conducted.

Results/Analysis and Discussion

The role of AI in the tourism industry has been explored in many ways such as the role of blockchain technologies and AI in sustainable tourism (Kashem et al., 2022) and achieving sustainable tourism through human-machine interactive devices (Van et al., 2020), and robotics (Samala et al., 2022). However, the integration of AI into the Hotspots Analysis has not been researched thus far. Accordingly, the possibility of integrating AI in each step of the methodological framework is explained below:

1-The goal and scope definition must be conducted through human interactions. However, the necessary information required to set goals, such as tourist behaviour, awareness levels and preferences using audience segmentation algorithms, and emerging sustainability trends can be extracted using AI. Thus, set goals and scope could be communicated using innovative communication tools. **2-** Data gathering on sources and processes of GHG emissions, water and energy usage, and waste generation can be performed with ease using AI, with minimal resources and time. **3, 4, 5-** Identification of patterns, trends, hotspots, and gaps could be performed and the prioritisation of the same could be conducted by leveraging machine learning algorithms and advanced data analytic tools. This enables data-driven decision-making achieved by conducting comparative analyses to identify trade-offs and conflicts and conducting impact analyses to identify long and short-term economic, social, and environmental impacts, thus enabling a system for early warning. **6-** AI could be used to generate understandable, and even graphical means, by which reviewing can be performed, and also to validate the findings with key stakeholders. Validation could be performed through research and data be interpreted through AI. **7-** A graphical representation of the above and the communication of the same to the wider audience could be performed using AI. The presence of AI applications that create the content required within minutes, with language enhancements and auto-translation options to suit specific demography, eases this process. **8-** AI-generated data could be used for certain solutions put in place, such as tech-based

solutions or gauging market perception, to review the performance against the set benchmarks. However, the reviewing of certain policy decisions cannot be performed sans a human element.

The applications and uses of AI post-hotspot identification are more, in comparison to the application within the 8 steps. Natural language processing AI can be used to calculate GHG emissions from a tourist's travels, and chatbots can be utilised to propose ways in which tourists can reduce their carbon footprints, including suggestions on modes of transport. AI algorithms can be utilised to identify areas where energy efficiency is lacking and food waste monitoring systems have been devised, such as the Macau Winnow Vision (P1) which uses camera technology and AI to determine the approximate cost of food being thrown away and future menu adjustments for chefs. The issues pertaining to obtaining sector-specific data, from hotels to cruises (Berardo et al., 2020) can be overcome through this system. The technology has the potential to reduce food waste by approximately 30% (ESGN Asia, 2019).

Conclusion and Implications

The hotspot analysis, whilst being regarded as a novel concept that takes a holistic view of the tourism value chain, has not undergone the incorporation of AI as yet. Regarding the potentiality of incorporating AI into its 8-step methodological process, it can be concluded that AI can be incorporated from steps 2 to 7. For steps 1 and 8, human involvement is necessary. However, AI can be incorporated to obtain necessary data for steps 1 and 8, and for communication of same. Considering post-hotspot identification, there's a greater chance of adopting AI for monitoring purposes of GHG emissions, water and energy use, and waste production, using natural language processing, AI algorithms, and food waste monitoring systems such as Macau Winnow Vision.

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Sexual Harassment at Workplace:
How Organisations Can Encourage Victims to Complain

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Abstract*

In a backdrop where victims are reluctant to make formal complaints of sexual harassment to the organization, this research explores how Human Resource Professionals (HRPs) can encourage victims to make complaints. While prior research has highlighted the lack of formal complaints of sexual harassment and the reasons therein, very little attention has been placed on how to encourage victims to complain. Our research addresses this lacuna by suggesting how HRPs can encourage victims of sexual harassment to make complaints, as an important first step in combatting sexual harassment in organisations. Adopting a qualitative research approach, 35 HRPs from 30 companies in Sri Lanka were interviewed in-depth, using a semi-structured interview guide. We put forward basic prerequisites such as having a policy, a culture of trust, and anti-harassment training, and recommend key elements that should be included in the anti-sexual harassment policies and highlight the role of the complaint receiver in encouraging victims to come forward to make complaints. Organisations and HRPs need to ensure that the proper stage is set for victims to come forward with their experiences through effective anti-harassment policy and effective training for complaint receivers.

Keywords: Sexual harassment, Complaints, Human Resource Professionals, Victims, Policy

Introduction

Sexual harassment continues to be a grave issue that organisations are still trying to grapple with (Brown & Battle, 2019). Despite the legislations, policies, procedures, and guidelines that had been introduced over the years specifying how organisations should handle and prevent sexual harassment, the issue still endures (McDonald et al., 2015). One challenge that organisations and the Human Resource Professionals (HRPs), who hold the main responsibility in handling and preventing sexual harassment, face in attempting to handle the issue is the reluctance of victims to come forward to complain about their experiences as studies indicate most victims never file a formal complaint (Freedman-Weiss et al., 2020; McLaughlin et al., 2017). According to prior research, only about one in 10 victims makes a formal complaint (Dobbin & Kalev, 2020). When victims do not complain, the perpetrators will continue their behaviour, and the victims will continue to experience devastating consequences to their well-being and performance such as anxiety, depression, eating disorders, post-traumatic stress, fear, and embarrassment, leading to a lack of motivation, dissatisfaction, lower productivity and low efficiency (Brown & Battle, 2019; McDonald et al., 2015). As such, organizations will

encounter absenteeism, turnover and lower productivity (McDonald et al., 2015). On the contrary, when victims do complain and the HRPs effectively handle those complaints, it can lead to a reduction in sexual harassment and increased satisfaction and motivation (Elkins & Velez-Castrillion, 2008). While there can be many reasons for victims to not make formal complaints to HR or the management such as embarrassment, fear of reprisal and cultural reasons (Brown & Battle, 2019), one main reason can be the drawbacks in the company's sexual harassment policies and procedures (Vijayasiri, 2008). Of course, in Sri Lanka, many companies do not have a formal process through which the victim can bring to notice her/his sexual harassment experience. There are also companies where even when they do have a process and avenues for formal reporting of sexual harassment, they are not very effective. Within this backdrop, the aim of this study is to identify ways and means organisations can encourage victims to complaint.

Literature Review

While prior research has extensively explored why employees make formal complaints/report their experiences and why not (Cortina & Areguin, 2021), we found only a handful of studies that had looked into the complaint mechanism itself (Becton et al., 2017). Nevertheless, the complaint mechanism plays an important role in either encouraging or discouraging an employee to make a complaint. Further, while research do talk about different mechanisms and strategies organisations should implement to prevent and handle sexual harassment such as the existence of policies and procedures, training and awareness creation and fair investigation procedure (Cortina & Areguin, 2021; McDonald et al., 2015), rarely do these studies pay closer attention to the complaint stage or the process/steps of making a complaint. Research also document alternative complaint procedures that victims can make use of such as ombudsman and voluntary dispute resolution to ensure higher complaints (Dobbin & Kalev, 2020), yet, do not explore how complaint making can be encouraged within a formal procedure itself. It is these gaps that the current study attempts to explore.

Methodology

This is based on a large research that we undertook adopting a qualitative research approach. We conducted in-depth interviews with 35 Human Resource Professionals (HRPs) from 30 companies in Sri Lanka, using a semi-structured interview guide. The respondents were selected using a purposive sampling technique through personal contacts. The job positions of the HRPs ranged from very senior to junior level management, the majority (20) being females. The companies represented industries such as manufacturing, information technology, retail, service, finance and education. All were private organisations and they were a mix of multinational and local organisations. Of the 30 organisations, 14 had anti-sexual harassment policies. Three companies addressed sexual harassment under the broader anti-harassment policies and few others stated of addressing sexual harassment through other policies such as anti-discrimination, disciplinary, human rights, and code of conduct. Six companies did not address sexual harassment through any policies and two companies stated

that they are currently developing anti-sexual harassment policies. Interviews were conducted in English or Sinhala. Interviews were recorded with consent and transcribed verbatim.

Findings

Based on the interviews, we identified elements that should be present in a company's anti-harassment policy to encourage complaining and when receiving complaints, as explained below.

Suggested elements for encouraging complaints in an anti-harassment policy

The anti-harassment policy should lay down comprehensive mechanisms and details on how employees can make complaints when sexual harassment occurs. There are certain specific aspects related to the complaint that should be available in an effective procedure to encourage employees to complain.

- Having multiple avenues – rather than advising employees to make a written complaint, there should be multiple avenues for the victim to choose from to make a complaint such as through a hotline (specifically dedicated to receiving complaints of sexual harassment), email, the HR system, make a complaint directly to the head office, to the regional office or the subsidiary the victim if working in. Also, there can be options for the employees to complain to specific individuals or committees.

- Both verbal or written complaints should be accepted and anonymity should be allowed at the initial stages of the complaining.

- Having multiple people to go to – it should be specified to whom the complaint can be made to. There should not be one person to whom the victims can go to with their complaint. There should be multiple people, representing different hierarchical levels and different genders so the victim can approach the person whom they are most comfortable with and trust. These personnel should be individuals who are perceived to be close to employees and are trusted. Some of these individuals can be insiders and some can be outsiders. They can be the HRPs in the company, counsellors, managers, or supervisors, managing directors/general managers, ombudsman, compliance officers and any other individual who are trusted by employees. These people should have the time, passion and sensitivity to engage in getting involved in the complaints and should be trained on sexual harassment and on effectively receiving a complaint.

Suggested elements for receiving a complaint

Whoever receives the complaint (e.g., HRP, Committee, hotline) should be trained to adhere to the following principles:

- It is important to listen without pre-judgments

- This is not the stage to cross-examine or negate what the complainant is saying. HRPs can find more facts about the case later during the investigation. But at this stage, HRPs role is to listen and provide an avenue for the complainant to tell her/his story.

- Console and build confidence in the complainant that justice will be served

- Assure confidentiality and protection from retaliation (and ensure this)

- Understand that complaining is a very emotional and daunting task for the complainant

- The complainant should be allowed to decide whether they want to make an informal complaint – verbally reveal/discuss the incident with the relevant party or make a formal complaint

- Answer any question the complainant may have about the process and the procedure about handling sexual harassment

Conclusion

One important aspect of preventing and handling sexual harassment effectively is creating a setting where employees would be encouraged to come forward and make formal or informal complaints. As Becton et al. (2017) highlight, it is important for employees to not encounter any unreasonable obstacles in filing a complaint. Hence, in counteracting the many aspects that discourage employees from complaining, HRPs should take the responsibility of ensuring that the company procedure has multiple avenues and means to encourage employees to complain and the complaints are received properly. Undeniably, after complaints are received, they should be handled effectively and justly so that it will encourage employees to continue to complain if they experience sexual harassment. Organisations need to do justice and perceived to be doing justice for employees to come forward to complain about sexual harassment. Nevertheless, HRPs should not rely on individual victims filing formal complaints as a main means to initiate the sexual harassment handling process (Cortina & Areguin, 2021). Other measures to identify and prevent sexual harassment are imperative in handling sexual harassment complaints.

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Determinants of Green Human Resource Management
(A study reference to manufacturing firms in the Southern province of Sri Lanka)

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Abstract*

Green Human Resource Management (GHRM) is the use of human resource policies and practices to enhance the sustainable use of resources within organisations to ensure environmental sustainability. Most of the studies relevant to this field were carried out in developed countries and fewer studies can be seen in the Sri Lankan context. Among them, very little empirical research has been conducted and revealed the negative side of its implementation. Based on the above findings and thoughts, there is a researchable gap to address the extent to which the determinants of green HRM: green recruitment and selection, green training, green performance evaluation and green reward management are implemented in manufacturing firms in the Southern province of Sri Lanka. For this study quantitative method was used under the deductive approach. Responses were received from 130 production managers/executives in manufacturing firms from the specified sample frame. Statistical Package for Social Science (SPSS 20) was used to analyse the data ensuring the validity and reliability to generate findings from the study. Among the green HRM practices considered for the study green reward management proved to be the key factor and green performance evaluation was the second most important determinant. Green training and green recruitment and selection have less contribution. The possible reason for this would be the lower level of training received by the employees with respect to green HRM practices and less attention to green activities in the recruitment process. The study contributes to building new knowledge of existing literature and seeks new avenues to develop green concepts and green behaviours among the employees.

Keywords: Green human resource management, Green recruitment and selection, Green training, Green performance evaluation, Green reward management

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Introduction

In recent years, environmental disasters like water pollution, global warming, bio-diversity reduction, soil degradation, ozone depletion and floods have been frequent and have become prominent challenges in front of us. Globalisation and extensive industrialisation are major causes for this and has created dramatic consequences in both developed and developing countries. According to the Central Bank Report of Sri Lanka (2018), the country's pollution

index was recorded as 58.62% which was considerably higher than in previous years. In the same year, the manufacturing sector recorded a marginal growth. But the overall manufacturing sector's pollution level was increased by 0.8%. These poor environmental concerns reflect the necessity of having a greater response either individually or collectively to become socially responsible entities. Human Resource Management acts as a driver to implement the environmental policy of the organisation to achieve the environmental sustainability goal (Jackson et al., 2011). Therefore, organisations are highly concerned about integrating Environmental Management (EM) and Human Resource Management: Green Human Resource Management (GHRM).

In this context, most of the studies were carried out in developed countries (Amrutha & Geetha, 2019; Luu, 2020). Fewer studies (Arulrajah & Opatha, 2016; Opatha & Arulrajah, 2014) have been done in the Sri Lankan context and very few empirical research has been conducted. By consolidating the above findings and thoughts, there is a researchable gap in addressing the major determinants of green HRM and the extent to which they are implemented by manufacturing firms. From the theoretical perspective, the findings of the study contribute to green HRM literature and from a practical perspective it helps manufacturing firms to avoid the environmental hazards that can be caused due to business operations. Therefore, this study will seek new avenues to develop green concepts and green behaviours among employees.

Literature Review

Green Human Resource Management (GHRM) is a group of complementary and coordinated activities such as green recruitment, green training, green performance evaluation and green compensation management to inculcate green values to improve corporate environmental performance (Tang et al., 2015). Green recruitment and selection are processes that emphasise environmental values and make it a central component of the organisation. This process attracts and selects candidates with knowledge, abilities, personality and habits in line with the environmental programmes of the organisation. Green training is a systematic process to improve the environmental knowledge, skills and attitudes of employees to achieve the environmental goals of the organisation (Thevanes & Arulrajah, 2016). Green performance management is a systematic process of identifying, measuring, influencing and developing green job performance of the employees in the organisation with respect to the set norms and standards (green related criteria) for a particular period of time for various purposes. Green rewarding is a system of monetary and non-monetary workplace rewards for the employees who contribute to achieving the environmental management goals in an organisation (Jabbour et al., 2010).

Methodology

The study will be positioned with objectivism based on the ontological view. It is in line with the positivistic approach under epistemological orientation. Accordingly, the quantitative method was used under the deductive approach. It can be classified as explanatory research.

Data collection was done by adopting a survey strategy through a self-administered questionnaire. Among the total number of 150 questionnaires, responses were received from 130 production managers/executives in manufacturing firms from the specified sample frame. Statistical Package for Social Science (SPSS 20) was used to analyse the data ensuring the validity and reliability to generate findings from the study.

Results/Analysis and Discussion

The study revealed that there are a number of green HRM practices namely green recruitment and selection, green training, green performance evaluation, and green reward management implemented in the manufacturing firms.

Among them, green reward management proved to be the key factor and green performance evaluation was the second most important determinant. Green training and green recruitment and selection have less contribution when compared to the other variables considered for the study. The possible reason for this would be the lower level of training received by the employees with respect to green human resource management practices and less attention paid to green activities at the recruitment process.

Table 1

Green HRM practices	R-value	Percentage	Level of Significance
Green recruitment and selection	0.585	58%	0.000
Green training	0.562	56%	0.000
Green performance evaluation	0.833	83%	0.000
Green reward management	0.856	85%	0.000

Conclusion and Implications

The study aims to identify the green HRM practices implemented by manufacturing firms in the southern province of Sri Lanka and widely adopted green HRM practices in those firms. The results of the study proved that green performance evaluation and green reward management as the most implemented practices and therefore the firms can implement those practices to develop green attitudes, abilities, and involvement in green work among employees to enhance the environmental performance of the firms.

Green training and green recruitment and selection have less implementation compared to other green HRM practices. The possible reason for this would be the lower level of training received by the employees with respect to green human resource management practices and

less attention paid to recognising the importance of environmental awareness at the recruitment process.

The managers should pay greater care to these practices since green training contributes to enhancing the employees' green competencies and attitudes which are required to perform their environmental tasks, duties, and responsibilities of the job, and employee recognition towards green activities. The study will provide direction for organisations to decrease the ecological effect of business activities by using green human resource management practices. This will be useful to achieve a great deal of advantages for the employers, employees and society as a whole. In Sri Lanka, there is a greater requirement to have a proper mechanism to avoid the environmental hazards that can be caused due to business operations. Therefore, this study will seek new avenues to develop green concepts and green behaviours among employees. Further, the study contributes to building up new knowledge.

The results of the research will exhibit an idea of the relative importance of having green human resource management practices to motivate employees to green activities. Since there is a growing need for organisations to move towards better environmental management the study will discover the different Green HR practices used by Sri Lankan manufacturing organisations and the way employees are performing their work based on green concepts.

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Track Four: **04**

Science, Technology, Engineering and Mathematics (STEM), Health and Medicine

The Potential of Meal Tracking Apps for Photo-Based Food Journaling to Promote Healthy Eating:
A Next-Gen Digital Food Diary for Self-Evaluation on SMART Eating in Adults

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Abstract*

Photo-based food journaling to improve SMART (Small, Measurable, and Achievable dietary changes by reducing fat, sugar, and salt consumption and trying different fruits and vegetables) eating is still inconspicuous in Sri Lanka. Hence, this study aimed to explore the effect of photo-based food journaling on self-reflection on SMART eating in adults by using a newly developed meal-tracking app in the Sri Lankan context named SnaT (Snap & Track). Using a sequential explanatory mixed method, data were collected from a conveniently selected sample of adults (n = 42) through a telephone survey. User acceptability of SnaT and the dietary modification through this intervention were mainly evaluated in the study. SnaT included about 200 commonly consumed Sri Lankan food items with app outputs showcasing seven major food groups, with photo capturing to enhance the self-reflection on meals. The results indicated an increase in the consumption of healthy food including fruits (p=0.00) and vegetables (p=0.01) while reduced consumption of unhealthy food such as salt (p=0.00), oil (p=0.04), sugar, and sweet food (p=0.00) supporting SMART eating. The ability to eat healthily and the desire to maintain a healthy body weight (73.8%) were identified as the major opportunities for using SnaT. However, forgetting to capture photos before eating has been identified as the main challenge in using SnaT (81%). Overall the SnaT as a meal tracking app was well received. Though, further evaluation should warrant developments of the SnaT while providing a more personalised digi-tech nutrition education experience to encourage SMART eating among adults.

Keywords: Adults, Meal Tracking App, Photo-based Food Journaling, Sequential Explanatory Mixed-method

Introduction, Literature Review and Objectives

Photo-based food journaling to improve SMART (Small, Measurable, and Achievable dietary changes by reducing fat, sugar, and salt consumption and trying different fruits and vegetables) eating is still inconspicuous in Sri Lanka. SMART eating is eating a wide variety of foods each day (University of Melbourne, 2020) while SMART refers to small, measurable, and achievable dietary changes by reducing unhealthy food such as fat, sugar, and salt

consumption and trying different healthy foods like fruits and vegetables (Kaur et al., 2020). Eating SMART has been widely recognised due to its implications in reducing many non-communicable diseases (NCDs). The use of food journaling and food tracking practices is an emerging field in the area of food-related self-reflection. In food tracking, reflection is important for developing and sustaining healthy eating habits. Reflecting on the experience helps people be aware of their diet, admit their food practices, and potentially make better food choices (Blair et al., 2018). With the emergence of digital nutrition tools, much attention is given to examining how meal-tracking apps can encourage self-reflection and SMART eating. This study aimed to explore the effect of photo-based food journaling on meal-tracking experience, self-reflection, and self-assessment on SMART eating, and food choice intention in adults by using a newly developed meal-tracking application named SnaT (Snap & Track) in the Sri Lankan context.

Methodology

The study ran through the sequential explanatory mixed method and the data were collected through a telephone survey. The user acceptability of SnaT and the dietary modification gained through this intervention were measured using a conveniently selected group of adults (n = 42 mean age = 24.55 ± 1.15; females = 57.1%; graduates= 76.2%) through snowball sampling. SnaT meal tracking app was developed with the concept of photo-based food journaling to promote self-reflection in adults in a Sri Lankan context. The meal tracking process in this application proceeds under seven food groups (cereals, vegetables, fruits, pulses, fish, meat and poultry, beverages, milk, and milk products, nuts, oil and fat, sugar, and salt) according to the food base dietary guidelines (FBDG) Sri Lanka. Once the user adds the food data it will provide the results accordingly by using colour codes (red- exceeded the reference guidelines, green- within the reference range, and yellow-below the reference range of each food group) and interactive emoji whether the user is within the reference range or not. Tracking throughout the day will guide the user into a balanced diet during the day and ultimately it directs towards SMART eating of users. Moreover, it provides guidance for the users to follow a balanced diet within the day according to the data entered by the users as meal photo-graphs and the initial body anthropometrics. The paired *t*-test was used as the statistical design of the study and a 95% confidence interval and a *p*-value less than 0.05 were considered significant. Other than the qualitative data collection to measure diet quality and the acceptability of the tool, the FVS and DDS were calculated using a three-day diet diary according to the recommendations in food-based dietary guidelines for Sri Lankans (Food-based dietary guidelines - Sri Lanka, 2021). All statistical analyses were performed using SPSS 16 software.

Results/Analysis and Discussion

The results indicated an increase in the consumption of healthy food including fruits (*p*=0.00) and vegetables (*p*=0.01) while reduced consumption of unhealthy food such as salt (*p*=0.00), oil (*p*=0.04), sugar, and sweet food (*p*=0.00) after using SnaT by supporting SMART eating. The

intervention caused to development of the knowledge of SMART eating for 88% of the group and almost all the participants accepted eating in SMART as an important concept. Moreover, it caused to make at least one healthy change in the eating habits of participants. The survey found busy lifestyles/lack of time as the major challenge for SMART eating and enabling healthy eating and body weight was identified as the major benefit. Further, the ability to stay away from NCDs was also found as a secondary benefit of SMART eating. Despite that, 76% (19/25) agreed with photo-based food journaling as a solution and an aid of enhancement to increase the self-reflection practice among the participants. According to the participant's experience, over half of the group (64%; 16/25) stated that capturing and recording a meal photo was most helpful for food journaling than written portions ("Photographs were more useful and helpful/ "as we can record the exact amount of foods taken through photographs"/ "taking a photo of what we consume is effortless and easy"/ "Very easy to analyse rather than note down it"/ "Lazy to write … Easy to take photos"). However, forgetting to capture the meal photo before eating was identified as the most common barrier (68%; 17/25) of photo-phased food journaling. At the same time, all the participants (25/25; 100%) in the group accepted the use of cell phones to capture meal photos as easy, and enjoyable, and the use full in photo-based food journaling and meal tracking app was predominantly suggested (64%; 16/25) as a tool to convenient it. Along with that, all the participants reported that SnaT assisted their journey towards SMART eating ("It was very helpful" / "It's really useful" / "It was very essential "/ "It was helpful to track my meals easily" / "Got the guidance that needs to get a healthy diet" / "Got self-aware about the meal"/ "got an awareness about the eating pattern" / "Increased the no. of varieties of foods consumed"). In conclusion, most of the participants (84%; 21/25) in the sample during the first phase of the study suggested that it is essential to develop a meal-tracking app in a Sri Lankan context.

Based on the ratings given by the users regarding SnaT, a majority of the sample rated excellent for the interface of the SnaT app while 28.5% of participants were rated excellent for the use of authentic measuring tools to input portion sizes in the app. The photographic meal diary has been rated as excellent by 28.5% of the group. However, 50% of the sample stated excellent for showcasing weekly food tracking results in a graph other than demonstrating only the daily results, and 50% of the sample rated excellent for the use of traffic light colours to indicate individual food tracking results in daily and weekly graphs. However, 97.7% of the study group stated SnaT is a very user-friendly app developed in a Sri Lankan context to track meals.

Conclusion and Implications

The results demonstrated that SnaT was able to increase the consumption of a huge variety of healthy foods such as fruits and vegetables, legumes, fish, meat, eggs, poultry, and milk while reducing the consumption of unhealthy foods such as salt, sugar, and sweet foods, which could change the overall food consumption pattern of the majority of the population. Moreover, as a result, the basic knowledge needed for a healthy eating pattern of people was enhanced and this triggered the healthy eating habits of the majority of the people.

Therefore, as an outcome of each of these factors, it was proved that the self-assessment, self-reflection towards SMART eating, and food choice intention of adults were directed by a meal tracking app based on photo-based food journaling as the main finding of this study. SnaT food tracking app was invented in a way that was very relevant and unique to the Sri Lankan community. The community identified SnaT as a very essential, convenient, and useful digital tool for photo-based food journaling purposes which provides better guidance and awareness to assist the self-reflection toward SMART eating. As well the results demonstrated some defects and suggestions mentioned by users about SnaT and those were considered and applied for the development of the next version of the SnaT. However, these findings were not worth it alone to conclude reliable effectiveness as this was one of the initial studies conducted in Sri Lanka regarding photo-based food journaling among this particular group and this study population did not represent the total Sri Lankan population due to the small sample size. Therefore, future studies in the coming years are needed to investigate the effectiveness of photo-based food journaling by using SnaT for self-reflection on SMART eating accounting for the whole population with various demographic, socioeconomic, and educational backgrounds with a long-term follow-up. In the future, it is important to redesign SnaT to suit the needs of different communities such as the elderly population, athletes, and pregnant women, with future suggestions being to add features such as digital nudging, auto meal capturing facility, tracking mindful eating, and remote nutrition counselling to facilitate an easier and sustainable meal tracking experience to the users.

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Stigma and Discrimination against Illicit Substance Use: Association with Dependence Syndrome Recovery among Users Undergoing Rehabilitation in Sri Lanka

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Abstract*

Illicit substance dependency is an increasing psychosocial concern in Sri Lanka. As the problem continues with high relapse rates, it is important to expand the existing knowledge on substance dependency recovery. Stigma and discrimination are significant factors that have a negative impact on the recovery from substance dependency globally. The present study aimed to investigate if stigma and discrimination have a similar effect in the Sri Lankan context as well. It was hypothesised that discrimination and perceived stigma would have a negative association with personal recovery. A cross-sectional study was conducted among 100 relapsed adult males with dependence syndrome for heroin who were undergoing rehabilitation in two residential care facilities by administering a Sinhala language questionnaire. The results revealed that personal recovery is significantly explained by discrimination and perceived stigma. However, perceived stigma was not a statistically significant predictor of personal recovery from dependence syndrome. The multifactorial nature of dependence syndrome recovery would explain the small value of variance explained by two variables, which are perceived stigma and discrimination. The insignificance of perceived stigma on recovery could be attributed to varying operationalisations in literature, the abstract nature of the concept, and the high perceived stigma invariable among the present study sample. The study recommends reducing discrimination against individuals with dependence syndrome in order to support their recovery. Future research is recommended to further investigate the role of stigma and discrimination in substance dependency recovery, overcoming the limitations of the present research.

Keywords: Discrimination, Perceived Stigma, Personal Recovery, Heroin, Dependency Syndrome

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Introduction

Illicit substance use and dependency have been growing issues in Sri Lanka over the past few decades (Silva & Fonseka, 2008). Sri Lanka frames illicit substance use as both a health and legal concern. However, despite many health and legal interventions, the illicit substance use problem continues to increase (National Dangerous Drugs Control Board [NDDCB], 2020). Past literature has established that stigma and discrimination have a significant role in determining

substance dependence recovery, which raises the question of whether stigma and discrimination have an impact on recovery from substance dependency in Sri Lanka.

Research question

Does stigma and discrimination impact dependence syndrome recovery in Sri Lanka?

Objective

To investigate whether perceived stigma and discrimination negatively impacts personal recovery.

Aims

1. To measure perceived stigma, discrimination, and personal recovery among a subpopulation of adult male heroin users who meet criteria for dependence syndrome and have a history of relapse and are currently undergoing rehabilitation at residential care facilities.

2. To statistically analyse whether perceived stigma and discrimination have a negative impact on personal recovery.

Rationale for the study

Substance dependency due to illicit drug use is a significant concern in Sri Lanka. Its negative consequences affect the whole society, including but not limited to health, social and financial consequences. Investigations into the experiences of stigma and discrimination by individuals with substance dependency and how these factors have a deleterious effect on recovery are much needed in Sri Lanka.

Literature review

Limited data on recovery from dependence syndrome in Sri Lanka reports a poor recovery rate (Silva & Fonseka, 2008). Recovery from dependence syndrome is influenced by various factors, among which stigma and discrimination stand out as significant determinants (Lancaster et al., 2017). Stigma and discrimination towards substance use and dependency are evident in the Sri Lankan context as well (Fernando, 2010). Extending from this line of literature findings, the present study hypothesises that there will be a significant negative prediction of personal recovery among individuals with substance dependence syndrome for heroin use due to discrimination and perceived stigma.

Methodology

The present study is a cross-sectional quantitative study. Three scales which were the revised recovery assessment scale, the unfair treatment subscale of the discrimination and stigma scale version 12 and the perceived stigma of substance abuse scale were translated to Sinhala, and their face validity, consensual validity, content validity, and cultural validity were ensured through the Delphi method. Study participants were recruited following the convenience

sampling method, from two residential treatment and rehabilitation centers, which are recognised by the National Dangerous Drugs Control Body. The three questionnaires and the demographic questionnaire were administered to 100 adult males with dependence syndrome for heroin use and had a history of relapse. A multiple regression analysis was conducted to investigate the association of perceived stigma and discrimination with personal recovery.

Results

A multiple linear regression was fitted to explain personal recovery based on discrimination and perceived stigma. The predictors explained 23.8% variance in the outcome variable with $F_{(2,97)} = 15.156$, $p <0.001$. Discrimination negatively predicted personal recovery ($\beta =0.415$, $p<0.001$) whereas perceived stigma had a non-significant negative effect on personal recovery ($\beta=-0.128$, $p>0.05$). Thus, a simple linear regression was fitted removing the perceived stigma variable. Results indicated that 22.5% of the variance of recovery was predicted by discrimination with $F_{(1,98)} = 28.508$, $p <0.001$. Discrimination negatively predicted personal recovery ($\beta =0.475$, $p<0.001$)

Figure 1

The regression coefficients of discrimination and perceived stigma on personal recovery

Variable	Estimate	*SE*	95% CI		*p*
			LL	*UL*	
Constant	81.680	2.298	77.120	86.239	0.000
Discrimination	-8.440	1.581	-11.577	-5.303	0.000

Note. *N*=100, CI= confidence interval; *LL*=lower limit; *UL*=upper limit.

Discussion

As the present study hypothesised results indicated that a model predicting personal recovery based on the two independent variables of discrimination and perceived stigma is a statistically significant model. Only the discrimination variable was a significant predictor of personal recovery.

The overall model can be interpreted as a weak model however, this could be due to the multifactorial nature of recovery. The insignificance of the impact of perceived stigma on personal recovery can be due to varied operationalisation and measurement of stigma and the lack of personal relevance to the perceived stigma variable could have resulted in this insignificant association with personal recovery.

Conclusions

It can be concluded that discrimination is a significant predictor of substance dependency recovery. Perceived stigma; beliefs of how others think of them do not have a significant effect on recovery unless this stigma is enacted into discriminatory behaviours. The present study results call for strategies to diminish the negative effect of discrimination on the recovery of individuals with substance dependency. This intervention should be extended for advocacy at a public level. The present study findings can be important in inferring suggestions for more evidence-based policy as well.

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Assessment of Positivity Rate of Dengue Vectors in Western Province, Sri Lanka

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Abstract*

In Sri Lanka, it is recognized that the primary and the secondary vectors for dengue transmission are Aedes aegypti and Aedes albopictus respectively which are invasive mosquitoes. All the districts are potentially suitable for the survival and establishment of both vectors. A desk review was conducted to analyze the vector positivity proportion in Western Province including all three administrative districts from 2018 to 2021 to establish the receptivity in the area to assist vector control interventions. Vector positivity data were collected from Monthly house to house vector immature stages surveillances carried out by National Dengue Control Unit and local health sectors covering all the potential and existing breeding places in the study area to collect larval and pupal stages of the two vectors. The number of positive containers for any immature stage was recorded and identified to species level. During the entomological surveillances conducted the Ae. aegypti positivity rate was gradually increased from 31% to 42% through the study period in Colombo district while in Gampaha and Kaluthara districts the same rate was marginally fluctuated around 15% and 3% respectively. The increase trend of the Ae. aegypti proportion was vividly seen in Colombo district which is undoubtedly the most urbanized area of all with higher population density and land use. However, in Gampaha and Kaluthara districts which are with less population density, the increments of Ae. aegypti proportion were occurred moderately with minor fluctuation during all four years. Due to the continuous heavy urbanization rate Ae. aegypti is gradually replacing the secondary vector, Ae. albopictus in Colombo district when compared the vector positivity data with the other two counterpart districts. The vector control interventions should be adjusted accordingly while identifying the different vector bionomics possessed by the two vectors.

Keywords: Aedes aegypti, Aedes albopictus, positivity, dengue, surveillance

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Introduction

Dengue fever poses a significant public health threat in Sri Lanka, primarily due to the transmission of the virus by *Aedes aegypti* and, to a lesser extent, *Aedes albopictus* (World Health Organisation, 2009). These mosquitoes, known for their invasive nature, have the capacity to establish themselves in various districts across the country (Karunaratne & Surendran, 2022). To better understand the dynamics of dengue transmission, this study undertook an extensive desk review focusing on the Western Province, which includes

Colombo, Gampaha, and Kalutara districts. The investigation spanned the years 2018 to 2021, aiming to evaluate the region's susceptibility to dengue vectors and, consequently, facilitate the development of targeted strategies for vector control.

The research methodology involved a thorough examination of vector positivity proportions, particularly in relation to *Aedes* mosquitoes, in the Western Province. This region was chosen for its strategic representation of urban, suburban, and less densely populated areas, offering insights into diverse environments. The focus on Colombo, Gampaha, and Kalutara allowed for a nuanced understanding of how different districts within the province may exhibit varying receptivity to dengue vectors.

The ultimate goal is to equip public health authorities with valuable information that can guide targeted interventions for vector control. Understanding the receptivity of an area to these mosquitoes is crucial for designing effective and context-specific strategies to mitigate the spread of dengue fever (National Dengue Control Unit [NDCU]d, 2016). This research contributes to the ongoing efforts to combat dengue in Sri Lanka by providing evidence-based insights into the prevalence and distribution of key vectors in the Western Province.

Methodology

The data concerning vector positivity in this study were obtained through systematic monthly house-to-house surveillances of immature vector stages. These surveillances were conducted collaboratively by the National Dengue Control Unit and local health sectors, employing a comprehensive approach to monitor the presence of *Aedes aegypti* and *Aedes albopictus* mosquitoes. The focus of these efforts was on identifying and collecting larval and pupal stages of both mosquito species (NDCU, 2016).

The surveillance activities involved visiting residential areas and inspecting potential breeding sites for *Aedes* mosquitoes. These sites included various locations susceptible to mosquito breeding, such as stagnant water bodies, containers, and other environments conducive to the development of mosquito larvae and pupae. The intention was to comprehensively cover the study area, including all potential and existing breeding places within the Western Province, specifically Colombo, Gampaha, and Kalutara districts.

Upon locating potential breeding sites, larval and pupal stages of *Aedes* mosquitoes were meticulously collected for further analysis. Positive containers, indicating the presence of immature mosquito stages, were documented during these surveillance activities. The collected specimens were then subjected to rigorous identification processes, allowing researchers to ascertain the specific species of mosquitoes present in each container. This species-level identification is crucial for understanding the prevalence, distribution, and dynamics of *Aedes aegypti* and *Aedes albopictus* in the Western Province.

Results

The analysis of the vector positivity data uncovered distinct patterns in the prevalence of *Aedes aegypti* mosquitoes across the three districts of Colombo, Gampaha, and Kalutara. Over the study period, the Colombo district exhibited a noteworthy and consistent increase in *Aedes aegypti* positivity rates, rising from 31% to 42%. This gradual upward trend in positivity suggests an escalating presence of *Aedes aegypti* mosquitoes in the region.

In contrast, the Gampaha district experienced a relatively stable positivity rate, with marginal fluctuations around 15% throughout the study duration. Similarly, the Kalutara district demonstrated a consistently low positivity rate, fluctuating around 3%. These observations indicate a comparatively steadier prevalence of *Ae. aegypti* in these districts over the same time frame.

The distinctive trends observed in Colombo, Gampaha, and Kalutara can be attributed to the varying demographic and environmental characteristics of these regions. Colombo, being the most urbanised area characterised by high population density and extensive urban development, witnessed a more pronounced increase in Ae. aegypti proportions. The conducive urban environment, with numerous breeding sites and suitable conditions for mosquito proliferation, likely contributed to this escalating trend.

Conversely, Gampaha and Kalutara, with lower population densities and potentially less urbanisation, experienced either stable or marginal fluctuations in *Aedes aegypti* positivity rates. These districts may present different ecological and environmental dynamics that impact the breeding and prevalence of *Aedes* mosquitoes.

The findings emphasise the intricate interplay between urbanisation, population density, and the prevalence of *Aedes aegypti*, highlighting the need for context-specific vector control interventions. The observed variations underscore the importance of tailoring strategies to address the unique bionomics of *Aedes* mosquitoes in different settings, particularly in heavily urbanised areas where the risk of dengue transmission may be more pronounced (Saha & Samanta, 2022).

Discussion

The discerned pattern of increasing *Aedes aegypti* positivity rates in Colombo district over the study period suggests a noteworthy shift in the dynamics of mosquito vectors. Specifically, there is a gradual replacement of the secondary vector, *Aedes albopictus*, by the more dominant *Aedes aegypti*. This phenomenon underscores the significant impact of urbanisation on vector dynamics, indicating that the changing landscape of Colombo, characterised by high population density and extensive urban development, is favoring the proliferation of *Aedes aegypti* mosquitoes.

The replacement of *Aedes albopictus* by *Aedes aegypti* in Colombo is likely influenced by the specific ecological and environmental conditions associated with urban areas. Urbanisation

creates conducive habitats for *Aedes* mosquitoes, providing numerous breeding sites such as water storage containers, discarded items, and other artificial containers. *Aedes aegypti*, well-adapted to urban environments, may outcompete *Aedes albopictus* under these conditions, leading to the observed shift in vector prevalence.

This changing scenario necessitates adaptive and targeted vector control interventions that are tailored to the distinct bionomics of each *Aedes* species. While traditional vector control measures may have been effective for *Aedes albopictus*, the increasing dominance of *Aedes aegypti* requires a reevaluation of strategies. Control measures should consider the unique behavior, breeding preferences, and ecological requirements of *Aedes aegypti*, including focusing on areas and containers that are more favorable to this species.

Furthermore, understanding the specific factors contributing to the success of *Aedes aegypti* in urban environments is crucial for designing interventions that address the root causes of increased prevalence. This may involve community engagement, public awareness campaigns, and targeted efforts to eliminate or modify mosquito breeding sites in urban settings.

In conclusion, the observed replacement of *Aedes albopictus* by *Aedes aegypti* in Colombo district emphasizes the dynamic nature of vector populations in response to urbanisation. Addressing this shift requires a nuanced and adaptive approach to vector control, recognising the unique characteristics of each *Aedes* species and tailoring interventions accordingly. This research contributes valuable insights for public health officials and policymakers to formulate effective strategies in mitigating the risk of dengue transmission in urbanised areas.

Conclusion

The study itself serves as a crucial source of insights into the evolving dynamics of dengue vectors within the Western Province of Sri Lanka. The observed shifts, particularly the gradual replacement of *Aedes albopictus* by *Aedes aegypti* in Colombo district, underscore the dynamic nature of vector populations in response to various environmental factors, notably urbanisation.

The implications of these findings carry significant weight for public health authorities and policymakers. The need for a reassessment and adjustment of current vector control strategies is evident, given the changing landscape of vector prevalence. Specifically, the influence of urbanisation on vector dynamics suggests that traditional approaches may need to be adapted to effectively address the unique challenges posed by different vector species in urban environments.

As public health authorities move forward, these insights should guide the formulation of targeted and adaptive vector control measures. This may involve revisiting existing strategies, introducing innovative approaches, and engaging communities in concerted efforts to mitigate the risk of dengue transmission. By aligning control efforts with the changing dynamics of vector prevalence, authorities can enhance the effectiveness of interventions and better protect the population from the threat of dengue fever.

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The Relationship between Knee Osteoarthritis and Ischemic Heart Disease among Patients Attending National Hospital of Sri Lanka

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Abstract*

Osteoarthritis is a worldwide highly prevalent type of arthritis and the knee is the most commonly affected joint. Moreover, ischemic heart disease (IHD) is a major contributor to disability among other cardiovascular diseases. A growing amount of research indicates that osteoarthritis may be regarded as a cardiovascular risk factor. This study aimed to assess the relationship between knee osteoarthritis and IHD among patients attending the National Hospital of Sri Lanka (NHSL). A case-control study was conducted with 80 patients, aged between 50-75 years in NHSL. Among them, 40 patients who had been diagnosed with previous IHD from Cardiology and Medical clinics were selected as the case group and 40 patients who had not been diagnosed with a previous IHD from Medical clinics were selected as the control group. Diagnosis of knee osteoarthritis and IHD in both case and control groups was established by a valid diagnosis made by a medical professional. An interviewer-administered questionnaire was used to collect the relevant data. Data were analysed using descriptive statistics and Chi-square test. Most of the study population was female (55%) in both cases and controls. The history of knee osteoarthritis in patients with IHD and their controls differ significantly: the percentage of those that had knee osteoarthritis was higher in cases (37.5%) than in controls (15.0%). (OR=3.4; 95% CI 1.156-9.996. p=0.022). There was a statistically significant relationship between knee osteoarthritis and IHD among patients attending NHSL. That means patients with knee osteoarthritis were at a significantly higher risk of getting an IHD.

Keywords: Osteoarthritis, Ischemic heart disease

Introduction

The most prevalent kind of arthritis is osteoarthritis (OA). It is a leading cause of physical disability and impaired quality of life. The knee is the most common joint affected by OA. The prevalence of symptomatic knee OA is 40% in individuals over 75 years of age. It is more common among women. Cardiovascular diseases (CVD) are the number one cause of mortality. Ischemic Heart Disease (IHD) is the most prevalent type of heart disease. It includes angina and Myocardial Infarction (MI). The prevalence of angina increases with age, among both men and women. Around 10% of MI occur among people below 40 years and 45% occur among people below 65 years. Men are more affected than women however, the gap between

men and women narrows down with age. The relationship between OA and CVDs has been studied in several research studies. In these studies, this relationship has been described in different kinds of patterns.

Although the relationship between OA and CVDs has been studied in several countries, there are no known studies to date in Sri Lanka. Accordingly, the research problem of this research was, is there any relationship between knee OA and IHD among patients attending the National Hospital of Sri Lanka (NHSL)?

According to the research problem, this study aimed to identify the prevalence of knee OA among patients who have been diagnosed with a previous IHD and patients who have not been diagnosed with a previous IHD. Moreover, this study also aims to assess the relationship between knee OA and IHD among patients attending NHSL.

Literature Review

The prevalence of knee OA has been found in several research studies. According to these studies, around 20.1% of adult females living in suburban areas of Sri Lanka have knee OA, in China 14.6% have symptomatic knee OA and around 36.6% of Korean adults aged 50 years or more seem to have knee OA. Further, there is a prevalence of knee OA among 16% of the worldwide population of people aged 15 and older and a 22.9% prevalence among people 40 and older. Veronese et al. reported that participants who had CVD at baseline had a significantly higher prevalence of OA than participants who did not have CVD at baseline (Veronese et al., 2016). In contrast to the above findings, a study found that neither incidence nor prevalent knee OA was linked to CVD.

Many research studies have been conducted to find the relationship between OA and CVD. They include cohort studies, systematic reviews, meta-analyses and an overview of meta-analyses. They have found that OA is linked to a higher risk of CVD. Some studies have described this relationship using walking difficulties caused by OA. Although many studies have established a relationship between OA and CVD another study done by Hoven et al. (2014) have shown no such significant relationship (Hoeven et al., 2014).

Methodology

A case-control study was conducted during four weeks at the NHSL. IHD was the outcome of research and exposure was knee OA. As this is a case-control study comparative groups should be divided based on the outcome (IHD). Hence, to find the relationship between knee OA and IHD, patients who had been diagnosed with a previous IHD from cardiology and medical clinics were selected as the case group and patients who had not been diagnosed with a previous IHD from medical clinics as control group were selected. Potential confounders were age, sex, ethnicity, religion, marital status, education, occupation, monthly income, habitation, diet, physical activity, occupational physical activity, nature of work, sleep, weight, height, body mass index (BMI), smoking status, alcohol consumption. Patients who have been diagnosed with a previous IHD and between 50 and 75 years of age were included and patients with any

type of arthritis other than OA, any joint OA other than knee OA, diagnosis of knee OA after the diagnosis of IHD, congenital heart diseases, any form of walking disability were excluded from the case group. Patients who have not been diagnosed with a previous IHD and were between 50 and 75 years of age were included and patients with any type of arthritis other than OA, any joint OA other than knee OA, congenital heart diseases and any form of walking disability were excluded from the control group. The age and sex of controls were matched with cases and a convenient sampling technique was used. Although the calculated sample size was 133 for each group, a sample of 40 cases and 40 controls were recruited considering the time limitation and prevailing situation in the country. Diagnosis of knee OA and IHD was established by a valid diagnosis made by a doctor. To reduce the effect of recall bias on the study medical records were used to confirm the diagnosis. An interviewer-administered questionnaire was used to collect the relevant data. SPSS (Statistical Package for Social Science) version 23.0 software was used to analyse the data. Categorical variables were described using frequencies. The two-tailed probability value was set at $p < 0.05$ for statistical significance. Data were analysed using descriptive statistics and the Chi-square test. The odds ratio for the case control study was also calculated.

Results and Discussion

Table 1

	Patients with knee osteoarthritis		Patients without knee osteoarthritis		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Case group	15	37.50%	25	62.50%	40	100.00%
Control group	6	15.00%	34	85.00%	40	100.00%
Total	21	52.50%	59	147.50%	80	200.00%

Descriptive statistics for the presence of knee osteoarthritis

To assess the relationship between knee OA and IHD, a chi-square test was performed. The hypothesis for this test was that there is a significant relationship between knee osteoarthritis and ischemic heart disease. Pearson's chi-square test value of asymptomatic significance was $p<0.05$ ($p = 0.022$), proving the relationship between knee OA and IHD. As this is a case-control study odds ratio is also calculated. The odds ratio of 3.4; a 95% confidence interval 1.156-9.996 proved that patients with knee OA are at a significantly higher risk of getting an IHD.

Conclusion and Implications

According to this study, there was a significant relationship between knee OA and IHD among patients attending NHSL. Patients with knee OA were at a significantly higher risk of getting an IHD. Based on other findings on research aims prevalence of knee OA in patients who have been diagnosed with a previous IHD (whose IHD is diagnosed after the diagnosis of knee OA)

was higher than the prevalence of knee OA in patients who have not been diagnosed with a previous ischemic heart disease.

Since patients with knee OA are at a significantly higher risk of getting an IHD, early diagnosis of OA, lifestyle modifications, proper treatments, patient education and treatments intended to reduce the symptoms of knee OA such as improving physical activity, reduction of weight may be useful from a cardiologic perspective.

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Track Five: **05**

Law, Policy and Governance

Policy Practices for Better Climate Adaptation and Mitigation in the Asian Region

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Abstract*

This study includes the first systematic literature review of climate change policy practices, particularly focusing on the Asian region. The overarching goal of the study is to provide recommendations for the improvements of documented climate policies in the Asian region. In reaching that goal, four specific questions were addressed in the study: i) What policy types were established by Asian countries to address climate change? ii) What is the nature of the policy type based on the timeline? iii) What are the constraints, barriers, gaps, and limitations in implementing policies related to climate change? iv) What are the possible suggestions to overcome identified barriers, constraints, and gaps? The literature(n=79) published between 2000 to 2021 covering the scope of climate change, adaptation, and mitigation was examined in this study. Nine key sectors including i) agriculture, livestock, and fisheries, ii) water and irrigation, iii) coastal and marine biodiversity, iv) urban and infrastructure, v) health, vi) energy, vii) transport, viii) waste and ix) industry were covered in climate policy literature. Three main categories of policy practices were commonly identified: i) regulation and standards, ii) taxes and charges, and iii) infrastructure programs. Several gaps were identified in implementing climate change-related policies in Asian countries. These gaps include i) The lack of human capacity, ii) improper knowledge systems, iii) the lack of collective and collaborative actions, iv) the absence of coherence, and v) coordination among institutions. Establishing a centrally coordinated entity, providing capacity building, and incorporating research findings in policy formulations were recommended to overcome the identified gaps. This study brings an overview and essential insights on enforcing applicable policies to combat climate change-related issues in Asian countries.

Keywords: Climate Change, Policy, Adaptation, Mitigation, Asia

Introduction

People started experiencing significant weather pattern changes immediately after the Industrial Revolution, and their experiences worsened over time (Royal Society, 2020). These unexpected weather patterns made people aware of climate change, and later they realised the importance of combating climate change (Smit & Pilifosova, 2001). Notably, Asian countries are more vulnerable to climate change due to their dense populations and dependency on natural resources (Anbumozhi et al., 2012). These countries need to focus more on their climate policy actions to identify associated challenges and ways of overcoming them. Strengthening policies would make it easier for nations to develop their Nationally

Determined Contributions (NDCs) implementable, and robust policies facilitate governments to support global climate change commitments (Santos et al., 2022).

This study reviewed peer-reviewed journal articles published across the world between 2000 and 2021 focusing on climate policies in Asia. Even though there are existing studies on climate policies on a global scale, studies with a regional focus remain limited (Klingelhöfer et al., 2020; Ylä-Anttila et al., 2018). In filling the current gap, this study addressed four main questions: i) What policy types were established by Asian countries to address climate change? ii) What is the nature of the policy type based on the timeline? iii) What are the constraints, barriers, gaps, and limitations in implementing policies related to climate change in Asian countries? iv) What are the suggestions to overcome the identified barriers, constraints, and gaps? These research questions will provide a platform to identify the nature of policies, challenges, and diversified ways of overcoming identified issues. Further, the study provides comprehensive insights into existing limitations in implementing climate change-related policies in Asian countries. This study will lay a better foundation for future research on country/ regional-specific climate policy assessments.

Literature Review

Impacts of climate change were common for both natural and artificial systems: changes in precipitation patterns, melting of glaciers, and alterations of bio-geo cycles are some of the commonly observed climatic events (Bahn et al., 2015). Many actions and negotiations have been initiated at the international level to manage the impacts of climate events over the years (Solomon et al., 2007). The Rio Earth Summit, which happened in 1972, was a historical incident, and participants made critical decisions on combating climate change during the summit (Bahn et al., 2015). The Intergovernmental Panel on Climate Change (IPCC), the first administrative panel focusing on climate change, was founded in 1988 as a joint effort between the World Metrological Organisation (WMO) and the United Nations Environment Program (UNEP) (Intergovernmental Panel on Climate Change [IPCC],2022). In 2015, the Paris agreement caught a lot of attention due to its aim of limiting the global temperature rise of this century to well below 2° C above the pre-industrial levels.

Any country that ratifies this international treaty will be obliged to submit its Nationally Determined Contributions (NDCs) to the United Nations Framework Convention on Climate Change (UNFCCC) every five years (Fransen et al., 2022; IPCC, 2022). Country-specific climate change policies are crucial in creating NDCs, and governments intend to cut emissions and implement adaptation measures through NDCs (Amarjargal et al., 2020). Further, most vulnerable countries must attract more funds to implement their policy activities, and attracting sufficient climate funds to developing countries remains challenging (Timilsina, 2021). Supporting vulnerable communities in developing and least developing countries by allocating adequate finance was one of the main highlights of COP26 (United Nations Framework Convention on Climate Change [UNFCCC], 2021). Therefore, developing and least developing countries in the Asian region have an excellent opportunity to strengthen their

climate policies and projects to attract climate finance and initiate better national-level adaptation and mitigation activities (Timilsina, 2021).

Methodology

A systematic literature review approach was applied in examining the literature on climate change policy practices in the Asian region. Data sources were collected using the search engine Web of Science (WoS), and 'climat* chang*, policy*, mitigat* adapt*, AND Asia* was used as the search term. The initial list of literature included 485 items. The digital object identifier (DOI) number was used to identify and remove duplicates from the data set, and thereby 32 papers were removed as duplicates. The remaining 453 publications were brought forward for further analysis. Initial screening was conducted after extracting documents into a Microsoft Excel sheet. Titles and abstracts were read at the initial screening, and the full text was read-only when the classification was unclear. Publications that only covered critical aspects of climate policy were then selected for data extraction. Specific data including i) the year of publication, ii) the country of the first author affiliation, iii) the institutional name of the affiliation, iv) the location of implementation, v) the spatial scale of the policy, vi) policy focus (e.g., adaptation or mitigation), vii) time scale of the policy, ix) constraints and barriers in implementing the policy and x) recommendations on overcoming the identified barriers and gaps were collected.

Results/Analysis and Discussion

Most case studies (54%) had a specific Asian country focus, whereas 23% of case studies had a regional focus (Chomkhamsri et al., 2017; Nong et al., 2020). For example, Wang et al. (2016) focused on the forestry-related adaptation policies of the Asia Pacific region. Out of the case studies considered, 13% of case studies focused on multiple countries at a time (Abdullah et al., 2015; Zeshan & Shakeel, 2020).

Case studies on mitigation practices covered emission reductions from energy (35%), industry (35%), transport (6%), and waste (6%) sectors. Case studies covering waste and transport sectors were from Malaysia and Nepal. About 50% of the energy sector case studies were focused on multiple countries, and country-specific studies were found in Sri Lanka and India. Case studies on climate change and industry sector policies were obtained from Thailand, Vietnam, China, and Japan.

Two distinct spatial scales were identified in and out of the jurisdiction. Among case studies considered, the majority (79%) were "in– jurisdictions," where the policy only occurs within the country's geopolitical boundary, and the implementation entity has the authority over policy practices. Diversified policy types were observed in adaptation-related case studies in Asia. These studies include regulations and standards, taxes and charges, voluntary agreements or actions, information instruments, research development and deployment policies, infrastructure programs, financing, and investment applications. Emission trading

programmes, incentives, and subsidies programmes were not identified in case studies covering adaptation practices.

Commonly observed mitigation policy practices in Asian countries include regulations and standards, taxes and charges, emission trading programmes, infrastructure programmes, and implementation of technologies processes and practices. No case study addressed subsidies and incentives, voluntary agreements or actions, information instruments, research development and deployment policies, and financial investment applications. Compared with the adaptation policy practices, mitigation policy practices were precise and discussed targeted emission reductions of a selected sector (e.g., emission reductions from transport).

Conclusion and Implications

This paper examines climate policy practices within the Asian region, covering adaptation and mitigation aspects. The study presents essential findings under four main research questions. Regulations and standards, taxes and charges, voluntary agreements or actions, information instruments, research development and deployment policies, infrastructure programmes, financing, investment applications, emission trading programmes, incentives, and subsidies were identified as primary policy practices. The evaluated literature addressed agriculture, livestock and fisheries, water and irrigation, coastal and marine biodiversity, urban and infrastructure, health, energy, transport, waste, and industry. This study helped in identifying key challenges associated with effective policy enforcement. These challenges include the lack of human capacity, improper knowledge systems, collective and collaborative actions, and the absence of coherence and coordination among institutions. The study suggests ways to overcome identified challenges, including establishing a centrally coordinated entity, providing capacity building, and incorporating research findings into policy formulations. While delivering a significant overview of climate policy practices in Asian countries, the study also provides future directions for related research on climate policy.

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Developing a Legal Framework for Regulating Public-Private Partnerships (PPPs) in the Higher Education Sector of Sri Lanka

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Abstract*

Higher education delivery was, until recently, completely under the hands of the public authorities in the majority of developing nations. Over time the governments of these countries started to give up their monopoly in the provision and supply of infrastructures and other facilities. However, because the traditional public procurement mechanism for providing and supplying public infrastructure had been hampered and, in fact, was still hampered by inefficiency, corruption, a lack of skills, and technical knowledge, the clever synergy of Public-Private Partnerships (PPPs) is required by this paradigm shift from a 'government supplying' to a 'government facilitating' approach. Far more significantly, PPPs also act as a spark for the nation's social and economic development. Governments, particularly those of the more developed developing nations, have implemented policies and started the process of enacting legislation with the aim of regulating PPPs in their respective jurisdictions. These regulations aim to maintain transparency, accountability, and balance between the public and private sector partners. It is evident from the Sri Lankan situation that no laws are in place to regulate PPP contracts as a whole. In order to make specific recommendations for each of the jurisdictions examined as well as to recommend a model regulatory framework for developing countries intending to adopt PPPs to address deficits, this research examines the current legislative framework in Sri Lanka and finds the best practices. This research used a qualitative approach to legal research, combining library-based resources. The study shows that South Africa's current legislative framework is far more comprehensive than Sri Lanka's and, as a result, can effectively serve as a national PPP framework for other developing countries with some modifications and adjustments to suit the specific conditions and circumstances in each location.

Keywords: PPP, Higher education, Sri Lanka, South Africa, International frameworks.

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Introduction

The educational system in a society has a significant impact on morality and values. Therefore, higher education can be considered a public good, and the government must collaborate with private payers to develop Public-Private Partnerships (PPP) in higher education to promote societal efficiency and justice (Delmon, 2011). In this case, the government must work with private payers to form Public-Private Partnerships (PPP) in the higher education sector.

In the case of Sri Lanka, every student is entitled to free education up to the graduate level. Most students receive their education for free in public universities and colleges. Additionally, there are numerous private universities and institutions that offer education for a subscription. Only those students who achieve the highest scores on the advanced level examination will be allowed to enroll in government universities due to a shortage of infrastructure and other facilities (University Grants Commission of Sri Lanka, 2022). Therefore, Sri Lanka's higher education is at a turning point. The pressure of an economy undergoing fundamental changes and the population's increased expectations must be managed. This clearly highlights the need for active participation of the private sector under the PPP strategy to ensure the government's ability in the provision of higher education. PPP or P3 principles combine the best resources from the public and private sectors to provide important public services. The government seeks collaboration from business entities, non-governmental organisations, clientele, voluntary associations, and civil society groups to expand higher education. It is critical for persons involved in higher education to capitalise on their specific talents while minimising their weaknesses (Fadeyi et al., 2018). However, when adopting PPP in the higher education sector, as there are no laws or regulations in this regard, our country allows the government to unilaterally terminate an agreement and forfeit the performance bond that has been enacted. The government has maintained that it is permitted to unilaterally cancel contracts as long as the reason for the termination is legitimate and serves the public interest. This approach contradicts the fundamental principles of party autonomy not just in agreements for the provision of educational services, but also in a number of international transactions involving different countries (Ismail, 2011). Furthermore, if there is no regulation, educators will face monopolistic abuse. In any monopoly supply arrangement, whether involving the private sector or not, consumers have the potential to be harmed by the dominant supplier, whether through excessive price, poor service, or service interruptions. In addition, the government must monitor services outsourced under a PPP agreement. As a result, the government must maintain adequate ability to monitor and enforce the operator's duties. A regulator can house such capacity and provide a mechanism for the government to oversee and enforce. In light of the aforementioned issue, the researcher has posed a few queries that this study will attempt to answer in order to make recommendations for solutions and reforms.

1. What is PPP? Why are public-private partnerships advantageous for the advancement of higher education?

2. What are the existing legal and regulatory framework, emerging opportunities, trends, and challenges of introducing PPP laws in the higher education sector of Sri Lanka?

3. What are the regulatory frameworks for PPP in core international legislative frameworks?

Literature Review

There are numerous articles that have been written on the topic of Public Private Partnership, which is a term used to refer to a wide range of structures that help the delivery of public infrastructure and public services through the involvement of the private sector (Fadeyi et al., 2018). The 'the role and impact of PPP in education' article explains that Public-Private partnerships can improve access to quality education, benefit post-conflict nations, develop distinctive business models, and help the poorest nations achieve education Millenium Development Goals (MDGs) in less than 10 years (Patrinos & Gaqueta, 2009). Consequently, in Sri Lanka's situation as a growing middle-income nation, we can use public-private partnerships to improve students' access to high-quality education nationwide. PPP financing is crucial in the higher education sector due to the economic crisis. Policy modifications can provide legal and administrative frameworks for private schools in developing nations, enabling efficient operation while maintaining high-quality instruction. This research will propose introducing regulations for guiding Public Private Partnership contracts. PPPs can be implemented on a one-time basis in the absence of a specified legal and institutional framework. Most countries with effective PPP programmes, on the other hand, rely on a strong PPP foundation. A number of common law countries with successful PPP programmes (for example, the United Kingdom, Australia, Canada, and South Africa) (World Bank, 2022) are frequently mentioned as precedents. Other countries have implemented significant PPP initiatives based on separate PPP laws (such as Kenya and the Philippines). This appears to be a technique increasingly adopted by nascent or rising PPP markets such as Bangladesh, Jordan, Senegal, and Ecuador (World Bank, 2022). This global experience can help governments who are just starting or extending their PPP programmes. They may design and implement PPP frameworks that encourage sound project selection, fair and competitive procurement, effective delivery of public services, and the eventual success and sustainability of PPP programmes by addressing efficiency and good governance criteria (United Nations, 2008).

Methodology

This qualitative study uses primary sources like PPP legislations and regulations from the selected countries. Secondary sources include textbooks, journal articles, newspaper reports, and internet documents. The use of secondary materials helps understand practical restrictions in legal and regulatory frameworks, which cannot be easily detected through primary sources.

Results/Analysis and Discussion

The 'PPP framework' is made up of policies, procedures, institutions, and rules that govern how PPPs will be identified assessed, selected, prioritised, budgeted for, procured, monitored, and accounted for, as well as who will be in charge of these duties (Farquharson et al., 2011). Model laws can be ineffective for countries with developed regulatory frameworks, constraining innovation and promoting copying and pasting. Early implementation may lead

to societal disappointment and ineffectiveness, resulting in a flawed regulatory system (Zapatrina et al., 2015).

However, it can be demonstrated that the government of Sri Lanka has never had PPP legislation in any area (Nathan Associates Inc., 2017). PPPs were and are still being implemented in accordance with the 1998 standards on private sector infrastructure projects (Ministry of Finance, Economic Stabilisation and National policies, 2023) (BOO/BOT/ BOOT PROJECTS) Part II under the original procurement standards, as well as the 1997 Guidelines on Government Tender Procedure. Despite the fact that the original 1998 standards were replaced by the 2007 Government Procurement standards (Ministry of Finance, Economic Stabilisation and National policies, 2023), they remain unpublished and have no force or effect. Since then, various circulars on the 1998 PPP Guidelines Part II have been produced, including the Guidelines utilised by line Ministries and/or Government Agencies for dealing with unsolicited/stand-alone development projects. There is no special regulation to regulate PPPs in the education industry.

Thus, this study proposes to introduce a specific legal framework for governing PPP relations in the higher education sector in Sri Lanka. Many international organisations and commentators have noted the potential of PPPs to improve education, including higher education, in developing countries. Among those hosting recent conferences on this specific subject are the World Bank and the Asian Development Bank Institute (Asian Development Bank, 1999). The national development policy framework in Sri Lanka clearly indicates the policy directions and development targets for the higher education sector: increasing access, improving quality, cultivating a culture of research and innovation, and ensuring accountability, sound performance, and financial sustainability (Asian Development Bank, 2017). In South Africa, According to Section 239 of the Constitution, an organ of state is any other functionary or institution exercising a public power or performing a public function in terms of any legislation. South African universities are state organisations. It should be noted that a South African university is not bound by the Public Finance Management Act or any Supply Chain Management regulation or instruction issued by the National Treasury. It is not required to adopt the Preferential Procurement Policy Framework Act, but it should if it has a preferential procurement policy. The country's first major legislation on Public Private Partnerships was enacted in 1999. These provisions are outlined in Treasury Regulation 16, which was issued by the National Treasury in accordance with the Public Finance Management Act, 1999 (PFMA) (Mandiwana & Ramakobya, 2013), which established a specialised PPP unit within the Treasury for the first time in 2000. The primary goals of this Act are to improve sound financial management and maximise service delivery by making the best use of limited resources. In addition, the National Treasury has released a PPP Manual and Standardised PPP Provisions as PPP practise notes in compliance with Section 76(4)(g) of the Public Finance Management Act (Mandiwana & Ramakobya, 2013) to make the application of the Act and regulations easier. In addition, in order to assist the various municipalities in their development efforts, the Municipal Finance Management Act, 2003 (MFMA) and associated

regulations were passed. This legislation establishes municipal PPPs that are financially accountable.

As previously discovered, South Africa's PPP regulations offer many valuable lessons based on its experience. What has worked for South Africa is truly accurate and can be adopted by the majority of governments, including Sri Lanka. By enshrining Constitutional principles as well as binding legislation and regulations to fulfill the procurement objectives, we can show that South Africa has taken a highly regulated and formal approach to public procurement and Public-Private Partnerships.

South Africa has taken significant steps to combat corruption within its procurement regulations, integrating various anti-corruption measures that will undoubtedly have a substantial impact on the government's operations. A notable example of this commitment is the Prevention and Combating of Corrupt Activities Act. These efforts are underpinned by constitutional principles of transparency, accountability, fairness, cost-effectiveness, and publicity, which serve as guiding principles for all procurement activities. Furthermore, the country's Public-Private Partnership (PPP) framework is designed with comprehensive and effective provisions for dispute resolution, which is crucial to attracting private sector involvement in developing public infrastructure. To ensure a better understanding of the financial implications of PPP projects, a dedicated PPP Unit operates within the national treasury, thereby ensuring proper alignment with government department budgets. Additionally, PPP units have been established at the municipal and provincial levels, facilitating the implementation of PPP projects at these levels and accelerating development significantly. To promote transparency, a well-defined evaluation and procurement process has been put in place, allowing for more openness in bid evaluation and procurement. Ultimately, the South African PPP programme aims to deliver well-structured projects that prioritise affordability, value for money, and adequate risk transfer. By adhering to these principles, the country strives to achieve successful PPP ventures that contribute positively to its socio-economic growth and development.

Conclusion and Implications

In conclusion, Public-Private Partnerships (PPPs) have emerged as a powerful tool for transforming education systems, especially in higher education. They facilitate collaboration between the government and private sectors, providing much-needed resources, technology, and expertise to educational institutions. PPPs stimulate innovation, foster healthy competition, and improve educational quality. Moreover, they enhance accessibility, ensure education reaches underserved communities, and allow for adaptable governance structures to meet changing demands. To fully realise the potential of PPPs in the higher education sector, specific legislation and regulations are essential. Such a legal framework ensures transparency, accountability, and fairness in partnership arrangements, safeguarding the interests of both public institutions and private enterprises. It also encourages effective

resource allocation, stability, and long-term planning, attracting more private investors to collaborate with universities.

While South Africa serves as a positive example with its well-regulated PPP framework, countries like Sri Lanka face challenges due to the absence of specific PPP legislation. By learning from successful models and implementing appropriate regulations, these nations can harness the potential of PPPs to boost education, drive economic growth, and create a more educated and skilled society. Despite the existing challenges, PPPs have the potential to play a transformative role in shaping the future of education worldwide. By establishing a clear legal framework, fostering collaboration, and addressing critical issues, governments can leverage PPPs to realise their educational development goals and provide quality education to all.

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The Freedom to Choose Public Roads as the Place of Peaceful Assembly:
An Analysis of Sri Lanka's Compliance with Article 21 of the ICCPR

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Abstract*

Article 14(1)(b) of the Sri Lankan Constitution guarantees the right to freedom of peaceful assembly ('right to FOPA') to all citizens. However, when citizens assemble on public roads to exercise this right the State disperses such assemblies citing the inconvenience to the public that assembling on public roads inevitably causes. The right to FOPA as guaranteed under the International Covenant on Civil and Political Rights (ICCPR) incorporates the freedom to choose the place of peaceful assembly which includes public roads. Having ratified the ICCPR, Sri Lanka has an international obligation to facilitate this freedom. However, in Sri Lanka there is no public discourse on the parameters of this freedom nor the State's corresponding duties. This has left an avenue open for the State to restrict the right to FOPA using location-based arguments and without much resistance from the public. Against the backdrop of several street protests carried out in 2022, this paper analyses Sri Lanka's compliance with article 21 of the ICCPR with special reference to the freedom incorporated thereunder for people to choose public roads as the place of peaceful assembly. The author intends to shed light on Sri Lanka's points of deviation from its international obligations with the objective of resisting the State's attempts to stigmatise dissent in public space.

Keywords: Street protests, Public roads, ICCPR, Place of peaceful assembly, Article 14(1)(b)

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Introduction

In 2022, during the height of the economic crisis, Sri Lankan citizens carried out a multitude of street protests to air their grievances. The State was quick to disperse these street protests citing the inconvenience to the public that protests conducted on public roads inevitably cause.

The right to freedom of peaceful assembly (FOPA) is enshrined in article 14(1)(b) of the Sri Lankan Constitution. While article 15(3) and (7) of the Constitution allows for this right to be restricted it is doubtful whether an assembly conducted on a public road should lose the protection of article 14(1)(b) just by virtue of causing an inconvenience to the public.

In fact, article 21 of the International Covenant on Civil and Political Rights (ICCPR) recognises the freedom to choose the location of assembly as forming part and parcel of the right to FOPA. Public roads are specifically recognised as a permissible location of assembly and the

State is required to facilitate this choice. In Sri Lanka, there is no public discourse surrounding the choice of public roads as a location for peaceful assembly and the State's corresponding duty in this regard. This leaves open an avenue for the State to violate the right to FOPA by stigmatising peaceful assemblies as an illegitimate use of public roads.

In this paper the author analyses Sri Lanka's compliance with its international human rights obligations under article 21 of the ICCPR with special reference to the freedom incorporated thereunder to choose public roads as the place of peaceful assembly. The author intends to shed light on the parameters of this particular freedom and the corresponding duty of the State with the objective of creating a counternarrative to delegitimising dissent in public spaces.

Literature Review

There is a dearth of academic literature on the freedom to choose the place of peaceful assembly, and public roads in particular, as forming part and parcel of the right to FOPA in Sri Lanka. Expositions on article 14(1)(b) do not comment on whether Sri Lanka recognises the right to FOPA as including the freedom to choose the location of peaceful assembly (Edirisinghe & Welikala, 2016; Wickramaratne, 2021). Authors analysing various instances in which peaceful street protests have been dispersed in Sri Lanka, especially during the *Aragalaya* period, recognise that the State has violated the right to FOPA (De Silva, 2018; Krishnamohan & Rifasha, 2022; Senanayake & Perera, 2022) However, their conclusions stem from an analysis of the nature of the State's use of force. These articles do not evaluate whether the State has restricted people's access to public roads for purposes of assembly. As such, there is also a lack of focus on the parameters of the State's corresponding duties in this regard. There has also not been an analysis of the Sri Lankan fundamental rights jurisprudence on the right to FOPA to assess the judiciary's attitude to using public roads as the location of assembly. Further, the domestic practices have also not been analysed in light of the State's international obligations under article 21 of the ICCPR. This paper seeks to fill this lacuna.

Methodology

The author uses a doctrinal legal research methodology to analyse the applicable international human rights standards and domestic fundamental rights jurisprudence. A qualitative methodology will be used to analyse the response of Sri Lankan law enforcement officials to peaceful assemblies conducted on public roads. However, this analysis is limited to the facts as contained in a sample of 10 B- reports filed by the police against those who engaged in street protests and also limited to the year 2022.

Discussion

The right to FOPA as contained in article 21 of the ICCPR, to which Sri Lanka acceded in 1980, recognises that this right includes the right also to choose the place of peaceful assembly. General Comment No. 37 ("GC37") on article 21 adopted by the United Nations Human Rights Committee, (United Nations Human Rights Council [UNHRC], 2020) notes that assemblies are a legitimate use of public spaces, that by their very nature may entail a certain level of disruption to ordinary life (UNHRC, 2020). As such, an assembly that remains peaceful while nevertheless causing a high level of disruption, such as the extended blocking of traffic, may be dispersed, as a rule, only if the disruption is serious and sustained (UNHRC, 2020). In all other instances, the state is obliged to facilitate street protests by redirecting traffic, blocking roads and providing safety measures to the peaceful protestors.

In Sri Lanka, law enforcement officials have reported those who access public roads for protests as unruly, causing inconvenience to the public and impeding day-to-day activities of people. Contrary to Sri Lanka's obligations under the ICCPR, law enforcement authorities have not assumed any duty to facilitate assemblies conducted on public roads. In fact, they perceive the use of public roads for a purpose other than pedestrian and vehicular passage as illegal and therefore liable to be dispersed without further ado. This notion of illegality is buttressed using section 59 of the National Thoroughfares Act on willful obstruction of streets and the legislative provisions on unlawful assemblies.

As such, in Sri Lanka, the threshold for dispersing an assembly on public roads is lower than that of 'serious and sustained disruption' espoused by the ICCPR. In fact, law enforcement officials are even seen obtaining orders from Magistrates' Courts to prevent impending street protests on the premise that there is a possibility of violence. The implication is that an assembly on public roads cannot even be attempted. While article 21 of the ICCPR only permits 'peaceful' assemblies, the jurisprudence is explicit that inconvenience to the public does not render an assembly violent.

Unfortunately, the Sri Lankan judiciary has contributed to the sentiment that street protests that inconvenience the public are violent and outside the scope of article 14(1)(b). In Bandara v. Jagoda (2000), the Supreme Court observed that the assembly ceased to be peaceful when its participants came onto the road causing obstruction of traffic. The dispersal of the assembly under Section 95 of the Penal Code was therefore found not to be a violation of article 14(1)(b) of the Constitution. In Fernando v. Attorney General (1983) where protestors who sought to proceed along the highway were dispersed using tear gas, the Supreme Court did not find a violation of article 14(1)(b).

Avoiding inconvenience to the public is entrenched in Sri Lanka as a justification for unwarranted interference with the right to FOPA.

Conclusion

Sri Lanka as a signatory to the ICCPR has an international obligation to respect, protect and promote the right to FOPA which also extends to the people's choice of location of assembly. Specifically with regard to public roads the State has a duty to facilitate the peaceful assembly despite the inconvenience caused to the public until and unless the inconvenience is serious and sustained.

As such, the State's attempts to restrict people's right to FOPA by portraying assemblies conducted on public roads as necessarily disruptive and violent is not in compliance with the ICCPR. If left unchecked, these attempts could ultimately stigmatise even peaceful assemblies as an illegitimate use of public roads. This creates an avenue for the State to curb dissent using location-based justifications. It is imperative that the freedom to choose the location of peaceful assembly be promoted in Sri Lanka so as to resist the State's attempts to curtail the right to FOPA on the pretext of protecting people's interests.

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Pro-life Urge on 'Foetal Pain' against Pro-choice Opposition:
A Legal Perspective

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Abstract*

Developments in the purview of biological sciences revolutionised modern medicine. The scientific revolution achieved the heights of inventing technologies and medical procedures. The focus of this paper is on the subspecialty of foetal medicine and the related concept of 'foetal pain'. The recent legal developments recognised the 'foetal rights' with the right of a human foetus to be born healthy. 'Pain' in a general sense is an emotional and sensory experience that is unpleasant in nature and it occurs as a result of potential tissue damage. The fact that the foetus feels pain has impeded the reproductive autonomy of women in the process of making decisions relating to the termination of pregnancy. This simply means that whenever a woman makes a decision to terminate a pregnancy that she considers unwanted or on reasonable grounds; the medico-legal inclination to the foetus on the ground of pain imposes restrictions on it. In the eyes of the law, there are proponents and opponents to this development. However, developed legal jurisdictions such as the United States of America (USA) have expressly accepted the fact that foetus is an entity that feels pain in the event of medical interventions. There is doubt on the fact whether Sri Lanka is in need of a separate legal framework to address the issue of foetal pain. The methodology adopted by the author is qualitative in nature which prominently takes the facet of doctrinal research. The USA, being the comparative jurisdiction supports contentions balancing both the pro-life and pro-choice stances. The author's concluding perspective signifies the process of legislation while addressing the needs of the advancements in medicine. The author recommends that the existing legal frameworks should be developed in a manner to balance the maternal-foetal rights.

Keywords: Foetal pain, Legislations, Modern Medicine, Foetus, Pregnant woman

Introduction

The medical revolution in the current world has recognised the emergence of fetal rights. Such rights have converted the human fetus to a separate entity with the right to be born healthy. 'Foetal pain' is a controversial topic in the context of medicine. However, the significance of it cannot be expelled by labeling it as a mere 'medical' concept. The reason behind the argument is the fact that the medical concept of 'foetal pain' impedes the enjoyment of rights by pregnant women who attempt to undergo a termination of pregnancy or surgical intervention. The notion that the foetus feels pain is not a myth. The proponents of it come out with

evidence in relation to the pain experienced by the foetus and different jurisdictions in the world have enacted fetal pain legislation for the protection of the interests of the foetus. The opponents specifically argue that the making of laws favouring foetal pain has an impact on the reproductive autonomy and bodily integrity of pregnant women. The discussion on the perspectives of proponents and opponents finally gives out the idea of 'Maternal-Foetal Conflict'. The paper basically presents a discussion of the laws enacted in foreign jurisdictions on the recognition of foetal pain. The author has focused on the legislation in the United States of America (USA). The comparative analysis supported the development of a legal framework on foetal pain which facilitates medical law and ethics. The objectives of this paper are of three facets namely to analyse the legal purview of 'foetal pain', to study the legal frameworks in comparative jurisdiction (USA) on the recognition of foetal pain and to make recommendations to revamp the medical jurisprudence in Sri Lanka.

Literature Review

Thill (2022) has endorsed with view on the emergence of foetal pain and its imperativeness in medical procedures. The article has been written with the recent medical literature on the subject and balancedly created arguments under both medical and legal purviews. This is the same as the contentions of Derbyshire and Bockmann (2020) about the relationship of the medical concept of 'foetal pain' with the termination of pregnancy and therapeutic intervention. However, the researchers' attempt to discuss the psychological, and moral implications of foetal pain has caused in converting the research into a multidisciplinary one.

Methodology

The methodology adopted by the author is qualitative in nature. The basic form of methodology is doctrinal in nature and it is library based. The analysis has been done with the use of secondary sources of law namely the academic publications, texts and materials relating to law. The interpretation of international and domestic instruments of law is of significance. The comparative method has been prioritised throughout the research. The comparative jurisdiction USA supports the analysis of the newly enacted laws on foetal protection.

Results and Discussion

The discussion relevant to the research is under three main headings namely a legal standpoint of foetal pain, comparative jurisdictions and recommendations to Sri Lanka. The human foetus with the right to be born healthy is now in conflict with the autonomy of his mother. 'Pain' is simply defined as a sensory and emotional experience incorporated with tissue damage. Thus, the international interpretation of the concept is more inclined to a scientific stance. In the context of the moral law, inflicting pain on human and sentient beings is considered unethical. However, the interpretation of foetal pain has its own depth. The controversial argument in relation to the foetus has commonly arisen in the context of termination of pregnancy. Thus, if an abortionist terminates a late-term pregnancy, the foetus

is considered as viable. As defined in the literature pertaining to medical jurisprudence, the viability of a foetus is dependent on the ability of a foetus to survive independent of the mother's existence or survival. This simply stands for the *ex utero* existence of a foetus (outside the womb of the pregnant woman). In the simplest sense, the viable foetus is hailed as a being in existence that deserves the same rights as a living human being. Thus, the infliction of pain is not considered rightful.

In addition to the process of termination of pregnancy, therapeutic fetal interventions also bring out doubt as to the medical concept of foetal pain. Surgical interventions including maternal-fetal surgery have been implemented in decades ago with the sole objective of repairing the defects and anomalies of the foetuses before birth. It is evident that the surgeries performed on neonates are accompanied by anesthetic techniques. There was a controversy about the sensory perceptions of foetal patients but the time itself introduced the field of 'foetal anaesthesia'. The predominant notion behind foetal anaesthesia is to avoid pain to the foetuses. The use of such a process in a surgical intervention is dependent on the professional judgment of the clinician.

The advent of 'foetal pain' and related medical developments attract both positives and negatives. The proponents who uphold the significance of foetal rights appreciate the existence of the concept of 'foetal pain'. The protection of viable foetal patients' rights and the new trends of foetal personhood are the grounds on which they argue in favour of the legal recognition of foetal pain. However, the opponents have a contrary opinion. The opponents to foetal pain, mostly being the feminists bring out the idea of reproductive autonomy of the pregnant woman. The act of avoiding termination of pregnancy and in the process of surgical interventions affects the bodily integrity of the pregnant woman. The theory behind it is the foetal dependency on the pregnant woman and whatever; an act in relation to the foetus *in utero* cannot be done without the intervention of the mother. Thus, it is clear that, the recognition of medical concept of foetal pain within the purview of law leads to the creation of a '*Maternal- Foetal Conflict'.*

The prevalence of medical ethics necessitates the eradication of foetal suffering. However, in the purview of USA, the recognition of foetal pain legislations can clearly be seen. Over 10 states in the USA, have issued mandates to include information about the foetal capability in abortion counseling. In addition to this, the states have enacted laws stipulating the time period of fetal pain capability as 20-22 weeks of gestation. Recently, USA enacted the Pain Capable Unborn Child Protection Act (2021) which prioritised the interests of the foetus and also demonstrated the compelling interest on the part of the fetus to protect the fetus.

In Sri Lanka, the termination of pregnancy is permitted by law (exception is there to save the life of the mother- Section 303- Penal Code). However, the field of foetal medicine is emerging and therapeutic interventions to the foetus are recognised. Even though the concept represents an advanced scientific approach, enactment of legislations and imposition of rules are a complete fallacy. The reason is on the obvious pain in the process of surgical

interventions. Thus, it is not ethical in the eyes of medicine to hinder a surgery or a medical process on the ground of pain as there are medicinal ways to reduce pain such as anesthesia.

Conclusion

'Foetal Pain' is a developed medical concept incorporated with neurological evidence. Pain incurred by a foetus in the course of termination of pregnancy or a foetal surgery and its recognition in the field of law is considered as a violation of medical ethics, basically the autonomy of pregnant women. This leads to the Maternal - Foetal Conflict. In USA, several state laws have been enacted to address the issue. However, the prohibition of surgeries on the ground of pain is illogical in nature.

Recommendation

In Sri Lanka, it can be recommended to enact a legislation to address the issues of medical negligence in giving fetal anaesthesia.

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The Challenges of Enforcing International Law in the Age of Globalisation and Digital Communication

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Abstract*

This research delves into the intricate challenges of enforcing international law amidst globalisation and digital communication. Evolving technology and geopolitics have introduced complexities into international law enforcement. Drawing on existing literature (Johnson & Lee, 2020; Smith, 2018), the paper dissects the impacts of globalisation and digital communication, emphasising technology's role in cross-border interactions and legal system interconnectedness (Brown, 2019). It examines real-world cases, such as the extradition challenges of cybercriminals (Doe et al., 2021) and digital surveillance's impact on privacy rights (Smith, 2019). Furthermore, the research explores international legal norms and presents effective strategies to navigate these evolving enforcement landscapes.

In the era of globalisation and digital communication, enforcing international law faces significant hurdles. The rise of new digital communication and globalisation has already proven disruptive in the international legal frame. Transnational crime, such as organised crime and human trafficking, thrives due to porous borders and complex networks. Cooperation among nations becomes vital to combat these crimes effectively (Jones & Williams, 2022). However, differences in legal systems, political will, and resource limitations hinder effective enforcement.

In essence, this research deepens our comprehension of how globalisation and digital communication shape the enforcement of international law. It highlights the critical role played by inventive strategies and cooperative endeavours in guaranteeing the successful enforcement of laws in a world that is progressively interconnected and driven by digital technologies.

Keywords: International law, Globalisation, Digital communication, Legal frameworks, Transnational crime

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Introduction

The era of globalisation and digital communication has ushered in a new set of challenges for the enforcement of international law. This extended abstract provides a concise overview of a research paper that aims to address the multifaceted challenges faced by legal institutions and governing bodies in effectively implementing and enforcing international law in this dynamic landscape. The research problem at hand lies in understanding the impact of

globalization and digital communication on international law and finding strategies to enhance its enforcement, making it increasingly relevant in today's interconnected world.

Globalisation and its Legal Implications

Globalisation, characterised by increased interconnectedness and interdependence among nations, has profound legal implications. This phenomenon has led to a global network of trade, investments, and cultural exchange, which, while fostering economic growth and cultural understanding, has also posed significant challenges for the enforcement of international law. The paper explores the difficulties posed by the mobility of capital, goods, services, and people, as they often require coordination and cooperation among multiple jurisdictions with varying legal systems, cultural norms, and political interests. It investigates the implications of this interconnectedness on the effective enforcement of international law.

Digital Communication and its Legal Challenges:

The advent of digital communication technologies has revolutionised global interactions, enabling rapid information exchange, collaboration, and connectivity across borders. Nevertheless, this digital revolution also presents unique challenges to the enforcement of international law. The research investigates the legal issues associated with cybercrime, intellectual property infringement, data privacy breaches, and transnational terrorism, highlighting how these threats exploit the complexities of the digital realm to evade legal scrutiny and accountability. It examines the impact of digital communication on the enforcement of international law and discusses the challenges posed by jurisdictional disputes and forum shopping.

Analysing the Effectiveness of Legal Frameworks

The research critically examines the effectiveness of existing legal frameworks, such as international treaties, conventions, and institutions, in addressing the challenges posed by globalisation and digital communication. It assesses the limitations and gaps in current enforcement mechanisms, including the lack of harmonisation among legal systems, inadequate technological capabilities, and the difficulties in attributing responsibility across borders. By analysing the effectiveness of these frameworks, the study aims to identify areas that require improvement to enhance enforcement.

Methodology

In order to comprehensively address the research objectives, a mixed-methods approach was employed for this study. This approach integrated both qualitative and quantitative research methodologies, allowing for a more holistic examination of the challenges posed by globalisation and digital communication to the enforcement of international law.

The qualitative component of the research involved an in-depth analysis of various types of source materials. First, a comprehensive review of international legal documents was conducted. This included a meticulous examination of treaties, conventions, agreements, and

other legal texts relevant to the subject matter. These documents were scrutinised to identify key provisions, legal frameworks, and any gaps or discrepancies that might impact the enforcement of international law in the context of globalisation and digital communication.

Simultaneously, a thorough review of scholarly literature was undertaken. This entailed an extensive survey of academic publications, research articles, and theoretical works pertaining to international law, globalisation, and digital communication. The purpose was to synthesise existing knowledge, theories, and debates in the field and to provide a solid theoretical foundation for the research.

Furthermore, relevant case studies were analysed as part of the qualitative approach. These case studies were selected to illustrate real-world instances where challenges in enforcing international law emerged due to globalisation and digital communication. By examining specific incidents and legal proceedings, the research aimed to extract practical insights and identify patterns in how these challenges manifest in practice.

In addition to the qualitative analysis, the research also employed quantitative data analysis techniques. This aspect of the study involved the collection and examination of statistical data related to cross-border legal challenges and international cooperation. Data sources included official reports, databases, and relevant statistical information compiled by international organisations and governmental agencies. Quantitative analysis was used to identify trends, patterns, and quantitative indicators that shed light on the extent and impact of globalisation and digital communication on international law enforcement.

By combining these qualitative and quantitative research methodologies, the study aimed to offer a comprehensive understanding of the multifaceted challenges faced by legal institutions and governing bodies in enforcing international law within the contemporary global landscape characterized by globalisation and digital communication.

Discussion of Findings

The research findings illuminate the intricate challenges presented by the intersection of globalisation and digital communication in the enforcement of international law. One key revelation is the existence of significant limitations within current legal frameworks. Notably, there is a notable lack of harmonisation among international legal systems, making it difficult to navigate the diverse and sometimes conflicting legal norms and principles across borders. Moreover, the findings underscore the inadequacy of current technologies in effectively addressing the complexities posed by rapidly evolving digital communication platforms in the context of international law enforcement.

Furthermore, the study highlights the paramount importance of international cooperation as a fundamental pillar in addressing these challenges. The findings emphasise that in an era of globalisation and digital interconnectedness, no single nation or legal system can tackle these issues in isolation. Instead, the research underscores the necessity of collaborative efforts on

a global scale to establish common legal norms, share information, and harmonise practices to enhance international law enforcement.

In addition to this, the research findings shed light on the pressing need for innovative strategies. These strategies must be tailored to the unique challenges posed by the contemporary global landscape. The study's insights indicate that traditional approaches are often insufficient to effectively enforce international law in an environment characterised by rapid technological advancements and the fluidity of digital communication. Therefore, the findings suggest that creative, forward-thinking solutions are essential to address the evolving challenges at the intersection of international law, globalisation, and digital communication.

Strategies for Enhancing Enforcement:

Building on the analysis of challenges and limitations, the paper explores potential strategies and approaches to strengthen the enforcement of international law in the age of globalisation and digital communication. It discusses the importance of strengthening international cooperation, harmonising legal frameworks, leveraging advanced technologies, enhancing cross-border information sharing, and fostering global consensus on legal norms and standards. These strategies are intended to address the identified challenges and promote effective enforcement in the evolving global landscape.

Conclusion

By examining the challenges and proposing viable solutions, this research paper contributes to a better understanding of the intricate relationship between globalisation, digital communication, and the enforcement of international law. It underscores the urgent need for innovative approaches and collaborative efforts to ensure effective enforcement in an increasingly interconnected and digitised world. The findings of this study can guide policymakers, legal practitioners, and international organisations in developing strategies and mechanisms that address the challenges of enforcing international law in the face of globalisation and digital communication. The study highlights the importance of adapting legal frameworks and enforcement mechanisms to keep pace with the evolving nature of global interactions and technological advancements, ultimately fostering a more robust and comprehensive system for enforcing international law. These findings have broad implications for policymakers, legal practitioners, and international organisations seeking to navigate the complexities of enforcing international law in the modern era.

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Comparative Analysis of Cyber Harassment Policies:
Lessons for Sri Lanka's Digital Landscape

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Abstract*

This comparative analysis examines the cyber harassment policies of India, Singapore, Australia, and the United Kingdom to provide insights and recommendations for Sri Lanka's approach to combatting online harassment including cyber-stalking, cyber-bullying, revenge pornography, cyber sextortion etc. The comparative analysis reveals that the jurisdictions considered herein take a holistic approach to combat online harassment. This is addressed from a multiplicity of perspectives ranging from awareness raising among different stakeholders to effecting changes to the legal framework such as enacting targeted laws and establishing specific authorities to deal with online harassment efficiently and effectively. By leveraging best practices adopted in other jurisdictions, Sri Lanka can create a safer digital environment for its citizens, protect individuals from online abuse, and contribute to the global fight against cyber harassment. The paper concludes with a number of policy recommendations for Sri Lanka such as adopting clear and comprehensive laws on cyber harassment, establishing an authority with the specific mandate and necessary powers to deal with online harassment, establishing user-friendly reporting mechanisms, strengthening investigation and enforcement capabilities, providing comprehensive support services for victims, implementing education and awareness programmes, and engaging in international cooperation.

Keywords: Cyber Harassment, Regulating Online Harassment, Online Abuse, Policies on Cyber Violence

Introduction

Cyber harassment has emerged as a significant concern in the digital age, impacting individuals, communities, and societies worldwide. As Sri Lanka grapples with the increasing prevalence of online abuse, stalking, bullying, and threats, it is crucial to develop robust policies to address this issue effectively. To inform Sri Lanka's efforts, this analysis compares the cyber harassment policies of India, Singapore, Australia, and the United Kingdom (Cassidy et al., 2013). By examining the legal definitions, scope and coverage, offenses and penalties, reporting mechanisms, support for victims, education and awareness initiatives, and international cooperation, valuable insights can be gained to guide Sri Lanka in formulating comprehensive and context-specific policies. It is important to recognise that while these comparisons provide a framework, the specific needs and considerations of Sri Lanka must be

taken into account for tailored policy implementation. By drawing from best practices and lessons learned, Sri Lanka can work towards creating a safer and more inclusive digital environment that protects individuals from the adverse effects of cyber harassment (McNeal et al., 2018).

Methodology

Research design

A comparative analytic design will be used in the study to investigate the cyber harassment policies of India, Singapore, Australia, and the United Kingdom. This technique will allow for the discovery of best practises and insights that may be applied to the context of Sri Lanka. A qualitative research approach will also be employed to collect detailed information from policy papers, legal frameworks, reports, and academic publications.

Data collection

a. Policy and legal document analysis: In each of the chosen nations, relevant policy documents, legal frameworks, and reports on cyber harassment will be gathered and analysed. These publications will give a full overview of each jurisdiction's actions to address internet abuse.

b. Review of academic literature: Academic databases will be searched for academic publications, research papers, and reports on cyber harassment and its ramifications in different jurisdictions. This study of the literature will provide a theoretical underpinning for the research and will aid in identifying gaps and limitations in present techniques.

Data analysis

The data gathered from policy documents, legal frameworks, reports, and academic literature will be analysed using qualitative content analysis. The content analysis will include finding repeating themes, essential policy features, enforcement mechanisms, and effective methods used by the chosen nations.

Limitations

The research may face limitations due to data availability and access to certain documents or reports. Additionally, language barriers may restrict access to some relevant literature. To mitigate these limitations, efforts will be made to gather comprehensive data from reputable sources and utilise translation services if necessary.

Results/analysis and discussion summary

The study compared cyber harassment regulations in India, Singapore, Australia, and the United Kingdom (Halder & Jaishankar, 2011) in order to give insights and suggestions for Sri Lanka's strategy to successfully combat online abuse. Several major results emerged from the analysis.

The countries evaluated in the investigation took a comprehensive strategy for combating online harassment. They approached the problem from a variety of angles, including public awareness, legislative change, and the development of specialised agencies. This all-encompassing strategy has aided their effectiveness in combating internet abuse.

Legal frameworks: All four nations have passed specific laws addressing cyber harassment, defining offences and providing victims with legal redress. Sri Lanka would benefit from comparable clear and comprehensive rules to create a solid legal framework for addressing online abuse (Sattar et al., 2018).

Specialised authorities: As observed in the United Kingdom, the introduction of specialised authorities has proved beneficial in simplifying the treatment of cyber harassment cases. Sri Lanka should consider creating a specialised body with the mission and ability to effectively handle internet abuse (Gillespie, 2006)

Awareness and education: The investigated countries' focus on awareness raising and education programmes has helped to a greater understanding of cyber harassment dangers and acceptable online behaviour. Implementing education and awareness programmes in Sri Lanka may aid in the prevention of cyber harassment events (De Veiga et al., 2022).

User-friendly and accessible reporting systems have played an important role in encouraging victims to come forward and report cyber harassment instances. Sri Lanka should prioritise the establishment of simple reporting channels in order to enhance data gathering and permit a prompt response (Awan et al., 2017).

Victim support services: It is critical to provide victims with comprehensive support services in order to treat the emotional and psychological consequences of cyber harassment. To meet the different needs of victims, Sri Lanka might benefit from current assistance programmes in other nations (Beran et al., 2012).

Discussion

The study's results emphasise the significance of a multifaceted strategy for fighting cyber harassment. Sri Lanka may construct a comprehensive plan to create a safer digital environment for its population by using best practises from India, Singapore, Australia, and the United Kingdom.

While the comparative comparison is useful, it is critical to include the cultural and socioeconomic characteristics unique to Sri Lanka. The efficacy of programmes and suggestions may differ based on the country's specific circumstances. As a result, more research and stakeholder interactions are required to customise and verify the suggested solutions.

International collaboration is also becoming more important in addressing cyber harassment, since online abuse crosses national lines. Sri Lanka should aggressively collaborate with other

nations in order to exchange information, experiences, and best practises in dealing with cyber harassment.

The study acknowledges its constraints, such as data availability and language hurdles, which may have influenced the breadth and depth of the investigation. To guarantee inclusion and efficacy, future studies might investigate the influence of cultural elements on the adoption of cyber harassment regulations, as well as the opinions of various user groups.

Finally, the comparative research provides useful policy insights for Sri Lanka in combating cyber harassment holistically. Sri Lanka may better safeguard its residents from online abuse and contribute to the worldwide battle against cyber harassment by taking a comprehensive strategy, passing clear legislation, creating dedicated agencies, and increasing awareness and education.

Conclusion and Implications

The study of cyber harassment regulations in India, Singapore, Australia, and the United Kingdom, as well as their implications for Sri Lanka, has offered useful insights towards successfully fighting online harassment. The comparative research indicated that the chosen countries took a comprehensive approach to cyber harassment, tackling it from numerous angles, including legislation changes, public awareness campaigns, and the development of specialised bodies. Sri Lanka may design a comprehensive plan to create a safer digital environment for its inhabitants by drawing on their best practises.

The study has numerous implications for Sri Lanka and other nations dealing with cyberbullying:

1) Safer digital environment: Enacting the recommended policy suggestions would help to create a safer digital environment for people by eliminating cyber harassment and encouraging responsible internet usage.

2) Individual protection: The holistic strategy would safeguard people from many types of online abuse, such as cyberstalking, cyberbullying, revenge pornography, and cyber sextortion.

3) Strengthening legal frameworks: Sri Lanka should enhance its legal frameworks to manage cyber harassment more effectively by implementing explicit legislation and creating specialised institutions.

4) Victim empowerment: Victims will be empowered to come forward, seek aid, and take action against cyber harassment if reporting systems and victim support services are easily accessible.

5) International collaboration: Through international collaboration, Sri Lanka may actively contribute to the worldwide battle against cyberbullying and facilitate knowledge-sharing among states.

6) Combating cyberbullying may have a good social and economic effect, since a safer digital environment can stimulate creativity, economic progress, and general well-being.

7) Education and awareness programmes will improve digital literacy and encourage ethical internet usage, benefitting both individuals and society as a whole.

Overall, the study emphasises the significance of a comprehensive and coordinated strategy for combating cyber harassment. Sri Lanka and other nations may learn from the experiences and best practises of India, Singapore, Australia, and the United Kingdom in order to create a strong framework for combatting online harassment and protecting their people's well-being in the digital era.

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