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Empowering Sri Lankan Women Entrepreneurs: Navigating the Post-COVID Landscape

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Abstract

This research examines the challenges encountered by female business owners in post-COVID era Sri Lanka. The pandemic dramatically exacerbated the gender-based issues encountered by female business owners all around the world. The situation in Sri Lanka with its growing entrepreneurial landscape adds the complications to those challenges. The study included 25 members via zoom and in person and also interviews were recorded. Data analyzed using NVivo program. Results revealed a profusion of barriers, which included limited digital proficiency, the disruption of supply chains, and gender prejudice. Adaptability, resilience, and innovative approaches have been fundamental for post-pandemic times. Still, difficulties remain, such as the lack of empowerment and support from external forces. The research suggests specialized interventions, the upgrade of digital literacy, gender-considerate fiscal measures, and mentorship programs as solutions. The conclusions drawn from this research can be beneficial for elevating the level of policy and practice, all the while creating a sustaining environment for female business owners during Sri Lanka's recovery attempts.

Key words: *Post-COVID Challenges, Sri Lanka, Women Entrepreneurs*

1. Introduction

The worldwide effects of the COVID-19 pandemic have been far-reaching, bringing about new challenges and prospects around various industries (Dharmarajah, 2021).

According to Dharmarajah among the areas that have been heavily impacted are those dealing with women entrepreneurs, who now have to contend with issues that have been exacerbated by the pandemic. The idea of female entrepreneurship in burgeoning economies is multifaceted, usually defined by economic structures, social assumptions, and cultural mores (Adikaram, 2022). According to Adikaram The problem of the 'femininity penalty' is one that is deeply entrenched in these businesses, where the female gender identity intersects with their business pursuits, resulting in discrimination and inequality.

As per Toress (2021) the post-pandemic world has been rife with studies looking into the effects of the pandemic on women-owned businesses. In addition, according to Torres, many of these companies are concentrated in fields such as retail and hospitality, industries which have been hit particularly hard by the economic shocks of COVID-19. Finding capital and adjusting to the altered business landscape have been tough feats for these women to accomplish (Adikaram, 2022).

According to Rajapaksha (2019), Selvarajan and Thayani (2022), Sri Lanka has a vibrant entrepreneurial culture, and yet women here still encounter a multitude of struggles in their quest to lead businesses. Both identify hindrances in this enterprise, such as customary gender roles, insufficient access to finance, and limited backing systems (Rajapaksha, 2019). The pandemic has added another layer of complexity to these issues, with upheavals to the usual supply chains, consumer behavior, and market mechanics (Wang, 2021). As per Wang (2021), bridging the so-called digital divide in a climate where entrance to technology remains unbalanced might prove particularly tough for women entrepreneurs

This paper targets to contribute to the current body of knowledge by zeroing in on the challenges that women entrepreneurs in Sri Lanka go through in the post-COVID era. By researching the combined effects of gender problems and the pandemic's specific influence, the paper endeavors to supply useful analysis that can inform policy and action to support female business operators in their venture to revive and flourish. By means of a thorough examination of available literature and empirical evidence, this research strives to bring to light tactics that could help these women surmount hindrances and fruitfully enhance economic growth and stability in Sri Lanka.

1.1 Research Problem

According to (Mustafa, 2021) the part of women in entrepreneurship has been progressively receiving recognition as a key factor for economic development and gender equality. Nevertheless, despite this acknowledgment, female entrepreneurs still face multifarious difficulties that obstruct their prosperity and growth capability (Mustafa, 2021). This research difficulty aims to go into the roadblocks and influences impacting female entrepreneurs in Sri Lanka (Mustafa, 2021). While existing research has given advantageous insights into the difficulties confronted by female entrepreneurs in these territories, there remains a need for an exhaustive comprehension of the particular elements that add to or obstacle their prosperity (Mustafa, 2021).

Luna K C and Crystal Whetstone (2022) analyze the broader gendered consequences of the COVID-19 pandemic on the security of women in Nepal and Sri Lanka, illuminating the intricacies of female roles and troubles in these conditions (Luna K C, 2022). Nevertheless, a more focused inquiry is necessary to explore the intricate dynamics affecting women's entrepreneurship, particularly in the post-pandemic circumstance (Luna & Whetstone, 2022). Moreover, Selvarajan and Thayani (2022) bring to light the challenges confronted by female entrepreneurs in the Jaffna region of Sri Lanka, yet their exploration doesn't sufficiently address the changing post pandemic scene and its effect on women entrepreneurs (Selvarajan, 2022).

Furthermore, the study by Kaushalya Attygalle (2014) accentuates the job of business improvement services in advancing women entrepreneurship in Sri Lanka (Attygalle, 2014)). However, this examination does not delve into the particular difficulties experienced by female entrepreneurs in the Western Province, which is a zone of monetary importance (Attygalle, 2014)). Likewise, the research by Thilakarathne (2022) centers around achievement factors for women entrepreneurs in the Western Province of Sri Lanka, giving profitable bits of knowledge into their successes (Thilakarathne, 2022). In any case, a complete comprehension of the barricades and challenges that these ladies confront remains essential (Thilakarathne, 2022). This exploration problem focuses on understanding the intricate troubles and achievement components experienced by female entrepreneurs in Sri Lanka.

2. Literature Review

2.1 Impacts of the COVID-19 Pandemic on Women Entrepreneurs

The COVID-19 pandemic has posed unprecedented dilemmas to worldwide economies, and particularly vulnerable were women entrepreneurs (Mustafa, 2021). Considerable research has brought to light the pandemic's gender-specific repercussions on women-owned businesses. Mustafa (2021) investigated the pandemic's effects on female entrepreneurs in Pakistan, identifying disruptions stemming from lockdowns, supply chain stoppages, and decreased consumer demand. Furthermore, being largely represented in industries such as retail and hospitality, women entrepreneurs were uniquely exposed to the crisis (Mustafa, 2021).

Likewise, Henri, Beharry, and Mashau (2023) conducted a systematic investigation of the pandemic's repercussions for female entrepreneurs.

They illustrated how restrictions of markets, capital, and resources combined with amplified caretaking responsibilities disproportionately affected them, thus causing additional strain and a hindrance of their business's progression (Henri, 2023).

The crisis was not limited to Pakistan; Monnaf and Rahman (2022) explored the socio-economic consequences on women entrepreneurs in the Rangpur City Corporation of Bangladesh. They spotlighted the difficulties encountered, specifically by entrepreneurs in the informal sector, such as decreased economic activity, confined access to credit, and interruptions in supply chains (Monnaf, 2022).

In spite of this, the pandemic has incited a display of resilience and flexibility from women entrepreneurs. Many took to digital platforms as physical storefronts faced limitations. Notwithstanding, this digitation was not without its own set of problems, mostly correlated to limited digital know how and technology access (Henri, 2023).

2.2 Evolving Landscape of Women's Entrepreneurship in Post Pandemic Sri Lanka

The transforming portrait of female entrepreneurship in post-COVID Sri Lanka reflects a vibrant exchange of dilemmas, reactions, and openings, affected by the unparalleled disturbances generated by the pandemic (Roar, 2021). As the pandemic completely

overhauled the global business sector, women entrepreneurs in Sri Lanka were forced to maneuver through unfamiliar territories to guarantee the sustainability of their businesses.

The pandemic's effects on women-owned companies have been manifold, ranging from supply chain stoppages to changes in shopper habits (Torres, 2021). In a country where the digital gap and modern technology access are still unresolved issues (Wang, 2021), female entrepreneurs additionally had to conform to the digital requirements of the post-pandemic age. This adjustment was notably central as digital channels became vital for commerce continuity and consumer communication.

While the pandemic accentuated doubts, it also provoked women entrepreneurs to display their versatility and malleability. The story of female entrepreneurs in the Jaffna locus emphasized the value of tutorship and reinforcement networks in overcoming barriers (Selvarajan, 2022)). Their recipes for negotiating the post-pandemic landscape provide insight into the job of cooperative initiatives and training communities.

Likewise, the Western Province's women executives, who had displayed profitability determinants prior to the pandemic (Thilakarathne, 2022), likely adjusted these determinants to the varying circumstances. Their adventures furnish acumen into the shifty temperament of these victorious factors and how they contribute to post-pandemic revival.

As Sri Lanka's economy re-energizes in the post-pandemic age, the updating scene of female entrepreneurship has far-reaching consequences. The tactics employed by women executives to conquer tribulations, modify their companies, and make the most of new openings adding to economic recuperation and advancement. Gauging their experiences gives important comprehension for decision-makers, bodies, and support organizations to do interventions that create a promoting atmosphere for women entrepreneurs.

2.3. Barriers and Opportunities for Post-Pandemic Recovery

The upcoming renewal period presents a one-of-a-kind atmosphere of both barriers and opportunities for women entrepreneurs in Sri Lanka. Looking at the wider conversations surrounding difficulties and openings in the post COVID-19 era (WEF,

2020), this section will explore the individual aspects that constrain female business owners' revival and growth potential, and the potential paths for overcoming these issues.

2.4 Hindrances to Post-Pandemic Recovery

The commotions instigated by the pandemic have magnified pre-existing blocks that impede the evolution of women entrepreneurs. These hindrances comprise of restricted access to financing, deficient backing systems, and public gender maxims (Rajapaksha, 2019). The snags distinguished by Selvarajan and Thayani(2022) additionally emphasize the need for mentorship and aid nets for women entrepreneurs in Sri Lanka. The post-pandemic recovery might confront battles in re-building these webs and tending to the durable gender predispositions that obstruct women's access to assets and opportunities.

2.5 Chances for Post-Pandemic Recovery

The changing landscape also carries forth several openings for women entrepreneurs in Sri Lanka. The digital transformation motivated by the pandemic has cleared roads for digital businesses, e-commerce, and digital promotion (Wang, 2021)). Female business owners can exploit these chances to access a larger audience and tap into novel markets. The alteration into ecological and circular supply chains (Alva Ferrari, 2023) synchronizes with the augmenting tendency towards eco-aware customer conduct, providing room for women entrepreneurs to inventive and add to more responsible business practices. The shifting characteristics of craft and the expanding significance of distant and adaptable working preparations also present possibilities for women entrepreneurs to match their business assignments with other engagements (WEF, 2020).

3. Methodology

This research adopted a qualitative approach to thoroughly explore the obstacles encountered by female entrepreneurs in the post-COVID period of Sri Lanka. Interviews were chosen as the data collection approach, affording a platform for immediate interaction with the individuals, allowing for the capture of their stories in a genuine way. Twenty-five female entrepreneurs were deliberately chosen as

participants to guarantee diversity in terms of business divisions, sizes, and geographic areas within Sri Lanka. The sampling strategy sought to represent a comprehensive array of the issues confronted by female entrepreneurs. Participants were identified by means of networking events, sector associations, and on-line platforms applicable to women entrepreneurs. Semi-structured interviews were done with each individual to aid an extensive evaluation of their ordeals. The interview guide was formulated carefully to encompass a wide range of issues, including the problems experienced during the pandemic, approaches applied for restoration, and variations made to address the changing business climate. The discussions were conducted either physically or virtually, contingent upon participants' choices and operational limitations. Data analysis was performed using thematic analysis, a method suitable for picking out and decoding regularities within qualitative data. NVivo software was employed to facilitate the organization and administration of the broad interview transcripts. The analysis course of action was iterative, necessitating multiple interconnected steps. Themes were then defined and named, giving a lucid and concise description of the designs observed within the data. The analysis incorporated direct quotes from the interview transcripts to authorize the identified themes, raising the dependability of the outcomes. To assure the legitimacy of the research, member checking was done, allowing participants to assess the summary of their interviews for precision and harmony with their lives. Peer debriefing was also held, engaging colleagues accustomed to qualitative research methodologies to thoroughly investigate the research approach and results

4. Findings

4.1. Demographic Profile

Table 1: Demographic Profile

Demographic Variable	Frequency	Percentage
20 – 30	8	32.0%
31 – 40	12	48.0%
41 – 50	3	12.0%

Above 50	2	8.0%
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Table 2: Educational Qualification

Diploma Level	6	24.0%
Graduate	15	60.0%
Post graduate	4	16.0%
Total participants	25	100.0%

Source: Author

The examination of the demographic profile of those who participated in the survey illuminates a varied age group, with the bulk of the subjects falling between 31 and 40 years old (48.0%), followed by the 20 to 30 age group (32.0%). Moreover, 12.0% and 8.0% of the participants used were aged 41 to 50 and above 50 correspondingly. Regarding academic background, the

investigation delineated a heterogeneous background. The largest contingent had a graduate degree (60.0%), while 24.0% held a diploma and 16.0% had achieved post-graduate qualifications. This array of demographic characteristics ascertains the study's incorporation of participants from different age groups and educational levels, helping to form a thorough synopsis of the issues encountered by Sri Lanka's female entrepreneurs in the aftermath of the COVID-19 crisis.

4.2 Challenges Prior to Covid-19

Digital Marketing and Technology: Entrepreneurs often encounter difficulties in harnessing the power of digital marketing and technology to fuel their business growth. This challenge stems from the rapidly evolving digital landscape. Keeping up with the latest trends, tools, and platforms can be daunting. Businesses need to adapt to new technologies and marketing strategies to stay competitive. It involves understanding search engine optimization (SEO), social media marketing, email marketing, content creation, and data analytics. Failure to effectively leverage digital marketing and

technology can result in missed opportunities for reaching a wider audience and maximizing sales.

Supply Chain Disruptions: Supply chain disruptions have become increasingly common, especially in the wake of global events like the COVID-19 pandemic. These disruptions impact businesses involved in the sourcing and distribution of products, such as those in the gifting and event management industries. Import and transportation restrictions can make it challenging to access quality gift items and essential supplies. These disruptions not only affect inventory management but can also lead to delays in fulfilling customer orders, customer dissatisfaction, and revenue loss.

Factory Closures: Specialized niche businesses, like those producing customized baby wear, can face significant challenges when factories that produce their goods are forced to close. Factory closures and supply chain interruptions disrupt production schedules and can lead to delays in product delivery. This can harm a business's reputation, lead to increased costs, and result in missed sales opportunities.

Financial Support: Access to financial support is a constant challenge for entrepreneurs, both before and during the pandemic. Securing funding and financing options are crucial for business sustainability and growth. Many entrepreneurs rely on loans, investments, or grants to expand their operations, invest in technology, and weather economic downturns. A lack of financial support can hinder business development and innovation, limiting an entrepreneur's ability to seize market opportunities.

Gender Biases: Gender biases persist as a pervasive challenge in the entrepreneurial ecosystem, particularly affecting women entrepreneurs. These biases can hinder women's access to opportunities, resources, and support. Women may face discrimination in securing funding, gaining access to networks, and overcoming stereotypes about their abilities as business leaders. Addressing gender biases is essential for achieving a more equitable and inclusive entrepreneurial landscape.

Work-Life Integration: Balancing work responsibilities with personal commitments is a common challenge for entrepreneurs. The demands of running a business often spill over into personal life, making it difficult to maintain a healthy work-life balance. This

challenge can lead to burnout, strained relationships, and decreased overall well-being. Entrepreneurs strive to find effective strategies to integrate their professional and personal lives while ensuring they have time for self-care and family.

Access to Training: Limited access to training and skill development programs can hinder entrepreneurs' ability to enhance their business knowledge and management skills. In a rapidly changing business environment, ongoing education is essential for staying competitive. Entrepreneurs need access to training in areas such as marketing, finance, leadership, and technology adoption. The lack of such opportunities can limit their capacity for innovation and growth.

Prior to the outbreak of Covid-19, female entrepreneurs in Sri Lanka were battling a number of obstructions that framed their business milieu. Capitalizing on technology and digital marketing in order to sustain growth was a struggle, emphasizing the need for adaptation in the online world. Importation and shipping limitations disrupted supply chains, adversely affecting the ability to locate quality gift items and organize events. Those engaged in specialized services, such as those in customized baby garments, went through adverse experiences due to factory shutdowns and impediments in the supply chain. Having access to financial assistance yet persisted as an ever-lasting quandary, whereas gender prejudices proceeded to hinder possibilities and resources. In addition, work-life balance and a shortage of training opportunities created difficult obstacles for female entrepreneurs attempting to make a success of their endeavors.

4.3 Impact of Covid-19 on Businesses

Developing Stage Businesses: Businesses in their developmental phases faced substantial challenges during the pandemic. Lockdowns and restrictions disrupted their operations, causing significant interruptions in their growth trajectories. Uncertainty loomed large, and many of these businesses struggled to stabilize after months of operational halts. The pandemic essentially halted their progress, leaving them grappling with stagnation. This period tested their ability to adapt and innovate to survive in the face of unforeseen adversity.

Transitioning and Established Businesses: Transitioning and established businesses demonstrated varying levels of resilience during the pandemic. Well-established

ventures, particularly those following service-based models, showcased a degree of adaptability, although they were not completely immune to the pandemic's impacts. They were forced to re-evaluate their strategies and operations to cope with the changing business landscape. Smaller businesses, often owned and led by women entrepreneurs, faced a different set of challenges. They encountered reduced orders and struggled with formulating clear strategies to navigate the crisis. To counter the new challenges, many established entities adopted innovative strategies such as remote work to ensure business continuity.

Businesses Initiated During the Pandemic: Entrepreneurs who took the bold step of launching their ventures during the pandemic adopted a different approach. Despite the uncertainties surrounding the business environment, they capitalized on the growing prevalence of online platforms and digital trends for marketing and reaching customers. Their ability to swiftly adapt to the digital landscape allowed them to establish a foothold in the market even during the crisis.

Resilience, Adaptability, and Innovative Strategies: The COVID-19 pandemic underscored the critical importance of resilience, adaptability, and innovation for Sri Lankan women entrepreneurs. Businesses that exemplified these qualities were better equipped to navigate the challenges brought about by the pandemic. Resilience became a cornerstone for businesses to weather the storm, allowing them to bounce back from setbacks. Adaptability emerged as a pivotal skill, as the business landscape continued to evolve rapidly. Entrepreneurs who remained flexible and responsive to changing circumstances were better positioned for success.

Innovation played a crucial role in the survival and growth of businesses during this challenging period. Entrepreneurs who embraced innovative strategies, whether by pivoting their business models, adopting digital solutions, or exploring new markets, were able to not only survive but also thrive amidst uncertainty.

The consequences of Covid-19 on the female economy in Sri Lanka were heterogeneous, commensurate with their levels of commercial implementation and approaches. Start-ups experienced hefty obstruction, as lockdowns brought about cooperation holds and ensuing restructuring endeavors. Transitional and settled firms displayed various robustness, with operationally sound structures enduring better,

although not fully immune. Minor enterprises struggled as a consequence of diminished orders and dubious tactics. Entrepreneurs who commenced throughout the pandemic capitalized on virtual platforms. Ultimately, the global health crisis accentuated the importance of pliability, versatility, and invention. Businesses embodying these qualities fared superiorly, being cognizant of the need to remain adaptable and responsive to pandemic-associated tensions, ultimately contributing to gain in a transforming enterprise terrain.

4.4 Challenges During and Post Covid-19

Empowerment and Progress: The journey towards women's empowerment often encounters several obstacles within their communities. These obstacles necessitate a greater level of support and mentorship to overcome. Empowerment initiatives may face resistance or skepticism from various segments of society, making it crucial to establish robust support systems to uplift and guide women in their pursuit of personal and professional growth. Mentorship programs can provide valuable guidance and encouragement, helping women navigate these challenges and gain the confidence and skills needed to break down barriers.

Support Networks: Accessing support networks, such as women's chambers of commerce or professional associations, can be challenging for women who are juggling family responsibilities. The responsibilities of managing a family, including childcare and household duties, can hinder their ability to engage actively in these networks. It becomes vital to address these hindrances by creating flexible and family-friendly support systems that enable women to participate fully in professional and business communities. This may include providing childcare facilities or offering virtual networking opportunities to accommodate busy schedules.

Cultural Barriers: Cultural norms often play a significant role in restricting women's engagement in independent business activities. In some societies, traditional gender roles and expectations limit women's autonomy and opportunities. Additionally, gender-based violence can pose a significant threat to women entrepreneurs, hindering their business growth and personal safety. Addressing these cultural barriers requires a multi-faceted approach, including education and awareness campaigns to challenge

stereotypes, legal protections against gender-based violence, and initiatives that promote gender equality in both public and private spheres.

Access to Finance: Gender bias within financial institutions can make it difficult for women entrepreneurs to secure the necessary financing for their businesses. This bias is often compounded by collateral requirements that may be challenging for women to meet. To address this issue, financial institutions must adopt more inclusive lending practices and provide targeted financial products and services designed to support women-owned businesses. This can involve offering microloans, reducing collateral requirements, and providing financial literacy programs.

Marketing Challenges: Budget cuts, particularly during challenging economic times, can severely impact public relations and marketing services for businesses. When resources are limited, businesses must find creative ways to convince potential investors or customers to engage with them. This may involve leveraging digital marketing strategies, content creation, and social media engagement to reach a broader audience with limited resources.

Shift in Consumer Preferences: The post-pandemic era has witnessed shifts in consumer preferences, challenging businesses that focus on sustainable or handmade products. To adapt, businesses may need to reassess their product offerings and marketing strategies to align with changing consumer demands. This might involve diversifying product lines, emphasizing convenience, or highlighting the sustainability aspects of their products in a more compelling manner.

Supply Chain Disruptions: Disrupted supply chains, caused by factors such as restrictions and lockdowns, have led to production delays and increased costs. Businesses need to develop resilient supply chain strategies that can withstand disruptions. This may include diversifying suppliers, investing in local sourcing, and adopting digital tools to monitor and manage supply chain operations more effectively.

Economic Downturn: The economic downturn can significantly affect consumer spending habits, leading businesses to adjust their strategies to cater to more budget-conscious clients. This could involve offering discounts, creating value-added bundles, or exploring cost-effective ways to maintain product or service quality.

Worker Availability: Migrated workers and movement restrictions can create challenges related to workforce availability. Businesses may need to invest in training and upskilling programs to ensure that their employees have the necessary skills to meet production demands. Additionally, exploring remote work arrangements or flexible scheduling can help mitigate workforce disruptions.

Client Satisfaction: Budget constraints may necessitate a delicate balance between providing high-quality service and managing costs. Maintaining client satisfaction becomes paramount, and businesses may need to enhance their efficiency and customer service while finding innovative ways to cut expenses without compromising quality.

Digital Transformation: The shift from in-person interactions to virtual methods, including online meetings and digital marketing, has become essential in the modern business landscape. Adapting to these changes can be challenging, requiring businesses to invest in technology, train their employees in digital skills, and create engaging online experiences for customers.

Lack of Access to Material: Restrictions and high prices for materials can pose significant hurdles for entrepreneurs. Finding alternative suppliers, negotiating better pricing, and exploring sustainable sourcing options can help businesses overcome these challenges and ensure a consistent supply of materials.

Global Economic Crisis: The global economic crisis has reshaped client spending habits, affecting product and service demand. Businesses must remain agile and responsive to these shifts, potentially diversifying their offerings or exploring new markets to sustain and grow their businesses during challenging economic times.

Women entrepreneurs in Sri Lanka encountered a panoply of challenges during and post-Covid-19. These challenges were too often intertwined with community ethics, economic circumstances, and industry-based elements. Challenges included difficulties in growth and development inside communities, hindrances in using assistance networks due to family roles, ethnic walls which limited independent commercial engagement, and predicaments in procuring funding due to gender inequality. Slashed marketing budgets affected public relations and marketing services, while variations in customer tendencies and supply chain interferences added to the

complexities. Financial slumps affected purchaser expenses, demanding businesses' capacity to adjust. The need for revolutionary tactics to manipulate virtual connections and access to supplies further contributed to these multifaceted tribulations.

4.5 Funding and Financing Challenges

Access to Loans and Funding: Entrepreneurs faced post-pandemic challenges accessing loans and financial support due to inflation, high interest rates, and gender disparities, relying on lenders and NGOs for limited assistance while grappling with overlapping efforts and lack of comprehensive aid databases.

Business Closures: Financial constraints during the pandemic resulted in business closures, with family financial backing aiding some ventures in sustaining operations and weathering the economic downturn.

Reinvestment and Management: Entrepreneurs navigated economic uncertainties by reinvesting profits and practicing prudent financial management, yet shifting consumer preferences towards affordability affected business sustainability; absence of local angel investors accentuated funding difficulties.

Recruitment and Job Demand: The pandemic froze recruitment in certain sectors, creating a pool of internship-seeking talent but revealing a gap between market readiness and job availability; supply chain disruptions led to innovative material sourcing strategies.

Adaptation Strategies: Entrepreneurs demonstrated resilience by embracing online platforms, altering business models, and exploring diverse funding options while leveraging family support and personal savings for business continuity in the face of unprecedented challenges.

In the wake of the COVID-19 pandemic, securing funding and financial support for entrepreneurs has become a multifaceted challenge. A myriad of hurdles, including uncontrollable inflation, soaring interest rates, and persisting gender disparities within the financial industry, have combined to impede entrepreneurs' access to essential financing and backing. This confluence of obstacles has compelled many aspiring businessmen and women to seek alternative avenues for financial support, turning to

private financiers and non-governmental organizations (NGOs) when traditional lending institutions proved inaccessible.

The proliferation of entrepreneurial efforts, exacerbated by limited and fragmented data on available resources, has further compounded the difficulties faced by these enterprising individuals in their quest for crucial assistance. Against this backdrop, the looming specter of economic recession has threatened the very existence of businesses, though some have managed to weather the storm through the lifeline of family economic support.

To sustain their entrepreneurial dreams and aspirations, these resilient individuals have employed a range of tactics and strategies. One such strategy involves reinvesting profits back into their businesses, a prudent measure that not only bolsters their financial stability but also fuels growth and resilience. Entrepreneurs have also demonstrated adaptability by morphing their enterprise operations to align with changing market dynamics and consumer preferences.

Additionally, resourceful entrepreneurs have explored alternative avenues for capital infusion, seeking out creative sources of financing to keep their ventures afloat in turbulent economic times. This diversification of capital sources not only mitigates risk but also ensures a more robust financial foundation for their businesses.

In the face of these formidable challenges, the indomitable spirit of entrepreneurship has shone through. Entrepreneurs have embraced the winds of change, harnessing digital mediums to pivot their businesses and reach new markets. Furthermore, the unwavering support of family members has played a pivotal role in providing emotional and financial reinforcement during times of economic adversity.

4.6 Lack of Knowledge and Skills

Lack of Specific Knowledge: Entrepreneurs faced diverse challenges related to the lack of specific knowledge and skills, especially in industries where expertise is crucial, highlighting the importance of gaining such knowledge, even if access to it is limited in their context, like in Sri Lanka.

Seeking Professional Help: Addressing these challenges, individuals sought professional assistance to bridge knowledge gaps, recognizing the acceptability of not

knowing everything and choosing to seek help or delegate tasks beyond their expertise; hiring experts and consultants for tasks like accounting, marketing, and online presence was a common strategy.

Digital Literacy and e-commerce: Entrepreneurs emphasized the necessity of digital literacy and e-commerce knowledge, revealing a lack of these skills among small business owners and highlighting the potential of digital platforms for business growth; they stressed the importance of educating themselves and peers about these opportunities.

Continuous Learning: Gaining practical experience, adapting to new trends and technologies, and viewing learning as an ongoing process were highlighted as essential; pursuing higher education or business management programs was embraced to enhance skills and knowledge.

Gap in Formal Education: The job market exhibited a mixed scenario, with startups encountering both enthusiastic and educated interns, yet observing a significant portion lacking basic skills like CV preparation, underscoring the gap between formal education and practical job readiness.

Cultural and Social Barriers

Cultural and social barriers posed challenges for certain women entrepreneurs; while some interviewees navigated these barriers through background or family support, others faced difficulties in this regard.

Leveraging Networks and Support: Entrepreneurs addressed knowledge gaps by focusing on core competencies and clearly communicating services to clients; leveraging personal networks of friends and supporters for assistance with tasks and challenges was a strategy adopted in some cases.

Entrepreneurial challenges arising from disparities in skills and knowledge encompass a wide array of experiences and situations. In various sectors, particularly those demanding specialized capabilities, the glaring absence of access to essential knowledge has been notably evident, especially within the unique context of Sri Lanka. Consequently, the imperative quest for specialist assistance has emerged as a pivotal

strategy for bridging the profound gaps in knowledge that many aspiring business owners encounter.

One critical area of concern that has come to the forefront is the pressing need for digital proficiency and expertise in the realm of e-commerce. This imperative necessity has been underscored as a means of addressing the inherent deficiencies prevalent among Small and Medium-sized Enterprises (SMEs), with a pronounced focus on harnessing the expansive developmental potential that digital platforms offer.

Moreover, the significance of continuous learning has gained unprecedented prominence in the entrepreneurial landscape. This encompasses a multifaceted approach that includes dedicated efforts towards staying updated with the latest trends, adopting innovative practices, and engaging in tertiary education as a means of bolstering one's knowledge base and skill set.

The labor force has also brought to light a discernible disparity between formal education and the readiness of individuals to embark on the challenging journey of entrepreneurship. The realization that formal education may not always adequately prepare individuals for the dynamic demands of entrepreneurship has prompted a reevaluation of educational strategies and approaches.

Notably, social and cultural barriers have posed significant obstacles for female entrepreneurs, who, nonetheless, have displayed remarkable resilience in surmounting these challenges. They have achieved this by building and relying on supportive communities and by harnessing the personal benefits that come from navigating the entrepreneurial landscape in the face of adversity.

In sum, the entrepreneurial landscape in contexts such as Sri Lanka is marked by a tapestry of challenges stemming from disparities in skills and knowledge. These challenges necessitate multifaceted solutions, ranging from specialized assistance to a renewed emphasis on digital proficiency, continuous learning, and the cultivation of supportive communities, particularly for female entrepreneurs.

4.7 Cultural and Social Barriers

Regional Differences: Participants' experiences regarding cultural and social barriers varied, with cultural differences influencing the role of women in business; traditional

roles and societal expectations restricted participation in some regions, while others exhibited more empowered women pursuing entrepreneurial endeavors.

Patriarchal Challenges: The patriarchal nature of society posed challenges, including unsupportive husbands and women being expected to balance multiple roles; overcoming these barriers involved seeking supportive networks, mentorship, and finding individuals receptive to diverse cultural dynamics.

Role of the Younger Generation: The younger generation's more accepting attitude towards women's entrepreneurship contributed to shifting societal norms positively, influencing a more inclusive perspective on women's participation in business.

Negative Perceptions and Gossip: While some participants personally didn't face barriers, they recognized persistent challenges in Sri Lanka, including negative perceptions and gossip that hindered progress and demotivated women entrepreneurs; societal understanding of social media's impact on mental well-being needed improvement.

Defying Societal Norms: Women entrepreneurs defying norms have inspired positive change; examples include a plus-size clothing brand founder challenging beauty standards and those promoting strong mindsets and inclusivity, showing determination leads to business success despite cultural and social obstacles.

Participants reported a slew of experiences involving cultural and social hindrances, mirroring various backdrops. Geographical modifications shaped female's business parts, with empowered women appearing in some regions, and access restricted due to national standards in others. Patriarchal models amplified the complexity, as women coped with no helpful husbands and had to handle multiple positions. Overpassing these obstacles necessitated participation in allied webs and guidance, with the younger cohort spurring progressive transformation. In spite of progress, quandaries endured in certain Sri Lankan areas, including unfavorable outlooks and the mental health-related repercussions of social media. Motivating stories divulged resilience surpassing cultural and social impediments, culminating in non-discriminatory commerce perspectives.

5. Discussion

This research aimed to explore significant challenges experienced by women entrepreneurs in Sri Lanka Post Covid 19 context, including their perceived strategies used. The Covid 19 pandemic has impacted every economic system all over the world and badly affected businesses and entrepreneurs in all sectors. Women entrepreneurs are one of the sectors that were unexpectedly hit hard by the Covid 19 pandemic and faced significant challenges in continuing their businesses and adapting to the new normal. Women entrepreneurs contribute a major role to the Sri Lankan economy and one of the sectors that strongly helps the economic development as well.

Six themes were developed in relation to women entrepreneurs' perceived barriers. Challenges prior to Covid was the first theme, second theme was impact of Covid 19 on businesses. Third theme was challenges during and post Covid 19, fourth theme was funding and financial challenges, fifth theme was lack of knowledge and skills and last theme was social and cultural barriers. Findings from the current study also highlight how women entrepreneurs faced challenges after Covid 19 and how they overcame those challenges.

Participating individuals hail from various professional backgrounds, and their foray into distinct business spheres reflects a vibrant landscape of entrepreneurship. The spectrum of pursuits encompasses an array of industries, both minority and majority. From the transition of a Program Manager at Asia Foundation who evolved from gift options to event management and personal brand development, to a former Public Relations specialist who initiated her own PR firm focused on marketing communications and entrepreneurship, the entrepreneurial scope is wide-ranging.

6. Conclusion

To conclude, this research illuminates the manifold predicaments confronted by female business owners in Sri Lanka prior to and during the Covid-19 pandemic. Pre-pandemic challenges included impediments with digital marketing, technology incorporation, supply chain disruptions, factory closures, deficient access to finance, gender disparities, difficulty in reconciling work and life, and a scarcity of training openings. These difficulties underscore the necessity of comprehensive systems of assistance and

policy amendments to enhance women's participation and prosperity in entrepreneurship. The impact of the pandemic moreover amplified the strength and flexibility of women entrepreneurs in light of adversity. Companies began during the pandemic evinced agility by utilizing online platforms. Strength, flexibility, and original tactics emerged as essential components for steering the pandemic-related issues. Suggestions for legislator's bolster associations, and stakeholders incorporate objective innovations to tackle particular difficulties. Bolstering digital literacy programs, facilitating access to finance through gender-sensitive regulations, and establishing comprehensive records of aid and support can assist female entrepreneurs in overcoming preexisting and pandemic prompted restrainers. Future research should examine the long-term effects of the pandemic on women-owned companies, evaluating their recuperation tactics and perpetual progression. Investigating the efficacy of particular interventions and policy amendments in alleviating gender disparities and social roadblocks is critical. Additionally, digging into the responsibility of guidance, networks, and family backing in female entrepreneurs' accomplishment can grant beneficial understandings in forming an encouraging environment.

Women entrepreneurs in Sri Lanka showed startling resilience and adaptability while confronting diverse crises. Addressing these troubles necessitates collaborative endeavors from various stakeholders, encouraging inclusive procedures, reinforcing digital abilities, and providing specific support to foster their engagement and victory in the business realm. The learning drawn from these clinches and the tactics employed by women entrepreneurs serve as advantageous insights for constructing a more decent and supportive entrepreneurial milieu in Sri Lanka.

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Gen Z's Attraction to the Gig Economy: A Social Cognitive Career Theory Perspective

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Abstract

The “on-demand economy” concept has evolved significantly; over the past decade, the ‘gig economy’ has risen from obscurity to become synonymous with the contemporary digitalized labour market. This category includes occupations as varied as interpreters and consultants, IT specialists, artists, and creative workers, and is frequently called the independent professionals category. The rapid growth of the gig economy has meant that there is a need for more research to understand gig economy workers and their motivation for being gig workers. This study aims to examine what motives Gen Z workers’ participation in the gig economy. Social Cognitive Career Theory used to develop the conceptual framework of the study. Knowledge characteristics, social characteristics, task characteristics, and contextual characteristics are included as the determinants. The target population of this study was Gen Z people engaged in or interested in gig work. 450 sample was selected based on a purposive sampling technique using online platforms that are popular amongst Gen Z, such as Instagram and TikTok. Multiple regression analysis was used to test the hypotheses. The findings revealed that all four hypothesized characteristics had a significant impact on Gen Z’s attraction to gig work. Task characteristics ($\beta = 0.263$, $p < 0.001$) were the strongest predictor, followed by contextual characteristics ($\beta = 0.218$, $p < 0.001$), social characteristics ($\beta = 0.350$, $p < 0.001$), and knowledge characteristics ($\beta = 0.123$, $p = 0.018$). Under the current circumstances where many individuals face unemployment, gig economy becomes a quick alternative for Gen Z people who have dependents to be taken care of. The study proposes a comprehensive framework illustrating the interplay of task, knowledge, social, and regulatory forces affecting Gen

Z's attraction to gig work in order to foster a more equitable gig economy. Future research should conduct longitudinal studies along with qualitative approaches to understand nuanced experiences and experiences across cultures to inform cross-cultural comparisons and studies.

Keywords: *Contextual characteristics; Generation Z; Gig economy; Knowledge characteristics; Social characteristics; Task characteristics*

1. Introduction

Technological advancements such as the advent of smartphones and widespread mobile internet access catalyzed a shift toward a dynamic economic model characterized by immediate service fulfillment and flexible employment arrangements. The concepts “gig economy “platform economy”, or “on-demand economy” have evolved significantly (Pilatti et al., 2024). A “gig” refers to a job with no long-term connection to a particular business (Nasir et al., 2024). Gig or on-demand work involves project-based or short-term employment arranged through online platforms. Many organizations increasingly rely on the gig economy for higher business performance and gains in competitive advantage. As such, remote platform work does not require physical proximity between workers and customers (Martindale et al., 2024).

Unemployment in the traditional labour market naturally has a significant effect on the supply of labour in online markets and push the unemployed and underemployed individuals to search a new form of employment. Gig economy paradigm leverages temporary, flexible jobs often facilitated by digital platforms. An annual survey conducted in the USA, UK and Australia indicate that approximately one-third of their workforce participates in the gig economy; skilled professionals who work independently use online platforms to find clients and adult population have earned income from gig labour platforms (Nasir et al., 2024). Currently gig economy exists in virtually every industry and include writers, graphic designers, app and web developers, accountants, legal experts, translators, and more (Larsson, 2020; Pilatti et al., 2024). The trend is likely to continue and spread (Ovretveit, 2020).

Although the gig economy is an innovative approach to youth unemployment, gig workers cannot benefit from the kind of stability that people expect from employment.

Because of their demand-based income, most are generally inconsistent and many gig workers suffer unsafe working conditions without a safety web of protective legislation (Aslam, 2020; Taylor, 2017). Gig workers also suffered an inadequate social protection and possibly without future savings (Galière, 2020). Gig employees faced financial uncertainty because of their irregular earnings because a lack of social protection makes them potentially vulnerable to future savings (Aslam, 2020).

Basically, it is important to understand satisfaction and motivation on workers so the management and relevant authority can provide required support as needed (Nelson et al., 2020). Thus, this study aims to investigate the degree to which a broad range of factors influence the Gen Z workers' participation in the gig economy in Sri Lanka. The study seeks to present a framework through the lens of social cognitive career theory. Three key segments of the gig economy (delivery, ride hail and digital) that span local and remote types of platform work were considered in this study.

2. Literature Review

2.1 Gig economy

The gig economy refers to a labour market characterized by short-term contracts, temporary positions, and freelance work, as opposed to permanent, full-time employment (Christie & Ward, 2019). This economic model has been facilitated by the rise of digital platforms that connect workers with customers for various services, including ridesharing, delivery, and online freelance work. While definitions vary, the gig economy is marked by high worker flexibility and autonomy and potentially greater job insecurity than traditional employment (Christie & Ward, 2019). McFeely and Pendell (2018) posit the existence of two types of “gig” economy jobs: independent workers and contingent workers. Independent workers are their own boss; include people such as online platform workers and independent contractors. Contingent workers, on the other hand, provide a cautionary tale for all those who are suspicious of the gig economy.

While we know that Gen Z are digital natives who have grown up with smartphones, social media, and on-demand services (Weligodapola et al., 2023), it is an open question whether these generation look more like gig workers. As Gen Z enters the workforce,

they bring unique perspectives and expectations that may differ from previous generations. They value diversity, prioritize work-life balance, and seek personal and professional growth opportunities. When applied to the workplace, generation theory predicts that different generations will prefer varying work styles, motivations and expectations (Leighton & McKeown, 2015). Thus, it is worth to investigate how Gen Z's distinct generational experiences shape their perceptions and engagement with the gig economy.

2.2 Social Cognitive Career Theory

According to Social Cognitive Career Theory (SCCT), self-efficacy beliefs, outcome expectations, and personal goals are significant determinants of career choice behaviour and development (Lent et al., 1994). It appreciates the impact of the personal roles attributable to contextual supports and barriers. Successfully entering the gig economy will depend on Generation Z's self-efficacy, and Generation Z's high digital literacy and comfort with technology may help them succeed. Much of the gig economy is mediated via online platforms and tools. Inside, robotsier thinking also has the potential for positive outcome expectations regarding the benefits of gig work, such as being one's boss or being locational flexible (Dangmei & Singh, 2016).

SCCT also proposes that enhancing Gen Z's self-efficacy and coping skills for navigating the challenges of gig work, providing support and reducing barriers, and promoting positive and realistic outcome expectations will facilitate their career success in this domain (Lent et al., 2002). Nonetheless, individual differences in goals, backgrounds and circumstances also need to be considered. While gig work's flexibility, autonomy, and transactional nature may align with some of Gen Z's values and expectations, insecurity, isolation, and lack of support may also pose risks to their well-being and development. Understanding these nuances can inform strategies for optimising gig work design for this cohort.

Thus, the study focused on the factors related to the nature of work tasks, the knowledge and skills required, the social context of work, and the broader environmental and technological landscape as the key drivers of Gen Z's engagement with the gig economy. These factors therefore organised into four key categories: task, knowledge, social, and contextual characteristics.

2.3 Determinants of gig economy participation

Digital platform familiarity appears to positively predict gig economy participation for Gen Z. A survey of U.S. Gen Z workers found that those who frequently used online platforms for social media, entertainment, and shopping were likelier to have engaged in gig work. For this cohort, this is evidence that technological savvy and gig economy appeal go hand in hand (Nelson et al., 2020).

For Gen Z, financial necessity seems to be perhaps a more powerful driver of gig work than any other generation. According to a study, Gen Z gig workers were also more likely than Millennial and Gen X gig workers to identify paying for basic expenses and saving for the future as among the top reasons they sought gig work (Gomes et al., 2023). This implies that economic insecurity is a main push factor for Gen Z to enter the gig economy (Christie & Ward, 2019).

As it turns out, Gen Z is much more interested in entrepreneurship, which bodes well for a more positive outlook on the gig economy. A survey of U.S. college students found that those who want to start a business or be self-employed had more positive views of the gig economy as a career path (Allon et al., 2023).

With regard to the task characteristics, gig work is enabled by completing remote work, and the produced work products can be submitted electronically (Johns & Gratton, 2013). For workers, task autonomy and variety are often cited as appeals of gig work compared to traditional jobs. Some gig work is micro-task heavy and can be as simple as repetitive, while others may require specialised skills.

The knowledge and skills required for gig work span a broad spectrum. Online talent platforms have revolutionised the gig economy, making it easier for organisations to access workers with niche expertise as needed. The algorithmic matching of workers to tasks based on skills and reputation scores enhances efficiency, providing a convenient and effective way to find the right talent for the job (Johns & Gratton, 2013). At the same time, the short-term, project-based nature of gig work enables knowledge workers to gain exposure to a diversity of challenges and continuously develop their skills across multiple organizations. Learning quickly, picking up new skills, and adapting to different work contexts is essential for success in the gig economy (Gomes et al., 2023).

The social context of gig work is characterized by dynamic, loosely coupled networks rather than stable organizational hierarchies and teams. Gig workers are more likely to be physically dispersed and have limited face-to-face interaction with clients and coworkers. Relationships tend to be transactional and project-specific rather than long-term (Leighton & McKeown, 2015). At the same time, online platforms are creating new opportunities for gig workers to connect, collaborate and share knowledge. The social features of these platforms, such as forums, chat functions and virtual teams, can foster a sense of community (Malone et al., 2012). Reputation systems and performance ratings introduce an element of social capital. High-performing gig workers can cultivate a personal brand and following.

Several contextual factors have created a conducive environment for the gig economy's growth. Advances in digital technologies and connectivity are a key driver, enabling work to be dissected, distributed and delivered online (Johns & Gratton, 2013). Economic conditions and labour market trends have also played a role. More broadly, the shifting power dynamics between employers and workers, erosion of job security, and decline of traditional employment benefits have normalized non-standard work arrangements (Dangmei & Singh, 2016).

As Allon et al. (2023) opined there is a need for more studies exploring how gig platforms can align with Gen Z's preferences and understanding of Gen Z's engagement with the gig economy and inform strategies for optimizing gig work design and support systems for this cohort. Thus, this study aims to examine what motives Gen Z workers' participation in the gig economy utilizing the social cognitive career theory

3. Methodology

The study adopted a positivist philosophy of having objective knowledge, which assumes systematic observation and measurement of the object. That aligned to identify generalizable factors that affect Gen Z's engagement within the gig economy. From a positivist stance hypotheses were developed and tested about the relationships between key variables. Because this philosophical approach fits so well with the study's goal of measuring quantifiable relations between work characteristics and the gig economy's popularity for Gen Z, positivism focuses on empirical evidence and statistical analysis.

Acknowledging the aforementioned literature, the study used four dimensions in independent variable namely knowledge characteristics, social characteristics, task characteristics, and contextual characteristics, and the dependent variable as engagement of the gig economy. intention to adopt crowdfunding. The measurement items of the selected variables were based on established scales from the literature. Table 1 shows the measurement items of each of the variables.

Accordingly, the study postulates the following hypotheses: -

H1: Task characteristics of gig work positively influence on engagement of the gig economy among Gen Z.

H2: Knowledge characteristics of gig work positively influence on engagement of the gig economy among Gen Z.

H3: Social characteristics of gig work positively influence on engagement of the gig economy among Gen Z.

H4: Contextual characteristics of gig work positively influence on engagement of the gig economy among Gen Z.

The measurement items of the selected variables were based on established scales from the literature. Table 1 shows the measurement items of each of the variables.

Table 1: Measurement Items

Variables	Dimensions	Measurement Items	Source
Task characteristics	Diversity of work activities Impact on others Completion of projects from start to finish	1. Gig work allows me to complete different tasks in the selected subject. 2. The gig tasks I perform have an impact on others. 3. I can see the positive results of my work in gig assignments.	Morgeson & Humphrey (2006)

Variables	Dimensions	Measurement Items	Source
		4. I have the freedom to decide how to complete my gig work tasks. 5. Gig work provides me with clear feedback on my performance.	
Knowledge characteristics	Use of diverse skills Application of specialized knowledge Requirement for creative problem-solving	1. Gig work allows me to use my specialized skills and knowledge. 2. I often learn new things while completing gig assignments. 3. Gig work requires me to be creative in solving problems. 4. I can apply a wide range of skills in my gig work. 5. Gig assignments often challenge me to expand my knowledge.	Colbert et al. (2016)
Social characteristics	- Support from other gig workers - Interaction with clients/customers - Feedback on performance from others	1. Gig work allows me to interact with a diverse group of people. 2. I feel part of a community through my gig work. 3. I receive support from other gig workers when needed. 4. Gig platforms provide opportunities for meaningful social connections. 5. I can collaborate with others on gig projects when I choose to.	Malone et al. (2012)

Variables	Dimensions	Measurement Items	Source
Contextual characteristics	Flexibility of work environment Comfort of work setup Physical requirements of tasks	1. Gig work allows me to work in a variety of physical settings. 2. I have control over my work environment in gig assignments. 3. Gig work provides me with a good work-life balance. 4. The technology used in gig work is up-to-date and efficient. 5. Gig work allows me to avoid traditional office politics and hierarchies.	Leighton & McKeown (2015)
Engagement of gig economy	Perceived appeal of gig work Likelihood of participation Preference over traditional employment	1. I find gig work to be an attractive employment option for my career. 2. I am likely to engage in gig work opportunities in the near future. 3. The gig economy aligns well with my work preferences and lifestyle. 4. I would recommend gig work to other members of my generation. 5. Gig work platforms are my preferred method for finding employment opportunities.	(Leighton & McKeown, 2015).

The scope of this study includes the Gen Z (18-25 yrs) people engaged in or interested in gig work. When the traits that samples are anticipated to have are uncommon and difficult to find, a non-probability (non-random) sampling approach known as purposive sampling is used. Targeted recruitment of individuals for whom they could provide appropriate insights into the research questions was enabled by this approach. Primarily, online platforms that are popular amongst Gen Z, such as Instagram and TikTok, were used as the first points of contact. These platforms were chosen for this platform because the target demographic has high usage rates for them and can reach a variety of Gen Z'ers regardless of geography and or background.

In a population greater than 1,000,000 with a 5% margin of error, Krejcie and Morgan (1970) showed a sample size of 384 participants at a 95% confidence level. To account for non-response or invalid data, which is typical of survey research and especially common with online distribution methods, the target sample size was increased to 450. Thus, the oversampling strategy was designed so that even if some attritions were to occur, the final sample would meet or exceed the desire of 384 participants.

The cross-sectional online survey method was chosen to collect data from the desired sample. A structure questionnaire was constructed, including a total of 35 items to collect primary data from the desired sample. The items were measured by five-point Likert scale type questions with strongly disagree and strongly agree as end points.

In quantitative approach, data analysis consists of three steps: measuring the sample profile, testing the goodness of the data, and testing the hypotheses. The sample profile is measured using frequency analysis. The measurement items' reliability and validity were tested to ensure the measurement goodness. Factor analysis, construct reliability, average variance extraction, Cronbach's alpha values, and discriminant validity were all tested. Multiple regression analysis is used to test the hypotheses.

4. Results and Discussion

Sample Profile

The study gathered data about respondents' characteristics such as gender, age, level of education, and business characteristics. Out of 384 respondents, 384 257 were male and 127, female. The majority of respondents (78%) were between 24-25 years old, with

the remaining 22% falling in the 21-23 age range. This distribution suggests that the sample primarily represents the older segment of Gen Z, who are likely to have more work experience and may be more actively engaged in or considering gig work. The sample was evenly split between urban (52%) and rural (48%) locations. This balanced distribution allows for comparing gig economy perceptions across different geographical contexts. With regard to the education level of respondents, overwhelming majority (96%) of participants held a bachelor's degree, with only small percentages having A/L qualifications (3%) or diplomas (1%). This high level of education among respondents may influence their perceptions and engagement with gig work, potentially viewing it as a means to leverage their educational background in flexible work arrangements. As the current employment status, largest group consisted of full-time employees (52%), followed self-employed/freelancers (14%) and part-time employees (13%). Finally, respondents' experience levels with gig work indicates that 47% had 6 months to 1 year, 19% had 1-2 years, and 12% had more than 2 years of experience.

Goodness of Measurements

To reduce the data and purify the items under each study variable, a factor analysis was used. The Kaiser-Meyer-Olkin (KMO) sample adequacy measure was used. According to Hair et al. (2010), a KMO value of 0.60 or higher indicates a good factor analysis. Table 2 shows that the KMO value of the measurement items was greater than 0.50 and that the Bartlett's test of sphericity showed a significant level ($p < 0.001$), indicating the appropriateness of factor analysis. The reliability of each variable was assessed using Fornell and Larcker's (1981) measure of composite reliability (CR) and Cronbach alpha, as shown in Table 2. The CR and Cronbach's alpha values for each construct were above 0.70, which falls within the acceptable reliability range (Hair et al., 2010). Convergent validity of the constructs was assessed by examining the average variance extracted (AVE). The results presented in Table 2 further shows that AVE values exceed the respective threshold values (above 0.50) ensuring the convergent validity.

The discriminant validity was ensured as the square root values of all AVEs exceed the correlation values of the respective constructs (Fornell and Larcker, 1981) (Table 3).

The values of the square root of the AVE are as given in italic along the diagonals in Table 3.

Table 2: Assessment of adequacy of measurement

Variable	No. of Items	KMO measure	Bartlett's test of sphericity	AVE	Cronbach's alpha
Task characteristics	5	0.843	1144.54	0.584	.899
Knowledge characteristics	5			0.583	.888
Social characteristics	5			0.581	.899
Contextual characteristics	5			0.597	.891
Engagement of gig economy	5			0.513	.785

Source: Survey data, 2025

Table 3: Discriminant validity

Variable	Mean	Std. deviation	TC	KC	SC	CC	EGE
Task characteristics	3.5245	1.05614	<i>0.764</i>				
TC							
Knowledge characteristics	3.5797	.95590	.721**	<i>0.763</i>			
KC							
Social characteristics	3.6281	.98746	.601**	0.618**	<i>0.762</i>		
SC							

Contextual characteristics CC	3.5745	.96198	.604**	.646**	0.631**	0.772
Engagement of gig economy EGE	3.7073	.82630	.652**	0.611**	.663**	0.716

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

Source: Survey data, 2025

All correlations were positive and statistically significant at the 0.01 level. The strongest correlation was observed between Social Characteristics (SC) and Engagement of gig economy (EGE) ($r = 0.663$), followed closely by Task Characteristics (TC) and EGE ($r = 0.652$). Knowledge Characteristics (KC) and Contextual Characteristics (CC) also showed strong correlations with EGE ($r = 0.611$ and $r = 0.584$, respectively). The strong correlations between all independent variables and the dependent variable provide initial support for the hypothesised relationships.

Multiple Regression analysis

Multiple regression analysis was conducted to examine hypothesized relationships between the independent variables and dependent variable. The regression analysis results are presented in Table 4.

Table 4: Regression analysis results

R	R Square	Adjusted R Square	Std. Error of the Estimate	Dur bin-Watson	F Sig.
.891^a	.794	.792	.37711	1.892	364.951
			1	2	0.000 ^b

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1 (Constant)	.873	.078		11.169	.635		
Task characteristics	.205	.036	.263	5.648	.000	.252	3.975
Knowledge characteristics	.106	.045	.123	2.374	.018	.202	4.946
Social characteristics	.293	.045	.350	6.500	.000	.188	5.320
Contextual characteristics	.187	.041	.218	4.601	.000	.243	4.114

a. Predictors: (Constant), knowledge characteristics, social characteristics, task characteristics, and contextual characteristics,

b. Dependent Variable: Engagement of gig economy

Source: Survey data, 2025

According to the model summary, the independent factors account for 79.4% of the variance in the engagement of gig economy ($R^2 = 0.794$, Adjusted $R^2 = 0.792$). The model's high R-squared value indicates strong explanatory power. The ANOVA results confirm that the regression model is statistically significant ($F = 364.95$, $p < 0.001$). The coefficients values provide insights into the individual contributions of each

independent variable. All four predictors show statistically significant positive relationships to engagement of gig economy ($p < 0.001$). Social Characteristics had the most substantial impact ($\beta = 0.350$), followed by Task Characteristics ($\beta = 0.263$), Contextual Characteristics ($\beta = 0.218$), and Knowledge Characteristics ($\beta = 0.123$). In sum, all four hypotheses proposed in this study are supported based on the regression analysis results.

The findings of this study provide valuable insights into the factors driving Gen Z's engagement with the gig economy. All four hypothesised relationships were supported, indicating that task, knowledge, social, and contextual characteristics all significantly shaped Gen Z's perceptions and attraction to gig work.

Social characteristics emerged as the strongest predictor of gig economy popularity among Gen Z. That means the chance for networking, collaboration and creating a professional community is especially attractive to this generation. A possibility is that the gig economy's ability to facilitate diverse social interactions and connections will mark the attractiveness that Gen Z workers are looking for.

The second strongest predictor was Task characteristics which pointed to the high importance of work variety, autonomy, and defined project borders in gig work. While previous research indicated that Gen Z places a high value on the ability to engage in a wide variety of tasks and to see the direct result of their work handling, this study found that they similarly favor opportunities for managers to bring out the best in their employees.

The gig economy was also popular because of its contextual characteristics such as work location and flexibility in work hours. The imbalance in Gen Z's desired work and life balance, demonstrated by having to integrate work in their lives, is something that this conforms with. The variation with knowledge characteristics had very little influence. But this might imply that, despite Gen Z's preference for access to skill deployment and enhancement in gig work, other things like social connections and work flexibility are the real drivers of Gen Z's participation in the gig economy.

The findings of this research have several important implications for both practice and academia. From a practical standpoint, organizations and platforms operating in the gig

economy can use these insights to tailor their offerings to attract and retain Gen Z talent. The strong influence of social characteristics suggests that platforms should priorities building community features, facilitate networking opportunities, and foster a sense of belonging among gig workers. For example, implementing virtual co-working spaces, mentorship programs, or collaborative project opportunities could enhance the social aspects of gig work.

The significance of task characteristics indicates the importance of offering diverse, meaningful projects with clear deliverables. Gig platforms could consider implementing project variety algorithms that ensure workers are exposed to various tasks or develop more apparent project scoping tools to enhance task identity and significance.

The moderate impact of contextual characteristics underscores the need for continued emphasis on flexibility in work arrangements. Platforms could explore innovative ways to offer even greater flexibility, such as implementing AI-driven scheduling tools that optimize worker preferences while meeting client needs. While knowledge characteristics had the slightest impact, they remain significant. Gig platforms could differentiate themselves by offering targeted skill development programs, perhaps in partnership with educational institutions or industry experts, to address Gen Z's desire for continuous learning. From an academic perspective, this research contributes to the growing body of literature on Gen Z work preferences and the evolution of the gig economy. The findings extend existing theories about work design and generational differences in the context of non-traditional employment arrangements. The strong influence of social characteristics, in particular, suggests a need for further research into how social connections and community building can be effectively fostered in distributed work environments.

5. Conclusion

Results from this study revealed that the gig economy did not appeal solely to Gen Z through specific characteristics but rather that a mixture of social and task attributes is necessary for enticement. The results show that to maximize opportunities for engagement with gig work, we must build platforms and present opportunities that cater to Gen Z's preferences for social connection, work variety, and flexibility.

Understanding and meeting these will be game changers for organisations trying to attract and keep Gen Z talent as the gig economy grows.

It also helps illustrate how technological advancements, shifts in work preferences, and the economics of our world are reshaping the work of the future. As Gen Z continues to grow and more members join the workforce, their preferences and values will continue to influence changes in work design and employment relationships.

Based on the findings, several recommendations can be made for gig economy platforms and organisations engaging with Gen Z workers. First, build social features that will enable networking and community building. These would include virtual coworking spaces, peer mentoring programs, and collaborative project opportunities. They provide variety and precise outcomes for design tasks. To keep workers interested and develop their skills, you can practice project rotation systems or make it easy for people to switch among their various tasks. Establish flexible work arrangements to support work and life in equilibrium. This could involve anything from AI-driven scheduling tools that optimize workers' preferences while meeting client needs. Partner with educational institutions or industry experts to provide targeted training programs or micro-credentials, creating opportunities for skill development and knowledge application. To adapt to Gen Z's demand for transparency, improve transparency in project scoping and pay compensation. Start creating extensive well-being programs designed for the particular needs of gig work, like monetary planning help and mental health assets.

This study is not without its limitations. Due to the cross-sectional nature of the study, it was not possible to examine how perceptions change over time. Longitudinally following Gen Z as they age and transition into careers will offer insight into the long-term sustainability of gig work for this generation. Furthermore, while the focus on quantitative measures may have escaped the nuances underlying Gen Z's experience in gig work, the lack of focus on qualitative measures lost insightful information about these experiences. Future studies could use mixed- method approaches, that is, in-depth interviews or focus groups, to gain a clearer, contextualized understanding of Gen Z's motivation and experience in the gig economy.

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Technological Adoption and Organizational Performance of SMEs in Sri Lanka

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Abstract

Modernity is rapidly accelerating, causing changes in every single element of the world, starting from individuals, organizations, and then influencing a country as a whole. Today, technological changes have become more frequent than ever. In Sri-Lanka Small and Medium Enterprises (SMEs) are one of the major contributors of employment generation and source of living for the Sri Lankan citizens thus increasing the country's GDP growth. Even if so, the slowness associated with technology adoption among the SMEs, might be one of the prime grounds hindering the optimum organizational performance of SMEs. Therefore, the purpose of this study is to evaluate the level of technological adoption within the SMEs in Sri-Lanka while investigating the impact of technology adoption on the overall organizational performance of SMEs. The author has followed a qualitative research approach to investigate deeply on the subject matter. The study was conducted by interviewing 06 SME owners and managers in Western, North-western and Sabaragamuwa provinces, Sri-Lanka. The purposive sampling technique was followed in selecting the respondents, where the author's inclusive criteria were to select the SMEs that have already adopted technology for at least two years. In order to generate solutions for the study a thematic analysis was followed where 05 major themes were generated as: theme 01-Decision for adoption, theme 02- technology adoption process, theme 03- Level of technology adoption, theme 04- Impact on organizational performance and theme 05- Improving technology adoption. The findings obtained through the analysis point out that the level of technology adoption in SMEs depend on the functions performed by and relevant to that particular organization and they involve in step-by-step implementation of technology. Moreover, the findings highlight SMEs in Sri-Lanka often adopts the basic

levels of technological applications in their organizations. Further the results of the study conclude that technology adoption has an overall positive impact on the organizational performance of SMEs in Sri-Lanka. The findings of the study will guide SMEs in the technology adoption process as well as help the government in implementing different strategies to uplift technology adoption among the SMEs.

Keywords: *Small and Medium Enterprises (SMEs), Technology Adoption, Organizational Performance, Qualitative research, Sri-Lanka*

1. Introduction

Globalization and rapid changes in the business environment each and every day and minute forces countries, organizations and individuals to adopt new forms and methods of conducting businesses along with the living patterns. In the recent years the technological revolution has become faster than ever influencing the social, conomic and cultural aspects of the world. Especially in terms of the business world the rapid expansion of technological innovations has resulted in forcing organizations to change their methods of performing businesses. According to Peter Drucker (2009) all enterprises represent the main catalyst of economic development. Small businesses contribute intensely in achieving the underlying goals to any national economy. SMEs in Sri-Lanka play a vital role in contributing to the employment generation and GDP of the country while acting as the backbone of the country as stated by the Sri-Lankan government. (Gunawardana, 2016) Hence the growth of SMEs in Sri-Lanka directly impacts on the economic development of the industrialized nations like Sri-Lanka. Technological adoption refers to the process of choosing to acquire and adopt a brand-new transformation. (Straub, 2009) Bringing technological revolution is not just an interest of increasing the profits, but also about the growth of SMEs and creation of employment opportunities. Even though technology keeps on updating and modernizing frequently there is a slowness in technology adoption in Sri-Lanka in terms of both individuals and organizations more specifically SMEs. Quick technological advancement and intensive competition forces companies to look at different ways to set themselves apart from the rest, especially in terms of small and medium enterprises (Ramachandran et al., 2019) Many researchers have already conducted studies on factors influencing technology adoption in Sri-Lanka in terms of

e-commerce, e-marketing, various computer applications, etc. However, the level of technology adoption among the SMEs and its impact on the overall organizational performance is unanswered and only few research has been conducted addressing it. Further the technological adoption process of SMEs in Sri-Lanka is less elaborated and focused in researches which is crucial in delivering a better understanding on technology adoption among SMEs. Thus, the researcher focuses on conveying the research gap found in the previous literature while reaching the major objectives of the research study which is to investigate the level of technological adoption of SMEs in Sri-Lanka and to observe the impact of technological adoption on the overall organizational performance of SMEs in Sri-Lanka through a qualitative research study that will cover up six SMEs belonging to different industries such as food, textile, finance, etc.

The outcome of the study will contribute in supporting the SME owners in implementing technology inside their organizations indicating the steps that are followed by SMEs in technology adoption and how those decisions for implementation were initiated along with the factors that will support and challenge the process of adoption. Further the study highlights the benefits of technology adoption on the SMEs organizational performance, helping the interested parties to identify the generated positive results of technology. Through the findings the government will have a broader overview on the actions that can be initiated to encourage technology adoption within the Sri-Lankan SMEs, so as to improve the economic development of the country.

2. Literature Review

2.1 Defining SMEs

SMEs have been described under various perspectives by different countries, authors and institutions around the globe. Divergent yardsticks are used to define SMEs such as employee number, amount of capital invested, nature of the business and annual turnover. According to the article 2 of the annex of recommendation 2003/361/EC as cited by the European Commission, (2015) SMEs in Europe are organizations that do not employ more than 250 persons and which have an annual turnover not exceeding Euro 50 million and possess an annual balance sheet with a value less than or equal to 43 million. In Sri-Lanka, according to the national policy framework for SME

development prepared by the Ministry of Industries and Commerce, SMEs are defined based on the number of employees and annual turnover as follows: In the manufacturing sector if the number of employees is more than 50 and less than 300 and if the annual turnover is between Rs.251-750 million then those organizations are known as medium scale organizations however if the number of employees is between 1 to 50 and if the annual turnover is less than Rs.250 million those are known as micro and small scale organizations. (Gunawardana, 2016).

2.2 Importance of SMEs organizational performance

Over the past few years, the importance of the organizational performance of SMEs has become an overriding topic throughout different nations across the world emphasizing the value created by them in achieving the overall growth and development of an economy. As indicated in the World Trade Report, 2016 as cited by Bayraktar and Algan, 2019 SMEs represent 95% of businesses in the world while contributing for more than half of the total employment. Abundant journals and research articles have been developed to highlight the importance of performance of small and medium enterprises in different parts of the world immensely. In line with Berry 2007 as noted by (Keskgn et al., 2010) SMEs plays a key role in almost all the economies however their part is on spotlight in developing countries. According to research the MSMEs in India represent 80% of the total number of industries and potentially produce 8000 value added products. (Pawar and Sangvikar, 2019) A research article done on the importance and challenges of SMEs: A case of Pakistani SMEs has emphasized why SMEs are important to their nation by providing several reasons as to such as employment generation, use of local resources, entrepreneurship development, conservation of foreign exchange, capital formation and equal distribution of income. (Arshad, 2020) Nowadays the significance of SMEs is not only limited to the developing countries as a whole but a high concentration is provided on how development can be achieved in rural areas in the developing countries as a promotion of SMEs performance. According to a study conducted from (Manzoor, Wei and Sahito, 2021) it was found that SMEs has the ability to fit in with the rural entrepreneurs' requirements of developing their quality of life.

2.3 Technology Adoption

Technology adoption has obtained an escalating fame in recent years due to high globalization and rapid expansion of innovation. Diffusion of Innovation (DOI) theory which was introduced by Roger in 1960's derives the first definition associated with technology adoption; accordingly it can be termed as the physical acquisition of technological equipment and the implementation of innovation based on the decision to adopt. (Roger 1995 as quoted by Sarosa, 2012) However, Saros 2012 argued that this Roger's definition on technological adoption is not sufficient since it doesn't explain how actually technology is adopted and used. The second definition on technological adoption is obtained from the research of (Thong and Yap, 1995), technological adoption is expressed as use of information technology as a support for the performance of businesses. As stated by Sarosa (2012) the second definition is much more similar to the third definition of technological adoption which states that it is the method of using innovation by an intended user. (Boving & Boker 2003 as cited by Sarosa, 2012) The author of the study will apply the definition of Thong & Yap (1995) where technological adoption refers to the application of technology for business support to conduct the research further.

To identify the level of technological adoption a number of researchers and practitioners have developed theoretical frameworks to assess how organizations and people make decision associated with technological adoption. Given below are some of the theoretical framework that are used for evaluating the technological adoption:

Diffusion of Innovation Theory (DOI): Diffusion of Innovation Theory which was introduced by Roger in 1962 is one of the oldest social science theories. This focuses on the behavioral aspects of technological adoption. Under the DOI model he identified that there are five factors that influence the adoption of technology and innovation such as relative advantage, compatibility, complexity, trialability and observability. (Behavioral Change Models,2019)

Technology-Organization-Environment Framework (TOE): It was pointed out that the process by which an organization adopts and use technology depends on the technological context, organizational context and environmental context. Accordingly, the adoption of technology in the firms are affected by technological, organizational

and environmental factors. Given this situation the framework will continue to provide valuable guidance for the researchers. (Baker, 2012) The TOE framework has a strong theoretical basis, solid empirical support and has been used to study technology adoption of innovations. (Abed, 2020)

Technology Acceptance Model (TAM): In line with Davis, 1989 as quoted by Lee, Hsieh and Hsu, 2011 TAM focuses on the user's attitude and apply the perceived ease of use (PEOU) and perceived usefulness (PU) in understanding the user acceptance in technological innovations. Supplementarily the author has claimed that PEOU and PU as the preliminary factors of behavioral intentions to adopt information and communication technology by the individuals as well as organizations.

2.4 Technology Adoption and Organizational Performance of SMEs

Organizations will be able to make their operations sustainable if they can gain an advantage in a competitive environment, the key factor for its information technology adoption. SMEs have a key role in the economy especially completing the shortcomings of large businesses. As a result of the competitive world that makes things more and more difficult, SMEs need to adapt the condition of time. For this purpose, with the help of technology SMEs will be able to sell the right product to the right market at the lowest cost. (Ertugrul, Ege and Oztas, 2017) A research conducted in Nigeria on the impact of technological innovation on the profitability of SMEs concluded that there is a relationship between technological innovation and SMEs performance. It mentions that it becomes necessary for SMEs in the manufacturing industry to intensify their innovation activities so as to create a competitive advantage which will further improve their turnover and profitability. Moreover, technological adoption results in the growth of the firms and employment opportunities. (Akinwale, Adepoju and Olomu, 2017) An article conducted on the organizational performance of SMEs in Ghana highlighted that since the Ghanaian economy highly depends on the organizational performance of SMEs as of other developing countries the government of Ghana has created various fund schemes helping SMEs in adopting the new innovation and technology with the intention of increasing the organizational performance of SMEs which will ultimately create benefits to the nation such as employment generation, improving the living standards and achieving an overall sustainable development in the economy. (Afriyie,

Du and Ibn Musah, 2019) According to Zahra and Nielsen 2002 as quoted by (Ryu, Baek and Yoon, 2021) if SMEs seize technological capabilities that could not be followed by their rivals, they have the ability to nurture better organizational performance while promoting successful internationalization.

3.Methodology

Adopting the right methodology is an essential element in the process of conducting a research study. Accordingly, here the researcher has engaged in a qualitative research study to address the two research questions on what is the level of technological adoption and what is the impact of technology on the overall performance of SMEs in Sri-Lanka. As per research conducted on SMEs in Pakistan a unique characteristic that set apart qualitative from quantitative research is that, it indicates that there are several realities in the universe for a single phenomenon where every person distinguishes, clarifies, and acknowledges differently based on his/her knowledge and expertise. (Ahmad et al., 2021) Here the researcher has followed an exploratory study to investigate the real-world scenarios of technology adoption. The researcher has incorporated in-depth interviews as the research strategy since personal interviews have the ability of deriving more worth-while information regarding the subject matter in addressing why and how questions. The interview guide was prepared in English and Sinhala languages which include three major parts such as as: part one- demographic features of the SMEs, phase two includes two sub parts as 2.1 which consist of questions regarding the decision to adoption and 2.2 on implementation of technology and part 03 includes the impact of technology adoption on the overall organizational performance. The interviews were conducted through telephone calls, where the maximum time incurred for an interview was approximately 45 minutes. Correspondingly the author has selected six individual SMEs in Sri-Lanka that operate in different industries as the sample size which conducted business operations for at least 2 years respectively. SMEs for the study were selected based on purposive sampling technique which is a non-random sampling method. The sample of six SMEs was selected based on the saturation point. The number of respondents in qualitative research can only be determined during the data analysis, if iteration occurs in interviewee stories it means the data has reached the saturation point (Moshood,

Adetoun and Akkpa, 2014) The study area of the research was limited to three provinces in Sri-Lanka namely Western province, North-Western province and Sabaragamuwa province.

Table 1: Respondents (Enterprise) demographic information

	SME 01	SME 02	SME 03	SME 04	SME 05	SME 06
Designation	Head administrati on & accounting	CEO	Manger and Head HR	CEO	CEO	CEO
Industry of Operation	Supermark et Chain	Fast food	Apparel	Financi al	Handbag producer s	Food
Types of Business	Local	Local	Internati onal	Internati onal	Internati onal	Local
Year of establishm ent	1926	2017	2018	2011	2017	2017
Year technology adopted	2005	2017	2019	2014	2017	2019
Number of employees	120-150	20-30	180-230	10-12	8-10	10-15

Source: Author's Work ,2021

4.Data Analysis and Discussion

The technique for analysis of data in this study is known as Thematic Analysis. The procedure of recognizing themes or patterns in a set of qualitative data is known as thematic analysis. (Rozmi et al., 2020) The author followed six major steps of data

editing, data familiarization, code generalization, code classification, theme generation and theme finalization in generating the final themes of the study. These themes aid the researcher in addressing the research questions of the study. Below is a detailed analysis on the themes generated in conducting the research study. The study evolves around five central themes derived through the data analysis.

Theme 01: Decision for Adoption

Theme one of the research studies shows the decisions involved by the SMEs owners in the adoption of technology, which highlight which factors created the need for adoption and which elements influenced the decision for the technology adoption. As per the data collected it was identified that some SMEs face the need for technology adoption as well some adopt technology as a result of numerous factors that influence the organization towards adoption. Therefore, the theme ‘Decision for Adoption’ was derived through the sub themes of ‘Need for Adoption’ and ‘Factors influencing Adoption’.

Accordingly, the sub theme need for adoption was derived based on thirteen sub-sub themes such as ‘time issues’ where the respondents pointed out that the failures associated with time in manual method generated the need for the decision for adoption, *“If we, did it manually it is a very difficult task, time is consuming, long queues are formed” (SME 01)*

‘Number of employees’ is another factor that generate the need for technology, as specified by the SME owners without technology they would have to recruit to a large number of employees for work, *“Earlier before these programming machines were properly installed in the organization, we had to recruit a high number of employees for these jobs” (SME 05)*

As per the respondents the need for ‘High skills requirement’ in the traditional method of business led SMEs towards the decision for adopting technology. *“So, if we want to check whether a currency is a counterfeit or not the employee should have a good knowledge and experience to check it by hand” (SME 04),*

‘Marketing limitations’ is another constraint that created the need for adoption as stated by SME 02, *“There was only a very small board in front of our house saying that we bake cakes”*,

‘Omission problems’ existed in the traditional method is another major issue that generated the need for technology adoption, as indicated by respondents’ omissions had led to miscalculation within the organization *“Actually, there were times we were not able to make a proper calculation because some of the fabrics used were being omitted without our knowledge.” (SME 03)*

Likewise, the findings indicated that ‘supervision issues’, ‘more effort’, ‘customer dissatisfaction’, ‘competition’, ‘technology as a trend’, ‘productivity issues’ and ‘difficulties cause in the manual method’ led towards the need for technology adoption.

On the other hand, the sub theme ‘factors considered for technology adoption’ was used to generate the theme decision for adoption. Factors considered for technology adoption indicate the major features and facts taken into consideration when making the decision for technology adoption. Thereby the author has identified seven major factors considered when making the decision for technology adoption by the Sri-Lankan SMEs. When deciding to adopt technology SME owners were concentrated regarding the ‘efficiency’ as per the SME owners the main factor that encouraged adoption is efficiency, *“To be exact, efficiency was the most encouraging factor. We wanted to be efficient in our day-to-day work.” (SME 04)*

Other than that, SMEs in Sri-Lanka concentrated on ‘Ease’ and ‘User-friendliness’ of the technological applications when deciding to adopt technology. Based on the respondents it is important for the SMEs to ensure that the technological applications adopted are providing the facility to ease the operations of the organizations while it is user friendly. *“Usability, and the ability to make employees get related to the system easily within a short period”, “The ability to provide information quickly when employees need them.” (SME 01)*

Cost a somewhat a huge concern in adoption of technology. Especially in industrialized countries like Sri-Lanka since most of the technological equipment’s, tools and applications are imported the cost of these are considerably high. Therefore, almost all

the SME respondents engaged in conducting a ‘cost benefit analysis’ *“I have a thing like this as an organization. Once we decide to use something we first analyze whether we will receive any return from it, what benefits we have and then so it’s like that.”* (SME 04)

All in one package, Accuracy and Anytime data access were the other major factors considered in the decision for technology adoption.

Theme 02: Technology Adoption Process

Through the second theme the author has elaborated the supporting and challenging factors that SMEs in Sri-Lanka will have to face during the implementation of technology within the organization while providing an insight regarding the technology implementation process. Once the decision to adopt technology has been clearly made by the SME owners their next initiative is to engage in the adoption process of technology. When involving in the adoption process SME owners will have to pass through certain boundaries and hurdles while there some factors that would encourage them to hold on the technology adoption process within their SMEs. Hence the theme ‘technology adoption process’ is evolved around three sub themes namely; ‘Supporting factors’, ‘Challenging factors’ and ‘Implementation of technology’

The researcher has identified supporting factors as the elements that encourage SMEs in the adoption of technology within their organization. These seven factors identified as supporting factors makes the implementation of technology much easier and more convenient for the SME owners. The author found it interesting that most of the SMEs didn’t face any financial barrier in the process of adopting technology. As per the respondents once the decision for adoption was made the capital required for it was collected. So ‘no financial barrier’ is a major supporting factor. *“Here is the thing anyway we had the financial strength.”* (SME 01) *“Before I started to use technology inside the organization, I collected a certain amount of our business profit and allocated it to be invested on technology”* (SME 06)

‘Technical support from 3rd party’ and ‘family support’ are also some supporting factors that motivates SMEs to adopt technology within their organizations. Many SMEs have obtained the technical support and aid from the outsourced companies. *Yes, we have*

outsourced them at the initial point when the computer system was installed, they physically visited whenever an issue arises since we were not familiar with the system (SME 03)

While some obtained the support of their families, relatives and friends. *“We faced it quite easily since my father had a good knowledge in machineries and was well experienced in programmed machines since he worked in the garment industry.” (SME 05)*

Mostly as specified by the SME owners and managers having competent employees in the organization has become a strength to the organization. *knowledge we have employees those who have a good knowledge. “Now this new young generation is much more advanced in terms of technology. So, from that side we have strength.” (SME 04)*

However, when compared to these supporting factors the researcher has identified that there are certain factors which act as a barrier or a constraint for the process of technology adoption. Accordingly based on the data collected the author has identified that there are seven challenging factors as well. One of the greatest limitations for the adoption of technology as specified by the SME owners was the ‘network limitations.’ As per the respondents they always face numerous issues associated with network connection which makes things difficult when adopting technology. Mostly SMEs have problems associated with poor internet connection interrupting the actions performed through technological equipment’s *“The thing is nothing else, but as you know everything related to technology depends on networks, we mostly need this internet technology without any interruptions. We face a lot of network issues with low connectivity.” (SME 02)*

Every single respondent emphasized that there was no any support from the government in the process of adopting technology within SMEs. Therefore, the researcher identified it as a challenging factor which resist the adoption process. *To be frank we didn't receive any support from the government. We did it all by ourselves. (SME 06)*

Mostly SMEs faced the issue of ‘reluctance for change’ within the organization, where SME employees didn’t like the idea of replacing their jobs with technology since there were issues associated with familiarization. *Challenges mean like employee training*

issues and they were reluctant in accepting technology Now when we adopt technology, we have to train employees. employee training problems. Challenges mean like employee training issues and they were reluctant in accepting technology. (SME 01)

Another barrier for the adoption of technology is the ‘initial cost’ of adoption, SMEs that adopts technology will go through a high initial investment when integrating technology to the organization. However, the SME owners emphasized that the initial cost incurred was worth the benefits they enjoy afterwards as a result of technology *“Initially of course the financial cost is high. One of the reasons is due to the high initial cost” (SME 06) “To take technology of course the cost is high” (SME 01)*

Moreover, some other challenging factors that the author was able to identify include ‘data entry issues’, ‘environmental issues’ and ‘technical issues’.

Once the SME owners go through all the challenges with the aid of supporting factors, they will engage in the implementation process. Here the author found that SMEs even though they fall into the same category of business classification there are certain difference even among SMEs in process of implementing technology. Accordingly in accordance to the respondent provided details there are seven sub-sub themes that falls into the Sub theme of Implementation of Technology. When implementing technology some SMEs specified that they had a certain degree of technological integration within their organization from the very beginning of starting the business. *We started using technology from the very initial point of starting our business. so that's why I think we used technology in our business from the start itself (SME 02).*

However, most of the SMEs at the initial stage didn’t have any significant technological adoption and also many SMEs follow a step-by-step logical method for the adoption of technological application and equipment’s within their organizations which resulted in a better outcome.

“It didn't happen at once, it involved steps, where we came forward step by step. At once it is not an evolution, it comes gradually so we introduced little by little, then problems did not arise since we didn’t do it all together, so no big issue came in the way. So, you did it step by step? Yes, that's correct.” (SME 01), “That means we actually

started the organization in 2018 but when we started to adopt technology for most of our business activities by like 2019, October, I guess” (SME 03)

‘Training employees’ and ‘Technical assistance’ are crucial elements in the technology implementation of SMEs. Crafting the employees’ skills and competencies to meet the technological application requirements was necessary during the implementation according to the respondents. Further in order to ensure the smooth application of technology within the SMEs, SME owners pointed out that technical assistance was crucial in the implementation. *“About 02 employees were trained within 02 months and through those trained employees the others were trained” (SME 01)*

“Even now if a problem arises on our system, if we call them, they will solve our issue, they don’t come to us. We have this “AnyDesk” software through which they remotely log to the system and solve our issue. So, this AnyDesk helps them to log on to our system once we provide them a password”. (SME 03)

Theme 03: Level of Technology Adoption

Theme three indicates the types of technological applications used within the SMEs and the areas in which technology is being adopted in the organization. Here the author refers to the level of adoption as the types of technological applications used in the organization along with the areas in which technology has been adopted by the SMEs. Accordingly based on the data gathered by interviewing the SME owners the theme level of technological adoption was generated by the two sub themes ‘Types of applications’ and the ‘areas of implementation’. There are different technological innovations around the world here the author has provided full concentration in obtaining thorough understanding regarding the specific and common types of technological application utilized by SMEs. Further through the collected facts the author has found the areas in which technology is specifically used by the SMEs within their organization as a whole. The researcher was able to identify the Sri-Lankan SMEs that integrate the basic types of technological applications and equipment. Further the area in which technology is adopted in SMEs totally depends on the importance of that particular function to the existence of the organization. The table given below indicates the type of applications adopted by the SME owners and the areas in which the SMEs normally adopt technology.

Table 2: Level of technology Adoption

Theme	Sub theme	Sub-sub theme
Level of technology adoption	Type of applications	Computer System
		Computers
		Internet
		Fingerprint machines
		Facebook page
		Accounting System
		Microsoft applications
		Electronic payment system
		Advanced technological equipment's
		CCTV Cameras
		Online Website
		Design applications
		Instagram
		Computer network
		Billing system
		Google marketing
		Computerized records
		WhatsApp
		Barcode system

	Areas of implementation	Inventory management
		Online store management
		Marketing management
		Employee management
		Finance management
		Supplier management
		Customer management
		Online banking
		Designing
		Security
		Production management
		Cash management
		Market analysis

Source: Author's Work ,2021

Theme 04: Impact on Organizational Performance

The most prominent theme in the study is theme four, impact on organizational performance. This theme highlights the importance of adopting technology within the SMEs in Sri-Lanka. The author generated the theme based on two sub themes which is 'outcomes of technology usage' and 'impact on performance'. The researcher was able to identify that the overall impact on the organizational performance of SMEs as a result of adopting technology is positive even though there is a high initial cost in adopting technology for the SMEs in Sri-Lanka, as specified by the SME owners once it is adopted the more positive rewards are obtained as an organization. Therefore, the outcomes of technology usage will indicate the positive vibes of using technology as a SME while the impact on performance will present the result of using technology on the organizational performance as a SME.

Accordingly, the author was able to identify that there are fourteen outcomes of technology adoption of SMEs. One of the major outcomes of utilizing technology on organizational activities involved the capability of perform multiple tasks at once. SMEs could perform the multiple functions of the organization without any issues compared to the traditional methods of performing business activities. *“Actually, I decided that if I am to use a computer system it should include all the functions in one system. So, once I said that to my friend, he came up with a suitable computer system.”* (SME 06)

‘Better analysis’ is another advantage that SMEs enjoy as a result of using technology within their organization. As per the respondent’s technology provide their businesses the capability of evaluating their facts and figures and engage in an effective analysis.

“But now this monitoring system helps us in nicely showing us how variations in exchange rates have occurred which is very easy to understand.” (SME 04)

‘Updated information’ and ‘Better information recording’ are also better outcomes of technology that SMEs in Sri-Lanka enjoy. Rather than the manual method the organization has the capability of performing work with more diligence due to the functions available in technological applications.

“Let’s think we need to obtain a daily report. Even if the daily stock usage can be easily obtained, we can calculate the amount of stock decreased. No need to measure using a weight scale on how much kilos are left.” (SME 02)

“Today with the help of our system, we are updated. For instance, we can even identify whether there are any expired items in our supermarket quickly without any time.” (SME 01)

As mentioned by the SME owners and managers technology adopted by SMEs act as an ‘Alert system’, which also a positive result of implementing technology within the organization.

“So now it's not like that whenever we pay a bill we enter into the system, cheque numbers all those things are computerized, now if we provide a cheque other than a

cash cheque then the date when the cheque is realized all those are included in the system with the dates as to when the cheque is to be realized.” (SME 03)

‘More convenience’, ‘reduced effort’, ‘automatic processing’, ‘automatic information generation’, ‘reliable data’, ‘anytime and anywhere’ and time management are some of the generous outputs of technology implementation and adoption of SMEs in Sri Lanka. For instance, as specified by the respondents these benefits could not be enjoyed in the traditional method of conducting business. Time is gold for businesses as a result of technology implementation SMEs have the opportunity of getting the maximum out of time management. ,

“We have accurate timing and measurements which will greatly help us to increase your productivity when engaging in production than manually.” (SME 06)

‘Mental wellbeing’ is an attractive outcome of technology as stated by the SME owner’s technology has the capability of generating mental wellbeing. Since technology reduce the workload of individuals in the organization and since operational activities could be done effectively SME owners have less stress associated with work related matters.

“So, through this system now I can stay relaxed because once I go to the system, I know what are the orders that I have to fulfill next week, what items I should purchase. “(SME 06)

When observing the overall impact of technology on the organizational performance of SMEs, the author found through the data collected that technology overall results in a positive impact on the organizational performance of SMEs. The researcher identified eleven sub-sub themes related to the impact on overall organizational performance. One of the positive impacts of technology on organizational performance is ‘profit improvement’. SME owners were delighted about their decision to adopt technology since it resulted in improving the profits earned by the organization.

“Through all these definitely they can increase the profit” (SME 03)

“Actually, it is like this to increase the profitability I turn into technology therefore the profit has definitely increased (SME 06)”

Another impact on overall organizational performance as a result of implementing technology is ‘productivity improvement’, as indicated above earlier the need for technology also aroused as a result of inefficiencies in the traditional method. So, SME that adopted technology has been successful since technology resulted in a productivity improvement.

“Greatly help us to increase your productivity when engaging in production than manually When compared to the early situation in my organization, now the organization is more efficient.” (SME 06)

‘Increasing market share’ and ‘reducing the employee cost’ are the beneficial impact of technology on the organizational performance of the SMEs as identified by the author through the analysis.

“And also, when we take our online business now our products are distributed around Sri-Lanka as a result of it so the demand has increased.” (SME 06)

“Due to this new technology if we have 15 employees, we can decrease it by 50%, so it saves the cost incurred for employees, and also, we can give a good service for the customers. For example, now assume we keep a security guard now we can do it by CCTV so you can understand right that cost decreases.” (SME 04)

‘Better communication’ is an immense benefit that SMEs relish with regard to technology adoption on the overall organizational performance of SMEs. Communication has never been easier than with technological innovation and applications.

“We can easily interact with our customers and suppliers, like we don't need to visit them or they don't need to come and visit us whenever work is there.” (SME 03)

“The FB page is very well managed and we update it and provide our details to our customers.” (SME 05)

‘Increasing customer satisfaction’ and ‘good service quality’ are also major impacts of technology on the overall organizational performance of SMEs. As mentioned by the SME owners’ customers of their organizations are more interested in engaging transactions with their organization as a result of utilizing technology to provide them

with services. Moreover, through the integration of technology in the organization SMEs have the chance of improving their service quality.

“When the customers arrive, they don’t need to wait in long queues, they can quickly make the transaction and leave” (SME 01)

“We can give a good service for the customers. we try to achieve is to provide satisfactory and good service to the customers through technology” (SME 04)

Likewise, the SMEs also enjoy the benefits of increase innovativeness, facing competition successfully and reducing wastage as a result of adopting technology.

Theme 05: Improving Technology Adoption

Through the research study conducted the author has been able to identify various methods that the Sri-Lanka government and relevant authorities could initiate in order to promote and encourage SMEs in adoption of technology. These themes were generated based on the respondents’ suggestions to improve technology adoption among SMEs in Sri-Lanka. Most SME owners strictly emphasized the importance proper telecommunication facilities within the country in order to improve the adoption of technology.

Table 3: Improving Technology Adoption

Theme	Sub theme	Sub-sub theme
Improving technology adoption	Method to improve technology adoption	Tax relief
		Financial benefits
		Proper network connections
		Legal requirement
		Awareness programs
		Technical assistance

		More open to the foreign market
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Source: Author's Work ,2021

5.Conclusion

One of the research objectives of the study was to investigate the level of technology adoption of SMEs in Sri-Lanka. Through the analysis of the research study conducted it was concluded that SMEs adopt technology in most important areas of the organization such as inventory management, finance management and the applications such as computer systems, online websites, CCTV security systems much more are adopted by the organization. The interesting factor was according to the respondents most of the SMEs implement technology on step-by-step basis in order to make it easy for the process of familiarization. The second objective of the research was to evaluate the impact of technology adoption on the overall performance of SMEs in Sri-Lanka and the themes generated indicates that the technology result in overall positive impact in conducting the organizational function while contributing towards performance growth. Finally, it can be concluded that technology adoption contributes immensely on the organizational performance of SMEs in Sri-Lanka. Through this study the SME owners and other interested parties such as the government could obtain a comprehensive understanding on what are the outcome of technology and further the actions that could be formed in order to uplift the implementation of technology within the SMEs in Sri-Lanka. Further the theoretical contribution of the study is vast since it provides a comprehensive understanding regarding new dimensions for various factors of technology adoption and performance. One of the major limitations of the research is the number of respondents and they were limited to three provinces in the country. It would be better if the future researchers considered all the provinces of the country while considering more forms of technology adoption.

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Impact of Individual Factors on Business Performance of Women Entrepreneurs in Construction Industry in the Western Province, Sri Lanka

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Abstract

Entrepreneurship is seen as a crucial factor of the development of any economy because it contributes to the generating of revenue both locally and globally, facilitating economic and social progress. It focuses on not just the generation of income, but also the improvement of people's living standards and the acceleration of production, among other things. Scholars have identified women entrepreneurship as one of the most vital variables in a country's economic progress. Sri Lankan women have most recently begun to participate actively in the commercial sector. This study makes an effort to investigate the impact of individual factors on business performance of women entrepreneurs in the construction industry in Sri Lanka and six hypotheses were developed along with six main research objectives. The population includes all the women entrepreneurs in the construction industry who have established their businesses in the Western Province. The sample of 113 women entrepreneurs was selected with random sampling method. Multiple linear regression analysis and Pearson's correlation analysis were used to examine the hypotheses. Based on the tested hypotheses, individual factors which are motivation and goals, social learning, network affiliation, human capital and environmental influences positively impact on business performance of women entrepreneurs in construction industry in the Western Province, Sri Lanka. The study's findings will be useful in implementing practical ramifications in the construction industry, particularly for women entrepreneurs, by enabling women to participate in more entrepreneurial endeavors while effectively

conquering their obstacles. With this understanding, Sri Lanka is forging a novel route to a novel period of growth by promoting women entrepreneurship.

Keywords: *Business Performance, Construction Industry, Entrepreneurship, Individual Factors*

1. Introduction

Being a female entrepreneur in a market economy entails accepting the risks that come with selling products or services for an income. Businesspersons own and operate their personal firm, settle taxes, and also labor alone or hire people, gaining social status in the process. Despite the risks and the fact that they must devote a significant quantity of time as well as energy to the venture, a growing number of women want to be business owners (Dharmaratne, 2012). Female entrepreneurship thrives in the United States of America (USA), Canada, and the United Kingdom (UK). The number of women entrepreneurs remains low in Sri Lanka. Anyhow, the condition has now altered, and indication exists to show that Sri Lankan women play a significant part in the country's economy, politics, and social life (Silva & Wijewardene, 2019). This study tried to investigate the impact of individual factors on the business performance of women entrepreneurs in the construction industry in the Western Province, Sri Lanka. This study mainly pays attention on construction industry, because of the all previous studies relating to this topic are conducted in other industries.

Though there is a long history for the term entrepreneur or entrepreneurship, a universally accepted definition of that word has not yet been given or developed by any academic. However, there has been an increased interest in the field of entrepreneurship during the recent period. That has resulted in thousands of published and unpublished researches on titles such as, entrepreneurship, entrepreneurial characteristics, entrepreneurs' career path, male and female entrepreneurs, and many other entrepreneurship related topics.

The definition of Hisrich, (1980) is one of the most popular definitions of entrepreneurship and it clearly describes many aspects of that concept. According to him entrepreneurship is the dynamic procedure of creating somewhat distinct and by beneficial by giving the essential time and exertion, accepting the related economical,

psychological, and social dangers, and reaping the economic, private fulfillment and freedom as a consequence.

According to Stoica, Roman, and Dia (2020), the relationship between entrepreneurship and economic growth was observed as early as the 18th century. Entrepreneurship is seen as a possible driver for boosting development in the context of stagnation, slowing growth rates, unemployment, political instability and environmental challenges. It highlighted the potential of entrepreneurship to push nations forward through the creation of new wealth, jobs and innovation incubators.

Women have made great success in Sri Lanka's commercial sector during the previous few decades particularly in comparison to men (Wickramasinghe, 2000). There are differences among factors of these women entrepreneurs that influenced their choice to start a business, their degree of achievement (or failure), the factors that influenced their business performance, and several other factors (Dharmaratne, 2012). As stated by the Global Entrepreneurship Monitor 2015, women's participation in entrepreneurship not only benefits the country's growth, but it also helps to decrease destitution levels in globally.

Globally, women have historically had a low presence in the construction business limiting their ability to contribute to economic progress (Wangle, 2009; Verwey, 2005; Hakala, 2008; Worrall et al., 2008). The under-demonstration of feminine entrepreneurs in the construction industry has been caused by various factors such as the background women come from and choice of business (Gupta et al., 2012).

In Sri Lanka's commercial sector, it is clear that women have made substantial gains during the last few decades and women have had an advantage over men. A great number of women have created their own enterprises and the majority of them have been successful. Some of them are now competing on a global scale (Silva & Wijewardene, 2019). However, only a limited number of researches are done about this significant topic in several business sectors in Sri Lanka. The purpose of this study is to examine the impact of individual factors which are motivation and goals, social learning, network affiliation, human capital and environmental influences impact on

business performance of women entrepreneurs in construction industry in the Western province, Sri Lanka.

2. Literature Review

Women Entrepreneurship

According to Hayter (2011), Goyal & Parkash (2011), and Jennings & Brush (2013), women entrepreneurs are females running or initiating their own business by organizing their activities to manage business projects. Levie & Hart (2011), stated that women entrepreneurs can also be said as she-entrepreneurs who seek self-satisfaction in running a business and gain financial independence, it also includes managing their own business administration according to their own will and skills.

Ahl & Nelson (2015), determine women entrepreneurship as women who runs a business as an owner-head of the company, manages their own operations, and setting a foundation for business.

Business Performance

The performance is also characterized as a mindboggling marvel of various measurements that are hard to control without utilizing a blend of objective and subjective measures (Dharmaratne, 2012). According to Eniola and Entebang (2015), measuring business performance, a company can identify its strengths and weaknesses. Accurate performance measurement is vital to understanding firm success and failure. Performance is the strategic outcome that organizations use to realize its goals, success or not.

The following section is focused on clarifying the individual aspects those effects, especially for women entrepreneurs' performance of their businesses.

Motivation and Goals

Motivations and goals are a factor which deals with individuals' intensity, persistence of effort and the direction of achieving a particular goal or an objective. Motivations towards the goals can be measured by using four indicators (Lerner, Brush & Hisrich, 1997). Sadi and Al-Ghazali (2012), compare Saudi Arabian and Bahraini women

entrepreneurs and the study found that the most outstanding aspect that attracts Saudi Arabian women is self-actualization. It was observed that personal motives and goals have a connection towards performance in female enterprises, whereas opportunity motivation was connected to survival and independence was associated with no growth (Khan, 2014). According to Teoh and Chong, (2007), goals are the positive results that someone imagines to get from doing coherent behavior, while motivation is the procedure by which goal-directed action is activated and sustained.

Social Learning

According to Hisrich and Brush (1982), social learning can be defined as, socialization process of each individual which is also engaged with the household situation, communicates social norms, language, learning ambitions, and determines job favorites, over experimental knowledge and modelling. Dharmaratne (2012), shows that entrepreneurs believe in their parents as role models, especially if the father is an entrepreneur. It also concludes that there is a clear relationship between having a role model for the career and the performance of that person not only the business performance but also in other activities too.

Network Affiliation

Network affiliation has an impact on the likelihood of successful entrepreneurial endeavor. Many of the problems women face appear to relate to women's relative lack of exposure to the world of business. It has been noted that women's business networks are poorly developed as social assets yet effective networking can provide significant advantages for women entrepreneurs (Linehan and Scullion, 2008) by helping to provide a competitive edge in business (Miller et al, 2007).

Dharmaratne (2012), emphasized the situation in Sri Lanka regarding the factor of network affiliation. According to that study, the researcher explained that most of the Sri Lankan women are unwilling to connect with social networks because of difficulties in time schedule.

Human Capital

The significance of human capital could be restricted by two main demographic characteristics, which are education and experience. Furthermore, prior studies reveal that human capital at the early phases of entrepreneurial venture is significant (Hasan & Almubarak, 2016). Entrepreneurs with higher general and specific human capital can be expected to show higher levels of performance than those with lower levels of general and specific human capital (Eniola et al., 2015). Hence, human capital is substantial and consequential to entrepreneurial growth.

Environmental Influences

Environmental influences assume elements are important predictors of performance. Financial processes of undertaking success; returns and employee numbers are linked to ecological, financial variables likewise marketplace, geographical chances, investment, labor obtainability, and other aspects (Gibb, 1988). Equally, resource obtainability of resources, such as business investment, technical personnel, lends, backing facilities and a satisfactory entrepreneurial philosophy, has a significant impact on performance. (Bruno & Tybjee, 1982).

Empirical Findings Relating to Impact of Individual Factors and Business Performance

Individual Factors and Business Performance

According to Silva and Wijewardene, (2019) individual factors positively impact on business performances of women entrepreneurs. Further prior studies explained the positive impact of individual factors on business performances among women entrepreneurs (Stevenson and Jarillo, 1990; Vesper, 1980; Gartner, 1985; Cooper, 1989). Furthermore, Brush (1992) explained the individual factors impacting on business performance positively.

Hence, the first hypothesis is developed as follows:

Hypothesis 1 (H₁): *There is a positive impact of individual factors on business performance of women entrepreneurs in construction industry in western province, Sri Lanka*

Motivation and Goals and Business Performance

Few studies can be identified regarding how motivation and goals influence the business performance of female entrepreneurs. As stated by Hisrich & Brush (1987), in the USA, there is a close connection between motivation and goals with the performance of female - owned businesses specially. Furthermore, it emphasized that the owners are getting motivated, according to the opportunities that they get and it impacts on the survival of the business.

The outcomes of the research which is conducted by Lerner et al., (1997) in Israel context specifies that, there is a noteworthy connection between motivation and goals and the business performances especially when it comes to the business organizations that women entrepreneurs owned. According to their research motivation and goals are dealing with various aspects of the performance of the business. Maysami and Goby (1999), investigated the features that encourage women entrepreneurs who start businesses in Singapore. Motivation has a considerable impact on women business performance, according to these findings.

Motivation and goals are consisting of achievement and independence, and locus of control positively impact on business performance (Brockhaus and Horwitz, 1986). Further Dharmaratne (2012), explained that motivation and goals positively impact on business performance of women entrepreneurs.

Hence, the second hypothesis is developed as follows:

Hypothesis 2 (H₂): There is a positive impact of motivation and goals on business performance of women entrepreneurs in construction industry in western province, Sri Lanka

Social Learning and Business Performance

Performance of a particular person is also very high if the parent performing a role is an entrepreneur. Specially most of the time the father's role as a parent is considered here (Scherer et al., 1989; Belcourt et al., 1991). From the early stages of the childhood of an entrepreneur, they have followed their parents' behaviors. This has caused to increase the performance of the business. Furthermore, women entrepreneurs are taking

the expectancy for an entrepreneurial career, educational knowledge, training aspirations, task self-efficacy from their parents. There is an opposite opinion presented by Hisrich & Brush (1987), and it says that family socialization is not impacted to the business performance, especially in cases like father is self-employed and engaged with a business activity.

Scherer et al., (1989), also revealed that entrepreneurs, who are having role models for their career, perform well in their activities rather than the people who are not having role models. Lerner (1992), shows that entrepreneurs believe in their parents as role models, especially if the father is an entrepreneur. It also concludes that there is a clear relationship between having a role model for the career and the performance of that person not only the business performance but also in other activities.

According to Bandura (1977), the social learning has a favorable impact on women entrepreneurs' business performance. Further Scherer et al., (1989), explained the social learning positively impact on business performance of women entrepreneurs.

Hence, the third hypothesis is developed as follows:

Hypothesis 3 (H₃): There is a positive impact of social learning on business performance of women entrepreneurs in construction industry in western province, Sri Lanka

Network Affiliation and Business Performance

Another important factor influencing women entrepreneurs' performance is network affiliation, which is defined by a variety of networks, the use of advisors, membership in females' associations, and mentors. Within these networks, entrepreneurship is constrained by relationships between self-assured entrepreneurs, capital, and opportunity. According to Israeli research, success in socialist and informal societies is based on private contacts and dealings with essential persons who help with the new ventures (Aldrich & Zimmer, 1986).

Considerable numbers of studies have been held to recognize the network affiliation positively impact on business performance of women entrepreneurs and it is consistent with previous studies such as, Lerner, Brush & Hisrich (1997). Further Aldrich, (1989),

explained the network affiliation positively impact on business performance of women entrepreneurs.

Hence, the fourth hypothesis is developed as follows:

Hypothesis 4 (H₄): There is a positive impact of network affiliation on business performance of women entrepreneurs in construction industry in western province, Sri Lanka

Human Capital and Business Performance

There are some experimental researches that share the years of official education of entrepreneurs to the performance of the venture. As a sample, Box et al., (1993) exposed a connection between advanced levels of education and improved performance among industrial enterprises in Oklahoma. According to data from industrialized nations, a high degree of education is thought to be related to improved performance (Box et al., 1993; Brush & Hisrich, 1991).

Moreover, Ellinas & Kountouris (2004), observed that in South Cyprus, women entrepreneurs do not appear to trust that obtaining earlier experience of beginning their firm is necessary.

Some results found that human capital is positively impacting on business performance. This impact has been tested and proved several times by various studies conducted by Cooper (1989), Ronstadt (1988) and Belcourt et al., (1991).

Hence, the fifth hypothesis is developed as follows:

Hypothesis 5 (H₅): There is a positive impact of human capital on business performance of women entrepreneurs in construction industry in western province, Sri Lanka

Environmental Influences and Business Performance

Lerner et al., (1997) found that there is a significance connection between the environmental influences and the business performance of women entrepreneurs in Israel context.

Further Gibb (1988), proved that environmental factors such as the location of the business, sectoral activities, as well as sociopolitical issues such as the availability of government aid, can have a direct influence on female entrepreneurs' business performance. At the same time Gibb (1988), revealed that economic factors can be influenced critically business performance. It may depend on the structure of the market, regional opportunities, investment climate, labor availability etc. Similarly, resource availability, including labor force with adequate technical skills, availability of business support services, favorable entrepreneurial subculture can be hugely affected to the business performance of female entrepreneurs (Bruno & Tybjee, 1982).

The same findings were proved by Dharmaratne (2012), at the Sri Lankan context as environmental influences are favorably affected to the business performance of Sri Lankan women entrepreneurs.

The obtainability of resources, such as business capital, technical personnel, loans, support services, and a positive entrepreneurial environment has a positive impact on business performance (Bruno and Tybjee, 1982).

Hence, the sixth hypothesis is developed as follows:

Hypothesis 6 (H₆): *There is a positive impact of environmental influences on business performance of women entrepreneurs in construction industry in western province, Sri Lanka*

Conceptual Framework

Reviewing of available literature, conceptual framework of this research is developed as Figure 1. Hence, in this study, individual factors are independent variables and dependent variable is business performance.

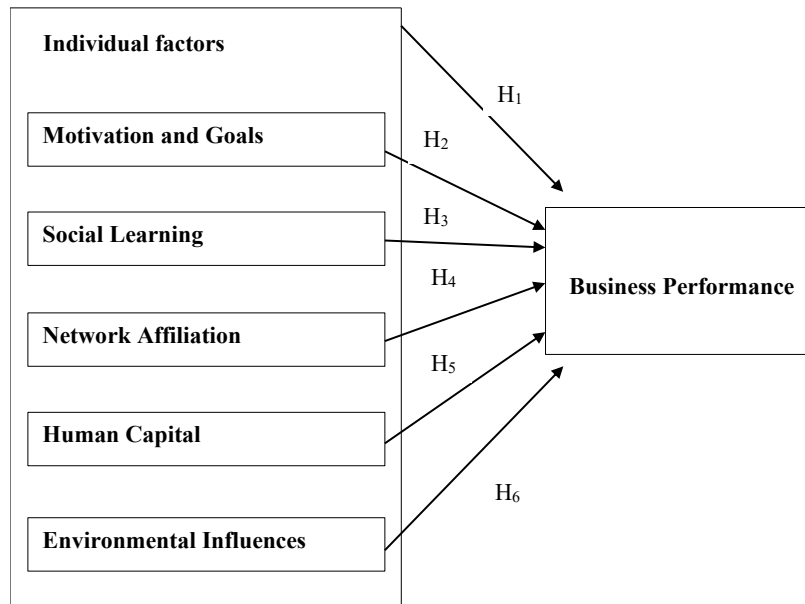


Figure 1: Conceptual Framework

Source: Author's Compilation (2021)

3. Methodology

For achieving the research objectives, information was gathered from primary as well as secondary sources in this study. The qualitative information was collected from secondary sources to identify the population of the study. A survey was planned to collect quantitative data from the women entrepreneurs in the construction industry. The population includes all the registered women entrepreneurs in the construction industry who have established their businesses in Colombo, Gampaha and Kalutara districts. Due to the Covid 19 pandemic situation only Western Province women entrepreneurs who engaged in the construction industry for the data collection purposes were selected. However, the total population of women entrepreneurs in the Western Province construction firms is 161 (The Construction Industry Development Authority, 2020). The sample of 113 women entrepreneurs based on the Krejcie and Morgan Table, (1970) included 68 from Colombo, 30 from Gampaha and 15 from Kalutara. The probability sampling technique of the simple random method was used to choose the

women entrepreneurs in the construction industry. The data from the selected sample of female entrepreneurs was collected using a self-administered questionnaire.

The original questionnaire was developed by Dharmaratne (2012); Hisrich and Brush (1985) divided it into three major parts such as A, B and C. Part A of the questionnaire covers the information related to five identified individual factors of women entrepreneurs relating to motivations and goals, social learning, network affiliation, human capital and environmental factors with 24 questions. Part B of the questionnaire includes the questions related to the business performance of the women entrepreneurs and contains profitability, revenues, competition, business growth and business achievements relating to 7 question items.

Part C of the questionnaire includes questions related to the personal information of the respondents. All variables were measured through five point Likert scale ranging from (1) strongly disagree to (5) strongly agree. This part consists of 05 questions including highest education level, age level, business located in, the business started in and number of employees.

The questionnaire was developed in English medium and translated to Sinhala. Participants were asked to select one of the two mediums as they wish to answer the questions and asked to put (✓) in the relevant cage.

Respondents were recruited throughout the website of the Institute for Construction Training and Development and were contacted via cell phone and google forms were sent to them asking to submit the completed form. The analytical data analysis was performed to examine the hypotheses and to achieve objectives of the research. Therefore, descriptive, correlation and regression techniques were used to analyze the data. The Social Science Statistical Package (SPSS 23) was used to analyze the data and come to conclusions.

4. Data Analysis and Results

Demographic Profile of the Sample

In this section, the data gathered respondents' individual and information are furnished and scrutinized. The data was gathered on the respondents' five (05) demographic

characteristics as mentioned in the questionnaire which are highest education level, age level, business located in, business started in and number of employees. The largest, highest education level group representation is 35% who are diploma holders. Then 34% represents the degree holders. There are 15% who are MBA/ MSc holders. Then 7% and 6% represents the highest education level as certificates of other courses and G.C.E. A/L. Very low percentages like 1% and 2% represents the highest education level as between grade 1- grade 10 and G.C.E. O/L passed. Moreover, the largest age group representation is 57% who are less than 40. Then 24% and 19% represents the age more than 50 and 41-50 categories. District-wise 60% of women entrepreneurs have represented the Colombo district of Sri Lanka. 26% represents Gampaha district. 14 out of 103 samples are from Kalutara district.

The largest business started year-based categorization is 57% in 2011-2020. Then 21%, 17%, and 15% represent business started year-based categorization in 2001- 2010s, 1991-2000s, and 1981-1990s. The largest group of numbers of employee representation is 75% who have below 20 employees. Then 19%, 4% and 2% represents the number of employees as 21-50, 51-100 and over 100 categories. Table 4.11 outlines and tabulates the demographic profile of the survey.

Then the main survey was conducted and google forms of questionnaires were disseminated among 113 women entrepreneurs in the construction industry in the Western Province, according to the sample size. Four valid participants were not received, yielding a response rate of 96.5%.

Further, researchers examined outliers, testing for multivariate assumptions, sample adequacy, exploratory factor analysis (EFA) and reliability testing. Outliers are checked by using visual aids like a scatter plot or a boxplot. Based on box plot diagrams there are six case numbers that have to be removed. There are three cases from motivation and goals, two from human capital and one from business performance. Finally, 103 questionnaires were used for the data analysis.

According to Curran et al., (1996), skew value less than 2 and kurtosis value less than 4 suggest that the normality assumption is not seriously violated. In this study, all skewness values are less than 2 and all kurtosis values are less than 4. Further Table 1,

displays the results of two well known normality tests, namely Kolmogorov-Smirnov and Shapiro-Wilk. Since the sample size is 113 of the current size, the Kolmogorov-Smirnov test is the most suitable for evaluating normality. If data are normally distributed as the sig value of the all variables exceeds 0.05 (Field, 2000). In this study the sig values of individual factors and business performance are more than 0.05. Hence, the data is dispersed normal.

Table 1: Test of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Individual Factors	.082	103	.084	.979	103	.105
Business Performance	.076	103	.165	.981	103	.142

a. Lilliefors Significance Correction

Source: Survey data (2021)

As mentioned in Hadi et al., (2016) Kaiser-Meyer-Olkin (KMO) is used to examine the sample adequacy and if the KMO value is above 0.5 the sample is adequate and sufficient. Further Hadi et al., (2016) have pointed out that the strength of the relationship can be measured by the Bartlett's test of Sphericity. It is concluded that, if the significance value is less than 0.05 these data do not yield an identity matrix and nearly multivariate normal and satisfactory for more analysis (Field, 2000). KMO and Bartlett's test results of the current study are presented in Table 2.

Table 2: KMO and Bartlett's Test Results

Variable	Number of items	KMO (>0.5)	Bartlett's test (P<0.05)
Motivation and Goals	04	0.712	0.000
Social Learning	05	0.799	0.000
Network Affiliation	04	0.708	0.000

Human Capital	06	0.605	0.000
Environmental Influences	05	0.789	0.000
Business Performance	07	0.859	0.000

Source: Survey data (2021)

With reference to the Table 2, the value of KMO were above the cutoff point which indicates a good range of sample adequacy and the values of constructs were significant according to Bartlett's Sphericity Test.

This study is carried out with 103 sample size and usually, more than 100 sample size requires more than 0.50 factor loading values according to the Hair et al., (2014). Factor loading values in this study exceed the required level, which is the minimum of 0.5. Based on the EFA results none of the items were removed from the questionnaire (refer Table 3)

Table 3: Factor Loadings

Motivation and Goals		Social Learning	
Item	Factor Loading	Item	Factor Loading
01	.584	05	.717
02	.669	06	.752
03	.732	07	.644
04	.621	08	.558
			.640
Network Affiliation		Human Capital	
Item	Factor Loading	Item	Factor Loading
10	.644	14	.731
11	.735	15	.754
12	.785	16	.747

13	.759	17	.727
		18	.799
		19	.694
Environmental Influences		Business Performance	
Item	Factor Loading	Item	Factor Loading
20	.664	25	.719
21	.746	26	.823
22	.725	27	.826
23	.750	28	.867
24	.655	29	.649
		30	.634
		31	.620

Source: Survey data (2021)

Reliability

Chronbach alpha is the broadly used measure for measuring reliability by the researchers (Hair et al., 2014). Reliability is ranging from 0 to 1 and according to Hair, which the values from 0.60 to 0.70 are considered to be the lower boundary of suitability. Chronbach alpha was used in the analysis to calculate the reliability of the variables and figures. All Chronbach's Alpha values are above 0.70 in this study; hence the reliability of the variables was ensured.

Validity

Content validity describes the adequacy and representativeness of the items which explain the concept (Sekaran & Bougie, 2016). The study marked high content validity as this study has hypothesized based on quality literature and specially conceptualized and operationalized based on literature. The set of measured items which are designed to measure the conceptual hidden construction of those items is called as construct

validity (Hair et al., 2014). Construct validity was evaluated through convergent and discriminant validity (Sekaran & Bougie, 2016).

When the marks derived with dual separate indicators assessing the similar model are extremely interrelated it is called as convergent validity (Sekaran & Bougie, 2016). In the current study, Average Variance Extracted (AVE) 0.5 or above ensures that the constructs are adequately convergent (Hair et al., 2014). The values for Composite Reliability (CR) should be 0.6 or more are generally considered acceptable (Bagozzi & Yi, 1988). The following Table 4, displays the findings of the tests. The findings of the current study confirm the CR values are above 0.6 and AVE are above 0.5. Therefore, it can be concluded that the validity of the constructs is adequately convergent.

Table 4: Convergent Validity

Variable	No of Questions	CR >0.6	AVE >0.5
Motivation and Goals	04	0.843	0.574
Social Learning	05	0.864	0.564
Network Affiliation	04	0.824	0.540
Human Capital	06	0.856	0.507
Environmental Influences	05	0.843	0.518
Business Performance	07	0.897	0.561

Source: Survey data (2021)

Discriminant validity is established when the measurements are not theoretically highly correlated to each other in fact not found to be highly correlated (Sekaran & Bougie, 2016). The comparison of square of the correlation estimates with AVE value was used to examine the discriminant validity of the present study (Hair et al., 2014). Further, they said, AVE evaluations for any two elements should be larger than the square of the connection between the two elements to convey proof of discriminant validity. The following Table 5 displays the findings of the discriminant validity. All Square

Correlation estimates are lower than the AVE, that ensures the discriminant validity of the constructs.

Table 5: Comparison of AVE and Squared Multiple Correlation

Variable	MG	SL	NA	HC	EI	BP
Motivation and Goals (MG)	0.758					
Social Learning (SL)	0.264	0.751				
Network Affiliation (NA)	0.466	0.372	0.735			
Human Capital (HC)	0.348	0.408	0.430	0.712		
Environmental Influences (EI)	0.390	0.537	0.435	0.357	0.719	
Business Performance (BP)	0.250	0.499	0.440	0.407	0.522	0.749

Source: Survey data (2021)

Hypotheses Testing

Regression analysis was conducted to examine the hypotheses of the study.

Table 6: Results of Regression Analysis

	Individual Factors	Motivation and Goals	Social Learning	Network Affiliation	Human Capital	Environmental Influences
R	.608	.250	.499	.440	.407	.522
R square	.394	.063	.249	.194	.166	.272
Adjusted R square	.363	0.53	.242	.186	.157	.265
Constant	5.580	14.611	18.716	15.010	12.048	13.442

Coefficient	.218	.547	.457	.645	.518	.651
t						
β value						
Sig value	.000	.011	.000	.000	.000	.000

Source: Survey data (2021)

According to the information in Table 6, five dimensions of individual factors had a positive impact on business performance, and individual factors as a whole had a positive impact on business performance. Considering the results shown in Table 6, 39.4% of the variance in individual factors can be predicted from the business performance.

The Equation: Business performance = 5.580 + 0.218 (Individual Factors)

Thus, for every unit increase in individual factors, business performance is expected to increase by 0.218. The p-value for individual factors is less than 0.05(refer Table 6). Hence, individual factors are significant predictor. Which ensures H₁, there is a significant impact of individual factors on business performance.

Motivation and goals as a whole had a positive impact on business performance. Considering the results shown in Table 6, 6.3% of the variance in motivation and goals can be predicted from the business performance.

The Equation: Business performance = 14.611 + 0.547 (Motivation & Goals)

Thus, for every unit increase in motivation and goals, business performance is expected to increase by 0.547. The p-value for motivation and goals is less than 0.05(refer Table 6). Hence, motivation and goals are significant predictor. Which ensures H₂, there is a significant impact of motivation and goals on business performance.

Social learning as a whole had a positive impact on business performance. Considering the results shown in Table 6, 24.9% of the variance in social learning can be predicted from the business performance.

The Equation: Business performance = 18.716 + 0.457 (Social Learning)

Thus, for every unit increase in social learning, business performance is expected to increase by 0.457. The p-value for social learning is less than 0.05 (refer Table 6). Hence, social learning is significant predictor. Which ensures H₃, there is a significant impact of social learning on business performance.

Network affiliation as a whole had a positive impact on business performance. Considering the results shown in Table 6, 19.4% of the variance in network affiliation can be predicted from the business performance.

The Equation: Business performance = 15.010 + 0.645 (Network Affiliation)

Thus, for every unit increase in network affiliation, business performance is expected to increase by 0.645. The p-value for network affiliation is less than 0.05(refer Table 6). Hence, network affiliation is significant predictor. Which ensures H₄, there is a significant impact of network affiliation on business performance.

Human capital as a whole had a positive impact on business performance. Considering the results shown in Table 6, 16.6% of the variance in human capital can be predicted from the business performance.

The Equation: Business performance = 12.048 + 0.518 (Human Capital)

Thus, for every unit increase in human capital, business performance is expected to increase by 0.518. The p-value for human capital is a less than 0.05(refer Table 6). Hence, human capital is a significant predictor. Which ensures H₅, there is a significant impact of human capital on business performance.

Environmental influences as a whole had a positive impact on business performance. Considering the results shown in Table 6, 27.2% of the variance in environmental influences can be predicted from the business performance.

The Equation: Business performance = 13.442 + 0.651 (Environmental Influences)

Thus, for every unit increase in environmental influences, business performance is expected to increase by 0.651. The p-value for environmental influences is less than 0.05(refer Table 6). Hence, environmental influences are a significant predictor. Which

ensures H_6 , there is a significant impact of environmental influences on business performance.

5. Discussion

The current study revealed the positive impact of individual factors on business performance of women entrepreneurs in the construction industry according to the regression analysis. Dharmaratne, (2012); Silva & Wijewardene, (2019) in their studies have established that individual factors have impact on business performance. The results of this study are also consistent with previous studies.

This study revealed the positive impact of motivation and goals on business performance of women entrepreneurs in the construction industry according to the regression analysis. Brockhaus and Horwits (1986); Lerner, Brush & Hisrich (1997); Lerner, (1992) in their studies have established that motivation and goals have impact on business performance. This study results are also consistent with previous studies.

This study concludes that the social learning has a positive impact on business performance of women entrepreneurs in the construction industry. Bandura (1977); Scherer et al., (1989) in their studies have established that social learning has impact on business performance.

The current study concludes that the network affiliation has a positive impact on business performance of women entrepreneurs in the construction industry. Lerner, Brush & Hisrich, (1997) in their studies have established that network affiliation has impact on business performance.

This study concludes that the human capital has a positive impact on business performance of women entrepreneurs in the construction industry. Cooper (1989); Ronstadt (1988); Belcourt et al., (1991) in their studies have established that human capital has impact on business performance.

The current study also concludes that the environmental influence has a positive impact on business performance of women entrepreneurs in the construction industry. Gibb (1988); Bruno & Tybjee (1982); Brush & Hisrich (1991); Brophy, (1989) in their

studies have established that environmental influence has impact on business performance.

6. Conclusion

There are five significant factors recognized during the study as the individual factors impact on the business performance. All five factors display positive impact on business performance of women entrepreneurs in the construction industry.

Mostly, all the outcomes added were steady with earlier studies and verified literature. However, all those studies have been done for the western countries and the outcomes were generalized to the western culture which are more established and economically steady than Sri Lanka. Thus, the same confirmed factors in this study has discoursed for Sri Lanka with the different sectors.

The intention of this study is to examine the individual factors of women entrepreneurs in the construction industry. However, women entrepreneurs are more concerned about the factors relating to business performance. From a managerial perspective, these findings provide support for investment decisions for the women entrepreneurs to their business performance.

According to the outcomes of the study, the following recommendations can be suggested to expand the business performance of female entrepreneurs.

Encouraging women entrepreneurs to participate in motivational and goal setting programs and enhance their motivation to achieve life and business goals. The entrepreneurs cannot make their businesses successful without any proper vision. Therefore, they should create their own vision and the goals to reach the level which they want. Furthermore, in order to maintain a continuous success, the entrepreneurs should always make their businesses with a motivated mind. Therefore, they should participate in motivation and goal setting programs and set up their personal and business goals.

Developing business and social networks to improve the network of different professions with enhancing resource accessibility of women entrepreneurs. In order to be a successful entrepreneur, the contribution of the professionals is significantly important, and they have relevant theoretical knowledge to improve the business

performance. Therefore, the women entrepreneurs in the construction industry should develop a proper mechanism to improve professionals' contribution to make their businesses successful.

Educating the women entrepreneurs is the way of acquiring sufficient relevant human capital to their businesses. The human capital is a vital factor to achieve highest success of business. Therefore, a good entrepreneur always needs to be a good human resource manager. Some entrepreneurs are equipped and have access to human resource management capabilities, but some need to be educated to do it properly. Hence, the skillful entrepreneurs always need to upgrade their capabilities to reach to the maximum success. Therefore, the women entrepreneurs should focus their education often to reach the next level of success.

According to research outcomes, the above recommendations can be made. The results obtained in this study could be used for developing a strategy for improvement of the women entrepreneurs in the construction industry. Moreover, this study can be helpful for women entrepreneurs who are trying to join the construction industry.

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Service-Learning, Spiritual Orientation, and Social Entrepreneurship: A exploration of the Vikings Club of the University of Sri Jayewardenepura, Sri Lanka

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Abstract

The primary goal of this research is to explore the impact of a student's service-learning experience gained through working on social entrepreneurship projects and participating in corporate social responsibility activities (CSR) on a student's change in their spiritual orientation as a change in attitude towards social and community development. This exploratory study analyzed 20 transformational stories from Viking Club students at the University of Sri Jayewardenepura (USJ) using snowballing to select the suitable respondents. The Viking Club is a student-led club at the USJ that promotes social entrepreneurship in Sri Lanka along with the active engagement in CSR activities. In-depth questionnaire was based on the author's personal experiences, autoethnography as the instrument to comprehend and capture the participants' real experiences of transformative change using a qualitative research approach. According to the findings, active participation in the Viking Club's social entrepreneurship and CSR activities boosted empathetic behavior and developed a more empathic attitude that was socially responsible, happy, as well as sustainable. The students appeared to be more inspired to work collaboratively and to put forth more effort in sharing love with others, which represents the evolution of spiritual orientation and how it has combined with social entrepreneurship to achieve the club's

ultimate vision of “Solving social problems in Sri Lanka through Entrepreneurship”. The paper thereby gives theoretical and practical implications.

Keywords: *Service-Learning, Social Entrepreneurship, Spiritual Orientation, Student clubs*

1. Introduction

As the digital age changes the nature of work and restructures our communities, educators are faced with the dual challenge of teaching students how to be the best performers in today's highly competitive economy while also instilling spiritual values that will help us create a more humane society for all. Service-learning is seen as a form of moral development and appreciation of the connections between civic engagement and spirituality. Civic participation is critical to many higher educational establishments around the world, according to Dalton (2006), who regarded service learning as a chance for moral development and appreciating the links between civic engagement and spirituality. As a result, service-learning is a course-related educational strategy that employs experiential learning to teach students about citizenship, academic subjects, and skills, as well as values.

Even though there are multiple scholars who have researched the impact of social entrepreneurship clubs on college campuses (Johanna & Martí, 2006; Johanna & Noboa, 2006) there is a lack in knowledge about the value of student-led social entrepreneurial clubs that develop the individuals' spiritual orientation through service learning. There is currently limited research on the role of student-led social entrepreneurial clubs in fostering service learning and transforming members internally for the betterment of the world which demands an exploration in order to solve the existing research problem. Several universities in Sri Lanka have student-led clubs and associations that aim to improve entrepreneurial learning, but only the University of Sri Jayewardenepura's Vikings club and the University of Colombo's Vikings club support social entrepreneurship in Sri Lanka (Jpura Vikings, 2019). The club is driven towards *solving social problems in Sri Lanka through Entrepreneurship* with active engagement in social entrepreneurship projects that address human and community needs. Furthermore, since service-learning is primarily an experiential learning, the lessons

are derived from the experience of conducting a service activity that addresses the needs of the community. The impact of the Viking club on a student's level of service learning thus would be critical to unearth. Thus, the primary purpose of this paper is to address the existing gap in the research studies conducted in understanding the value of the student-led social entrepreneurial clubs that develop the individuals' spiritual orientation through service learning. Therefore, two Research Objectives (RO) were established initially.

RO01: To explore the contribution of the Vikings Club of the University of Sri Jayewardenepura in enhancing the students' spiritual orientation as a change in attitude towards social and community development of a potential social entrepreneur through service-learning aspects.

RO02: To understand how effective service learning is in improving the students' vital aspects of social entrepreneurial learning.

RO03: To recommend the ways through which the Vikings Club of the University of Sri Jayewardenepura can further improve student-learning for a better way forward.

As one of the first detailed research studies on social entrepreneurship clubs in Sri Lanka, the paper also reports on the steering vision and objectives, the various club activities, the role of club in the paper's literature review and the students' motives for participating in the activities of the club under the findings. Thus, the final outcome of the discussion will facilitate answers to the research questions below.

RQ01: What is the contribution of the Vikings Club of the University of Sri Jayewardenepura in enhancing the students' spiritual orientation as a change in attitude towards social and community development of a potential social entrepreneur through service-learning aspects?

RQ02: How effective is service learning in improving the vital aspects of social entrepreneurial learning for the student?

RQ03: What are the ways through which the Vikings Club of the University of Sri Jayewardenepura can further improve the students' experience for a better way forward?

This paper is divided into six sections: literature review, methodology, findings, discussion of findings, conclusion, and summary. The literature section will cover significant research areas; the methodology section will explain the in-depth interview process and autoethnography; the findings section will provide an organized report of the in-depth interviews and autoethnography, the discussion of findings section will provide an analysis of the key findings of the study, followed by the conclusion of the paper and suggestions for future research directions.

The literature review covers six different domains, each of which, are believed to be interconnected: Service-learning, Spiritual Orientation, Dimension of Spiritual Orientation, Social Entrepreneurship, Student Clubs, and the Viking Club of the University of Sri Jayewardenepura.

2. Literature Review

2.1 Service-Learning (SL)

According to Jacoby (1996) SL is defined as “A form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development. Reflection and reciprocity are key concepts of service-learning” (p.5). Accordingly, it is clear that service-learning includes a service experience followed by critical reflection upon the experience as a means to facilitate learning. Service-learning also delivers a chance to feel the interconnectedness, an opportunity for “opening your heart,” and the enlargement of self-inquiry as well as self-knowledge (Louie-Badua and Wolf, 2008).

Service learning has bloomed in the arena of education, evidencing its usefulness concerning academic results and relative to social commitment which was further supported by their findings that confirmed that the SL approach has an impact on students’ evaluations of their own learning processes (Gomez-Estern et al., 2021). The tasks led by students must be motivated by community-defined needs with the aim of building reciprocal connections in the process. Attention in this paper is on a service-learning experience that strives to incorporate the following concepts: (1) Spiritual Orientation, (2) Social Entrepreneurship.

2.2 Spiritual Orientation

An additional outcome of service-learning is the dependence of spirituality for a given spiritual orientation. Spirituality means diverse things to individuals depending upon their spiritual orientation. Being spiritual is all about being human in full, and about connecting all the energies that are integral parts of us. It is also about linking with the life force that defines us and integrate us together (Moxley, 1999).

Similarly, Hamilton and Jackson (1998) argued that spirituality consists of three key themes: the further growth of self-awareness; the sense of interconnectedness of all; and the association between the “higher power” or the “higher purpose.”

The third theme does not essentially suggest a deity, even though it definitely could. Either way, for Hamilton and Jackson (1998) spirituality means the connection to something greater than oneself, such as, a higher purpose to serve a local community or a global community as well as a deity.

According to Singh and Premarajan, (2007), Spiritual Orientation (SO) has been conceptualized as the self-perceived spiritual knowledge, skills, and attitude that affect one's capacity to stem meaning and purpose, from both work and life. Thus, SO is facilitating a strengthening belief system that consist of Spiritual attitude: is having a positive opinion, thinking outside the apparent and having a feeling of inner peace. Spiritual knowledge: is being close to oneself, knowing the various needs of others and understanding that everything is influenced by everything else. Spiritual skill: is the capacity to exercise spirituality well, the capacity to live in the present moment and the capability to get responsibilities (Singh & Premarajan, 2007).

2.3 Dimensions of Spiritual Orientation

Built on the theories and definitions of spirituality specified by numerous authors the following dimensions of spiritual orientation are from Singh and Premarajan (2007) and are used as the basis for coding the interviews (if this is true) for the present study:

(1) Self-awareness

Self-awareness is knowing oneself, what he or she believes in or for what matters they will fight.

(2) Inter-connectedness

Inter-connectedness is viewed as an expression of oneness where everything is a part of everything else (Singh & Premarajan, 2007).

(3) Respect for others

Respect for others consists of the personal privacy, physical space along with the belongingness, religious beliefs, gender and lifestyles (Singh & Premarajan, 2007).

(4) Feeling of inner peace

One must feel happy with self, environment, work and others while having no complaint with life, and feel positive about life in order to live with peace of mind (Singh & Premarajan, 2007).

(5) Service towards humankind

The service towards humankind accounts for caring, being hopeful, kind, considerate, compassionate and empathetic for other beings, along with the ability to walk in the neighbour's shoes (Singh & Premarajan, 2007).

(6) Being vision and value led

It is the attainment beyond or partaking a sense that things could be well and better (Singh & Premarajan, 2007).

2.4 Social Entrepreneurship

Social Entrepreneurship (SE) is an emerging field of investigation within the entrepreneurship and not-for-profit marketing literatures (Weerawardena & Mort, 2006). Social Entrepreneurship is an innovative and a social value creating action that occurs within or across the non-profit, profit oriented, and the public sectors (Austin, Stevenson, & Wei-Skillern, 2006). The first main component to highlight is innovation. Entrepreneurship is a creative process that searches for opportunities to generate something new. The second major aspect is the social value creation which is a basic dimension differentiating SE from commercial entrepreneurship.

2.5 Student Clubs

A student club is defined as an independent group of students that gather on a regular basis with the goal of enhancing their own learning on a specific topic or theme (Cox

& Goff 1996). Professional honor societies, subject-specific clubs (e.g., investment), and expert interests are only some of the possibilities for student groups (e.g., Chinese business). They also participate in a variety of events that are dependent on the club's specific objective, such as guest lectures, seminar series, panel discussions, network meetings, and competitions (Cox & Goff 1996).

2.6 The Vikings Club of the University of Sri Jayewardenepura

The Vikings Club of the University of Sri Jayewardenepura is a student club established by a group of undergraduates in the year of 2018 with the primary idea developed by Dulaj Udayanga (Jpura Vikings, 2019) with the steering vision “Solving Social Problems in Sri Lanka through Entrepreneurship”. It is a student club that focuses on fostering social entrepreneurs and corporate social responsibility with the application of service learning.

“E.S. Wickramasekara, one of the authors of the current paper was a founder member of the club and was also a former Vice President who was involved in the recruitment process along with the ideation and implementation of major social movements that were undertaken by the club whose autoethnography is used in the data collection.

Table 1: The Vision, Mission and the Objectives of the Club

Vision	“Solving Social Problems in Sri Lanka through Entrepreneurship”
Mission	“Creating the best 100 Social Entrepreneurs in Sri Lanka whilst fostering their benevolence and innovative spirit hence promoting Social Entrepreneurship globally”
Objectives	• To nurture confident and responsible social entrepreneurs with a positive mind-set. • To provide continuous mutual assistance to those interested in starting their own business.

-
- To give members exposure to the practical business world and consequently developing their business insights.
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Source: (Jpura Vikings, 2019)

2.7 Expanding Beyond Social Entrepreneurship to CSR

In addition to the efforts the club shares in enhancing social entrepreneurship multiple corporate social responsibility movements that address human and community needs are also organized by the club and conducts them with the participation of the members of the club as reviewed under Table 2.

Table 2: The Corporate Social Responsibility movements of the Club

The event	Description
Walk of Mercy	Walk of Mercy is organized to teaches fellow Vikings well about the importance of humanity over material possessions in life, and as privileged members of the society, to educate and give them better opportunities to engage in community service to help the underprivileged. The Vikings continued visiting them following this first movement.
Medical Camp (Kruthaguna)	Vikings were able to undertake a health campaign for the sanitary workers at the University of Sri Jayewardenepura in partnership with the Ministry of Health, Nutrition, and Indigenous Medicine. The University's sanitary staff members were able to have their physical diseases diagnosed, as well as their blood pressure, glucose, and cholesterol levels checked, by general practitioner doctors and nurses. With the second installment of the Kruthaguna series the Vikings were able to undertake an eye check-up campaign for the sanitary workers at the University of Sri

	Jayewardenepura thanks to a collaboration with the Sri Lanka Eye Donation Society. The Vikings continued Kruthaguna following these first two movements.
Christmas with Kind souls	The Vikings spent the 24th of December celebrating Christmas with the patients and staff at Apeksha Hospital in Maharagama. Vikings managed to teach the world the true essence of Christmas. Vikings spent the day entertaining the residents of Apeksha Hospital, making it a cheerful Christmas evening. The Vikings continued visiting them following this first movement.

Source: (Jpura Vikings, 2019)

3. Methodology

The methodology is based on the philosophical assumption within the interpretive research paradigm as explained by Denzin & Lincoln (2011); both the interviewer and the respondents co-created knowledge, as well as an ontological belief that emphasizes reality as socially constructed. According to Creswell (2012), the interpretivism paradigm requires the researcher to inductively generate a theory based on the observations collected from the primary data. As a result, the current study is an exploratory study using an inductive methodology.

In this study, the snowballing sample approach was applied, which requires selecting a large number of "information-rich" respondents (Patton, 2002). The snowball sampling was used in the current study to select members who are actively involved in the activities club and thereby have been influenced by the club and who also possessed an open-minded understanding of it, as well as who had both the willingness and capability to articulate their own experience.

Twenty present and past members of the University of Sri Jayewardenepura's Vikings Club were selected to be interviewed. The first five respondents were contacted using the researcher's personal network and the remaining respondents were suggested by a few of the interviewed respondents and the founder of the club. It was significant since

the researcher, as a former vice president and active member of the club, had participated in a number of social activities and knew the respondents personally therefore the researcher had the capability of probing effectively during the interviews with the respondents and to get more sensitive and personal data on how both positively and negatively the club has influenced them.

To interpret the respondents' personal narratives about their experiences and motivation to participate in the club's activities one of the researcher's own autoethnographies were also used in the current study. Autoethnographies cover a wide range of topics, from personal experiences and reflections of the research process to parallel explorations of the researcher's and respondents' involvements, as well as the researcher's experience while doing precise research along with his/her subjective experience and perspective (Carolyn & Arthur., 2000). The researcher's personal narrative inspired the team of researchers to consider the changes she underwent as a result of her active participation in the club.

The identification of the primary themes (see Appendix 1), grounded in the authors' personal experiences, helped clarify respondents' narratives as one of the researchers reflected on her own evolving engagement with the Vikings Club. To minimize bias, all interviews were conducted by two of the researchers, with the analysis supervised by the senior authors. As Ritchie and Lewis (2003) note, qualitative studies typically employ two main forms of data collection: in-depth interviews and group discussions. For this study, only in-depth interviews were used, as they allow participants to provide detailed accounts of complex experiences (Bowling, 2002). Semi-structured interviews were selected for their flexibility, enabling the researchers to follow a prepared guide while also probing further to enrich the data (Bryman, 2018). The interview guide, prepared in advance, contained core questions that were addressed in each session. The interviews were conducted jointly by the two researchers, who used probing techniques to capture more nuanced insights. Owing to COVID-19 restrictions, interviews were held via Zoom with video enabled. Each session lasted no longer than sixty minutes, and participants were informed of both the time limit and the fact that the interviews

would be recorded. No participants objected. To avoid language barriers, interviews were conducted in both Sinhala and English.

Recording the interviews ensured systematic analysis and reduced the limitations of human recall, while also allowing researchers to focus on the interaction and observe participants' facial expressions. The twenty interviews were recorded on two smartphones and transcribed verbatim. All respondents were Buddhists and either current or former members of the club, each of whom already owned or aspired to own a business. The profiles of the twenty respondents are provided below.

Table 3: The Respondents' Profile

<i>Pseudonyms</i>	Age	Gender	Religion	Membership	Business
Respondent 01	24	Female	Buddhist	Former Executive Board Member	Wishes to become a lecturer
Respondent 02	23	Male	Buddhist	Director of Entrepreneurship	Organic fruits and vegetable delivery
Respondent 03	23	Male	Buddhist	Director Marketing, junior director board	Online and physical tuition classes on Geography
Respondent 04	24	Female	Buddhist	A member of the junior director board and assistant treasurer	Have started a business in designer ladies' shoes but now inactive
Respondent 05	24	Female	Buddhist	Director of Events	Wishes to do a job first

Respondent 06	27	Male	Buddhist	A member of the junior director board	Wishes to become a lawyer
Respondent 07	22	Male	Buddhist	A member of the junior director board	Undergraduate
Respondent 08	23	Male	Buddhist	President 2020-21	Haven't yet started a business
Respondent 09	26	Female	Buddhist	Former vice president and an initiative member	Lecturer
Respondent 10	25	Female	Buddhist	A member of the director board	A clothing line
Respondent 11	24	Female	Buddhist	Former executive board member	Has two businesses, cards and cakes.
Respondent 12	24	Male	Buddhist	A member of the director board and a former Webmaster	Wishes to start a business in the future
Respondent 13	23	Male	Buddhist	Webmaster 2020-21	Wishes to start a business in the future

Respondent 14	24	Female	Buddhist	Former Director of members relations	Wishes to start a business in the future
Respondent 15	27	Male	Buddhist	Founder	Owner of a few businesses
Respondent 16	24	Female	Hinduist	Former executive board member	Wishes to start a business in the future
Respondent 17	24	Male	Buddhist	Former Director of members relations	Sells electronic appliances as a business with a partnership with suppliers from China
Respondent 18	24	Male	Buddhist	Former Director of members relations	Wishes to start a business in the future
Respondent 19	22	Male	Buddhist	Current member	Undergraduate
Respondent 20	25	Male	Buddhist	Former webmaster	Wishes to start a business in the future

Source: Author Compiled

3.1 Data Analysis: Constant Comparative Method and Thematic Analysis

Tesch (1990) considers comparison the main intellectual process that underpins all grounded theory analysis, where she is adopting this viewpoint:

“Comparison is the most important intellectual tool. During analysis, the approach of comparing and contrasting is employed for virtually all intellectual tasks: constructing categories, defining category boundaries, assigning segments to categories, evaluating the content of each category, and discovering negative evidence. The purpose is to find conceptual connections, improve the discriminative ability of categories, and find patterns.” (Tesch,1990).

The method to the constant comparative method (CCM) was used for analysing the interview data. It was helpful as a purposeful way and in reporting the researchers’ own experiences which assured the traceability and credibility of data analysis (Tesch,1990). The responses were compared with each respondent in entering into conclusions. The comparisons were conducted with collective contribution of all the four authors through a meeting. Thus, the researchers knew beforehand the comparative steps needed in the analysis with respect to the aims, the questions asked and the responses. The difficulties and ambiguities of analysing qualitative data, the interview responses were re-writing, and revising, therefore, to reduce any means of bias the interviews were re-written, translated, and read again and again until meanings were clear.

The patterning of the collected data provided the answers to the research questions that were examined in the study. Also, initial results were needed, such as codes, conceptual profiles, summaries, and field notes. Accordingly, thematic analysis was used for the development of codes and themes.

3.2 Thematic Analysis

Clarke and Braun's (2013) six-step data analysis technique were used to analyze the data for this study, which included familiarizing with the data, generating initial codes, looking for themes, reviewing themes, defining and labeling the themes, and lastly producing the report. To begin, all of the transcribes were read several times to familiarize themselves with the data, which was straightforward because the data had been acquired by the researchers themselves.

Then, first and foremost, codes were generated. Code is a word or a brief phrase that is used to identify the parts of a data collection that are related to the research issue (Clarke & Braun, 2013). The initial round of code development and assignment yielded a total of 100 codes on the list which is attached in appendix 1. The questions were organized in a way that adhered to the interview guide. For ease of reference, all of the codes were manually recorded on a single sheet. The manual editing made the revision process go more smoothly. Because they all fell under the same code, several sentences were broken down into subcodes under a single parental code. Following the initial sifting of data, the search for themes began. A theme should be able to explain something relevant about the data and respond to research inquiries (Clarke & Braun, 2013). After the prospective themes were established, the final evaluation of the themes was completed, accompanied by the defining and naming of the themes, and they have been reported under the findings.

The data collection was done by two researchers and out of those two researchers one was the former vice president of the club and whose autoethnography was used as primary data of the study. All the four researchers were involved in the data analysis.

4. Results and Discussion

The research objectives of the study were to explore the contribution of the Vikings Club of the University of Sri Jayewardenepura in enhancing the spiritual orientation as a change in attitude towards social and community development of a potential social entrepreneur through service-learning aspects, understand how effective service learning is in improving the vital aspects of social entrepreneurial learning and thereby recommend the ways through which the Vikings Club of the University of Sri Jayewardenepura can further improve for a better way forward. The results of the thematic analysis of the interviews with the twenty members are shown in detail below, and they give evidence for the themes and sub-themes that arose from the data. As a result, it was discovered that active engagement in the club mirrored significant spiritual growth. During the data collection, the participants gave many insightful descriptions that helped to understand how the recognized characteristics of spiritual orientation evolved and were influenced throughout their time at the club. Purpose of life, self-

awareness, interconnectedness, respect for others, feeling of inner peace, service to humanity, being vision and value led, and social entrepreneurship were recognized themes through the six steps of the thematic analysis.

4.1 Spiritual Orientation

4.1.1 Purpose of life, a dimension of Spiritual Orientation

In order to understand how the respondents have changed their understanding as to the purpose of their life. The question, “Do you see any difference in how you define your life’s purpose?” was asked in the beginning to understand how the respondents perceive life and its purpose before becoming a member of the club and finally, a question was asked to understand their current understanding of the purpose of life.

The Respondent one, who wishes to develop her career in the academic field as a lecturer reported,

“The majority of the people talk about sustainability but personally, they lack the social well-being component of it. I did my undergraduate research in corporate sustainability and ethics related to the field of marketing because I know that is the solution. The health issues and most of the problems arise because the corporate sector does not provide accurate information. So, one day I want to do something that will provide an example to others. I know the club is promoting such ethical conduct and that is why I joined the club.”

She also stated,

“I have understood that the large multinational corporations in Sri Lanka along with its marketing function creates unnecessary needs for the consumers. Knowledge and intelligence are two different things and I see that the attitudes of the people are in a very low position currently in our country. So, I want to bring in sustainable and ethical ways of doing business and products one day”

Respondent two who is currently operating his own business that delivers natural organic fruits and vegetables to the consumers reported,

“I think the purpose of life is to live a long life in a healthy way. I think a lot of people today have given more value to money, but money isn't the only thing that we need in life. Most of us today eat a lot of unhealthy food it inspired me to start my business. I started my business after becoming a member of the club. I got to know members who were conducting research in the field of agriculture and who are working with the technology side of agriculture. I first started to learn about different plant types I had little knowledge as I came from a village”

According to the respondents' response of the data collected, it appears to suggest that respondents have highlighted slight changes in the way of perceiving and thereby living their life with meaning and purpose with the membership of the club. It is evident that the respondents have had spiritually driven purposes in life before becoming a member of the club.

They have added more value to the purpose of their lives with much more meaning and spiritual values with a proper understanding received by the experience received by witnessing the social and community problems by engaging in the initiatives of the club.

4.1.2 Self-awareness, a dimension of Spiritual Orientation

Almost all the respondents showed greater self-awareness with respect to the transformative changes that have taken place in their life like with the membership. Respondent five, who claimed that she was able to bond with other members greatly reported,

“I'm not usually getting inspired to help other people just because I feel that pain. But recently as one of our members and his whole family got infected by covid-19 members got together collected money and other. Essentials, but I didn't give money as all the other members have donated but I got the feeling that I must help, and I think that is an improvement”

As per Singh and Premarajan (2007) Self-awareness is knowing oneself for who they really are, and the beliefs that one holds in life. According to the findings it is evident that the respondent has been inspired by actively engaging in the activities of the club

in favour of social and community development through their social responsibility activities facilitate an opportunity for service learning for the members has increased self-awareness as a dimension of spiritual orientation.

4.1.3 Inter-connectedness, a dimension of Spiritual Orientation

Respondent ten, who intended to start a business even at the point of joining the club reported,

" I manage to get to know a lot of good people through the club. I was surprised to see their kindness and how helpful they were. I was exposed to friends who are into studies before. They were only focusing on their studies but not on any extracurricular activities. But I in the club we bonded so strongly"

It is clear that clubs do cause people to develop good connections as networking is one of the top reasons for joining a club, to find connections for personal, business, social, or spiritual reasons. The above quote does identify the respondent's ability to find people with spiritually driven attitudes.

As per Singh and Premarajan (2007) is an expression of unity among all. The results show that the respondent has been motivated to participate actively in club activities that support social and community development. These activities provide members with a chance to participate in service learning, which has increased interconnectedness as a dimension of spiritual orientation.

4.1.4 Respect for others, a dimension of Spiritual Orientation

Respondent four, who has improved herself with respect to being actively and socially engaged in with others through the club reported,

"As undergraduates usually we, don't get the opportunity to visit the hope Hospital and to actively engage with cancer patients. Also, the friendly relationships that we have with the non-Academic Staff, visiting the elder's homes, and spending time with them taught me the importance of respecting all human beings"

Respondent 12 also stated,

"I was exposed to seeing how all the members who respect each other even the senior members of the club. They are so friendly, kind and maintain no status or distance between each other"

4.1.5 Feeling of inner peace, a dimension of Spiritual Orientation

Most of the respondents did value peace of mind. They reported various sources of peace of mind for them but most importantly it is evident that the members avoid unnecessary troubles and looking forward to happiness and peace of mind. Respondent 9 who is one of the authors of the research along with the autoethnography reported,

"I value peace of mind now in my life more than anything. The true understanding of the purpose of life along with happiness reached me in 2020 with the learning of the philosophy of Buddhism. When I was working in the club, I did not have that understanding. And I believe with the understanding that I have right now if I had it before we would have been able to do things with much more meaning and true value than not just doing it merely for the purpose of doing it"

It is also clear that the respondents are experiencing spiritual satisfaction as a result of participating in the socially responsible events outlined in the literature review. These respondents are evidently happy for reasons other than pleasure, as seen by their responses. Literature clearly distinguishes between happiness and pleasure, with happiness being a mental state and pleasure being a chemical reaction that occurs in the brain as a result of the five senses being satisfied. Pleasure can bring happiness, but only for a brief time. Long-term happiness can be attained through completely fulfilling one's human responsibilities and duties. Obtaining power, wealth, prestige, position, and reputation provides pleasure to humans (Ulluwishewa, 2016).

4.1.6 Service towards humankind, a dimension of Spiritual Orientation

Respondent 7, who has participated in several business competitions organized by multinational companies for which the willingness was inspired by the club reported,

"Happiness for me is getting to know that someone has achieved something because I helped. I always had that way of thinking and by entering into the club it increased"

The response does identify a change, a positive increase, that occurred as a result of club membership.

The majority of respondents have acknowledged the importance of serving other people, as evidenced by their comments. Serving other people is both a source of long-term satisfaction and a responsibility for them. In the literature accessible, serving other people is also regarded as a wonderful virtue. Based on a thorough examination of the existing literature, Morales-Sánchez and Cabello-Medina (2015) identified a list of sixteen virtues for workers: transcendence, courage, environmental responsibility, commitment, benevolence, honesty, optimism, humility, fair treatment, perseverance, prudence, self-control, gratitude, service to others, solidarity, and amiability. It can be concluded that because serving other people is seen as a source of happiness, respondents are more interested in happiness than pleasure. In literature, it is believed that when a person seeks pleasure, he or she sees other people and the natural world around them as possible pleasure objects. And the software brain causes people to see themselves not as integral parts of the whole, but as individuals separate from others and the environment, and to see our fellow humans as 'others,' as in competitors and foes (Ulluwishewa, 2016). They become more self-centered when they regard themselves as individual creatures. Self-centered humans are unconcerned about other people, which has bad consequences for other people and the environment. As change agents, specifically social entrepreneurs, if they are self-centered, they will not develop enterprises that will solve social concerns, nor will they conduct business in a way that will safeguard other humans and nature, according to the setting of the current study.

4.1.7 Being vision and value led, a dimension of Spiritual Orientation

It is evident that the respondents. have become vision and value-led with their membership. Respondent three who has a plan of improving the teaching of Geography in Sri Lanka reported,

“Joining the club improved my willingness to help one another more. I have previously taught in a Sunday school and currently, I have my business. It has a Vision and a Mission. I'm working in a way that I will be able to achieve them. I came this long by myself, and I am looking forward to implementing both long-term and short-term goals and strategies to achieve them in the future.”

It can be stated that the respondents have reshaped their way of moving forward in life with the experiences that they have received by working with the club.

According to the evidence it cannot be concluded that the club and its service-learning projects are the only reason for the respondents to provide such responses that highlight the Spiritual Orientation. Also, the statement applies to all of the findings as it is nearly impossible and most likely impossible to isolate the impact of club membership from all other sources that influence a person's attitudes, opinions, and behaviour.

As per the current research findings, the club has become a fantastic platform for enhancing the willingness and capability of the majority of the respondents to serve other people and the society in which they live. During their time in the club, the responders' spiritual growth grew even more. As per the literature, the current study used a series of measures to assess respondents' spirituality levels and development. It was learned that the members of the club were chosen through an interview procedure conducted by the founder, initiative members, and existing board members. The author has also become active in the interviewing and selection processes. The members are initially assessed based on their level of kindness and viewpoint on societal concerns, as well as what they plan and hope to do in the future to avoid such situations. It is clear that their level of selflessness increased significantly after they first joined the club, and that their level of selflessness has continued to rise.

4.2 Social Entrepreneurship

It was found that active participation in the club has simulated important aspects of entrepreneurial learning. Most of the respondents reported that they did not have a sound understanding of the concept of social entrepreneurship when they first joined the club yet over time, they have become well aware.

Respondent 8 who is the current president of the club reported,

"Even though I knew from my Sunday's school that we must help the people in need I never practiced as I does now. It is because I saw how the senior club members helped others even with a little money in hand. I understood the importance of solving social problems. A social entrepreneur is the one recognises the social problems and tries to solve them through a creative business idea. Also, I think it is our responsibility as human beings"

Respondent 11, who has started three businesses of her own reported,

"I was inspired by the senior club members to start my own business soon. All the three businesses of mine received a huge support from the club. "

Empathy is an important trait for an entrepreneur to cultivate. The respondents' level of empathy has gradually improved as a result of their participation in the numerous social activities that the club has introduced. Many respondents expressed that observing elderly parents left alone in their homes lamenting their solitude and longing for their children—through the social project *Walk of Mercy* evoked a strong sense of empathy in them.

Solomon (1992), Shanahan, and Hyman's research findings are also consistent with the current findings (2003). Empathy, the Protestant work ethic (considered as hard effort), respect, piety, incorruptibility, and incorruptibility and reliability as a virtue of businesspeople, with managers were suggested based on their work where they established a new empirical virtue ethics scale out of 45 corporate virtues.

4.3 Weaknesses of the Club

As the only weakness that was reflected was the poor understanding of spirituality and the true meaning of selfless service. Respondent 6, who has only joined the Vikings Club in the University reported,

"I think I became more selfish by becoming a member of the club. I learned that we have to communicate greatly than truly working"

Respondent 20, who had given up working in other clubs and decided only to be a member of the high Kings club because of its uniqueness reported,

" The members do not communicate well. They just listen to something that someone else tells and blindly believe them. I think the members must be more friendly than they are now"

It is clear that such problems occur due to the fact of understanding the true meaning of service-learning even though they are planning projects that provoke selfless serving.

Table 3 provides the demographics of the respondents.

Limitations of the Study

It was also assumed that the respondents' actions were motivated by their religious beliefs in order to help other people and protect the environment in which they live. Because Buddhists made up the majority of the respondents, the sample was skewed toward one dominant faith. The respondents' ability to understand the teachings that they had previously learnt through Buddhism has been hampered by service projects organized by the club in which they had participated. As per the literature, service-learning projects are seen as a better way for Christian students to put their ideas into action at school rather than just expecting or analyzing them (Schaffer, 2004). According to the results of the current study, the respondents practiced Buddhism. And by participating in such service initiatives, the respondents have gained a better awareness of life's realities, and as a result, they have made certain changes to their way of life based on their comprehension of Buddhist philosophy and real-world experiences.

Table 4 : Comparative Overview: Christianity, Buddhism, and the Real World

Dimension	Christianity	Buddhism	Real World
Ultimate Reality	One God, creator and sustainer of the universe; revealed	No creator God; reality is impermanent, conditioned, and	Material, observable existence; explained through science, culture, and human experience

	through Jesus Christ (McGrath, 2016).	interconnected (Rahula, 1974).	(Berger & Luckmann, 1966).
Human Condition	Humans created in God's image but fallen through sin; need redemption (Tillich, 1957).	Humans suffer due to ignorance, craving, and attachment (Gethin, 1998).	Humans face biological and social challenges (aging, death, inequality, conflict) (Inglehart & Welzel, 2005).
Moral Framework	Rooted in God's commandments and Jesus' teachings of love and compassion (Yoder, 1972).	Guided by the Five Precepts and the Noble Eightfold Path (Harvey, 2013).	Based on cultural norms, secular ethics, laws, and human rights (Rawls, 1971).
Goal of Life	Eternal salvation and union with God in heaven (Lewis, 1952).	Liberation (<i>nirvana</i>) from suffering and rebirth (Williams, 2009).	Health, happiness, success, security, and legacy (Taylor, 1989).
View of Time & Afterlife	Linear: life → death → judgment → heaven or hell (Wright, 2003).	Cyclical: rebirth until enlightenment is achieved (Harvey, 2013).	Emphasis on the here and now; afterlife not assumed (Berger & Luckmann, 1966).

It was difficult to determine the willingness to participate in the service initiative. The majority of respondents said they were also inspired by the club's teaching of new skills through the many projects they had executed. When they joined, the majority of the respondents didn't have a clear idea of the club's purpose. At first, the respondents were unfamiliar with the concept of social entrepreneurship. Some of the respondents have

witnessed the club's service programs, which has influenced their decision to join. The originality of the club's service projects can be seen as a good characteristic.

5. Conclusion

The research paper contributes to a better understanding of the club's role in spiritual orientation development through service learning. Thus, the study facilitates answers to the below research questions. RQ01: What is the contribution of the Vikings Club of the University of Sri Jayewardenepura in enhancing the spiritual orientation as a change in attitude towards social and community development of a potential social entrepreneur through service-learning aspects? RQ02: How effective is service learning in improving the vital aspects of social entrepreneurial learning? RQ03: What are the ways through which the Vikings Club of the University of Sri Jayewardenepura can further improve for a better way forward?

The study revealed that the Vikings Club influences the value systems and mind-sets of future social entrepreneurs significantly. Through the service learning programs they design, the club ensures decision-making at both an individual and organizational level, on the ethical grounds of leadership, social responsibility, and community development. Subsequently, club members are engaged increasingly in genuine socially responsible activities geared toward solving immediate societal problems and toward fostering personal transformation. The key findings from this research is the spiritual orientation as a relevant factor for meaningful social change. The mission of the club-solving social problems and empowering emerging social entrepreneurs-is deeply anchored toward fostering compassion, empathy, and universal love. These orientations are translated into planned and spontaneous acts of service, thus furthering the idea that any service or action performed without expectation of reward is an act that contributes toward spiritual evolution.

The study also points toward another gap in knowledge: while most join the club with some spiritual values, their theoretical understanding of spirituality and its connectedness to service is limited. To increase impact, it is further recommended that the club includes some training for new recruits that will teach them to relate altruistic service to spiritual growth. Discussing it with them in theoretical, philosophical, and

even neuroscientific terms-that altruistic activity can literally rewire one's brain from self-preoccupation toward selflessness-will deepen members' ability to relate their experiences and enrich the transformative potential within those experiences. With a more intentional integration of theory and practice, the Vikings Club can further strengthen its role as a catalyst for spiritual and social entrepreneurial development. By fostering both awareness and understanding, the club can nurture a new generation of ethically grounded, socially conscious leaders who are equipped to create sustainable change in society.

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Appendices

Appendix 01

Code	Theme	Sub themes
Sustainable, Mindful, Happiness, Success, Love, healthy life, Wealthy life, Peaceful, family time, friends time, alone time, Trips, Travelling, helping others, teaching others, living in the moment, organic food, taking care of parents, family, well-being, good human being, doing better, giving, something back, nature friendly, family friendly, self-love, Help, live to the fullest, give back, Sharing, Caring, Others, Empathy, Compassion, team spirit, drive to help.		<i>Purpose of life, a dimension of Spiritual Orientation</i>
		<i>Self-awareness, a dimension of Spiritual Orientation</i>
		<i>Inter-connectedness, a dimension of Spiritual Orientation</i>
good people, kind, helpful, friendly, bonds, strong connection, caring, loving		
friendly relationships, non-academic staff, clerical staff, cleaning staff, all humans, no distance, no status		<i>Respect for others, a dimension of spiritual Orientation</i>

Happiness, peaceful mind, philosophy of Buddhism, circle of life, eternal peace, nibbana	<i>Spiritual Orientation</i>	Feeling of inner peace, a dimension of spiritual Orientation
Supporting, teaching others, giving, sharing		<i>Service towards humankind, a dimension of spiritual Orientation</i>
willingness to help, Vision, Mission, Achieve, long-term goals, short-term goals, strategies, future.		<i>Being vision and value led, a dimension of spiritual Orientation</i>
social problems, social business, support members, social entrepreneur, creative business idea, responsibility, community, wellbeing of people, help,	<i>Social Entrepreneurship</i>	
Miscommunication, selfish, outperform, competition, jealousy, anger, unkind	<i>Weaknesses of the Club</i>	

Appendix 02

INTERVIEW GUIDE

Respondent profile

Name:

Age:

Gender:

Membership position of the club:

Religious beliefs:

Transformation Story

1. What is it that you really wanted in life (purpose)?
සැබවින්ම ඔබේ ජීවිතයේ අරමුණ වූයේ කුමක්ද ?
2. What happen in your life that inspired a change in your life?
ඔබේ ජීවිතයේ වෙනසක් ඇති කිරීමට හේතු වූයේ කුමක්ද?
3. Why did you join the Vikings club?
4. Did the Vikings club support the change in your life? How?
ඔබගේ ජීවිතයේ වෙනසක් සඳහා වයිකින්ස් සභාය වූයේ කෙසේද?
5. What did you do and saw through the club? (Self-awareness / Inter-connectedness / Compassion/ Respect for others / Feeling of inner peace / Service towards humankind /love / happiness/ Being vision and value led/ Mindfulness/entrepreneurship)
වයිකින්ස් හරහා ඔබ කළේ කුමක්ද?
6. Did you become more selfless?
7. Did your ability to face sadness (reality of life) grew? (Atalo dhamma)
8. How do you live and see life now?
ඔබ දැන් ජීවත් වන්නේ කෙසේද?
9. Have you done things differently? What are they?
ඔබ වෙනස් ආකාරයකින් කටයුතු කර තිබේද? ඒවා කුමක් ද?
10. What is your purpose in life now?
දැන් ඔබේ ජීවිතයේ අරමුණ කුමක්ද?

Relationship between Financial Literacy and Business Performance: Empirical evidence from small and medium enterprises (SME) in Sri Lanka

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Abstract

The purpose of this study was to determine the level of financial literacy in Sri Lanka based on demographic factors and to identify the impact of financial literacy on the business performance of small and medium enterprises (SMEs). As a result, a quantitative study based on Prospect Theory and Exchange Theory was conducted. In Sri Lanka, there is a shortage of studies on these variables. This research is being carried out in order to close the empirical gap. The sample size was 100 SMEs in Sri Lanka, and the required data was collected using the usual purposive sampling method. After conducting factor analysis, reliability, and validity tests, this study used primary data from questionnaires. Since the previous empirical review suggested using this analysis to examine the relationship, the objectives were achieved through descriptive analysis, correlation, and regression analysis. The study's findings revealed that financial literacy and business performance have a positive relationship. As a result, independent variables such as technical financial knowledge, financial market knowledge, and financial management skills impact SMEs' business performance, with technical financial knowledge and financial management skills being the most influential of these variables. This study concluded that good financial knowledge among owners is required to make decisions to explain prospect theory. This study also found that owners and employees should have a higher level of education. According to the exchange theory, it should exchange information or knowledge among employees and recruit more skilled employees. The study gives SMEs and policymakers insight into how financial literacy can help them make better decisions and improve their

businesses performance. As a result, business owners and policymakers should set up training programs to improve financial literacy knowledge.

Keywords: *Financial Literacy, SME's, Business Performance*

1. Introduction

Small and medium-sized enterprises (SMEs) have risen to prominence as the primary engine for economic growth in Sri Lanka. For the simple reason, SMEs act as catalysts for entrepreneurship, employment, innovation, and other positive social outcomes. SMEs are crucial to domestic production and employment in developed and developing countries. Most SMEs in developing countries employ formal and informal workers to varying degrees (Page and Soderbom, 2015). As a result, SMEs are critical to the economy. Sri Lanka's government can increase tax revenue, reduce poverty, and reduce unemployment due to these factors.

When SMEs have a significant economic impact, they face various challenges. Their financial viability determines the success or failure of SMEs. One of the most common problems is maintaining a positive cash flow and working capital (Chepngetich, 2016). The result is that certain businesses fail because they do not understand the complexities of financial processes. The majority of SMEs do not know how to manage their finances. Sometimes they borrow money from high-interest companies, spend it all without planning, invest in negative NPV real estate investments, and so on. As a result, they must deal with significant financial difficulties within the organization and eventually close it. Given the high failure rate, it is critical to investigate the factors necessary for SMEs to survive and advance to the growth phase of the organizational life cycle (Kamunge et al., 2014).

Because of this, Financial Literacy has emerged as the most critical daily operation factor for both individuals and businesses. Financial literacy is the ability to make sound financial decisions based on knowledge of money and financial products (Basu, 2005). Financial literacy is critical for organizations to achieve their goals by improving transparency, efficiency, accuracy, and accountability (Koitaba, 2013). Effective financial literacy skill implementation leads to improved business performance due to better tracking business events from the record system (Siekei et al., 2013).

Numerous studies conducted over the last few decades have concluded that financial literacy strongly connects to financial performance. Furthermore, in today's dynamic and complex business environment, financial literacy is essential. Numerous studies have argued that SMEs have a limited role in economic development because of a lack of access to financial services, particularly from formal financial institutions. Due to poor financial literacy, SME owners and managers occur.

Studies on financial literacy tend to focus on personal finance more than business performance. Instead of focusing on a single aspect of financial knowledge, this study examined four different facets of technical, financial knowledge: risk attitude, financial management skills, and knowledge of financial markets. In every economy, SMEs play a critical role in creating jobs, contributing to GDP, and driving innovation. Over one million registered SMEs in Sri Lanka employ three people on average (Census, 2017). As a result, Sri Lankan SMEs account for 52 percent of GDP (CBSL) and employ more than 65 percent of the workforce.

However, due to a variety of factors, the failure rate of SMEs has skyrocketed. The major problem is that they do not know how to manage their finances to achieve their objectives and survive. It was reported that the rate of business failure among SMEs is 45% (Daily Mirror, 2016). It also revealed that the major causes for that failure are lack of education of business owners, prior business planning, financial knowledge & skills, and inappropriate finance. Thus, the primary objectives are to determine the level of financial literacy among SMEs based on demographic factors (gender, age, the amount of money they earn monthly, the educational level of the business owners, their legal structure, and the number of employees) and to investigate the impact of financial literacy on the business performance of SMEs in Sri Lanka.

2. Literature Review

2.1. Definitions of Financial Literacy

Financial literacy refers to the ability to make sound financial decisions by thoroughly understanding financial concepts and instruments (Agarwal et al., 2009). Noctor et al. (1992) further defined financial literacy as the ability to make sound financial decisions. Basic money management skills like budgeting, saving, investing, and insurance focus

on financial literacy (Widdowson and Haliwood, 2007). According to (Lusardi and Mitchell, 2011), financial literacy is the understanding of basic financial investment concepts such as inflation and risk diversification, as well as the ability to perform interest rate calculations.

The GAO (2012) defines financial literacy as the ability to make well-informed decisions and take appropriate action concerning one's current and future use and management of money. To have financial literacy, one must recognize and use financial statements to calculate important financial ratios for evaluating and managing a business (Pearl and Eileen, 2014). Personal and professional success now hinges on one's ability to manage one's finances.

This study defines financial literacy as the ability of business owners to make sound financial decisions in their day-to-day operations by combining technical, financial knowledge, financial market knowledge, financial management skills, and a risk-taking attitude.

Table 1: Definitions of financial literacy

Author	Definition
(Noctor et al., 1992)	Capability to make informed decisions and make effective decisions about the use and management of money.
(Mandell, 2006)	what people need to know in order to make critical financial decisions that are in their best interests.
(Widdowson and Haliwood, 2007)	basic money management skills such as budgeting, saving, investing, and insurance.
(Agarwal et al., 2010)	the ability to make sound financial decisions based on a thorough understanding of financial concepts and instruments.
(Lusardi and Mitchell 2011)	the recognizing of fundamental financial investment concepts such as inflation and risk diversification and the ability to perform interest rate calculations.

GAO (2012)	the capability to make informed decisions and take practical actions concerning the current and future use and management of money.
Pearl and Eileen (2014)	"The ability to understand and apply business financial statements to generate key financial ratios for evaluating and managing a business."

Source: Constructed based on literature

2.2 Definitions of Small and Medium-scale Enterprises (SMEs)

- There is no global agreement on the definition or nature of small and medium-sized enterprises (SMEs). According to (Obitayo, 1991), the most important criteria used to describe small-scale enterprises worldwide are the number of employees, sales volume, financial strength, relative size, initial capital outlay, and independent ownership. Small and medium-sized enterprises (SMEs) are businesses with annual revenues of less than Rs.600 million and borrowings of less than Rs.200 million by the Central Bank of Sri Lanka (CBSL). According to resource-based theories, a firm's resources and capabilities are the most critical determinants of its overall performance (Peteraf et al., 2003). Small and medium-sized enterprises (SMEs) are not subsidiaries of more giant corporations and have fewer than a certain number of employees (OECD, 2005).
- Small and medium-sized enterprises (SMEs) are defined in Sri Lanka's SME policy framework based on the number of employees and annual revenue. As a result, Small and Medium-sized Enterprises (SMEs) are defined as businesses with fewer than 300 employees and annual revenues of less than Rs.750 million (National Policy Framework for SME Development).

2.3 Empirical Evidence Related to Financial Literacy and Business Performance of SMEs

Scholars and policymakers in both developed and developing countries have recognized that financial literacy has been critical for the establishment and survival of small businesses over the last two decades (Wise, 2013). According to a study on

financial literacy in SMEs (Barte, 2012), it is directly related to business performance. The findings are consistent with Mwambia (2014), who discovered a favorable relationship between financial literacy and returns. (Njoroge, 2013) investigated the relationship between financial literacy and business success among SMEs in Nairobi County. According to the study, most Nairobi entrepreneurs had some financial literacy, and in some cases, those formal SMEs were highly financially literate.

According to Brown et al., (2006), financial literacy for small business owners must include reading and understanding fundamental financial statements and working with numbers, making informed judgments, and making effective decisions about the use and management of money. Financial literacy, as defined by two authors recently, is "the ability to understand and use business financial statements to generate key financial ratios to evaluate and manage a business." – Eileen and Pearl (2014). Through an educational program, (Brown et al., 2006) could demonstrate the rise of financial literacy among entrepreneurs, and (Pearl and Eileen, 2014) could demonstrate the association between financial literacy and the success of small businesses by removing the link between inadequate financial literacy and financial difficulties faced by entrepreneurs.

On the other hand, (Sage, 2012) conducted a survey on Canadian Small Business Financial Literacy, with a sample of 300 small businesses, to assess small business owners' perceptions, knowledge, and habits regarding financial and resource management. As a result, many researchers concluded that financial literacy has an impact on business performance.

2.4 Measures of Financial literacy

According to the literature on financial literacy, there are no standardized measures of financial literacy (Moore, 2003; Cole & Fernando, 2008). As a result, empirical researchers have used various measures to assess the effects of financial literacy on business performance.

Table 2: Measurements of financial literacy.

Author	Indicators
(Clercq and Venter, 2009)	Demographic factors Age Gender Cultural background Income
(Oseifuah, 2010)	Demographic data Financial attitude Financial knowledge Mathematical & computer literacy Financial behavior
(Zuhair and Wickremasinghe, 2014)	Personal factors Socio-economic factors Cultural factors
(Ajward et al., 2015)	Demographic factors Class rank Gender Race Age Experience Income

(Jonsson, 2016)	Technical financial knowledge Fund knowledge Market knowledge Risk attitude Saving
(Harari, 2016)	Saving behaviors Saving intention Attitudes toward saving

Source: Constructed based on literature

Clercq and venter (2009) have researched only personal demographic factors such as age, gender, cultural background, income. In contrast (Oseifuah, 2010) has considered demographic data, financial attitude, financial knowledge, mathematical & computer literacy, and financial behaviour. On the other hand, (Ajward et al., 2015) considered demographic factors such as class rank, gender, race, age, experience & income to measure financial literacy in a non-university higher education institution in Sri Lanka.

Jonsson (2016) has measured financial literacy using variables such as technical financial knowledge, fund knowledge, market knowledge, risk attitude & savings. (Harari, 2016) has adopted variables for his research such as saving behaviors, saving intention, and attitudes toward saving. (Jonsson, 2016) has measured financial literacy based on technical financial knowledge, fund knowledge, market knowledge, risk attitude, and saving. In contrast, Zuhair and Wickremasinghe (2014) have measured based on personal, socioeconomic, and cultural factors.

Accordingly, in this study, the conceptual framework for measuring the level of financial literacy has adopted four independent variables as Technical financial knowledge, Financial Market knowledge, Risk attitude, Financial management skills.

Furthermore, for measuring the business performance of the SMEs are adopted as dependent variables knowing the information about Pattern in sales, Pattern in profits, Business plan, Communication system, Customer loyalty and number of employees.

Technical financial knowledge: The ability to calculate and deal with new and more sophisticated financial instruments are increasingly important in day-to-day business operations. Specifically, the risk level of various securities, the implications of interest rates.

Financial Market knowledge; Everyone should be aware of the current state of the financial markets. A proclivity to monitor market activity and an interest in financial issues may lead to an awareness of situations in which one is more or less reluctant to trade, likely to result in corrective mechanisms (Wegener and Petty, 1995).

Risk attitude; Early work in psychology commonly assumed risk attitude, a person's position on the risk-aversion-to-risk-seeking continuum, to be a personality trait (Plax and Rosenfeld, 1976).

Financial management skills; Financial literacy can be measured based on financial management skills. i.e., the skills to budget and track spending, regularly contribute to a savings account and compare purchases to monthly statements.

2.5 Measures of Business Performance

Empirical researchers have adopted different measures to measure the impact of business performance.

Table 3: Measurement of business performance.

Author	Measurements
(Fernandes, 2015)	Business plan Cash flow forecast Profitability
(Chamwada, 2015)	Location of the SMEs The firm's size

	ROA Amount of capital invested in logarithmic terms Management practices
(Enlola and Encebanga, 2015)	Strategic resources Human resources Competitive capabilities
(Chepngetich, 2016)	Growth in sales Growth in profits Number of employees Market size Competitors

Source: Constructed based on literature

Fernandes (2015) has adopted measures to measure business performance such as business plan, cash flow forecast, and profitability, while (Enlola and Encebanga, 2015) used strategic resources, human resources, and competitive capabilities. On the other hand, Chamwada (2015) has adopted measures such as location, size, ROA, log amount of capital invested, and management practices in the study. Moreover, Chepngetich (2016) has measured business performance by using growth in sales, profits, number of employees, market size, and competitors.

2.6. Gap Analysis

Factors affecting a prospective chartered accountant's financial literacy have been studied (Clercq and venter, 2009). According to his findings, the age group, 30-39, is the most financially literate, and a higher income positively affects financial literacy. To this study's credit, it has considered various factors, but only two stand out. Financial literacy did not affect his company's performance, according to them. It was found that children with a high level of ISM had more positive attitudes toward saving

and more positive behaviour related to saving (Harari, 2016). On the other hand, this study has only looked at ways to save money but failed to consider financial literacy measures such as knowledge of financial markets, risk attitude, and financial management skills, among others.

Financial literacy directly impacts SMEs' sustainability, with access to finance acting as a partial mediator between financial literacy and sustainability (Ye and Kulathuna, 2018). The effects of the risk attitude on business performance, such as sales and employment, were not considered.

Because of this, to fill in research gaps, this study looked at financial measurements to see how well-informed small business owners are about financial literacy. According to previous research, financial literacy and business performance are linked based on metrics such as return on sales, ROI/ROS combination, liquidity, sales level, the growth rate of the sales sector, cash flow, and return on equity.

Financially literate business owners can make better decisions about how money is used and managed. Small business owners should know how to read and understand fundamental financial statements to work with numbers, make informed decisions, and use their money wisely. There is a general lack of financial literacy among small business owners, which adversely impacts the entire economy and society.

3. Methodology

Researchers used positivism, deductive reasoning, and quantitative methods to determine the impact of financial literacy on small- and medium-sized enterprises (SMEs). As a result, the study's two variables, financial literacy and small business performance in Sri Lanka could be identified with greater accuracy thanks to the study's effective research design. Owners of Sri Lankan SMEs are the target population for this research. According to the Sri Lankan census, there are approximately one billion small and medium-sized enterprises (SMEs). The sampling plan explains how the study's sampling unit, sampling frame, sampling procedures, and sample size will be determined using sampling plans and methods. Suppose all population units listed in the sampling frame random sample can be selected (Cooper and Schindler, 2011). However, this study could not explicitly identify a specific sampling frame and

considered a purposive sampling technique. This study selected 175 Sri Lankan SMEs that were both available and willing to participate using the purposive sampling method. Since the study was aimed at small business owners in Sri Lanka, only 100 of the 175 questionnaires were filled out by those business owners. Data on business performance (dependent variable) and technical financial knowledge, market knowledge, risk attitude, and market skills are needed. This data can be found here (independent variables). Primary data was used in this investigation, which was gathered by employing questionnaires. Primary data is vital because it enables the researcher to collect the information they need for the project (Cooper and Schindler, 2011). Questionnaires will be utilized to collect information. Five questions on the Likert scale and five on the nominal scale ask about dependent and independent variables and demographic factors. In order to achieve the study's goals, information was collected via a questionnaire.

The questionnaire consisted of 36 questions that were developed for each dependent and independent variable of the model. There are one dependent variable and four independent variables: technical financial knowledge, financial market knowledge, risk attitude, and financial management skills. Designing the questionnaire was a significant part of the research, as it was a fundamental part of the data collection process. As mentioned earlier, the questions were developed to gather information on business performance, technical financial knowledge, financial market knowledge, risk attitude, and financial management skills. In addition to this, a questionnaire was developed according to the past literature. Table 4 explains the operationalization of variables based on empirical review.

Table 4 - Operationalization table

Variable	Dimension	Indicator	No. of Questionnaire Items	Reference
Financial Literacy	Technical Finance	Simple and compound interest,	11 Items	Chepngeti ch (2016)

(Independent)	Knowledge (TFK)	risk & return, and inflation. Borrowing & budgeting financial literacy. The risk level of various securities, the interest rate for securities. The basic financial statements		Esiebugie, Richard, and Emmanuel (2018)
	Market Knowledge	Questions related to the finance market.	04 Items	Chepngeti ch (2016) Esiebugie, Richard, and Emmanuel (2018)
	Risk Attitude	Entrepreneurs or non-entrepreneurs Men & women Innovativeness	05 Items	Chepngeti ch (2016)

	Financial Management Skills	Managing daily expense Budget preparation & business plan Management experience Cash flow forecasting Knowledge of its software	06 Items	Chepngetich (2016) Esiebugie, Richard, and Emmanuel (2018)
Business performance (Dependent)	Growth in sales	Pattern of sales	11 Items	Chepngetich (2016) Cherotich, Ayuya and Sibiko (2018) Esiebugie, Richard
	Growth in profits	Pattern of profits		
	Growth in no of employees	Considering the number of employees at initial		
	Formal planning	Directing at long term goal attainment		

	Communic ation system	Top to bottom or bottom to up		and Emmanuel (2018)
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Source: Constructed based on literature

Accordingly, this study is conducted with a conceptual framework by using the following independent and dependent variables.

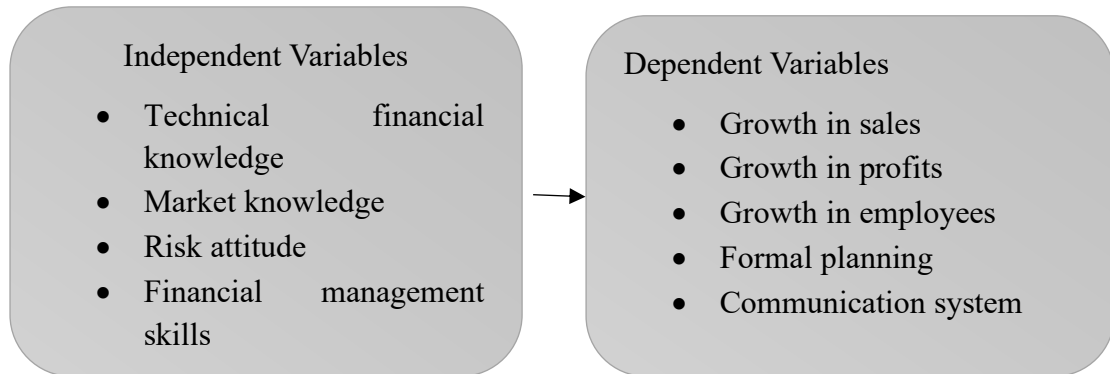


Figure 1: Conceptual framework

Several studies have found links between financial literacy and business performance. According to the findings of (Pearl and Eileen, 2014), there is a significant association between financial literacy and small business success by removing the link between inadequate financial literacy and financial difficulties entrepreneurs face. As a result, the hypothesis for this study was developed because there is a positive relationship between these variables.

H1: *There is a positive relationship between financial literacy and business performance in SMEs.*

Following the OECD, financial literacy includes knowledge of concepts such as simple and compound interest, return on investment (ROI), and inflation. Financial knowledge is a crucial determinant of whether someone is financially literate. When it comes to "best practice" financial behaviours, having financial knowledge is linked to having an adequate emergency fund, monitoring credit reports, avoiding checking account

overdrafts, not taking on revolving debt, and setting aside money for retirement, according to research (Robb, 2011).

H2: There is a positive relationship between Technical Financial Knowledge and the Business Performance of SMEs.

According to the past research, they have concluded that market knowledge of finance is significant for improving business performance. Accordingly, this study's hypothesis was developed, stating a positive association between financial market knowledge and business performance.

H3: There is a positive relationship between Financial Market Knowledge and Business Performance of SMEs.

The financial attitude of a company's employees is one factor that significantly impacts its overall performance. Richard and Emmanuel (2018) discovered that the financial attitude of small and medium-sized enterprises (SMEs) significantly impacts their performance. Since there is a positive relationship between these two variables, the hypothesis for this study was developed.

H4: There is a positive relationship between Risk Attitude and Business Performance of SMEs.

The lack of financial expertise among small business owners, according to research, can be a significant impediment to the success of a venture. There is a significant relationship between financial management skills and business performance, according to the findings of (Halabi and Dyt, 2010). Since there is a positive relationship between these two variables, the hypothesis for this study was developed.

H5: There is a positive relationship between Financial Management Skills and the Business Performance of SMEs.

The main aim of this study is to measure the effect of financial literacy on SMEs' business performance and examine the level of financial literacy. The data collected were analyzed with the aid of the Statistical Package for Social Sciences (SPSS 20) because of its clarity, precision, ease of comprehension, and interpretation. This study used descriptive analysis for that purpose, and accordingly, it used mean, median, mode

& standard deviation. In addition, this study used one-way ANOVA to test whether there is a difference in business performance according to demographic factors such as age, gender, education level, income level.

In addition to this, the correlation is used to measure the relationship between the independent variables - technical financial knowledge, financial market knowledge, risk attitude & financial management skills, and the dependent variable – business performance.

In this study, multiple linear regression analysis was used to assess the impact of financial literacy on business performance. Before that, this study validated some assumptions.

Accordingly, the regression model is as follows.

$$BP = \alpha + \beta_1 TFK + \beta_2 FMK + \beta_3 RA + \beta_4 FMS + \varepsilon$$

BP = Business Performance

TFK = Technical Financial Knowledge

FMK = Financial Market Knowledge

RA = Risk Attitude

FMS = Financial Management Skills

4. Discussion

Initially, the normality test was conducted, and outliers of the sample were reduced. Due to the low reliability *RA* variable is removed from the analysis. The reliability values for variables such as *TFK*, *FMK*, *FMS*, and *BP* were 0.793, 0.771, 0.852, and 0.865, respectively. Since the Extraction values from factor analysis for all questions are higher than 0.05, the validity was met.

In this study, the researcher considered two statistics related to factor analysis: Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. Bartlett's test of sphericity is a statistical test used to investigate the hypothesis that the variables in a population are uncorrelated. KMO sampling adequacy index is used to

determine whether factor analysis is appropriate. A value greater than 0.6 indicates the need for factor analysis.

Table 5: KMO and Bartlett's test – Factor analysis

Sampling Adequacy.		.857
	Approx. Chi-Square	2527.045
Bartlett's Test of Sphericity	df	630
	Sig.	.000

In this study, KMO is 0.857, which is higher than 0.6 indicates that the factor analysis is appropriate or the sample size is adequate for factor analysis. Furthermore, Bartlett's test is significant at a 5% level, indicating significant inter-item correlations.

Cronbach's alpha for *TFK* is 0.793, *FMK* is 0.771, *FMS* is 0.852, and *BP* is 0.865, which is more than 0.7. Accordingly, it can be indicated that there is good internal consistency between data, which measures the variables including *TFK*, *FMK*, *FMS*, and *BP*.

4.1. Descriptive Analysis

The descriptive analysis was conducted to examine the level of financial literacy among SMEs based on demographic factors, one of this study's main objectives. In addition, using one-way analysis of variance, it is measured whether financial literacy levels impact different demographic factors. Demographic factors include Gender, Age level, Monthly income level, Education level, Legal formation and number of employees at the SMEs.

- *To examine the level of financial literacy according to the Gender*

Table 6: Descriptives Analysis – Gender

N	Mean	Std. Deviation	Std. Error	95% Interval for Mean	Confidence Minimum	Confidence Maximum
				Lower Bound	Upper Bound	

Female	51	36.9412	5.92423	.82956	35.2750	38.6074	25.00	47.00
Male	29	38.1034	6.36028	1.18107	35.6841	40.5228	25.00	47.00
Total	80	37.3625	6.07181	.67885	36.0113	38.7137	25.00	47.00

Table 6 shows a descriptive table with beneficial statistics such as the mean, standard deviation, and 95 percent confidence intervals for the dependent variables – business performance for each separate male and female group. The mean value for a female is 36.9412, and the mean value for a male is 38.1034.

Table 7: Test of Homogeneity of Variance – Gender

Levene Statistic	df1	df2	Sig.
.423	1	78	.517

According to the table of test of homogeneity of variances, the Levene statistic indicates that the significant value is 0.517, which is greater than 0.05. It means that the requirement of homogeneity of variance has been met.

Table 8: ANOVA Table – Gender

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	24.974	1	24.974	.675	.414
Within Groups	2887.513	78	37.019		
Total	2912.487	79			

ANOVA test has been conducted to find the significance level between gender of SMEs' owners. Accordingly, Table 8 outlines that the significance value is 0.414, which is higher than 0.05, which means there is no statistically significant difference between the means of the different levels of gender. According to this data set, it can

be stated that the gender level of SMEs owners does not significantly impact financial literacy.

- *To examine the level of financial literacy according to the Age levels*

Table 9: Descriptives Table – Age

	N	Mean	Std. Deviation	Std. Error	95% Interval Lower Bound	Confidence Interval for Mean Upper Bound	Minimu m	Maximu m
18 - 25	2	33.5000	2.12132	1.50000	14.4407	52.5593	32.00	35.00
26 - 35	25	37.2800	5.44304	1.08861	35.0332	39.5268	27.00	46.00
36 - 45	32	37.3750	6.24112	1.10329	35.1248	39.6252	25.00	47.00
46 - 55	19	37.8421	6.55967	1.50489	34.6804	41.0038	25.00	47.00
Above 55	2	37.5000	13.43503	9.50000	-83.2089	158.2089	28.00	47.00
Total	80	37.3625	6.07181	.67885	36.0113	38.7137	25.00	47.00

Table 9 illustrates that the descriptive table provides some beneficial statistics such as the mean, standard deviation, and 95% confidence intervals for the dependent variables – business performance for each different age level such as 18 – 25, 26 – 35, 36 – 45, 46 – 55 & above 55. The mean value for different age levels is similar except for age levels of 18 – 25. The studies of (Brown et al. 2006) and (Banco de Portugal,2010) found evidence of lower levels of financial literacy among young entrepreneurs.

Table 10: Test of Homogeneity of Variance – Age

Levene Statistic	df1	df2	Sig.
1.828	4	75	.132

According to the table of test of homogeneity of variances, the Levene statistic indicates that the significant value is 0.132, which is greater than 0.05. It means that the requirement of homogeneity of variance has been met.

Table 11: ANOVA Table – Age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	34.421	4	8.605	.224	.924
Within Groups	2878.066	75	38.374		
Total	2912.488	79			

ANOVA test has been conducted to find the significance level among age levels of SMEs' owners. Accordingly, Table 11 outlines the significance value as 0.924, which is higher than 0.05, which means there is no statistically significant difference between the means of the different age levels. According to this data set, it can be stated that the age levels of SME owners do not significantly impact the level of financial literacy in Sri Lanka.

To examine the level of financial literacy according to the Monthly income levels

Table 12: Descriptives Analysis – Income level

	N	Mean	Std. Deviation	Std. Error	95% Interval for Mean	Confidence Lower Bound	Confidence Upper Bound	Minimum	Maximum
Below Rs.25000	34	34.5588	6.00097	1.02916	32.4650	36.6527	25.00	46.00	
Rs.25000- Rs.50000	35	38.4000	5.19162	.87754	36.6166	40.1834	27.00	47.00	

Rs.51000- Rs.100000	11	42.7273	4.31488	1.30099	39.8285	45.6260	33.00	47.00
Total	80	37.3625	6.07181	.67885	36.0113	38.7137	25.00	47.00

Table 12 illustrates the descriptive table, which provides some beneficial statistics such as the mean, standard deviation, and 95% confidence intervals for the dependent variables – business performance for each different monthly income level such as below Rs.25000, Rs.25000 – 50000, Rs.51000 – 100000 and above Rs.100000.

Table 13 Test of Homogeneity of Variance – Income level

Levene Statistic	df1	df2	Sig.
1.786	2	77	.175

According to the table of test of homogeneity of variances, the Levene statistic indicates that the significant value is 0.175, which is greater than 0.05. It means that the requirement of homogeneity of variance has been met.

Table 14 ANOVA Table – Income level

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	621.523	2	310.762	10.445	.000
Within Groups	2290.964	77	29.753		
Total	2912.487	79			

ANOVA test has been conducted to find the significance level among monthly income levels of SMEs. Accordingly, Table 14 outlines that the significance value is 0.000, which is less than 0.05, which means there is a statistically significant difference between the means of the different monthly income levels. According to this data set, it can be said that the monthly income levels of SMEs significantly impact the financial literacy in Sri Lanka.

Table 15: Multiple Comparisons – Income level

(I)	Monthly (J)	Monthly Mean	Std.	Sig.	95%	Confidence
Income Level	Income Level	Difference	(I- Error		Interval	
		J)			Lower	Upper
					Bound	Bound
Below Rs.25000	Rs.25000-					
	Rs.50000	-3.84118*	1.31345	.012	-6.9802	-.7022
	Rs.51000-					
	Rs.100000	-8.16845*	1.89206	.000	-12.6902	-3.6467
Rs.25000-	Below Rs.25000	3.84118*	1.31345	.012	.7022	6.9802
	Rs.51000-					
	Rs.100000	-4.32727	1.88544	.062	-8.8332	.1787
Rs.51000-	Below Rs.25000	8.16845*	1.89206	.000	3.6467	12.6902
	Rs.25000-					
	Rs.50000	4.32727	1.88544	.062	-.1787	8.8332

*. The mean difference is significant at the 0.05 level.

A Tukey post hoc test showed that financial literacy has a different effect on monthly income levels. The significant level between income below Rs.25000 and Rs.25000-50000 is 0.012, less than 0.05. Furthermore, the significant level between income below Rs.25000 and Rs.51000-100000 is 0.000. However, the significant level between income Rs.25000-50000 and Rs.51000-100000 is 0.062. Accordingly, when monthly income levels are Rs.25000-50000 and 51000-100000, the financial literacy level is higher than the income level below Rs.25000.

To examine the level of financial literacy according to the Education Levels

Table 16: Descriptives Analysis– Education level

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	Lower Bound	Upper Bound	Minimum	Maximum
Below O/L	24	35.1250	6.08857	1.24282	32.5540 37.6960	25.00	47.00		
Passed O/L	36	37.0556	6.01875	1.00313	35.0191 39.0920	25.00	46.00		
Passed A/L	17	40.5882	4.93785	1.19760	38.0494 43.1270	31.00	47.00		
Higher education after A/L	3	40.6667	5.85947	3.38296	26.1109 55.2224	34.00	45.00		
Total	80	37.3625	6.07181	.67885	36.0113 38.7137	25.00	47.00		

Table 16 shows that the descriptive table provides beneficial statistics for the dependent variables – business performance for each different education level, such as below O/L, passed O/L, passed A/L, and higher education after A/L as the mean, standard deviation, and 95 percent confidence intervals. The mean values for passed A/L and higher education are close to 40.6, higher than those for other education levels.

Table 17: Test of Homogeneity of Variances – Education level

Levene Statistic	df1	df2	Sig.
.626	3	76	.601

Furthermore, the table of test of homogeneity of variances the Levene statistic indicates that the significant value is 0.601, greater than 0.05. It means that the requirement of homogeneity of variance has been met.

Table 18: ANOVA Table – Education level

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	333.189	3	111.063	3.273	.026
Within Groups	2579.298	76	33.938		
Total	2912.487	79			

ANOVA test has been conducted to find the significance level among education levels of SMEs. Accordingly, Table 4.25 outlines that the significance value is 0.026, which is less than 0.05, which means there is a statistically significant difference between the means of the different levels of the education level. According to this data set, it can be said that the education level of SME owners significantly impacts the level of financial literacy in Sri Lanka.

According to (Sanjib 2016), education level leads to a higher understanding of financial matters, resulting in higher financial literacy. Furthermore, (Brown et al., 2006) and (Atkinson and Messy, 2012) discovered evidence that low levels of education were related to lower levels of financial literacy. As a result, the findings of this study are consistent with those of this study.

Table 19: Multiple comparisons – Education level

(I) Level	Education (J) Level	Education Mean Difference (I- J)	Std. Error	Sig.	95% Interval	Confidence Interval
					Lower Bound	Upper Bound
Below O/L	Passed O/L	-1.93056	1.53519	.593	-5.9632	2.1021
	Passed A/L	-5.46324*	1.84674	.021	-10.3142	-.6122
	Higher education after A/L	-5.54167	3.56746	.411	-14.9127	3.8293

Passed O/L	Below O/L	1.93056	1.53519	.593	-2.1021	5.9632
	Passed A/L	-3.53268	1.71438	.175	-8.0360	.9706
	Higher education after A/L	-3.61111	3.50078	.732	-12.8069	5.5847
Passed A/L	Below O/L	5.46324*	1.84674	.021	.6122	10.3142
	Passed O/L	3.53268	1.71438	.175	-.9706	8.0360
	Higher education after A/L	-.07843	3.64816	1.000	-9.6614	9.5045
Higher education after A/L	Below O/L	5.54167	3.56746	.411	-3.8293	14.9127
	Passed O/L	3.61111	3.50078	.732	-5.5847	12.8069
	Passed A/L	.07843	3.64816	1.000	-9.5045	9.6614

A Tukey post hoc test showed that financial literacy has a different effect on education levels. There is a significant difference between below O/L and passed A/L which the significant value is 0.021 between them. Therefore, when the owner of SME has the education level of passed A/L or higher education after A/L, the financial literacy level is high.

- *To examine the level of financial literacy according to the Legal formation of SMEs*

Table 20: Descriptives Analysis – Legal formation

N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	Minimum	Maximum
				Lower Bound	Upper Bound	

Sole proprietorship	74	36.9730	6.04543	.70277	35.5724	38.3736	25.00	47.00
Partnership	6	42.1667	4.35507	1.77795	37.5963	46.7370	36.00	47.00
Total	80	37.3625	6.07181	.67885	36.0113	38.7137	25.00	47.00

Table 20 illustrates that the descriptive table provides some beneficial statistics such as the mean, standard deviation, and 95% confidence intervals for the dependent variables – business performance for each legal formation of SMEs. Here the mean value for a sole proprietorship is 36.9730 and for a partnership is 42.1667.

Table 21: Test of Homogeneity of Variances – Legal formation

Levene Statistic	df1	df2	Sig.
1.583	1	78	.212

According to the table of test of homogeneity of variances, the Levene statistic indicates that the significant value is 0.212, which is greater than 0.05. It means that the requirement of homogeneity of variance has been met.

Table 22: ANOVA Table – Legal formation

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	149.708	1	149.708	4.227	.043
Within Groups	2762.779	78	35.420		
Total	2912.488	79			

ANOVA test has been conducted to find the significance level among the legal formation of SMEs. Accordingly, Table 22 indicates the significance value is 0.043, which is less than 0.05, which means there is a statistically significant difference between the means of the different levels of the legal formation of SMEs. According to this data set, it can be stated that the legal formation of SMEs has a significant impact on the level of financial literacy in Sri Lanka.

- *To examine the level of financial literacy according to the number of employees at SMEs*

Table 23: Descriptive Analysis – No of employees

	N	Mean	Std. Deviation	Std. Error	95% Interval for Mean	Confidence Interval for Mean	Minimum	Maximum
					Lower Bound	Upper Bound		
Below 2	19	33.0526	5.23316	1.20057	30.5303	35.5749	25.00	43.00
2 - 4	42	37.8571	5.20118	.80256	36.2363	39.4779	27.00	47.00
5 - 7	15	40.1333	6.46824	1.67009	36.5513	43.7153	28.00	47.00
8 - 10	2	37.5000	7.77817	5.50000	-32.3841	107.3841	32.00	43.00
Above 10	2	47.0000	.00000	.00000	47.0000	47.0000	47.00	47.00
Total	80	37.3625	6.07181	.67885	36.0113	38.7137	25.00	47.00

Table 23 illustrates that the descriptive table, which provides some beneficial statistics such as the mean, standard deviation, and 95% confidence intervals for the dependent variables – business performance for each number of employee level such as below 2, 2 – 4, 5 – 7, 8 – 10 & above 10. Accordingly, the mean value for no employees above 10 is higher than another no of employees, 47.0.

Table 24: Test of Homogeneity of Variance – No of employees

Levene Statistic	df1	df2	Sig.
1.693	4	75	.160

According to the table of test of homogeneity of variances, the Levene statistic indicates that the significant value is 0.160, which is greater than 0.05. It means that the requirement of homogeneity of variance has been met.

Table 25: ANOVA Table – No of employees

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	664.164	4	166.041	5.539	.001
Within Groups	2248.324	75	29.978		
Total	2912.487	79			

ANOVA test has been conducted to find the significance level among the number of employees of SMEs. Accordingly, Table 25 outlines the significance value is 0.001, which is less than 0.05, which means that there is a statistically significant difference between the means of the different levels of the number of employees. According to this data set, it can be stated that the number of employees of SMEs has an impact on the level of financial literacy in Sri Lanka. Accordingly, when the number of employees is 5-7, and above 10 at the SMEs, the level of financial literacy is high. When the number of employees is below 2, 2-4, 5-7, and 8-10 at the SMEs, the level of financial literacy is low.

4.2. Multiple Regression Analysis

In this study, another main objective is to investigate the relationship between financial literacy and the business performance of SMEs. For that purpose, multiple regression analysis is conducted. Before doing the regression analysis, four assumptions in this study such as normality, linearity, homoscedasticity, and absence of multicollinearity were tested.

Normality assumption

The term "normality" denotes that the residuals of the regression should have a normal distribution. The residuals are nothing more than the error terms.

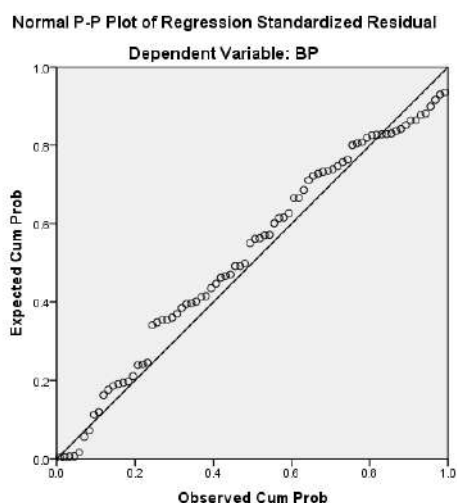


Figure 2: Normal P.P Plot

The little circles will follow the normality line according to the normal P-P plot of regression standardized residual. Accordingly, it can be said that the data is normally distributed in this study.

Homoscedasticity assumption

Another assumption of the regression analysis is to check the homoscedasticity using scatterplot diagrams.

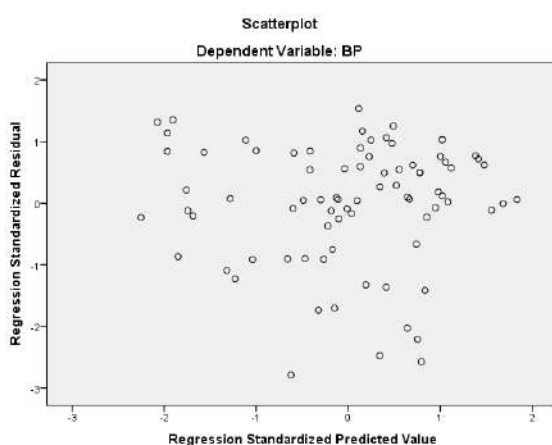


Figure 3 Scatterplot – Homoscedasticity assumption

Figure 3 shows no discernible pattern, and points are equally distributed above and below zero on the X-axis and to the left and right of zero on the Y-axis. Also, in the

residual plot, all points are within 3.3 and are distributed at random. As a result, the linearity and constant variance assumptions are satisfied.

Multicollinearity assumption

Another assumption of the regression analysis is variance inflation factor (VIF) values to test for multicollinearity. The term "collinear" refers to moving in tandem. The term multicollinearity refers to a situation in which independent variables are highly associated, violating the assumption of the predictors' independence. In the assessment of multicollinearity, the predictor (independent) variables are regressed upon other predictors.

Table 26: Coefficients – Multicollinearity assumption

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	4.882	3.152		1.549	.126		
TFK	.296	.099	.253	2.993	.004	.517	1.933
FMK	.095	.141	.048	.674	.503	.740	1.351
FMS	.873	.100	.657	8.745	.000	.657	1.522

Accordingly, Table 26: illustrates that the VIF value for all independent variables is below 5. Each value is below 5, indicating that the Multicollinearity is not severe and the assumption is met. Furthermore, the absence of multicollinearity often makes the regression coefficients high reliable.

After testing all the assumptions, multiple regression analysis was done. The R-Square value is 0.718, which means the fitted regression model can explain 71.8% of the variation in business performance. Furthermore, it can be stated that 71.8% of the variation in business performance can be explained by the independent variables –

TFK, *FMK*, and *f FMS*. Adjusted R^2 has represented the modification of R^2 that adjusted for the number of explanatory in a model.

Table 27: ANOVA Table – Multiple regression

	Sum of Squares	Df	Mean Square	F	Significance
Regression	2091.834	3	697.278	64.574	.000 ^b
Residual	820.654	76	10.798		
Total	2912.488	79			

Table 27 shows that the regression model accurately predicts the dependent variable. The overall regression model is statistically significant in this case because the F test is significant. As a result, it is possible to conclude that there is a positive relationship between financial literacy and the performance of SMEs in Sri Lanka.

According to the findings of (Pearl and Eileen, 2014), there is a positive relationship between financial literacy and small business success by removing the link between inadequate financial literacy and financial difficulties entrepreneurs face. Furthermore, several studies have found positive correlations between financial literacy and performance (Hilgert et al., 2003, Huston, 2010, Kidwell & Turrisi, 2004 & Lusardi, Mitchell, & Curto, 2010). As a result, the findings of this study are comparable to previous research. Using multiple linear regression analysis methods, Table 28 depicts the influence of the most critical financial literacy dimensions and business performance.

Table 28: Coefficients – Multiple regression

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Beta	Std. Error	

(Constant)	4.882	3.152		1.549	.126
<i>TFK</i>	.296	.099	.253	2.993	.004
<i>FMK</i>	.095	.141	.048	.674	.503
<i>FMS</i>	.873	.100	.657	8.745	.000

Accordingly, Table 28 illustrates the necessary information to predict *BP* from *TFK*, *FMK*, and *FMS* as well as to determine whether those independent variables contribute statistically significantly to the model. Accordingly, The p-value for *TFK* is 0.004, which is less than 0.05. Thus, *TFK* is a significant predictor of business performance. The p-value for *FMK* is 0.503, which is higher than 0.05. Thus, *FMK* is not a significant predictor of business performance. So this variable is removed from the model. The p-value for *FMS* is 0.000, which is less than 0.05. Thus, *FMS* is a significant predictor of business performance. Accordingly, the regression equation of three independent variables and business performance is:

$$BP = 4.882 + 0.296 TFK + \beta_4 0.873$$

4.3 Correlation Analysis

In this study, the sub-objectives examine the relationship between independent variables - *TFK*, *FMK*, *FMS*, and the dependent variable *BP*.

Accordingly, using the Pearson's product-moment correlation with a 2-tailed test of significance, the correlation analysis was made to investigate the relationship between *TFK*, *FMK*, *FMS*, and *BP*.

Table 29: Correlations

	<i>TFK</i>	<i>FMK</i>	<i>FMS</i>	<i>BP</i>
<i>TFK</i>	1			
<i>FMK</i>	.504**	1		

<i>FMS</i>	.581**	.229*	1	
<i>BP</i>	.659**	.326**	.815**	1

-
- *To examine the relationship between technical financial knowledge and business performance.*

The Pearson correlation between the two variables is 0.659, which is positive, according to Table 29. It demonstrates that *TFK* has a moderately positive relationship with *BP*. Furthermore, the correlation is statistically significant at 0.000 levels (2-tailed), less than 0.05. As a result, there is statistical evidence to support the claim that *TFK* and *BP* are related. Scholars and policymakers in both developing and developed countries have recognized the importance of *TFK* in the establishment and survival of SMEs, particularly in the agricultural sector, over the last decade (Wise, 2013).

- *To examine the relationship between financial market knowledge and business performance*

The Pearson correlation between the two variables is 0.326, which is positive, according to Table 29. It demonstrates that there is a moderately positive relationship between *FMK* and *BP*. However, the relationship is statistically significant because the correlation is significant at 0.003 (2-tailed) levels, less than 0.05. As a result, there is statistical evidence to support the claim that *FMK* and *BP* are related. According to a previous study (Richard and Emmanuel, 2018), there is a positive relationship between, *FMK* and *BP*. As a result, this study is similar to that one.

- *To examine the relationship between financial management skills and business performance*

The Pearson correlation between the two variables is 0.815, which is positive, according to Table 29. It demonstrates that *FMS*, and *BP* have a strong positive relationship. Furthermore, the correlation is statistically significant at 0.000 levels (2-tailed), less than 0.05. As a result, there is statistical evidence to support the claim that *FMS*, and *BP* are related. Furthermore, the relationships are statistically significant, with Sig. (2

tailed) 0.05 between independent variables. The past study of (Richard and Emmanuel, 2018) has been discovered that there is a strong positive association between *FMS* and *BP*. The results are consistent with them.

5. Conclusion

This study can conclude that financial literacy is positively related to the business performance of SMEs in Sri Lanka. Also, the conclusions drawn from this study revealed a positive relationship between three independent variables – technical financial knowledge, financial market knowledge, and financial management skills on the business performance of SMEs. However, according to the findings, technical financial knowledge and financial management skills are the most influential factors affecting business performance among these variables. Financial market knowledge is not essential to the improvement of the business performance of SMEs. Therefore, high levels of technical financial knowledge and financial management skills among employees imply higher financial returns for SMEs. An increase in technical financial knowledge and financial management skills will be increased financial returns by 72%.

The study can also conclude that SMEs' monthly income level, owners' education level, the legal formation of SMEs, and the number of employees are the primary factors influencing financial literacy. The research provides insight to the business owners of SMEs on how they can make better decisions to improve business performance through financial literacy. The impact that financial literacy can make on business performance dimensions is evaluated and analyzed. They are technical financial knowledge and financial management skills. Moreover, this study adds new knowledge to prospect theory by the financial knowledge among owners to make decisions.

Therefore, business owners and policymakers should arrange training programs to improve employees' knowledge of financial literacy. The training can improve the knowledge on budgeting and planning, maintaining cash book, record keeping, cash flow forecasting, and good IT knowledge on finance. In addition to that, it should give current education on finance techniques such as current interest rates, financial statements, safety borrowing methods, inflation. Furthermore, it adds new knowledge

to the current research community on the impact of financial literacy on business performance.

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Entrepreneurial Bricolage in SMEs: Exploring the Interplay of Divergent Thinking, Self-Efficacy, and Gender Dynamics

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Abstract

This study examines the relationships between divergent thinking, self-efficacy, and entrepreneurial bricolage in Small and Medium-sized Enterprises (SMEs), with a particular focus on the moderating role of gender. The research addresses a critical gap in understanding how cognitive processes interact with demographic factors to influence resourceful entrepreneurial behaviors, particularly in developing economy contexts where SMEs face persistent resource constraints. Adopting a quantitative approach, data were collected from 352 SME owners in Sri Lanka and analyzed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings reveal that both divergent thinking and self-efficacy have significant positive effects on entrepreneurial bricolage, while gender does not significantly moderate these relationships. These results underscore the centrality of creativity and confidence in fostering adaptive resource utilization, regardless of gender.

This study makes three key contributions. First, it extends entrepreneurial bricolage theory by empirically linking two core cognitive capabilities—divergent thinking and self-efficacy—to bricolage behavior. Second, it addresses a methodological and contextual gap by applying advanced structural modelling techniques to SMEs in a developing economy, offering evidence from a setting where bricolage is a strategic necessity. Third, it enriches gender and entrepreneurship literature by empirically testing the moderating role of gender, clarifying its limited influence in this context. The findings provide actionable insights for policymakers, entrepreneurship trainers, and SME support organizations to design interventions that cultivate creativity and

self-belief among entrepreneurs, ultimately enhancing SME resilience and sustainability.

Keywords: *Entrepreneurial Bricolage, SMEs, Self-Efficacy, Gender, Divergent Thinking*

1. Introduction

This study focuses on understanding the high failure rates of Small and Medium-sized Enterprises (SMEs) and the role that cognitive and demographic factors play in this context. It aims to bridge the gap in knowledge regarding the influence of divergent thinking, self-efficacy, and gender on entrepreneurial success, particularly in the realm of entrepreneurial bricolage.

SMEs are widely recognized as the backbone of the global economy, contributing significantly to job creation and economic growth (Acs & Audretsch, 2003). However, they face daunting challenges, with a substantial number failing within the first few years of operation (Aldrich & Martinez, 2001). This high failure rate is often attributed to a range of factors, including but not limited to financial constraints, market competition, and managerial inexperience. Understanding the underlying causes of these failures is crucial for developing strategies to support SME sustainability and growth.

Divergent thinking and self-efficacy are two cognitive factors that play a critical role in entrepreneurial success. Divergent thinking, which involves the ability to generate multiple creative solutions to a problem, is essential in the entrepreneurial process, especially in the face of resource constraints and uncertain market conditions (Runco, 2022). Self-efficacy, defined as the belief in one's ability to succeed in specific situations (Bandura, 1997), influences an entrepreneur's decision-making, risk-taking, and persistence, all of which are vital for navigating the challenges of starting and running a business.

Entrepreneurial bricolage, the practice of innovatively “making do” with limited resources is a critical strategy for SMEs operating under resource constraints (Baker & Nelson, 2005). Recent conceptual work further highlights bricolage’s importance in

adaptive contexts; for instance, Kumar and Stobdan (2024) examine how bricolage enables organizations to navigate uncertainty in resource-constrained environments), demonstrating its role in strategic flexibility. However, while the broader significance of bricolage is increasingly acknowledged, the influence of individual cognitive factors—such as divergent thinking and self-efficacy—on entrepreneurial bricolage behavior remains underexplored, indicating an important gap in current entrepreneurship research.

Gender is increasingly recognized as a critical factor in entrepreneurship. Studies have shown that male and female entrepreneurs often have different experiences and face different challenges in their entrepreneurial journeys (Brush et al., 2020). These differences may affect how entrepreneurs engage in divergent thinking, develop self-efficacy, and apply bricolage in their ventures. Understanding the moderating role of gender in these relationships is essential for developing gender-sensitive policies and support mechanisms for entrepreneurs.

This study is necessitated by the need to understand the complex interplay between these cognitive and demographic factors and how they impact the success and sustainability of SMEs. By exploring the relationships between divergent thinking, self-efficacy, entrepreneurial bricolage, and the moderating role of gender, this research aims to contribute to the development of more effective support systems for SMEs. This understanding is crucial for reducing failure rates and fostering a more robust and inclusive entrepreneurial ecosystem.

Entrepreneurship, particularly within the realm of Small and Medium-sized Enterprises (SMEs), plays a pivotal role in global economic development. However, SMEs face a high failure rate, with studies indicating that a significant proportion of these businesses do not survive beyond their initial years (Aldrich & Martinez, 2001). One of the critical factors contributing to this high failure rate is the lack of understanding of the cognitive and demographic factors influencing entrepreneurial success.

Divergent thinking and self-efficacy are essential cognitive processes in entrepreneurship. Divergent thinking, which involves the ability to generate creative and innovative ideas, is crucial for problem-solving and opportunity identification in

the challenging and resource-constrained environments in which many SMEs operate (Runco, 2022). Self-efficacy, or the belief in one's capabilities to execute tasks and achieve goals, significantly impacts entrepreneurial motivation and resilience (Bandura, 1997). Despite their importance, the specific impacts of these cognitive factors on entrepreneurial bricolage – the creative recombination of available resources for new purposes – are not fully understood.

Entrepreneurial bricolage refers to the capacity of entrepreneurs to creatively use limited resources to innovate and survive. Although divergent thinking and self-efficacy are known to drive such resourceful behavior, their combined impact and the role of gender in modulating this effect has largely been overlooked.

This research is timely and highly relevant in the Sri Lankan context. SMEs in Sri Lanka form the backbone of the economy, generating employment, fostering regional development, and contributing significantly to GDP. Yet, these enterprises face persistent challenges—capital constraints, limited managerial capacity, and market volatility that contribute to high failure and discontinuation rates. Understanding how cognitive factors such as creative thinking and confidence enhance bricolage is therefore particularly pertinent to improving SME survivability and performance in Sri Lanka.

Hence, this study has two main objectives:

1. To investigate the relationships between divergent thinking, self-efficacy, and entrepreneurial bricolage among Sri Lankan SME owners.
2. To examine whether gender moderates the effects of divergent thinking and self-efficacy on entrepreneurial bricolage.

By pinpointing how cognitive capabilities and gender dynamics influence bricolage, this research aims to inform targeted interventions—for example, training programs that enhance creative confidence—designed to support entrepreneurial persistence and economic resilience in Sri Lanka's SME sector.

This study makes three key contributions to the entrepreneurship literature. First, it extends entrepreneurial bricolage theory by empirically examining how two core

cognitive capabilities, divergent thinking and self-efficacy, drive bricolage behavior, a relationship that has received limited empirical attention in SME contexts. Second, it addresses a methodological and contextual gap by applying Partial Least Squares Structural Equation Modelling (PLS-SEM) to primary survey data from SMEs in Sri Lanka, a developing economy where resource constraints make bricolage a critical survival strategy. Third, it enriches gender and entrepreneurship scholarship by testing the moderating role of gender in these relationships, providing empirical evidence of its limited influence in this setting. These contributions not only advance theoretical understanding but also offer actionable guidance for policymakers, entrepreneurship trainers, and SME support organizations seeking to cultivate creativity and self-belief among entrepreneurs, ultimately enhancing SME resilience and sustainability.

2. Literature review

2.1. Theoretical Review

2.1.1 Entrepreneurial Bricolage Theory

The theory of entrepreneurial bricolage posits that entrepreneurs often operate under resource constraints and must creatively recombine available resources to innovate and solve problems. Baker and Nelson (2005) emphasize the importance of resourcefulness and improvisation in this process, suggesting that bricolage can lead to unique and innovative solutions.

2.1.2 Cognitive-Behavioral Theory

In the realm of entrepreneurship research, cognitive-behavioral theory offers a valuable lens for understanding the intricate relationship between an individual's thoughts, behaviors, and emotions. This theoretical framework posits that the cognitive processes of entrepreneurs, encompassing their beliefs about personal capabilities and market dynamics, play a pivotal role in shaping their entrepreneurial intentions and behaviors (Baron, 2004). The theory underscores the significance of how entrepreneurs perceive their environment and themselves, suggesting that these perceptions critically influence their actions and the eventual outcomes of their entrepreneurial endeavors (Krueger, 2003).

2.1.3 Self-Efficacy Theory

The belief in one's own entrepreneurial abilities (self-efficacy) is a key cognitive aspect that has been shown to impact entrepreneurial intentions and actions significantly. Entrepreneurs with higher self-efficacy are more likely to embark on entrepreneurial ventures and persist in the face of challenges (Bandura, 1997). Additionally, the way entrepreneurs interpret market opportunities and challenges also shapes their decision-making processes and strategic choices, ultimately affecting the success and growth of their ventures (Mitchell et al., 2007).

Therefore, cognitive-behavioral theory provides a comprehensive framework for analyzing how the internal cognitive world of an entrepreneur interacts with external actions, leading to a deeper understanding of the entrepreneurial process.

Self-efficacy theory, as articulated by Bandura, plays a crucial role in understanding entrepreneurial behavior. This theory asserts that an individual's belief in their ability to execute specific tasks effectively is a key determinant of their actions and subsequent outcomes (Bandura, 1997). Within the context of entrepreneurship, this concept of self-efficacy becomes particularly salient. It is posited that an entrepreneur's self-efficacy, or their confidence in their entrepreneurial capabilities, significantly influences their willingness to engage in risk-taking and to embark on entrepreneurial ventures (Chen, Greene, & Crick, 1998).

The impact of self-efficacy on entrepreneurship is multifaceted. Entrepreneurs with high self-efficacy are more likely to perceive challenging business situations as opportunities rather than threats, and they tend to set higher goals and remain committed to these goals even in the face of adversity (Zhao et al., 2005). This heightened sense of confidence in their abilities enables them to navigate the uncertainties and inherent risks of entrepreneurial activities more effectively (Boyd & Vozikis, 1994).

Moreover, self-efficacy influences not only the decision to initiate a venture but also the persistence and resilience of entrepreneurs throughout the entrepreneurial journey. Entrepreneurs with strong self-efficacy are more likely to persevere in their efforts

despite setbacks and are often more successful in securing funding and other resources critical for venture success (Markman et al., 2002).

In summary, self-efficacy theory provides a valuable framework for understanding the psychological underpinnings of entrepreneurial behavior, emphasizing the role of personal beliefs in capability as a driver of entrepreneurial action and success.

Resource Integration and Entrepreneurship: Entrepreneurial bricolage is closely tied to the idea of resource integration. Entrepreneurs often operate in environments where resources are scarce or unavailable. Bricolage allows them to creatively recombine and repurpose existing resources to address new challenges or seize opportunities. For instance, Fan et al. (2019) explored the relationships among entrepreneurship, entrepreneurial ability, bricolage, and the innovative business models of SMEs, emphasizing the role of resource integration in the process.

Bricolage and Business Model Innovation: Bricolage can lead to innovative business models. Entrepreneurs who practice bricolage are not just solving immediate problems; they are also rethinking how businesses can operate. Hou et al. (2022) highlighted the trickle-down effects of entrepreneurial bricolage on business model innovation, suggesting that bricolage can influence employee creativity and lead to innovative business models.

Bricolage in Adverse Conditions: Bricolage becomes especially crucial in adverse conditions, such as during crises or in challenging environments. For instance, Al-Bazaiah (2022) discussed the impact of entrepreneurial bricolage on the performance of e-commerce businesses, emphasizing how bricolage can help businesses overcome challenges like resource constraints.

Cognitive Aspects and Environmental Dynamics: The practice of bricolage is also influenced by cognitive abilities and environmental dynamics. Hou et al. (2022) explored how executive cognitive ability influences business model innovation through entrepreneurial bricolage, suggesting that cognitive ability and environmental dynamics play crucial roles in the bricolage process.

2.2 Empirical Review

Research on how gender differences impact entrepreneurial intentions generally presents two trends. Most studies suggest that male students exhibit stronger entrepreneurial intentions compared to their female counterparts (Haus et al., 2013; Sánchez & Licciardello, 2012; Yordanova & Tarrazon, 2010). Further evidence from Reynolds et al. (2002) indicates that in the USA, men are twice as likely as women to be engaged in starting a new business. This is echoed by Kothari's (2013) study in India, which found that among 880 final-year graduating students, only 5% of female students versus 10% of male students planned to pursue entrepreneurship. Similar disparities are visible in managerial domains. For instance, Allen et al. (2008) reported that the number of men initiating businesses is nearly double that of women. Gendered differences in leadership styles further illustrate this point: while women entrepreneurs tend to be more collaborative and inclusive, men often display more autocratic tendencies. Such differences can shape organizational strategies and outcomes. For example, Eagly and Johnson (1990) found that women were more likely to adopt democratic or participative leadership styles. Gender may also influence risk tolerance, with evidence suggesting that women tend to be more risk-averse than men, a factor that can significantly impact entrepreneurial ventures, investment decisions, and growth strategies (Byrnes et al., 1999).

However, other studies argue that gender does not significantly influence entrepreneurial intentions or activities. The relationship between gender and entrepreneurship remains contested. A critical review by Marlow and McAdam (2013) suggests that the influence of gender on entrepreneurial activity may be overstated. Although there are observable differences in the types of businesses initiated by men and women, the core intentions and processes driving entrepreneurship appear less dependent on gender than previously assumed. Similarly, Langowitz and Minniti (2007) found minimal differences between men and women regarding perceptions of entrepreneurial opportunities and self-confidence in business initiation, thereby challenging the dominant assumption that gender plays a decisive role in shaping entrepreneurial intentions.

Empirical evidence has also highlighted the role of cognitive abilities, particularly divergent thinking, in entrepreneurship. Divergent thinking fosters creativity and enables the generation of novel solutions—capabilities that are essential for entrepreneurial innovation (Runco, 2022). At the same time, gender disparities persist, with women often encountering unique barriers such as limited access to venture capital and restricted networking opportunities, both of which significantly influence entrepreneurial outcomes (Brush et al., 2020; Howell & Nanda, 2019).

Building on these insights, recent research has reinforced the importance of self-efficacy and bricolage in driving entrepreneurial outcomes, especially within resource-constrained environments. Jyoti et al. (2025) demonstrate that women entrepreneurs with higher levels of self-efficacy are more likely to engage in entrepreneurial bricolage, creatively leveraging limited resources to pursue sustainable business practices. Their study further highlights the moderating role of attitudinal factors in strengthening the bricolage–sustainability link, offering empirical evidence that psychological traits and behavioral strategies jointly shape entrepreneurial success. This supports the current study’s model by underscoring the interplay of self-efficacy, divergent thinking, and gender dynamics as critical mechanisms influencing SME performance.

Overall, the literature indicates that self-efficacy consistently emerges as a pivotal factor in entrepreneurship. Entrepreneurs with high self-efficacy demonstrate greater confidence in their abilities, are more willing to take risks, and show persistence in the face of challenges, ultimately increasing their likelihood of venture success.

2.3 Research Gap

Despite the valuable insights from prior studies, several key gaps remain:

1. Limited empirical testing of the *combined effects* of divergent thinking and self-efficacy on entrepreneurial bricolage.
2. Scarce evidence from developing economy SME contexts, where resource scarcity heightens the relevance of bricolage.

3. The moderating role of gender in the relationship between cognitive factors and entrepreneurial bricolage remains underexplored, despite gendered differences in entrepreneurial experiences.

Addressing these gaps will advance theoretical understanding of entrepreneurial bricolage and provide practical insights for designing SME support strategies that foster creativity, self-belief, and inclusivity.

2.4 Conceptual Framework and Hypotheses Development

The capacity for divergent thinking, defined by its facilitation of varied and imaginative idea generation, plays a pivotal role in entrepreneurial achievement, as identified in studies by Runco and Mraz (1992). Entrepreneurs regularly encounter intricate and unforeseeable problems, necessitating inventive resolutions. Divergent thinking empowers individuals to consider non-traditional methods, enhancing the impromptu essence intrinsic to entrepreneurial resourcefulness, as discussed by Baker and Nelson (2005).

Accordingly, the first hypothesis is developed as,

H1: There is a relationship between Divergent Thinking and Entrepreneurial Bricolage

The concept of self-efficacy, which refers to an individual's confidence in their capability to execute tasks, is frequently correlated with entrepreneurial activities, as evidenced in Bandura (1977). A strong sense of self-efficacy is connected with a greater propensity to undertake difficult tasks and to persevere against challenges, which are vital elements of entrepreneurial resourcefulness, as outlined by Baker and Nelson (2005). Studies, including those by An et al. (2018), indicate that entrepreneurs possessing high self-efficacy tend to be more adept at resourceful problem-solving and successfully managing the uncertainties that are characteristic of entrepreneurial endeavors. Accordingly, the second hypothesis is developed as,

H2: There is a relationship between Self Efficacy and Entrepreneurial Bricolage

Scholarly investigations into the differences in entrepreneurial behavior across genders have shown that the link between cognitive competencies, such as divergent thinking,

and entrepreneurial achievements may be gender-specific. This is highlighted in the research conducted by Jimenez and Fuentes (2016). Understanding how gender influences the impact of divergent thinking on entrepreneurial adaptability is crucial for a deeper insight into the factors that contribute to entrepreneurial success in both men and women. Accordingly, the third hypothesis is developed as,

H3: Gender moderates the relationship between Divergent Thinking and Entrepreneurial Bricolage

Differences in self-efficacy beliefs based on gender have been recorded, and these variations could affect the manner in which individuals tackle entrepreneurial challenges, as evidenced in studies by Jennings and McDougald (2007). Delving into the manner in which gender moderates the connection between self-efficacy and entrepreneurial resourcefulness is vital for identifying potential gender-specific routes to achieving entrepreneurial success. Thereby, the fourth hypothesis is developed as,

H4: Gender moderates the relationship between Self Efficacy and Entrepreneurial Bricolage

Conceptual Framework

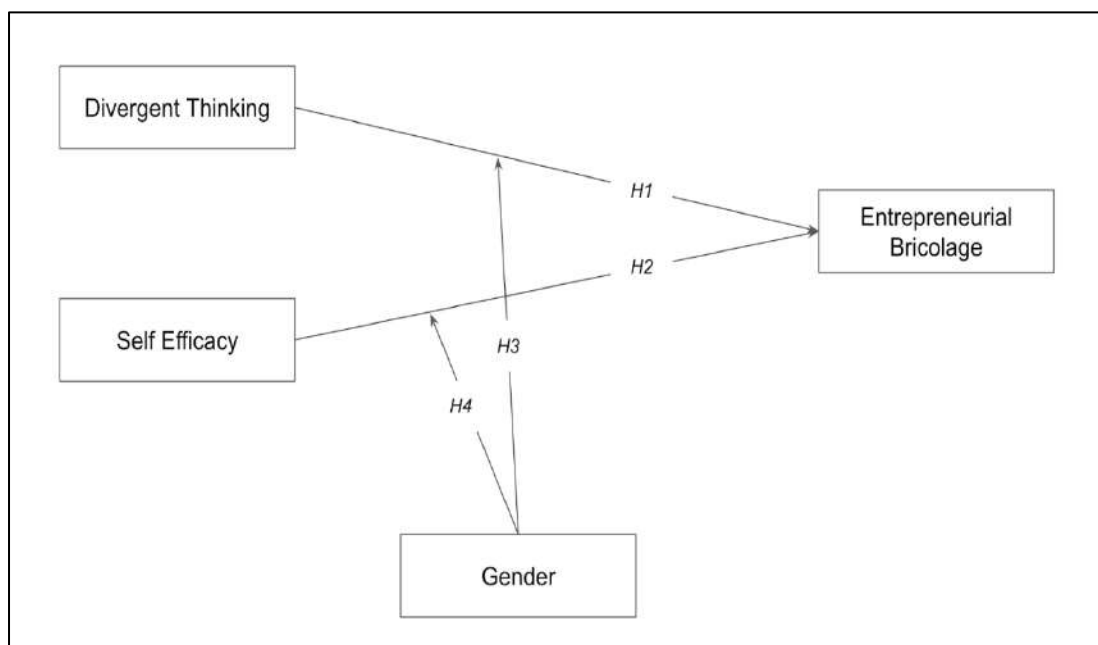


Figure 1: Conceptual Framework

Source: Compiled by authors

This research encompassed four hypotheses, grounded in the Cognitive Behavioural Theory, Self-Efficacy Theory and the Entrepreneurial Bricolage Theory, to explore the relationship among the Divergent Thinking, Self Efficacy and the Entrepreneurial Bricolage and to explore the moderating effect of gender on the above relationships. The research methodology aligned with positivism philosophy and adopted a deductive reasoning framework, as outlined by Bryman and Bell (2011). This study is characterized as cross-sectional, quantitative, and explanatory in nature, utilizing a survey strategy as detailed by Saunders et al. (2009).

3. Methodology

3.1 Research Design

This study adopted a positivist research philosophy with a deductive reasoning approach to test hypothesised relationships between divergent thinking, self-efficacy, and entrepreneurial bricolage, as well as the moderating role of gender. The design was quantitative, cross-sectional, and explanatory, making use of a structured survey strategy. The unit of analysis was SME owners in Sri Lanka, an appropriate context given the centrality of bricolage in resource-constrained environments.

A total of 352 valid responses were collected through self-administered questionnaires, developed from validated measurement scales for divergent thinking, self-efficacy, and entrepreneurial bricolage. The sample was drawn using convenience sampling, with both online and in-person distribution methods employed to maximise reach. Data analysis was conducted using Partial Least Squares Structural Equation Modelling (PLS-SEM) via Smart PLS 4.0, a method suitable for complex models with relatively small to medium sample sizes. The analysis followed a two-step process, first testing the measurement model for reliability and validity, and then evaluating the structural model to test hypotheses.

This design ensured methodological rigour while remaining appropriate for the study's objectives, enabling robust testing of the theoretical model in a developing economy SME context.

3.2 Population and Sampling

The target population comprised SME owners operating sole proprietorships registered in the Western Province of Sri Lanka. SMEs were selected as the unit of analysis due to their significant contribution to the economy and their frequent exposure to resource constraints, which make bricolage a relevant strategic behavior.

Given the absence of a comprehensive sampling frame for SMEs in Sri Lanka, convenience sampling was employed. A total of 400 questionnaires were distributed. Following data screening for completeness and validity, 352 usable responses were retained for analysis.

3.3 Operationalization of Variables

Construct	Definition	Indicators / Dimensions	Measurement Source	Scale
Divergent Thinking (DT)	The ability to generate multiple, novel solutions to a problem.	- Idea fluency (number of ideas)- Flexibility (variety of ideas)- Originality (novelty of ideas)- Elaboration (detail in ideas)	Runco (2022); Runco & Mraz (1992)	5-point Likert
Self-Efficacy (SE)	An individual's belief in their ability to successfully perform	- Confidence in problem-solving- Confidence in seizing opportunities-	Bandura (1997); Chen et al. (1998)	5-point Likert

	entrepreneurial tasks.	Confidence in handling risks- Confidence in achieving goals		
Entrepreneurial Bricolage (EB)	The practice of creatively recombining and leveraging available resources to address challenges and pursue opportunities.	- Making do with available resources- Combining resources for new purposes- Resource improvisation under constraints- Creating value from limited means	Baker & Nelson (2005); An et al. (2018)	5-point Likert
Gender (G)	Biological sex of the SME owner (used as moderator).	- Male- Female	Self-reported	Categorical (Dummy coded: 0 = Female, 1 = Male)

3.4 Measurement Instrument, Data Collection, and Analysis

A structured, self-administered questionnaire was developed using validated scales for divergent thinking (Runco, 2022), self-efficacy (Bandura, 1997; Chen et al., 1998), and entrepreneurial bricolage (Baker & Nelson, 2005; An et al., 2018). All items were rated on a five-point Likert scale (1 = “Strongly Disagree” to 5 = “Strongly Agree”). A pilot

test with 30 SME owners confirmed clarity and reliability, leading to minor wording adjustments.

Data were collected both in person and online, with voluntary participation, assured anonymity, and adherence to ethical guidelines. Analysis was conducted using SPSS for preliminary reliability tests and SmartPLS 4.0 for hypothesis testing via Partial Least Squares Structural Equation Modelling (PLS-SEM). Following Hair et al. (2014), the analysis comprised measurement model assessment (reliability, convergent, and discriminant validity) and structural model assessment, including bootstrapped estimates of path coefficients, t-statistics, and p-values. PLS-SEM was selected for its suitability for predictive modelling and complex models with relatively small to medium sample sizes (Chin, 1998).

4. Data Analysis

The study concluded its data analysis with a final sample of 352 responses, obtained after a thorough data screening procedure. This refined dataset underwent a demographic analysis. In this analysis, the Partial Least Squares (PLS) method, which is based on principal component analysis for estimation, was employed. This technique is particularly effective in confirming predictive models, especially those involving small sample sizes, as noted by Chin (1998). SmartPLS 4.0 was the specific software utilized. PLS facilitates two types of measurement models: firstly, evaluating the measurement model, and secondly, assessing the structural model.

The composition of the sample was as follows: 50.9% were manufacturing Small and Medium-sized Enterprises (SMEs), and 49.1% were service SMEs. In terms of business age, the majority (29.5%) of SMEs were in the 1-2 year range, whereas a smaller proportion (20.5%) reported their business age as less than one year. Additionally, 22.4% of the SMEs fell into the 3-5 years category, and 27.6% had been in business for over five years. Regarding the gender distribution of the respondents, 74% were males and 26% were females, reflecting a significant gender disparity within the sample.

Regarding employee numbers, a significant majority (66.5%) of the SMEs had a workforce size ranging from 1 to 20 employees. Meanwhile, 21.6% of the respondents indicated they did not have any employees. Smaller fractions of the sample reported

having larger workforces, with 7.7% having 21-50 employees, 2.8% with 51-100 employees, and only 1.4% having more than 100 employees.

Assessment of the Measurement Model

The psychometric properties of the model were scrutinized using indicators such as internal consistency, along with convergent and discriminant validities. Hair et al. (2014) proposed that item loadings should be at least 0.5 for adequacy, leading to the removal of items below this threshold. Furthermore, each construct in the study demonstrated composite reliabilities exceeding the 0.7 threshold, as recommended by Fornell and Larcker (1981), thereby confirming the internal consistency of the data. They also suggested adherence to the average variance extracted (AVE) criterion for evaluating convergent validity. An AVE value of 0.50 is considered ideal, indicating that a latent variable accounts for over half of the variance of its indicators on average. The AVEs in this study, as displayed in Table 1, were satisfactory.

Discriminant validity is established when two criteria are met: the AVE value surpasses 0.50, and the square root of the AVEs exceeds all cross-correlations. As shown in Table 1, the AVE values ranged from 0.50 to 0.97, with no correlations between constructs exceeding the square root of the AVE (the principal diagonal element). In conclusion, the study's measures were psychometrically sound for the purposes of this research.

Table 4: Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Divergent Thinking	0.762	0.771	0.863	0.677
Entrepreneurial _Bricolage	0.919	0.923	0.934	0.639
Self Efficacy	0.844	0.850	0.889	0.617

Assessment of the Structural Model

Table 5: Path Coefficients

		Path Coefficient	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Divergent Thinking Entrepreneurial _Bricolage	->	0.338	0.337	0.051	6.588	0.000
Gender Entrepreneurial _Bricolage	->	-0.055	-0.056	0.035	1.582	0.114
Self Efficacy Entrepreneurial _Bricolage	->	0.482	0.485	0.049	9.744	0.000
Gender Divergent Thinking Entrepreneurial _Bricolage	x	0.015	0.012	0.050	0.293	0.769
Gender x Self Efficacy Entrepreneurial _Bricolage	->	-0.005	-0.002	0.047	0.104	0.917

The bootstrapping analysis conducted via Smart PLS provided insights into the moderating effect of gender on the relationships between Self-Efficacy, Divergent

Thinking, and Entrepreneurial Bricolage. The path from Divergent Thinking to Entrepreneurial Bricolage was positive and statistically significant ($\beta = 0.338$, $p < 0.001$), suggesting that individuals with higher levels of divergent thinking are more likely to engage in entrepreneurial bricolage. The stability of this effect is reinforced by a high T statistic ($T = 6.588$) and a sample mean ($M = 0.337$) closely aligned with the original sample coefficient.

Contrastingly, gender did not demonstrate a significant direct effect on Entrepreneurial Bricolage ($\beta = -0.055$, $p = 0.114$), indicating that the likelihood of engaging in entrepreneurial bricolage is not dependent on gender when considered in isolation.

Self-Efficacy's contribution to Entrepreneurial Bricolage was strongly positive and significant ($\beta = 0.482$, $p < 0.001$), with a T statistic of 9.744, underscoring the robustness of this relationship across bootstrap samples.

However, the interaction effects of Gender with Divergent Thinking ($\beta = 0.015$, $p = 0.769$) and Gender with Self-Efficacy ($\beta = -0.005$, $p = 0.917$) on Entrepreneurial Bricolage were not significant. These findings indicate that the influence of Self-Efficacy and Divergent Thinking on Entrepreneurial Bricolage does not differ substantially between genders.

Overall, the results highlight the pivotal roles of Self-Efficacy and Divergent Thinking in fostering Entrepreneurial Bricolage, while Gender does not appear to have a moderating influence on these dynamics. Accordingly, H1 and H2 were supported while H3 and H4 were not supported as shown in the Table 3.

Table 6: Analysis of Hypotheses

Hypothesis	Path	Path Coefficient	T Statistics	P Values	Decision
H ₁	DT -> EB	0.338	6.588	0.000	Supported
H ₂	SE -> EB	0.482	9.744	0.000	Supported
H ₃	DT*G -> EB	0.015	0.293	0.769	Not Supported

H₄	SE*G	->	-0.005	0.104	0.917	Not
	EB					Supported

Source: Survey data.

5. Discussion of Findings

This study examined the relationships between divergent thinking, self-efficacy, and entrepreneurial bricolage, with gender as a potential moderating factor, in the context of SMEs in Sri Lanka. The results revealed that both divergent thinking and self-efficacy significantly and positively influenced entrepreneurial bricolage, supporting **H1** and **H2**. However, gender did not have a significant moderating effect on either relationship, leading to the rejection of **H3** and **H4**. These findings contribute to the literature by empirically validating the role of cognitive capabilities in fostering resourceful entrepreneurial behavior, while questioning the assumed moderating influence of gender in this context.

5.1 Cognitive Capabilities and Entrepreneurial Bricolage

The results demonstrate that divergent thinking significantly enhances entrepreneurial bricolage. This finding supports prior research emphasising creativity and adaptability as critical components of entrepreneurial success, particularly in constrained environments (Baker & Nelson, 2005, 2022). Entrepreneurs who can generate multiple, non-traditional solutions are better positioned to improvise and leverage available resources, aligning with Fisher's (2012) assertion that creative problem-solving is a survival strategy in early-stage ventures.

Similarly, self-efficacy emerged as a strong predictor of entrepreneurial bricolage, reinforcing Bandura's (1997) proposition that belief in one's abilities drives persistence and proactive action. Entrepreneurs with higher self-efficacy are more likely to perceive constraints as challenges to be overcome rather than insurmountable barriers (Zhao et al., 2005). This aligns with Chen, Greene, and Crick's (1998) observation that entrepreneurial self-efficacy fosters both venture initiation and innovative action.

These results suggest that cognitive resources, creativity and confidence are critical enablers of bricolage, complementing tangible resources and shaping how entrepreneurs respond to environmental challenges.

5.2 Demographic Moderators in Bricolage

Contrary to expectations, gender did not significantly moderate the relationships between either divergent thinking or self-efficacy and entrepreneurial bricolage. While some studies report gender-based differences in entrepreneurial intentions, leadership style, and risk-taking (Brush et al., 2020; Eagly & Johnson, 1990; Byrnes et al., 1999), other research finds minimal gender effects on core entrepreneurial capabilities (Langowitz & Minniti, 2007; Marlow & McAdam, 2013).

The absence of significant moderation effects in this study may be explained by contextual factors. In the resource-scarce environment of Sri Lankan SMEs, both male and female entrepreneurs may draw upon similar cognitive strategies to sustain their ventures. Cultural and economic constraints could also lead to convergence in entrepreneurial behavior, reducing the scope for gender-based variation in bricolage practices.

5.3 Theoretical Contributions

This study contributes to entrepreneurial bricolage theory (Baker & Nelson, 2005) by empirically linking two cognitive capabilities—divergent thinking and self-efficacy—to bricolage in SMEs. It integrates cognitive-behavioral theory (Baron, 2004) and self-efficacy theory (Bandura, 1997) into the bricolage context, demonstrating that psychological resources can be as influential as material ones. Furthermore, the finding of no significant gender moderation adds nuance to gender and entrepreneurship literature, suggesting that cognitive determinants of bricolage may operate similarly across genders in certain developing economy contexts.

5.4 Practical Implications

For policymakers and SME development agencies, these findings underscore the importance of enhancing creativity and self-confidence among entrepreneurs. Training programs should integrate divergent thinking exercises (Runco, 2022) and self-

efficacy-building interventions, such as mastery experiences, role modelling, and constructive feedback (Bandura, 1997). Given the lack of gender moderation, interventions can be designed to be inclusive and focus on cognitive skill enhancement across all entrepreneurs, rather than targeting one gender over the other.

5.5 Limitations and Future Research Directions

This study is limited by its geographic focus on the Western Province of Sri Lanka and its gender imbalance (74% male, 26% female), which may affect generalizability. The cross-sectional design restricts causal inference. Future studies should adopt longitudinal designs, test the model across different cultural and economic settings, and ensure more balanced gender representation. Additionally, examining other demographic and contextual moderators—such as age, education, or industry type—may yield deeper insights into the cognitive drivers of entrepreneurial bricolage.

6. Conclusion

This study examined how divergent thinking and self-efficacy influence entrepreneurial bricolage, with gender as a potential moderating factor, using evidence from 352 SME owners in Sri Lanka. The findings confirm that both divergent thinking and self-efficacy significantly and positively affect entrepreneurial bricolage, while gender does not significantly moderate these relationships. These results underscore the critical role of cognitive resources in enabling entrepreneurs to creatively and confidently utilise available resources, particularly in resource-constrained environments.

Theoretical implications are threefold. First, the study extends the entrepreneurial bricolage theory (Baker & Nelson, 2005) by empirically demonstrating the importance of cognitive capabilities—creativity and self-belief—in driving bricolage behavior. Second, it integrates cognitive-behavioural theory (Baron, 2004) and self-efficacy theory (Bandura, 1997) into the SME bricolage context, showing that psychological resources can be as influential as material ones in entrepreneurial success. Third, it contributes to gender and entrepreneurship literature by providing empirical evidence that, in certain developing economy contexts, gender may not significantly alter the effects of cognitive capabilities on bricolage.

Practical implications are equally important. Policymakers, SME development agencies, and entrepreneurship educators should prioritise programs that cultivate both divergent thinking and self-efficacy. This can be achieved through creativity-focused training, problem-solving simulations, and interventions designed to build confidence through mastery experiences, role modelling, and constructive feedback. Given the lack of gender moderation in this study, such interventions should be inclusive and accessible to all entrepreneurs, ensuring that cognitive skill development is not confined to specific demographic groups. Strengthening these capabilities can enhance the resilience, adaptability, and sustainability of SMEs, which are vital to economic growth and job creation in developing economies.

The study is not without limitations. The sample was geographically limited to the Western Province of Sri Lanka and exhibited gender imbalance, which may constrain generalizability. The cross-sectional design also limits causal inference. Future research should explore these relationships in more diverse cultural and economic contexts, adopt longitudinal designs, and examine additional moderating variables such as age, education, and industry sector.

In conclusion, this research reinforces the idea that the entrepreneurial capacity to “make do” with available resources is not solely determined by what entrepreneurs possess materially, but also by how they think and believe in their ability to act. By fostering creativity and self-confidence among entrepreneurs, stakeholders can build a more resilient and innovative SME sector, capable of thriving even in environments of scarcity and uncertainty.

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