

# A Literature Review on the Role of Entrepreneurial Leadership in Business Sustainability of Small-business Women Entrepreneurs

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**Abstract:**-This literature review investigates the imperative role of entrepreneurial leadership (EL) in fostering business sustainability (BS), particularly focusing on small-business women entrepreneurs (SWEs). The intertwined nature of EL and SWEs underscores the significance of women's empowerment and sustainable business practices for economic growth and societal welfare. Through an extensive analysis of existing literature and empirical studies, this paper navigates the intricate landscape of BS among SWEs, emphasizing the influence of EL on their organizational growth. By examining EL through the lenses of cognitive ambidexterity (CA), responsibility and sustainability (RS), and self and social awareness (SSA), this review, which is aided by the PRISMA method, underscores the critical factors propelling SWEs toward BS. Spanning from 2003 to 2023, the study captures the evolving concepts of EL within SWEs. It establishes a direct correlation between BS and EL principles, advocating for enhanced EL skills among SWEs to cultivate an inclusive and sustainable entrepreneurial ecosystem. The findings stress the necessity of empowering SWEs with resources to maximize their leadership potential, fostering thriving businesses and society.

**Keywords:** Business sustainability, entrepreneurial leadership, small business, women entrepreneurs.

## 1. Introduction

According to statistical research conducted, out of the overall 1.15 million active small and medium-sized enterprises (SMEs) in Malaysia, 20.6 per cent of them are under the ownership of women [1]. In 2020, it was estimated that approximately 190,000 women business owners were negatively impacted by the COVID-19 pandemic, further substantiating the decline in the number of women entrepreneurs and the widespread closure of many of their establishments [2]. In response to the problem, the government has implemented several initiatives to help women entrepreneurs reduce their financial load, prioritizing promoting and assisting them in rebuilding their enterprises [2].

The government has implemented numerous initiatives to facilitate the establishment and growth of women-owned enterprises in Malaysia, as evidenced by the allocation of resources through different ministries and government agencies [3]. However, according to the International Labour Organisation (ILO), most available support and resources are gender-neutral rather than gender-responsive [4]. Similarly, there is a notable disparity in the allocation of support programs, with most targeting micro-enterprises and women business owners from low-income backgrounds [5]. Equally, there is a lack of emphasis on assisting women entrepreneurs as they transition into higher value-added sectors and industries [4]. Hence, it is crucial for SWEs to demonstrate entrepreneurial leadership (EL) to drive the sustainability of their businesses while minimizing reliance on external assistance.

As in [6], there is empirical evidence supporting the notion that SWEs exhibit a deficiency in leadership efficacy, which hinders their ability to achieve success within industries that have historically been dominated by males, which further arisen as the primary obstacle in empowering women and achieving gender parity within the entrepreneurial domains. Following that, the authors perceived that EL plays an important role in allowing SWEs to secure their enterprises to achieve sustained business success. This paper contributed to the existing body of literature on business sustainability (BS) and entrepreneurial leadership (EL) by examining the role of SWEs' EL in strengthening their business sustainability.

The specific objectives of this review are as follows:

- i. To thoroughly comprehend and debate the future course of business sustainability among SWEs.
- ii. To investigate the aspects of EL that are useful for SWEs' business sustainability.
- iii. To reasonably connect the reviewed articles for insightful discussions and systematic interpretation of the results to integrate EL for the business sustainability of SWEs.

## 2. Literature Review

The authors collected the data subject for analysis by utilizing the "Connected Papers" web-based search engine, which provided a comprehensive list of relevant literature based on the identified keywords for this study. The "Connected Papers" tool is utilized because it offers similarity metrics derived from citations and references of articles sourced from multiple academic databases, including Semantic Scholar, Google Scholar, Emerald Insight, and SAGE journals. Consequently, this facilitated the authors in efficiently locating pertinent literature for the study while ensuring the reliability and credibility of the selected sources.

The study primarily examined publications that were published during the period spanning from 2003 to 2023, encompassing a timeframe of twenty years. The authors posited that the perspectives of EL for SWEs during the aforementioned period offer a suitable temporal framework for examining the development of associated theories.

### (a) Search Strategy

The search strategy comprised two iterations of searches using the keywords "business sustainability," "entrepreneurial leadership," "women entrepreneurs," and "small business". The authors' preset arrangement is used to identify the literature search iterations as described in Table 1 below.

**Table 1. Preset Arrangement for Literature Search Iterations**

Area of Study (A)	Scope of Study (B)	Element under study (C)	Search Iteration (A+B+C)
Business Sustainability (BS)	Women Entrepreneurs (WE)	Entrepreneurial leadership (EL)	1) BS – WE – EL
	Small Business (SB)		2) BS – SB – EL

The search procedures uncovered 180 publications. Table 2 summarises the search iteration outcomes based on the preset arrangements.

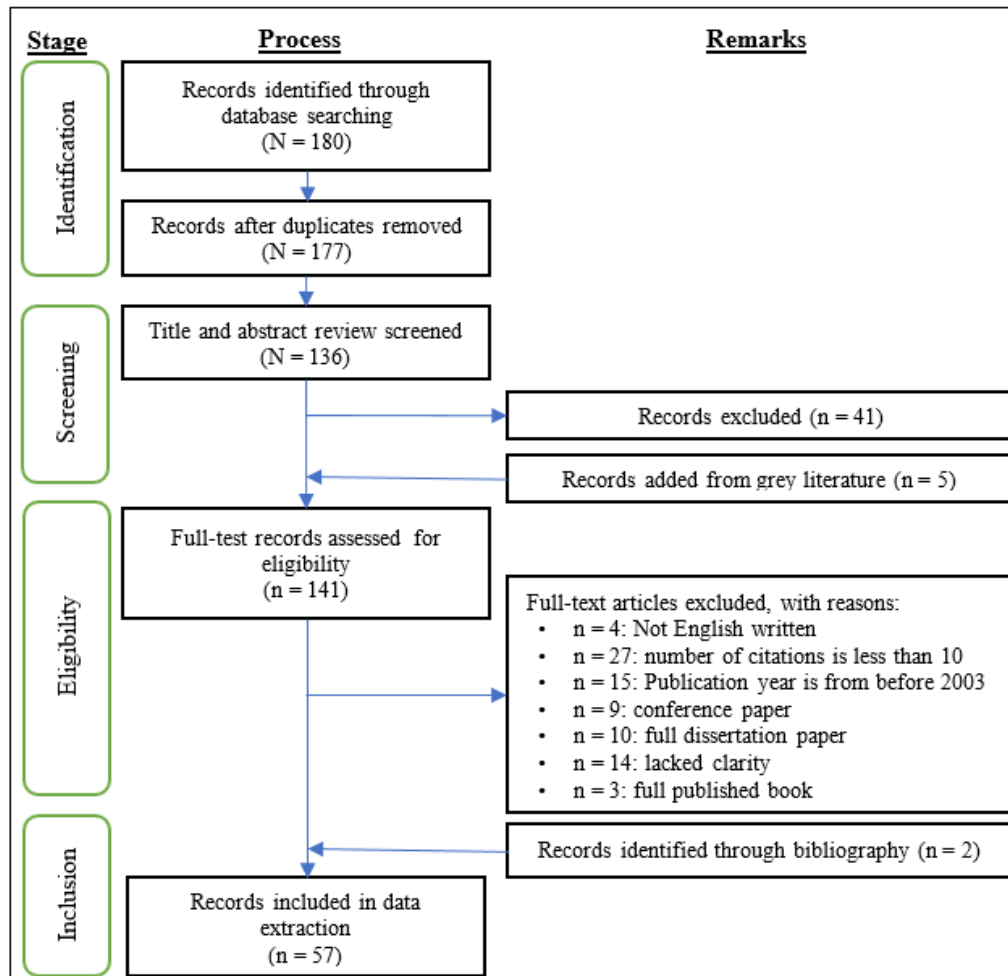
**Table 2. Summary of Search Iteration Results**

Period	2003 – 2023 (20 years)							
Web Engine	Connected Papers							
Search Keywords	Iteration 1				Iteration 2			
	business entrepreneurs leadership	sustainability AND	AND women entrepreneurial		business business AND	sustainability AND	AND small entrepreneurial leadership	

Search results	70	110
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**(b) Study Framework**

Figure 1 is a visual representation of the implemented search strategy adapted from the PRISMA method [7], consisting of four sequential phases of activity, i.e., identification, screening, eligibility, and inclusion.



**Figure 1: Search Study Framework Adapted from the PRISMA Method**

During the identification stage, the search process is initiated by implementing the preset search iteration arrangements. A total of 180 records from reputable sources were identified by searching the “Connected Papers” database. These records were obtained from various publications such as the Technology Innovation Management Review, Management Decision, Business Strategy and Development, International Journal of Academic Research in Business and Social Sciences, among others. Following that, the set of 180 records underwent a filtration process to eliminate any instances of duplication. Subsequently, 177 records were selected for the next stage of screening.

The screening process involved individually reviewing gathered records to find study-relevant titles and abstracts. Forty-one records were omitted from the study because they were unrelated to the keywords used. The screening produced 136 records representing the topic’s main literature. Five grey literature records, which consist of working documents, official newsletters, and reports, were added for examination at this stage. They total 141 records for eligibility examination.

Following the eligibility stage, the records were full-text screened using predetermined criteria to confirm that the selected articles were suitable for the study. It also helped authors analyze relevant, reliable, and credible

literature that gives an unbiased and complete summary of the material. The inclusion stage excluded 82 records based on Table 3's inclusion/exclusion criteria.

**Table 3. Secondary Research-Specific Inclusion/Exclusion Criteria**

Criteria	Inclusion	Exclusion
Research Study	<p>Definitions, Key functions, Applicability, Challenges, and Framework that evolved around the following areas:</p> <ul style="list-style-type: none"> <li>• Business sustainability practices among women entrepreneurs OR/AND small business; and</li> <li>• Entrepreneurial leadership practices among women entrepreneurs OR/AND small business.</li> </ul>	<ul style="list-style-type: none"> <li>• Articles lacked clarity concerning the topic, philosophy, and technique.</li> <li>• Articles/references from 2002 and prior years.</li> <li>• Articles with less than ten citations record</li> </ul>
Research Type	Published articles from reputable publications written in English	<ul style="list-style-type: none"> <li>• Full papers and abstracts published in conference proceedings</li> <li>• PhD/Master's degree dissertations and thesis excerpts</li> </ul>

Finally, bibliographical references in full-text screening revealed two records for inclusion. Researchers reviewed article bibliographies to find valuable sources that were not in the database. The add-on materials were selected and reviewed using the same approach. In this stage, a total of 57 records were gathered for data extraction, which necessitated the extraction of research characteristics, methodology, and outcomes. The researchers then conducted data analysis and synthesis to address the study's objectives.

### 3. Business Sustainability in Small Enterprises

The concept of business sustainability (BS) has been subjected to various definitions and perspectives. In recent years, the concept of BS has evolved to encompass financial performance and social and environmental considerations. The development of the concept of BS indicates the increasing recognition within the industry regarding the necessity to acknowledge and integrate sustainability considerations into their operational practices. Numerous scholars have arrived at a consensus regarding the multifaceted concept of BS, wherein it is widely acknowledged that the term encompasses the attributes of economically viable, socially responsible, and environmentally friendly [8], [9], [10].

SME Corp. Malaysia defines a small enterprise as a business entity with an annual sales turnover between RM300,000 and RM3 million or full-time employees between 5 and 30 people [11]. This section discussed how BS has evolved from a trend to a crucial requirement, expanding its influence beyond big companies to small-sized businesses. The comprehension of the components within the BST can influence the trajectory of BS implementation in small enterprises, prompting a shift towards a more comprehensive approach that incorporates social, economic, and environmental considerations.

In the case of small businesses, business owners focus less on shareholder value when examining value creation for their business sustainability. This is because many small businesses are family-owned and unlikely to collide with one another to exploit minority shareholders [12]. Indeed, it is common for small businesses' ownership control rights to be limited to ensure that profits are distributed among selected individuals [13].

BS in small enterprises began to value the ethical sensibility that captures the importance of employees and the public's well-being starting in the 2000s and continuing into recent years in terms of value creation for people, i.e., the company stakeholders [14], [15]. It includes companies' initiatives to enhance the lives of their employees and their families through fair labour practices, offering competitive salaries, and fostering a secure and welcoming workplace [15]. Simultaneously, ethical sensitivity reaches the local community through charitable efforts promoting common well-being and wealth [16]. It is followed by prioritizing civil society,

encouraging business transparency, and engaging stakeholders to improve the company's reputation [17]. In turn, it improves company ties with external parties, including clients, regulators, and partners in the supply chain, which ultimately contributes to business sustainability [18].

From a financial perspective, it is clear how the most crucial elements are changing—from a focus on people to generating money to the value of innovation and business owners' leadership. As in [14], establishing a sustainable business network facilitates collaboration among companies, thereby fostering partnerships that promote shared goals and values. As a result, businesses can better draw in and keep a committed customer base, cultivate solid partnerships with stakeholders, and seize long-term business prospects by matching their values with their consumers' values and actively pursuing innovation in the market.

It is also said that SMEs initially lacked expertise and comprehension of methods for addressing environmental challenges, as many SMEs believed they had little environmental impact [14]. However, businesses have become more conscious of environmental issues like climate change, pollution, and resource depletion [14]. As a result, there has been a paradigm change and an acceptance of the necessity of taking action to resolve these problems. A more nuanced comprehension of environmental issues, a broader emphasis on social responsibility, the pursuit of innovative solutions, the impact of leadership in driving change, and the importance of maintaining a sustainable public image are all part of the evolution of BS. These changes represent an evolution towards a more comprehensive and coordinated strategy for BS.

The concept of BS profoundly impacts small enterprises, leading to significant changes in their operational strategies and future direction [19]. Incorporating sustainable practices, such as cost and risk reduction activities, allows small businesses to conform to changing societal and environmental demands and bolsters their overall resilience and competitiveness [20], [21]. When small businesses prioritize sustainable growth, they not only help communities and the environment but also put themselves in a better position to succeed in the long run in a market that is becoming increasingly challenging.

#### **4. Small-Business Women Entrepreneurs' Business Sustainability**

Business sustainability (BS) in Small-business women entrepreneurs (SWEs) is defined as the capacity of their businesses to continue to function, produce revenue, and make meaningful contributions to their local communities over the long term [22]. SWEs frequently encounter challenges owing to gender-based discrimination and other causes. There are several obstacles to the long-term success of SWEs. Some of the most important issues related to this study are the lack of leadership skills and capacity building in business management [23], [24].

Following the understanding of BS in small enterprises, SWEs must aim to create and maintain a company that has a positive long-term impact on the environment, society, and economy that includes environmental awareness [9], community engagement [25], financial management [26], and innovation [27]. These characteristics are typical of those who exhibit entrepreneurial leadership (EL). Women entrepreneurs in Malaysia who adopt the aforementioned attributes can build long-lasting, fulfilling businesses for themselves and their communities [28]. Hence, EL is critical in enabling SWEs to create and sustain profitable businesses over time, eventually improving their economic standing.

Implementing BS practices can significantly influence the performance and growth of SMEs [29]; women-owned enterprises are included. The integration of sustainable practices into their business operations would most likely yield good impacts on multiple dimensions of their performance and add to their overall expansion, such as innovation and differentiation [30], cost savings, employee engagement and productivity [31], and reputation and brand building [32].

When it comes to pursuing sustainability in the modern business landscape, innovative ideas and creative thinking have become essential strategies [33], [34]. In the context of SWEs, this strategy transforms into a driving force behind their growth and long-term success, giving them more than just a competitive edge. By making innovation their guiding principle, SWEs can create ground-breaking ideas that align with sustainability and strongly connect with their target market's changing requirements and values, allowing them to come up

with unique goods, services, or entire business models [30], [33]. SWEs can transcend traditional boundaries and create solutions that set them apart from their rivals by rethinking problems as opportunities and fostering a culture that rewards experimentation [17]. As a result, innovation-driven differentiation benefits SWEs in two ways: it improves their market presence and lays the groundwork for future growth [30]. SWEs gain a competitive edge by utilizing their unique offerings, opening the door to potentially unexplored market areas.

In addition, incorporating sustainable strategies, which include enhancing energy and resource effectiveness, minimizing waste generation, and managing supply chains sustainably, holds the capacity to generate substantial financial benefits over an extended time, i.e., cost-saving advantages [31]. SWEs can allocate the collected cash resources from the cost-saving activities to fuel their expansion efforts. Having a strong financial base allows SWEs to confidently execute their growth strategies, which may involve entering new markets, opening additional branches, or diversifying product or service offerings [35], [36]. [35] further elaborated that the funds can be used to cover upfront costs, such as market research, infrastructure development, and initial marketing campaigns, ensuring a smoother and more successful expansion process.

The inclusion of sustainable practices within a firm encompasses not just external factors but also transcends internally to generate good benefits for its workforce dynamics [31]. As such, people frequently experience greater purpose and job satisfaction when working for a company that promotes sustainable practices [31]. Their sense of drive and engagement is much increased when they can relate their daily activities to a more important, meaningful goal [37]. Employees progress from simply contributors to champions of a common cause and collaborate for a larger good. That being said, when SWEs cultivate a culture of sustainability inside their organizations, they establish a setting where each team member's contributions are valued as vital parts of a larger goal [38]. This effort connects well with the employees, increasing their happiness and job satisfaction. Hence, it enables SWEs to access a powerful way to build a dedicated and high-performing workforce, which helps their businesses grow and succeed in the long run.

Moreover, the reputation of a small business owned and operated by women is crucial to its growth and success [32]. Adding sustainable practices to the foundation of their business operations adds an ethical layer that aligns with what society expects and values. In turn, this creates a positive image of the company and how consumers perceive it, radiating a sense of authenticity and accountability [39]. As the company acts according to its values, its reputation as a shining example of integrity develops, garnering the attention and respect of its immediate audience and a broader group of individuals [40]. This recognition, which demonstrates the company's commitment to sustainability, functions as a magnet, attracting both new customers and potential partners who wish to conduct business with a company that shares its values [40]. Consequently, establishing a positive reputation reflects moral principles and a growth strategy that increases the business's allure and gives it access to numerous opportunities.

Based on the insights from prior researchers, it is evident that there is a pressing need for proficient leadership positions within SWEs in order to facilitate the long-term viability of their respective businesses. Promoting the success and long-term sustainability of SWEs can be aided by addressing the key factors that contribute to their success and sustainability: their leadership skills. Further, this study examines how EL ensures the long-term success of SWEs.

## 5. Entrepreneurial Leadership

Entrepreneurial leadership (EL) has been widely defined in the context of leadership styles, signifying a unique method of directing and propelling endeavours. In the beginning, scholars described EL as a variant of entrepreneurship wherein individuals undertake personal risks to develop and augment their own enterprises. As in [41], visionary perspectives, ambitious resolve, and innovative capabilities are the key characteristics. As the business environment transforms, the significance of individual entrepreneurship diminishes, giving rise to corporate entrepreneurship, which tackles difficulties on a more comprehensive level [42].

[42] elaborated on this notion by emphasizing that established organizational leaders must foster an entrepreneurial culture, support innovation, and promote transformative business practices. In recent years, the



emergence of social entrepreneurship gave EL a fresh perspective by fusing economic savvy with a commitment to solving social and environmental problems [43]. In this setting, leaders create solutions that support a TBL strategy, promoting societal well-being, environmental sustainability, and financial prosperity.

EL has also integrated this dimension with the increasing recognition of the sustainability concept. Sustainable entrepreneurship emphasizes the establishment of firms that not only achieve financial stability but also make significant contributions to social and environmental outcomes [44]. [44] asserted that this strategy prioritizes integrating value creation, social responsibility, and sustainable practices as fundamental components of corporate endeavours.

Summing up the points above, the current state of EL encompasses various actors, including independent entrepreneurs, intrapreneurs operating within organizations, and individuals who lead in the domains of social and sustainable entrepreneurship. This event highlights the integration of business acumen, innovative thinking, adaptability, and a dedication to generating positive societal and environmental outcomes in establishing and maintaining enterprises.

#### (a) Theoretical overview of entrepreneurial leadership (EL)

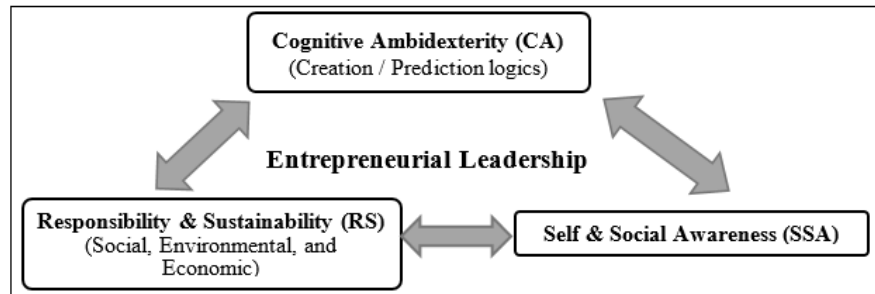
The authors investigated a few EL models, namely Gupta et al.'s (2004) [45] EL model, Thornberry's EL model [46], and Greenberg et al.'s (2013) [28] three EL principles model that may be applied to promote BS in SWEs by following the entrepreneurial perspectives that embed inside EL. Several works from earlier scholars are compared, as shown in Table 4, to comprehend the EL elements that fit BS terminology.

**Table 4. Comparative Studies of EL Models**

EL Model	Dimension	Role	EL Focus
Gupta (2004)	Scenario enactment	<ul style="list-style-type: none"> <li>Framing Challenge</li> <li>Absorbing uncertainty</li> <li>Path Clearing</li> </ul>	The importance of having a competent team to reorient the business model for business sustainability
	Cast enactment	<ul style="list-style-type: none"> <li>Building commitment</li> <li>Specifying limits</li> </ul>	
Thornberry (2006)	<ul style="list-style-type: none"> <li>Explorer</li> <li>Miner</li> <li>Accelerator</li> <li>Integrator</li> </ul>	<ul style="list-style-type: none"> <li>Opportunity recognition</li> <li>Innovativeness</li> <li>Promoting innovation</li> <li>Visionary</li> </ul>	Innovation, proactivity, and risk-taking to drive business sustainability
Greenberg et al. (2011)	Cognitive Ambidexterity	<ul style="list-style-type: none"> <li>Exploratory: Creation</li> <li>Exploitative thinking: prediction</li> </ul>	Entrepreneurial leaders have distinct mental models that enable them to positively impact the world by striving for sustainability.
	Social, Environmental, Economic Responsibility and Sustainability (SEERS)	<ul style="list-style-type: none"> <li>Social Responsibility and Sustainability</li> <li>Environmental Responsibility and Sustainability</li> <li>Economic Responsibility and Sustainability</li> </ul>	
	Self and Social Awareness	<ul style="list-style-type: none"> <li>Self-regulation</li> <li>Self-motivation</li> <li>Empathy</li> </ul>	

- Interpersonal skills

While Gupta's and Thornberry's EL models focused on personality traits and ethical and entrepreneurial orientations, Greenberg et al. presented three EL principles that support and facilitate the use of human initiative in enhancing business outcomes using sustainability's TBL approach. The three principles are (i) cognitive ambidexterity (CA), (ii) responsibility and sustainability (RS), and (iii) self and social awareness (SSA), as shown in Figure 2.



**Figure 2: The Three Principles of the Entrepreneurial Leadership Model**

Greenberg et al.'s (2011) EL model highlighted the importance of a business leader integrating CA, RS, and SSA in business operations. CA encompasses the simultaneous pursuit of exploration and exploitation, allowing prompt decision-making and action and the need to be adaptable and flexible in changing circumstances. Meanwhile, RS focuses on ethical business practices, and SSA promotes empathy and stakeholder engagement. All three principles synergistically promote comprehensive business sustainability for SWEs. This integration facilitates innovation, ethical behaviour, and positive societal outcomes, which contribute to sustaining their energy and motivation throughout their business journeys, consequently enabling them to make significant contributions to the success of their companies. Examining these three EL principles sheds light on how EL supports SWEs in today's dynamic and rapidly changing business environment.

### **(b) Cognitive Ambidexterity**

Cognitive ambidexterity (CA) is the ability to switch between exploratory and exploitative modes of thought as needed [47]. As in [28], exploratory thinking is a logic of creativity that comprises coming up with new ideas, considering various viewpoints, and trying new methods. It is typically associated with creative undertakings, ground-breaking concepts, and a readiness to take risks. On the other hand, exploitative thinking is a prediction logic that focuses on increasing effectiveness, streamlining processes, and fine-tuning established concepts that are linked to reliability, productivity, and consistency [28]. CA involves switching between different thinking styles and applying them appropriately to the situation. This skill is important for developing an entrepreneurial mindset, which promotes ambidexterity in the workplace, allowing individuals and groups to work together effectively and achieve shared goals innovatively [48].

For SWEs, CA can be highly relevant and helpful. SWEs frequently face specific challenges in the business environment, including bias and discrimination, limited access to finance and resources, and societal expectations and prejudices [49]. SWEs may use CA to help them overcome these issues by allowing them to develop fresh concepts, try new approaches, and take calculated risks while concentrating on productivity, efficiency, and profitability. SWEs that can switch between exploratory and exploitative modes of thought are more able to adapt to changing circumstances, spot new opportunities, and keep a step ahead of their competitors [50].

Furthermore, CA can aid SWEs in managing the complex social dynamics of the business environment [51]. SWEs can fight gender stereotypes and promote greater gender equality in the sector by innovating and upending the status quo [51]. Additionally, by focusing on production and profitability, they can gain credibility and respect in the business world [52]. CA can be a significant advantage for SWEs, enabling them to overcome



challenges effectively, capitalize on favourable circumstances, and flourish in a constantly evolving and highly competitive business environment.

### **(c) Responsibility and Sustainability**

Responsibility and sustainability (RS) are used to enable business leaders to internalize the concept of social, environmental, and economic responsibility and sustainability (SEERS) [28]. SEERS is becoming an important aspect for business owners, and SWEs are no exception.

SWEs can prioritize social RS by considering how their company affects their community, employees, and clients, which involves undertaking actions like supporting neighbourhood nonprofits and community initiatives, encouraging diversity and inclusion within their organization, and implementing ethical hiring procedures [53].

Environmental RS is another key quality of entrepreneur leaders. According to research, business owners with environmental RS are more inclined to accept accountability for the effects of their operations on the environment [54]. SWEs can lead by example when it comes to environmental responsibility by implementing green business practices, such as recycling, energy and water conservation, and using environmentally friendly products in their operations. They can also evaluate the environmental impact of their supplier chain and work to reduce their overall carbon footprint. Likewise, SWEs could act as role models for their workers and clients by instilling in them the value of environmental awareness and encouraging them to adopt sustainable lifestyles [55].

It is also emphasized the significance of economic RS in EL, arguing that business leaders bear a moral obligation to conduct themselves in a manner that enhances their companies' financial performance and contributes to the overall well-being of the economy. SWEs should concentrate on building a business that can be financially successful and offer value to clients and investors over the long term to demonstrate their commitment to economic RS [56]. [57] strengthened the point that SWEs need to manage their resources effectively, including financial resources, time, and human capital, to reduce waste, lower costs, and maximize production. SWEs who effectively manage business resources can achieve a balance between short-term and long-term goals, allocate resources to research and development, and establish a reputable brand built on trust and honesty [54]. Consequently, SWEs have the potential to contribute to the improvement of employment rates, thereby positively impacting local economies and the nation at large.

SEERS are the factors that effectively motivate SWEs to keep up with the latest developments in the field of sustainability. SWEs may maximize their business potential and contribute to the stakeholders' value generation by focusing on these SEERS aspects.

### **(d) Social and Self-awareness**

The third EL principle is SSA, which is defined as the ability to reflect on oneself that results in successful decision-making in ambiguous, complex environments [28]. These environments demand entrepreneurial leaders to have a genuine, in-depth understanding of who they are and how their environment affects them. That being said, SSA is fundamental for SWEs to succeed in today's dynamic business climate. SWEs can develop SSA by critically evaluating their goals, weaknesses and strengths, which include activities like coaching, mentoring, and training, as well as contemplation on oneself and receiving outside criticism [58]. In order to progress, SWEs with a healthy sense of self-awareness are aware of their own special set of talents and limits as well as their own set of guiding principles, beliefs, and motivations [59].

SSA helps SWEs make better business decisions, where they can focus on their skills and delegate responsibilities to others in areas where they are less proficient by identifying their strengths and weaknesses. This can help them make better business planning, recruitment, and resource allocation decisions.

Additionally, SSA can help SWEs manage their emotions and responses during stressful times. Running a business can be challenging and rarely goes as planned. Self-awareness and positive coping methods would help them identify and control unpleasant emotions like worry, stress, and anger.

Furthermore, SSA can help SWEs build deeper relationships with their team, clients, and other stakeholders [60]. They can better align their business with these principles when they strongly grasp their beliefs and motives. This helps them draw customers who share their values and assemble a workforce that is dedicated to their visions.

## 6. The Relationship between Business Sustainability and Entrepreneurial Leadership

The literature review provided a comprehensive overview of the current study on BS and EL in the context of SWEs.

The literature review began by highlighting the concept of BS and its importance for small businesses. It explains how BS goes beyond financial performance and includes social and environmental considerations.

The interaction between BS and EL is a critical dynamic that affects companies' long-term performance and resilience. In this context, BS is the dependent variable, signifying a company's ability to withstand and grow in a fast-changing economic and environmental setting. On the other hand, the three principles of EL serve as independent variables with considerable influences on a business's long-term practises and outcomes.

The interaction of these variables can impact a company's ability to solve environmental concerns, social responsibilities, and economic stability, resulting in a more sustainable and prosperous future for the company. In sum, the SWEs' business sustainability concept entails a comprehensive and interconnected relationship between the effective utilization of EL principles.

CA's ability to balance exploration and exploitation empowers SWEs to innovate continuously while effectively managing existing resources. This innovative mindset aligns seamlessly with the principles of RS, as SWEs prioritize ethical business practices and the long-term well-being of their ventures, fostering resilience and adaptability. Additionally, a strong foundation of SSA equips SWEs with a deep understanding of their strengths and weaknesses and the socio-cultural dynamics surrounding their business environments. This awareness enables them to forge meaningful connections with diverse stakeholders, inspire teams, and make well-informed decisions that contribute to the holistic sustainability of their businesses.

In combination, CA, RS, and SSA create a synergy that empowers SWEs to navigate challenges, drive innovation, and foster enduring success while positively impacting their enterprises and their communities.

## 7. Conclusion

The existing body of literature highlights the strong association between good leadership and achieving company objectives, which holds particular relevance for SWEs who face limitations in terms of available resources for growth and development. For SWEs, possessing EL is important because it gives them the skills and knowledge they need to successfully navigate the ever-changing business environment. They can maintain their competitiveness through creative and logical thinking, ethical conduct, and self-introspection, which support them in making well-informed decisions and making the most of their limited resources. SWEs with EL attributes also cultivate resiliency, moral principles, and environmentally friendly practices to ensure long-term success and positive societal influence.

As such, this study offers solid groundwork for future research on EL among women running small businesses and its effect on the longevity of these businesses. Future research can expand the study to include comparative studies and business ecosystem analysis, both of which will help us gain a deeper understanding of the influence of EL towards business sustainability.

Unlike the widely recognized belief that financial stability is a key component to long-term economic success, this study examined EL, especially in SWEs. This study revealed the importance of SWEs' EL as a business sustainability accelerator. Additionally, this study contributed to a more comprehensive understanding of the fundamental principles of EL, which include cognitive ambidexterity, responsibility and sustainability, and self and social awareness. The study emphasized the need for SWEs to develop transformative thinking, a sense of responsibility, and emotional intelligence to promote long-term success and prosperity in their businesses. In

summary, this study highlighted the significant importance of the three principles of EL in enhancing the efforts of SWEs to achieve business sustainability.

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#### **Conflict of interest:**

The authors declare that there is **no conflict of interest**.

#### **References**

- [1] Chipfunde D, Yahaya SN, Othman N. THE DETERMINANTS INFLUENCING THE PERFORMANCE OF WOMEN ENTREPRENEURS IN MALAYSIA: A CONCEPTUAL FRAMEWORK. *Estudios De Economía Aplicada* [Internet]. 2021 May 4;39(4). Available from: <https://doi.org/10.25115/eea.v39i4.4577>
- [2] Mahat NAAB, Mahat IR, Mustafa MSA. Covid -19 Pandemic: Issues and Challenges Among Women Entrepreneurs in Malaysia. *International Journal of Academic Research in Business & Social Sciences* [Internet]. 2021 Jun 11;11(6). Available from: <https://doi.org/10.6007/ijarbss/v11-i6/10114>
- [3] Natrah. Budget 2022: RM230 mln to help women entrepreneurs [Internet]. Kementerian Kewangan. 2021. Available from: <https://www.mof.gov.my/portal/en/news/press-citations/budget-2022-rm230-mln-to-help-women-entrepreneurs#:~:text=KUALA%20LUMPUR%2C%20Oct%2029%20%2D%2D,and%20Tekunita%20under%20Tekun%20Nasional>
- [4] International Labor Organization. Rebuilding better: assessment of women entrepreneurs' needs and available support services during COVID-19 in Malaysia, Philippines and Thailand [Internet]. International Labor Organization. 2021. Available from: <https://researchrepository.ilo.org/esploro/outputs/995218649502676>
- [5] Ariffin AS, Baqutayan SMS, Mahdzir AM. Enhancing Women Entrepreneurship Development Framework: Policy & Institution gap and challenges in the case of Malaysia. *Journal of Science, Technology and Innovation Policy* [Internet]. 2018 Jan 6;3(2):22–33. Available from: <https://doi.org/10.11113/jostip.v6n2.58>
- [6] Ojedian F, Anderson AR. Women's entrepreneurship in the Global South: Empowering and emancipating? *Administrative Sciences* [Internet]. 2020 Nov 3;10(4):87. Available from: <https://doi.org/10.3390/admsci10040087>
- [7] Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann T, Mulrow CD, Shamseer L, Tetzlaff J, Akl EA, Brennan S, Chou R, Glanville J, Grimshaw J, Hróbjartsson A, Lalu MM, Li T, Loder E, Mayo-Wilson E, McDonald S, McGuinness LA, Stewart L, Thomas J, Tricco AC, Welch V, Whiting P, Moher D. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* [Internet]. 2021 Mar 29;n71. Available from: <https://doi.org/10.1136/bmj.n71>
- [8] Barrachina M, Del Carmen García-Centeno M, Patier CC. Women Sustainable Entrepreneurship: Review and Research agenda. *Sustainability* [Internet]. 2021 Oct 31;13(21):12047. Available from: <https://doi.org/10.3390/su132112047>
- [9] Das M, Rangarajan K, Dutta G. Corporate sustainability in SMEs: an Asian perspective. *Journal of Asia Business Studies* [Internet]. 2020 Jan 6;14(1):109–38. Available from: <https://doi.org/10.1108/jabs-10-2017-0176>

- [10] Rezaee Z. Business sustainability research: A theoretical and integrated perspective. *Journal of Accounting Literature* [Internet]. 2016 Jun 7;36(1):48–64. Available from: <https://doi.org/10.1016/j.acclit.2016.05.003>
- [11] SME Corp. Malaysia. Guideline on SME Definition [Internet]. SME Corp. Malaysia. 2122. Available from: [https://www.smecorp.gov.my/images/pdf/2023/Guideline\\_on\\_SME\\_Definition\\_Updated\\_September\\_2020\\_Final.pdf](https://www.smecorp.gov.my/images/pdf/2023/Guideline_on_SME_Definition_Updated_September_2020_Final.pdf)
- [12] Fei GC, Rasli A, Khan SZ. Economic incentives of family controlling shareholders and the monitoring role of non-dominant large shareholders in corporate governance: Evidence from the manufacturing firms in Malaysia. *Suid-Afrikaanse Tydskrif Vir Ekonomiese En Bestuurswetenskappe/South African Journal of Economic and Management Sciences* [Internet]. 2014 Aug 29;17(4):471–83. Available from: <https://doi.org/10.4102/sajems.v17i4.738>
- [13] Ahmad S, Siddiqui KA, AboAlsamh HM. Family SMEs' survival: the role of owner family and corporate social responsibility. *Journal of Small Business and Enterprise Development* [Internet]. 2020 Feb 28;27(2):281–97. Available from: <https://doi.org/10.1108/jsbed-12-2019-0406>
- [14] Lawrence S, Collins E, Pavlovich K, Arunachalam M. Sustainability practices of SMEs: the case of NZ. *Business Strategy and the Environment* [Internet]. 2006 Jun 27;15(4):242–57. Available from: <https://doi.org/10.1002/bse.533>
- [15] Nor-Aishah H, Ahmad NH, Ramayah T. Entrepreneurial Leadership and Sustainable Performance of manufacturing SMES in Malaysia: The Contingent Role of Entrepreneurial Bricolage. *Sustainability* [Internet]. 2020 Apr 13;12(8):3100. Available from: <https://doi.org/10.3390/su12083100>
- [16] Moore SB, Manring SL. Strategy development in small and medium sized enterprises for sustainability and increased value creation. *Journal of Cleaner Production* [Internet]. 2009 Jan 1;17(2):276–82. Available from: <https://doi.org/10.1016/j.jclepro.2008.06.004>
- [17] Klewitz J, Hansen EG. Sustainability-oriented innovation of SMEs: a systematic review. *Journal of Cleaner Production* [Internet]. 2014 Feb 1;65:57–75. Available from: <https://doi.org/10.1016/j.jclepro.2013.07.017>
- [18] Jansson J, Nilsson J, Modig F, Vall GH. Commitment to Sustainability in Small and Medium-Sized Enterprises: the influence of strategic orientations and management values. *Business Strategy and the Environment* [Internet]. 2015 Aug 22;26(1):69–83. Available from: <https://doi.org/10.1002/bse.1901>
- [19] Chege SM, Wang D. The influence of technology innovation on SME performance through environmental sustainability practices in Kenya. *Technology in Society* [Internet]. 2020 Feb 1;60:101210. Available from: <https://doi.org/10.1016/j.techsoc.2019.101210>
- [20] Guerrero JE, Hansen E. Cross-sector collaboration in the forest products industry: a review of the literature. *Canadian Journal of Forest Research* [Internet]. 2018 Nov 1;48(11):1269–78. Available from: <https://doi.org/10.1139/cjfr-2018-0032>
- [21] Zighan S, Ruel S. SMEs' resilience from continuous improvement lenses. *Journal of Entrepreneurship in Emerging Economies* [Internet]. 2021 Nov 3;15(2):233–53. Available from: <https://doi.org/10.1108/jee-06-2021-0235>
- [22] Atiq M, Karataş- Özkan M. Sustainable Corporate Entrepreneurship from a Strategic Corporate Social Responsibility Perspective. *International Journal of Entrepreneurship and Innovation* [Internet]. 2013 Feb 1;14(1):5–14. Available from: <https://doi.org/10.5367/ijei.2013.0102>
- [23] Alene ET. Determinants that Influence the Performance of Women Entrepreneurs' in Micro and Small Enterprises in Ethiopia. *Research Square (Research Square)* [Internet]. 2020 Aug 19; Available from: <https://doi.org/10.21203/rs.2.24227/v2>
- [24] Kazumi T, Kawai N. Institutional support and women's entrepreneurial self-efficacy. *Asia Pacific Journal of Innovation and Entrepreneurship* [Internet]. 2017 Dec 4;11(3):345–65. Available from: <https://doi.org/10.1108/apjie-12-2017-041>
- [25] Rosca E, Agarwal N, Brem A. Women entrepreneurs as agents of change: A comparative analysis of social entrepreneurship processes in emerging markets. *Technological Forecasting & Social*

- Change/Technological Forecasting and Social Change [Internet]. 2020 Aug 1;157:120067. Available from: <https://doi.org/10.1016/j.techfore.2020.120067>
- [26] Rodgers C. Sustainable entrepreneurship in SMEs: a case study analysis. Corporate Social-responsibility and Environmental Management [Internet]. 2010 Mar 16;17(3):125–32. Available from: <https://doi.org/10.1002/csr.223>
- [27] Marqués H. Gender, entrepreneurship and development: which policies matter? Development Policy Review [Internet]. 2017 Jan 1;35(2):197–228. Available from: <https://doi.org/10.1111/dpr.12206>
- [28] Greenberg D, McKone-Sweet K, Wilson HJ. The new Entrepreneurial Leader: developing leaders who shape social and economic opportunity [Internet]. 2011. Available from: [https://openlibrary.org/books/OL24848726M/The\\_new\\_entrepreneurial\\_leader](https://openlibrary.org/books/OL24848726M/The_new_entrepreneurial_leader)
- [29] Masocha R. Social Sustainability Practices on small businesses in developing Economies: A case of South Africa. Sustainability [Internet]. 2019 Jun 13;11(12):3257. Available from: <https://doi.org/10.3390/su11123257>
- [30] Huang Y, Li P, Wang J, Li K. Innovativeness and entrepreneurial performance of female entrepreneurs. Journal of Innovation & Knowledge/Journal of Innovation and Knowledge [Internet]. 2022 Oct 1;7(4):100257. Available from: <https://doi.org/10.1016/j.jik.2022.100257>
- [31] Nawaz W, Koç M. Exploring organizational sustainability: themes, functional areas, and best practices. Sustainability [Internet]. 2019 Aug 9;11(16):4307. Available from: <https://doi.org/10.3390/su11164307>
- [32] Kumar V, Christodouloupoulou A. Sustainability and branding: An integrated perspective. Industrial Marketing Management [Internet]. 2014 Jan 1;43(1):6–15. Available from: <https://doi.org/10.1016/j.indmarman.2013.06.008>
- [33] Iñigo EA, Albareda L, Ritala P. Business model innovation for sustainability: exploring evolutionary and radical approaches through dynamic capabilities. Industry and Innovation [Internet]. 2017 Mar 31;24(5):515–42. Available from: <https://doi.org/10.1080/13662716.2017.1310034>
- [34] Awan U, Sroufe R, Kraslawski A. Creativity enables sustainable development: Supplier engagement as a boundary condition for the positive effect on green innovation. Journal of Cleaner Production [Internet]. 2019 Jul 1;226:172–85. Available from: <https://doi.org/10.1016/j.jclepro.2019.03.308>
- [35] Yoshino N, Taghizadeh-Hesary F. Major challenges facing Small and Medium-Sized Enterprises in Asia and solutions for mitigating them. Social Science Research Network [Internet]. 2016 Jan 1; Available from: <https://doi.org/10.2139/ssrn.2766242>
- [36] Osano HM. Global expansion of SMEs: role of global market strategy for Kenyan SMEs. Journal of Innovation and Entrepreneurship [Internet]. 2019 Jul 30;8(1). Available from: <https://doi.org/10.1186/s13731-019-0109-8>
- [37] Smolarek M, Sułkowski Ł. Job satisfaction among SMEs employees in Fibres & Textiles of the CEE countries. Economics & Sociology [Internet]. 2020 Jun 1;13(2):181–209. Available from: <https://doi.org/10.14254/2071-789x.2020/13-2/13>
- [38] Ketprapakorn N, Kantabutra S. Toward an organizational theory of sustainability culture. Sustainable Production and Consumption [Internet]. 2022 Jul 1;32:638–54. Available from: <https://doi.org/10.1016/j.spc.2022.05.020>
- [39] Eggers F, O'Dwyer M, Kraus S, Vallaster C, Guldenberg S. The impact of brand authenticity on brand trust and SME growth: A CEO perspective. Journal of World Business [Internet]. 2013 Jul 1;48(3):340–8. Available from: <https://doi.org/10.1016/j.jwb.2012.07.018>
- [40] Cantele S, Zardini A. Is sustainability a competitive advantage for small businesses? An empirical analysis of possible mediators in the sustainability–financial performance relationship. Journal of Cleaner Production [Internet]. 2018 May 1;182:166–76. Available from: <https://doi.org/10.1016/j.jclepro.2018.02.016>



- [41] Bernier L, Hafsi T. The changing nature of public entrepreneurship. *PAR Public Administration Review/Public Administration Review* [Internet]. 2007 May 1;67(3):488–503. Available from: <https://doi.org/10.1111/j.1540-6210.2007.00731.x>
- [42] Urban B. THE EFFECT OF PRO-ENTREPRENEURSHIP ARCHITECTURE ON ORGANIZATIONAL OUTCOMES. *Journal of Business Economics and Management* [Internet]. 2012 May 28;13(3):518–45. Available from: <https://doi.org/10.3846/16111699.2011.620153>
- [43] Alegre I, Kislenco S, Berbegal- Mirabent J. Organized Chaos: Mapping the definitions of Social entrepreneurship. *Journal of Social Entrepreneurship* [Internet]. 2017 May 4;8(2):248–64. Available from: <https://doi.org/10.1080/19420676.2017.1371631>
- [44] Urbaniec M. Sustainable Entrepreneurship: Innovation-Related activities in European enterprises. *Polish Journal of Environmental Studies* [Internet]. 2018 Mar 30;27(4):1773–9. Available from: <https://doi.org/10.15244/pjoes/78155>
- [45] Gupta V, MacMillan IC, De Surie GS. Entrepreneurial leadership: developing and measuring a cross-cultural construct. *Journal of Business Venturing* [Internet]. 2004 Mar 1;19(2):241–60. Available from: [https://doi.org/10.1016/s0883-9026\(03\)00040-5](https://doi.org/10.1016/s0883-9026(03)00040-5)
- [46] Dahiru AS, Lope Pihie ZA. Modelling of entrepreneurial leadership for effectiveness of schools. *Middle-East Journal of Scientific Research*. 2016;24(4):1371–5.
- [47] Tsai HT, Ren S. Antecedents of strategic ambidexterity in the context of internationalization: a panel study of Taiwan Small and median-sized enterprises. *Technology Analysis & Strategic Management* [Internet]. 2019 Feb 18;31(8):986–1001. Available from: <https://doi.org/10.1080/09537325.2019.1582764>
- [48] Aftab J, Veneziani M, Sarwar H, Ishaq MI. Organizational ambidexterity, firm performance, and sustainable development: Mediating role of entrepreneurial orientation in Pakistani SMEs. *Journal of Cleaner Production* [Internet]. 2022 Sep 1;367:132956. Available from: <https://doi.org/10.1016/j.jclepro.2022.132956>
- [49] Basit A, Hassan Z, Sethumadhavan S. Entrepreneurial Success: Key challenges faced by Malaysian women entrepreneurs in 21st century. *International Journal of Business and Management* [Internet]. 2020 Aug 16;15(9):122. Available from: <https://doi.org/10.5539/ijbm.v15n9p122>
- [50] Isa F, Jaganathan M, Ahmdon MAS, Ibrahim HM. Malaysian Women entrepreneurs: Some emerging issues and Challenges of entering global market. *International Journal of Academic Research in Business & Social Sciences* [Internet]. 2019 Jan 11;8(12). Available from: <https://doi.org/10.6007/ijarbss/v8-i12/5261>
- [51] Guerrero M. Ambidexterity and Entrepreneurship Studies: A Literature review and Research agenda. *Foundations and Trends in Entrepreneurship* [Internet]. 2021 Jan 1;17(5–6):436–650. Available from: <https://doi.org/10.1561/03000000097>
- [52] Păuceanu AM, Rabie N, Moustafa A, Jiroveanu DC. Entrepreneurial Leadership and Sustainable Development—A Systematic Literature Review. *Sustainability* [Internet]. 2021 Oct 22;13(21):11695. Available from: <https://doi.org/10.3390/su132111695>
- [53] Leslie LM, Snyder M, Glomb TM. Who gives? Multilevel effects of gender and ethnicity on workplace charitable giving. *Journal of Applied Psychology* [Internet]. 2013 Jan 1;98(1):49–62. Available from: <https://doi.org/10.1037/a0029943>
- [54] Rodríguez MRG, Díaz- Fernández MC, Simonetti B. The social, economic and environmental dimensions of corporate social responsibility: The role played by consumers and potential entrepreneurs. *International Business Review* [Internet]. 2015 Oct 1;24(5):836–48. Available from: <https://doi.org/10.1016/j.ibusrev.2015.03.002>
- [55] Ameer F, Khan NR. Green entrepreneurial orientation and corporate environmental performance: A systematic literature review. *European Management Journal* [Internet]. 2023 Oct 1;41(5):755–78. Available from: <https://doi.org/10.1016/j.emj.2022.04.003>



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- [56] Cho Y, Li J, Chaudhuri S. Women Entrepreneurs in Asia: Eight country studies. *Advances in Developing Human Resources* [Internet]. 2020 Feb 26;22(2):115–23. Available from: <https://doi.org/10.1177/1523422320907042>
- [57] Arráiz I. Time to share the load: gender differences in household responsibilities and business profitability. *Small Business Economics* [Internet]. 2017 Sep 2;51(1):57–84. Available from: <https://doi.org/10.1007/s11187-017-9925-z>
- [58] Saptono A, Wibowo A, Widyastuti U, Narmaditya BS, Yanto H. Entrepreneurial self-efficacy among elementary students: the role of entrepreneurship education. *Heliyon* [Internet]. 2021 Sep 1;7(9):e07995. Available from: <https://doi.org/10.1016/j.heliyon.2021.e07995>
- [59] Showry M, Manasa KVL. Self-Awareness - key to effective leadership. *The IUP Journal of Soft Skills* [Internet]. 2014 Mar 1;8(1):15. Available from: <https://www.questia.com/library/journal/1P3-3349429561/self-awareness-key-to-effective-leadership>
- [60] Saengsupavanich C, Gallardo WG, Sajor EE, Murray WW. Constraints influencing stakeholder participation in collective environmental management. *Environmental Earth Sciences* [Internet]. 2011 Oct 18;66(7):1817–29. Available from: <https://doi.org/10.1007/s12665-011-1407-z>