International Journal of Applied Economics, Finance and Accounting
ISSN 2577-767X
Vol. 14, No. 1, pp. 15-24.
2022
DOI: 10.33094/ijaefa.v14i1.635

Towards Green Credentials of SMEs: Qualitative Insights on Barriers to Green Responsiveness from a Developing Economy

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Keywords:
Small and medium-sized enterprises
Green responsiveness
Corporate sustainability
Barriers
Sri Lanka.

JEL Classification
Q01; Q53; Q54.

Received: *27 May 2022*
Revised: *18 July 2022*
Accepted: *2 August 2022*
Published: *25 August 2022*
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Abstract

This study explored the drivers/stimulators behind the effective implementation of green strategy and how firms can strategically minimise barriers and hurdles. It investigated the barriers to green responsiveness encountered by small and medium-sized enterprises (SMEs) from the perspective of owners/top managers in a developing economy. The present study utilised qualitative data gathered from 16 semi-structured interviews with manufacturing and service sector SMEs in Sri Lanka. It adopted directed qualitative content analysis to determine how firms interpret and judge the barriers to green engagement, which are classified into responsibility, practicality and individual barriers. The study found that responsibility and practicality-related barriers are the most salient barriers experienced by SMEs. The gaps in environmental regulatory frameworks, acts and ordinances, weak coordination and monitoring systems, and excessive political interventions caused resentment towards the prevailing command-control policies, as well as the lack of government support and incentives to navigate the embryonic stage of utilising market-based approaches in green responsiveness. The study outcome offers policymakers valuable implications regarding environmental policy development and suggests SME owners/managers focus on the existing barriers and formulate strategies to overcome them to ensure corporate sustainability.

Funding: This study received no specific financial support.
Competing Interests: The authors declare that they have no competing interests.

1. Introduction

Global environmental crises have become a focal concern in contemporary society. Numerous agents are constantly emphasising ecological preservation and the necessity for businesses to achieve green credentials. Consequently, firms must respond to the numerous environmental demands of their stakeholders while simultaneously improving their performance. Moreover, scholars have shown that voluntary pro-environmental strategies provide superior solutions to eco-crises than push strategies (Baah, Opoku-Agyeman, Acquah, Issau, & Abdoulaye, 2020) while allowing businesses to gain a potential competitive advantage (Murillo-Luna, Garcés-Ayerbe, & Rivera-Torres, 2011). The environmental literature has widely documented the role of large enterprises in ecological contamination, but little attention has been paid to small and medium-sized enterprises (SMEs), despite their profound contribution to the wellbeing of the economy, society and natural environment. In global economies, SMEs are the most common business form, accounting for over 90% of businesses (World Bank, 2021a). Hence, scholars are recognising that including the SME sector in environmental sustainability concerns may contribute to ecological wellbeing (Arnold, 2019; Cho, Cho, & Lee, 2019; Purwandani & Michaud, 2021).

Further, it is critical to investigate developing economies because they have demonstrated a strong tendency toward environmental degradation (Hasan, Anastasiadis, Spence, & Uba, 2020; Leal, Marques, &

Shahbaz, 2021) and air and water pollution (Gupta, Saksena, & Baris, 2019), as well as being leading contributors to greenhouse gas emissions (Chien et al., 2022), and all these environmental challenges have been linked to globalisation (Leal et al., 2021). Hence, the corporate environmental literature focuses predominately on the drivers, motivators, and enablers of green commitment; however, there has recently been growing interest in the empirical analysis of the barriers, challenges, and hurdles that hinder the effective development of green strategies (Chien et al., 2022; Leal et al., 2021; Murillo-Luna et al., 2011; Panigrahi & Rao, 2018). Nevertheless, scholars have highlighted that SMEs in developing countries have received less attention in the analysis of the barriers and challenges to green responsiveness (Ervin, Wu, Khanna, Jones, & Wirkkala, 2013; Mitra & Datta, 2014; Salim et al., 2018). Additionally, the existing environmental literature on SMEs in developing economies focuses predominantly on quantitative investigations of the barriers/challenges SME firms face in their green initiatives (Ghazilla et al., 2015; Lewis & Cassells, 2010; Panigrahi & Rao, 2018; Shi, Peng, Liu, & Zhong, 2008). The literature lacks qualitative insights, which are vital to policy development (Hasan et al., 2020). Hence, this study aims to fill this gap by providing qualitative insights into SMEs' barriers to green responsiveness in a developing economy.

Accordingly, this study makes several key contributions to the environmental literature. First, it enriches the existing environmental literature by adding knowledge on the barriers to corporate green implementation in developing countries, particularly in the South Asian region, where such analyses are rare (Gunarathne, Lee, & Hitigala Kaluarachchilage, 2021; Peng, Xie, Ma, & Fu, 2021). Second, the current study provides qualitative insights into the barriers to green implementation. A handful of prior studies has analysed the barriers and challenges faced by SMEs in developing economies, most of which were quantitative empirical investigations (Chien et al., 2022; Ghazilla et al., 2015; Panigrahi & Rao, 2018) with few qualitative insights; however, it is vital that policymakers can obtain a detailed understanding of implementation challenges and barriers (Hasan et al., 2020). The present study explores barriers from three perspectives – responsibility, practicality and individuality – which may help policymakers design environmental policy interventions that successfully address the needs of the SME sector.

This paper is orgnised into six sections. Section 2 discusses the research context. Section 3 presents a literature review on barriers to green responsiveness. Section 4 focuses on the research method, and Section 5 presents and discusses the study findings. The final section presents the study's conclusions, implications and recommendations.

2. The Research Context: Green Challenges and SMEs in Sri Lanka

The current study is set in Sri Lanka, an emerging economy in South Asia. The SME sector in Sri Lanka is one of the country's strategically important sectors because it generates high economic growth and regional development, reducing unemployment and poverty. SMEs in Sri Lanka account for more than 90% of the total number of enterprises, providing 45% of employment and contributing 52% of gross domestic production (Ministry of Finance, 2021). Hence, every government acknowledges the strategic importance of the SME sector in the economic development of the country. Further, Sri Lankan SMEs engage in a wide range of business activities, including "agriculture, industry/manufacturing, mining, tourism, fisheries, construction, and services" (Department of Census and Statistics, 2018). The Sri Lankan SME community consists of both manufacturing and service sector enterprises, most of which are part of corporations' supply chains (Weerasiri, 2012). Most SME establishments in Sri Lanka are in the manufacturing sector; it boasts 85.4% of the total industrial establishments (Department of Census and Statistics, 2018).

Furthermore, Sri Lanka is a predominantly Buddhist country, and Buddhist culture has historically shaped societal norms and environmental regulations (Thoradeniya, Lee, Tan, & Ferreira, 2015). Sri Lanka was considered one of the top biological hotspots in the world (UNDP, 2009). However, the country is highly vulnerable to environmental challenges (UNDP, 2021). Sri Lanka's climate risk ranking was 2nd in 2019 and 6th in 2020 (Eckstein, Künzel, Schäfer, & Winges, 2019). Furthermore, the UNDP (2021) reported that Sri Lanka has a wealth of natural resources and biodiversity and is on a development trajectory, although environmental and disaster issues are significant. According to Eckstein et al. (2019), Sri Lanka has been hit by cyclone Roanu, severe droughts, torrential rain, floods, and landslides. As a result, the country is among the top ten in the world most impacted by climate-related challenges. Moreover, Sri Lanka is one of the most densely populated countries in the world (World Bank, 2021b), indicating that Sri Lanka's land, natural resources, and environment are subject to excessive use.

Currently, Sri Lanka is approaching a circular economy. In line with the Paris Agreement, the "Blue-Green Era" was introduced to the Sri Lankan economy to achieve a clean and green environment by restructuring and empowering the communication networks (Ministry of Maweli Development and Environment, 2019). Focusing on the circular economy and 3R, government authorities have amended the country's policies and legislation and issued new regulations on clean air, clean land, and clean water (Central Environmental Authority, 2019). The Central Environmental Authority (CEA) has been given broader regulatory power to integrate environmental considerations into the country's development process.

Some scholars have argued that despite the above facts, Sri Lanka's economy is far from circular, as it has many social, environmental and economic problems (Gunarathne, Tennakoon, & Weragoda, 2019). Waste management problems seriously affect the country's sustainable development, and as in many Asian countries,

government and private parties have yet to identify a solid waste management solution. In 2017, for example, a tragic landslide at the Meethotamulla garbage dump outside Colombo took the lives of at least 26 people and buried 45 houses (Gunarathne et al., 2019). Sri Lanka has severe waste management difficulties, including recycling. Moreover, even if the government considers implementing circular economy strategies, few studies have yet analysed the barriers and challenges to green engagement in Sri Lanka.

3. Literature Review: Barriers to Green Responsiveness

The success of green strategy implementation is not only the result of internal and external drivers but also of firms being able to strategically engage with efforts to minimise their barriers and hurdles (Majumdar & Sinha, 2019). The reasons behind barriers to corporate environmental behaviour are complex (Murillo-Luna et al., 2011), and are broadly classified as external or internal (Jabbour et al., 2016). Moreover, major drivers of green implementation are also seen as barriers by SMEs, and the majority of SMEs remain unconvinced of the necessity of responding to environmental issues (Khatter, White, Pyke, & McGrath, 2021). Furthermore, the SME sector possesses heterogeneous characteristics compared to large business organisations. Therefore, it is vital to understand the barriers and hurdles of corporate green engagement to foster global greenness. The literature points to various factors that hinder the green credentials of the SME sector, and it often emphasises the gap between willingness and the actual implementation of corporate environmental strategies (Blake, 1999; Kollmuss & Agyeman, 2002; Lewis & Cassells, 2010). Blake (1999) argued that the gap between willingness and behaviour is due to barriers or hurdles.

Responsibility barriers are closely related to the locus of control, where people refrain from environmental engagement due to the perception that they cannot control the situation, as well as a lack of trust in local and national governments (Kollmuss & Agyeman, 2002) or weak regulatory frameworks (Do Valle & Assaker, 2016). Many empirical studies have emphasised these external barriers. Green responsiveness predominantly operates on a voluntary basis in developing economies, and regulatory bodies play a vital role in cultivating a green atmosphere by formulating and implementing ecological protection regulations and standards (Wang, Li, & Zhao, 2018). Firms unconditionally comply with environmental standards and regulations to minimise sanctions, penalties and lawsuits. However, as noted in the literature, a lack of stringent environmental norms, regulations and policies leads to the ineffective implementation of green strategies in SMEs rather than acting as a green facilitator (Kumar, Brint, Shi, Upadhyay, & Ruan, 2019). Accordingly, Shi et al. (2008) highlighted that lax environmental enforcement and a lack of economic incentive policies were prominent barriers for SMEs in China. Murillo-Luna et al. (2011) emphasised that the lack of clarity and rigidity of environmental regulations and the scarcity of relevant information are critical external barriers to corporate environmental engagement in Spain. Chien et al. (2022) highlighted that political barrier and the absence of government policies are the most prominent barriers to SMEs' green innovation in Saudi Arabia.

Practicality barriers are external barriers to social and institutional constraints. Customers, professional partners, societal groups, and the general public play a pivotal role in leveraging corporate green practices, and, in the absence of compliance, firms will be subject to resistance, isolation, and social protestation (Roxas & Coetzer, 2012). However, weak social and institutional pressures have more often been a hindrance rather than a motivator of greenness (Andaregie & Astatkie, 2021; Wang et al., 2018). According to Kollmuss and Agyeman (2002), practical barriers include a lack of funds, knowledge, environmental mindfulness, and internal and external incentives, as well as old habits and insufficient feedback about behaviour. High capital costs are a significant barrier to the effective implementation of green strategies by SMEs (Shi et al., 2008). Hence, governments and policymakers should prioritise the relaxation of environmental policies and financial hurdles. To increase green production, it is extremely important to support consumers' demand for green consumption (Kumar et al., 2019) and mitigate the problems caused by a lack of consumer awareness and low levels of eco-centric attitudes in society (Andaregie & Astatkie, 2021). Lack of subsidies and financial benefits, unavailability of bank loans, and inadequate knowledge and understanding are barriers to Saudi Arabian SMEs' implementation of green innovation (Chien et al., 2022). Lack of customer awareness, weak public demand for eco-products and services, and low enthusiasm toward greenness in society are severe barriers for SMEs and large firms in northern Ethiopia (Andaregie & Astatkie, 2021).

Individual relevance barriers are associated with the environmental concerns of the individual or the firm's management. These barriers are predominantly internal barriers that are influenced by individuals' stronger desires and needs and the lack of integration of green practices into daily operations (Khatter et al., 2021). Scholars have emphasised that individual or internal barriers play a more dominant role than external hurdles in hindering corporate green engagement (Jabbour et al., 2016; Khatter et al., 2021). Hence, if SMEs are competent to overcome their internal barriers, they are more likely to be able to overcome their external barriers (Andaregie & Astatkie, 2021). Less technological know-how, scarcity of management involvement, and insufficient resources are critical managerial hurdles to SMEs' green innovation in Saudi Arabia (Chien et al., 2022). Furthermore, researchers have documented a variety of individual barriers to SMEs' green responsiveness, including a lack of awareness of their negative ecological contribution, a lack of human resource capabilities (Andaregie & Astatkie, 2021), inadequate knowledge and understanding (Chien et al., 2022), and low management priority for green commitments (Salim et al., 2018). Ghazilla et al. (2015) and Andaregie and Astatkie (2021) have argued that the majority of SMEs are family-owned businesses, and a

weak firm structure does not support structured ecological decisions. The owner's belief in the high cost associated with environmental engagement and a lack of research and development are other prominent firm-specific barriers (Ervin et al., 2013; Jabbour et al., 2016; Salim et al., 2018). Hence, scholars have emphasised that well-developed regulatory frameworks and enhanced green awareness through training and promotional programs could overcome external and firm-specific hurdles (Jabbour et al., 2016).

4. Theoretical Underpinning: Institutional Theory

Organisations are highly exposed to various degrees of stakeholder threats and demands (Bansal & Roth, 2000), and based on these forces' power, they must respond to external pressures. Institutional theory explains that organizations are vulnerable to the demands of the business environment and inseparable from society. This theory primarily describes the interdependencies between social environment and organizational patterns (DiMaggio & Powell, 1983; Scott, 2003). Organizational attitudes toward social contact are influenced by three types of institutional pressure: coercive, normative and mimetic (DiMaggio & Powell, 1983). Institutional theory has been comprehensively applied to the corporate response to environmental concerns at a conceptual level, and several empirical studies have been conducted to understand corporate environmental and social behaviour and green motivators (Baah et al., 2020; Baah et al., 2021; Colwell & Joshi, 2013; Wang et al., 2018; Yang, 2018), though few have analysed barriers and challenges. The theory emphasises how external forces from industry and non-industry constituents shape a firm's ecological efforts. It dictates the reactive posture of the ecological demands and the organization's ecological performance (Cho et al., 2019). Coercive pressure stems from the government and regulatory bodies, primarily due to formal and informal political influences (DiMaggio & Powell, 1983). Coercive influence is essential for firms to conform to various environmental guidelines (Yang, 2018), and weak ecological regulations lead to an increase in pollution (Tian & Lin, 2019). In practice, coercive pressure at the firm level can emanate from firms' legal and regulatory stakeholders (Lin & Sheu, 2012). Mimetic influence refers to competitive benchmarking; firms tend to follow or mimic the actions of successful competitors (Yang, 2018). In the ecological context, mimetic influence is vital in selecting green strategies (Colwell & Joshi, 2013) to avoid "legitimacy concerns" and "ensure the competitive advantage" (Beddewela & Herzig, 2013). According to Yang (2018), normative influence relates to professionalism and comes from the media, industry associations, academic and professional institutions, and other social actors (Scott, 2003). A firm's green strategy is highly subject to normative influence since it enhances the firm's reputation and has a long-term positive impact on profits (Colwell & Joshi, 2013), and firms are subject to resistance, isolation, and social protestation if they fail to conform (Roxas & Coetzer, 2012).

Environmental scholars have stated that diverse institutional pressures play essential roles in leveraging the environmental engagement of SMEs and large firms in developing countries (Lodhia, 2003; Thoradeniya et al., 2015). To achieve green credentials in the SME sector, there is a need to respond to various institutional pressures so that firms are the beneficiaries of environmental outcomes and the creators of those outcomes (Caldera, Desha, & Dawes, 2019). However, it has been widely documented that SMEs' contribution to environmental degradation in developing countries is considerable. Unfortunately, many SMEs do not have coherent policies for the design and implementation of green practices, and most act on an ad hoc basis (Khatter et al., 2021), which can have an impact on their long-term economic and environmental sustainability. Hence from an institutional theory standpoint, it is essential to understand the factors that hinder SMEs' progression toward green credentials.

5. Methodology

The study involved 16 semi-structured interviews, conducted over five months in the year 2021, with individuals in the top management structure of SMEs (owner, director, or partner) to gather empirical data. The interviewees were selected based on purposive sampling, which is appropriate for exploratory research (Azam et al., 2021) because it allows the researcher to identify information-rich cases to fit the research question under investigation (Neuman, 2014). Accordingly, the sample included both manufacturing and service sector SMEs that had been operating for over ten years based on the judgment that these firms would have more experience and knowledge of environmental issues. The details are shown in Table 1. Due to the COVID-19 pandemic, the interviews were conducted via telephone and other electronic modes. The interviews were conducted in Sinhala, the local language, because it was felt that the interviewees would be more comfortable in their first language. The researcher used a tape recorder to take notes, with permission from the interviewees and others.

The interview guide was developed based on the corporate green responsiveness barriers provided in the environmental literature. Predominately, the interview guide was based on the arguments made by Blake (1999) that the attitude-behaviour gap is caused by responsibility, practicality, and individual barriers. Furthermore, SME owners and top managers are critical decision-makers for policies and practices on green engagement and drive the attitude-action connection. Indeed, the environmental literature emphasises that owners and top managers of SMEs can be erratic on environmental engagement and may not realise the full

potential of environmental engagement (Graafland & Smid, 2016; Lewis & Cassells, 2010) or the causes of attitude-action disconnect.

Table 1. Profile of the interview respondents.

Code	Designation	Industry Sector	No. of Years in Business Operation
IR1	Owner	Manufacturing	10 Years
IR2	Owner	Construction	15 Years
IR3	Partner	Construction	12 Years
IR4	Owner	Hospitality	10 Years
IR5	Director	Manufacturing	14 Years
IR6	Owner	Agriculture	16 Years
IR7	Owner	Wholesale/Retail	11 Years
IR8	Partner	Hospitality	12 Years
IR9	Owner	Manufacturing	18 Years
IR10	Owner	Agriculture	13 Years
IR11	Owner	Manufacturing	15 Years
IR12	Partner	Agriculture	14 Years
IR13	Director	Manufacturing	10 Years
IR14	Owner	Wholesale/Retail	17 Years
IR15	Owner	Construction	11 Years
IR16	Owner	Hospitality	12 Years

Note: IR, Interview Respondent.

The interview data were manually transcribed and summarised into predetermined themes, and relevant quotes were translated into English. The study adopted directed qualitative content analysis or deductive content analysis to analyse the interview data, based on existing models and prior research on environmental management (Hsieh & Shannon, 2005). This method is most suitable for obtaining a deep understanding of the "actual behaviour, attitudes, or real motives of the people" (Vaismoradi, Turunen, & Bondas, 2013).

6. Findings and Discussion

The findings revealed that SME owners and top managers were conscious of environmental issues. The desires and needs of SMEs' upper echelon guide their firms' strategic moves toward ecological engagement (Hasan et al., 2020). The discussion revealed that owners/top managers feel strongly about environmental issues. The view on environmental issues offered by interviewee IR6 from the agriculture sector was that *"It is excruciating to see the contamination of our natural resources. It is a disaster. Most of our natural resources were destroyed by us, we have to accept that truth*". This view was confirmed by interviewee IR15 from the construction industry, stating, *"We as humans create all these environmental issues. I feel I am also part of that crime"*.

As was evident in the environmental literature, many interviewees perceived their negative impact on the natural environment to be lower (Schaper, 2002; Tilley, 1999). As noted by interviewee R4 from the hospitality sector, *"I believe that the environmental impact of my business is minimal since we are operating as a small-scale business"*. Moreover, as emphasised in the literature, it was observed that green-thinking leaders of SMEs always try to develop environmentally upgraded products and services to minimise the negative impacts on the natural environment (Eiadat, Kelly, Roche, & Eyadat, 2008). It was apparent that leadership envisioning a sustainable future was vital to SMEs successfully adopting green corporate strategies.

According to interviewee IR1 from the manufacturing sector, *"Our firm always tries to develop products that are less harmful to the environment"*. Thus, genuine concern for environmental protection seemed critical for effective engagement in ecological activities (Eiadat et al., 2008). However, scholars have further emphasised that SMEs focus on survival rather than sustainability (Lewis & Cassells, 2010); although owners are enthusiastic about environmental issues, they collide with short-term economic interests. That was confirmed by the expressions of interviewee IR2 from the construction sector, *"My concern is not to harm the environment intentionally. However, we are in a price war; we have to reduce certain criteria to obtain a job. Then it may harm the environment."* The following sections discuss the salient barriers identified in the data analysis.

6.1. Responsibility-Related Barriers

The findings revealed that all three types of barriers – responsibility, practicality and individual – affect the effective implementation of green strategies in SMEs in Sri Lanka. Responsibility barriers are closely associated with the locus of control. The lack of stringent environmental policies and enforcement of regulations is a major obstacle to green corporate adoption (Ghazilla et al., 2015; Majumdar & Sinha, 2019; Yusof & Jamaludin, 2014). As emphasised by the interviewees, regulatory enforcement drives firms to engage in environmental initiatives. The strategic emphasis is to improve the business and its image by avoiding penalties and fines. Interviewee IR3's view from the construction sector was, *"Well. In terms of environmental engagement, we mainly complied with the rules and regulations imposed by CEA. If we do not follow those rules, we have*

to pay the penalty, and it will be an additional burden to us". In Sri Lanka, the CEA has legal power to enforce environmental regulations. However, firms have lost confidence due to several issues in the prevailing legal framework and governance system. Interviewees emphasised that most acts and ordinances were outdated and not aligned with ecological sustainability. According to interviewee IR5 from the manufacturing sector, *"Yes, rules and regulations are important, but they should be updated and flexible. Because the present rules cannot generally apply to every circumstance, and current provisions are not aligned with contemporary environmental concerns."* This highlights that for green sustainability to be successfully achieved, significant and effective influence is required of the coercive parties of the firm.

Furthermore, institutional interventions on certain environmental issues are lacking. For example, the waste management problem seriously affects the country's sustainable development, but the government and private parties have yet to identify solid waste management solutions to achieve a circular economic pathway (Gunarathne et al., 2019). Interviewee IR7 from the wholesale and retail sectors highlighted this fact: "*We observe that the current disposal mechanism of medical waste will create huge environmental issues in our country. With the COVID-19 pandemic, it became more crucial. Therefore, we propose that government authorities implement a systematic recycling procedure for medical waste."* This highlights that the government has yet to identify and develop sustainable policies for leading environmental issues in Sri Lanka. Further, loosely defined regulations cause low adoption of environmental initiatives among SMEs. Interviewee IR4 from the hospitality sector emphasised, "*We released wastewater into the municipal drainage system, so there is no necessity of having a wastewater treatment plant".* Hence, policymakers and regulators are required to develop stringent regulations and policies to empower a green drive (Majumdar & Sinha, 2019).

Political influence is another crucial hurdle in ensuring products and services comply with environmental provisions. According to interviewee IR3 from the construction sector, *"Before undertaking a project, we must fulfil all the required regulations. However, if someone or the firm has political support, everything goes smoothly without any issues. This is what occurs in most cases."* Further, as interviewee IR9 from the manufacturing sector noted, "*Our firm always attempts to develop products that are less harmful to the environment. Even if we developed an advanced product, we could not complete the required quality test approved by (name of the institute redacted). This is a pathetic situation in Sri Lanka. All depends on political agendas."* Interviewees highlighted the weaknesses in the approval and monitoring processes of the relevant regulatory authorities, which cause a dilution of responsibility.

Consequently, firms waste time and money because of the weakness of the regulators and monitoring authorities. Hence, most of the interviewees lost confidence in the regulatory authorities and prevailing regulatory frameworks. As per interviewee IR12 from the agriculture sector, "*As a business firm, certain regulatory requirements must be fulfilled by different regulatory institutions. However, there is no proper coordination and monitoring system among the regulatory institutions. So we waste our time and money unnecessarily."*

6.2. Practicality-Related Barriers

The lack of government support and incentives is another critical barrier to the implementation of green initiatives in the Sri Lankan SME community. The environmental literature has argued that economic incentive policies need to be promulgated to alleviate the SMEs' practical difficulties with green responsiveness (Shi et al., 2008). Accordingly, the interviews highlighted that SME firms lack the financial resources to invest in modern, environmentally sustainable technologies. As noted by interviewee IR8 from the hospitality sector, *"For us, the cost is the issue with implementing environmental activities. We cannot make such a huge investment at present. We struggle with price competition. If we adopt new technologies, we cannot survive the cost."* Hence, firms expect financial support from the government and other relevant authorities through tax relief, low interest rates, tax concessions and discounts on raw materials. Interviewee IR11 from the manufacturing sector stated, *"We expect more monetary support from the government to develop our businesses rather than adhering to conventional environmental rules. In particular, tax concessions and loans are very important for our businesses."* Moreover, owners/managers stated that prevailing environmental inducements apply only to selected segments or sectors. As emphasised by interviewee IR14 from the wholesale and retail sector, *"According to my knowledge, such tax concessions and subsidies on environmental initiatives are not applicable to my business, but day-by-day governors and regulators impose environmental levies."*

Furthermore, most SMEs have a low level of awareness regarding industry-specific technologies, capacity building and inducements. As emphasised by interviewee IR4 from the hospitality sector, *"Actually I am not much aware of new technologies and concessions. I think there should be proper training and awareness regarding these technologies and their benefits. We are in the dark on these technologies."* Normative parties, such as trade associations, professional collaborations and social groups, play a vital role in stimulating corporate green engagement (Berrone, Fosfuri, Gelabert, & Gomez-Mejia, 2013). The literature has particularly emphasised leveraging environmental engagement in developing countries (Lodhia, 2003). The interviews, however, revealed that trade associations and professional collaborations were minimal in the SME sector. According to interviewee IR13 from the manufacturing sector, *"I believe that trade associations in our industry do not provide such services for environmental conservation. They must organise such awareness programs to make us aware of new technologies and inducements. I think, due to this lack of awareness of new trends, rules and technologies, our bargaining*

and negotiation power has also been reduced." This causes low adoption levels of sustainable environmental activities in the SME sector.

Other interviewees explained that most of their customers have low awareness levels of green products, leading to a lack of market demand and pressure to implement green initiatives. The environmental literature indicates that the lack of customer support is a crucial barrier to corporate green initiatives (Majumdar & Sinha, 2019; Yusof & Jamaludin, 2014). As noted by interviewee IR10 from the agriculture sector, *"I think most customers are not very aware of eco-products. In Sri Lanka, a high price is generally charged for eco-products, but most customers are more conscious of price than quality."* However, customer awareness of environmental issues and the ensuing pressure can also be a competitive advantage (Rao & Holt, 2005). Interviewees revealed that support from financial institutions was another hurdle. The difficulty in obtaining financial support seriously affects SMEs and newly established firms. As noted by interviewee IR5 from the manufacturing sector, *"Yes, according to my understanding, there are few eco-loans. If we want a loan from a bank, we have to provide a great deal of collateral to obtain the loan, which is a hectic process. The process is not as smooth as the way they promote it."* Accordingly, social and institutional constraints are significant barriers to environmental initiatives for Sri Lankan SMEs due to a lack of social influence and professional collaborations, and a weak green culture.

6.3. Individual-Related Barriers

Interestingly, the study found that individual factors also hinder Sri Lankan SMEs' green progression. Environmental psychology states that people with positive environmental concerns feel ethically embarrassed to address negative environmental consequences (Papagiannakis & Lioukas, 2012). However, SMEs are more profit than sustainability-oriented. Hence, corporate citizenship behaviour is less visible in the SME sector. As noted by interviewee IR14 from the wholesale and retail sectors, *"We follow fundamental environmental rules and regulations. However, we are not highly concerned about additional environmental activities, and require additional investment. It is not compulsory to engage in additional environmental initiatives. Why should we bear the additional burden?"*

Moreover, scholars have emphasised that SMEs focus on survival rather than sustainability (Lewis & Cassells, 2010) and that owners' enthusiasm for environmental issues collides with short-term economic interests. That empirical finding was confirmed by the expressions of interviewee IR2 from the construction sector, *"My concern is not to intentionally harm the environment. However, we are in a price war; we have to reduce certain criteria to obtain jobs. Then it may harm the environment."* Generally, owners/managers are satisfied with their current level of green performance. In most cases, owners excuse their low level of environmental commitment by claiming that their operations have no impact on the environment and are considered less critical. As noted by interviewee IR16 from the hospitality sector, *"My business is service-based and related to the hospitality sector. The possibility of negative consequences for the environment is low. So I do not feel that we need any environmental technologies to minimise the environmental impact."*

Additionally, owing to a lack of professional and institutional collaborations, owners/managers are less aware of the relevant environmental inducements. The majority of SMEs do not hire professionally or academically qualified employees and lack in-house knowledge of emerging techniques and trends. The view of interviewee IR11 from the manufacturing sector was, *"No. I am not familiar with this kind of eco-loan or discounts relevant to my business. I make all decisions relating to the business by myself. We do not have many qualified employees at present because we could not offer such attractive packages to hire them."* As emphasised in the environmental literature, due to a lack of eco-literacy and low awareness of modern environmental technologies, owners' environmental concerns are not strongly reflected in their actual behaviour (Lewis & Cassells, 2010).

7. Conclusion Implications, and Recommendations

This study aimed to provide qualitative insights into the barriers to green responsiveness among SMEs in a developing economy. Sri Lanka is a developing country that is highly vulnerable to environmental challenges (UNDP, 2021). The study's findings provide valuable implications for academia, policymakers and the SME sector. The study adopted a qualitative methodology to obtain a deeper understanding of the barriers to green engagement through an institutional theoretical lens. The key finding derived from the interviews with SMEs' top management in this research was that weak institutional pressures create barriers to leveraging green practices.

The study findings revealed that most of the interview respondents had a pragmatic view of environmental engagement, in which they would not engage in green initiatives unless the market or regulations required them. Hence, policymakers often focus on command-control mechanisms to enhance green engagement. Though owners/managers of SMEs showed enthusiasm for environmental issues, this collided with their short-term economic interests. Hence, the corporate citizenship behaviour of SMEs does not become apparent, and their focus is instead on conformity with regulations. The gaps in environmental regulatory frameworks, acts and ordinances, weak coordination and monitoring systems, and frequent political interventions have caused a loss of confidence in the prevailing command-control policies. Under this command-control approach, the government and policymakers act as the catalysts to stimulate green engagement. Hence, the government and relevant regulatory authorities should formulate and implement

industry-specific rules, regulations and standards to ensure environmental sustainability and upgrade these regulations to meet current and future ecological demands. The CEA is prominently engaged in environmental activities to integrate environmental considerations into the country's development process. The depth and scope of the regulations should be broadened to facilitate rapid economic development, which would induce firms to adopt sophisticated green initiatives rather than hinder growth. Furthermore, it is essential to establish a systematic monitoring system using a national platform or coordination among related authorities. Punitive measures, such as sanctions and penalties, should be more rigorous than they currently are.

The lack of government support and incentives is another hurdle to the implementation of green initiatives in the Sri Lankan SME community, and it is critical to enhancing SMEs' capacity building. It is essential to promote market-based approaches, such as tax concessions, tax reliefs, low interest rates, soft loans and discounts on eco-materials to stimulate corporate green commitment. Policymakers should create a platform to strengthen the collaboration between industry and academia to obtain new knowledge on environmental technologies and strategies. The government should take the lead in implementing the required mechanisms to cultivate a culture of environmental protection and launch consumer awareness campaigns to increase the market demand from civil society (Majumdar & Sinha, 2019). The study further revealed that individual factors hinder Sri Lankan SMEs' green engagement. Providing training and enhancing awareness of eco-innovation and contemporary environmental technologies may minimise individual barriers to green engagement.

Although this study has produced several fruitful implications, the authors also acknowledge certain limitations. This study used the World Bank definition of SMEs, as there is no standard definition in Sri Lanka. This calls for future research to conduct an analysis based on a sampling frame with different SME definitions introduced by the regulatory bodies in Sri Lanka, compared with the findings of this research. The smallest SMEs, with fewer than four employees, were omitted from this research, and future studies may want to investigate this population. Furthermore, this study investigated the barriers to green engagement solely from an SME perspective. Hence, future studies might extend this to the perspective of regulators and policymakers to obtain deep insights into how these barriers can be overcome and develop suitable strategies.

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