

# Green Responsiveness of SMEs: A Review of Theoretical Underpinnings

Rajapakse Mohottige Dona Amila Prasangika Rajapakse<sup>1</sup>, Ali Khatibi<sup>2</sup>, S. M. Ferdous Azam<sup>3</sup>

<sup>1,2,3</sup>Post Graduate Centre, Management and Science University, University Drive, Off Persiaran Olahraga, Section 13, 40100, Selangor, Malaysia.

<sup>1</sup>amilar@kln.ac.lk

## ABSTRACT

Environmental challenges become a prominent factor in the contemporary business world since it highly impacts on sustainable economic development, human populations, and ecosystems around the globe. Environmental literature emphasized that Small and Medium-Sized Enterprises (SMEs) play a dominant role in the sustainable development of the economy, but their green credentials are at the infancy level. This paper reports the outcomes of a review of literature on the green responsiveness of SMEs in theoretical lenses. Among the theoretical perspectives found in environmental literature, institutional theory, resource-based view, and the theory of planned behavior are the prominent theories in the SME perspective. SMEs are reactive rather than proactive when addressing their environmental concerns. The institutional forces are important factors for the green engagement of SMEs since owner-managers of SMEs are typically motivated to fulfill the regulatory requirement rather than being a green leader.

## Keywords

Green Responsiveness, Small and Medium Sized Enterprises, Theories

*Article Received: 10 August 2020, Revised: 25 October 2020, Accepted: 18 November 2020*

## Introduction

The natural environment has become a universal concern due to an increase in severe global environmental pollution (Brammer et al., 2012; Das et al., 2020). Environmental issues include climate change, global warming, preservation of biodiversity are some of the major managerial challenges of the present business world. Thus environmental management is a prominent theme within the contemporary global business environment (Pushpakumara et al., 2019). Despite the size of the firm, all business entities are negatively contributing to ecology by releasing waste as environmental pollutants (Agan et al., 2013). In this context, the large organizations have recognized the need of embracing the ecological sustainability in their management process however little consideration done by the small scale business organizations (Agan et al., 2013; Testa et al., 2016; Tian & Lin, 2019) especially in the emerging countries (Das et al., 2020).

The SME sector plays an economically momentous role in developing and developed countries in the world since they are contributed to the social well-being of the people and economic growth (Das et al., 2020; Hillary, 2004; Kuruwitaarachchi et al., 2018; Suriyapperuma et al., 2015; Yacob et al., 2019). Over 90% of the global business establishment represents the SME sector (ACCA, 2012). It is evident that survival and growth of the SME sector is an important determinant for the healthiness of an economy (Das et al., 2020). Despite of the economic prominence of SMEs to the economy, it is estimated that the contribution of those firms to environmental pollution is at a considerable level (Yacob et al., 2019). The cumulative contribution of the SME community towards environmental pollution is greater than the larger firms (Arnold, 2019). Hence many scholars identified the growing importance in the role of the SME sector in ecological protection (Cho et al., 2019; Chung & Cho, 2018; Graafland & Smid, 2016; Reyes-

Rodríguez et al., 2016; Yacob et al., 2019). Further, most of the SMEs are take part in the supply chain of large companies or the sub-contractors (Yacob et al., 2019). In this light, SMEs are implementing environmental policies, employ specialists, and meet their values and expectations of is business partners (Cassells & Lewis, 2011). But some scholars stated that less focus on environmental strategies of SMEs is driven by the low-level of concern in going beyond the regulatory requirements, and low level of community attention for SMEs (Aragón-Correa et al., 2008; Sharma & Vredenburg, 1998).

## Green Responsiveness and SMEs

Green responsiveness or practices refers to the “extent to which organizations respond to natural environment issues” (Papagiannakis & Lioukas, 2012, p. 42). The typologies of corporate environmental strategy are ranging from reactive environmental strategies and proactive environmental strategies. Reactive environmental strategies are merely aiming at fulfilling legal requirements and implement pollution controls (Aragón-Correa et al., 2008; Sharma, 2000). Proactive environmental strategies are more concerned with voluntary ecological initiations to reduce energy and waste, minimize material use at the source, pollution prevention practices by making advancements in operational procedures, developed environmental leadership strategies to reduce the ecological footprint throughout the production process (Aragón-Correa et al., 2008; Pushpakumara et al., 2018; Sharma, 2000; Sharma & Vredenburg, 1998). Further, Hoogendoorn et al., (2015) emphasized that “reactive strategies” are the practices that meet environmental regulations where “proactive strategies” go beyond compliance. Moreover, Torugsa et al., (2012), emphasized that proactive environmental strategies contribute broadly and positively to society at large.

The research findings reveal that one of the determinants of proactiveness of ecological strategies is the size of the firm based on the rationale that lack of capital investment and human and technical skills suppress SMEs from executing proactive strategies (Aragón-Correa et al., 2008; Cassells & Lewis, 2011; Schaper, 2002; Testa et al., 2016; Torugsa et al., 2012; Yacob et al., 2019). Hence most of the SMEs are “opted for one to one initiatives” to control the detrimental impact to their environment (Yacob et al., 2019, p. 6). Further literature shows that the majority of environmental management among SMEs is evidently in its embryonic stage and those strategies are comparatively reactive than strategies of large companies (Aragón-Correa et al., 2008; Schaper, 2002). Despite the fact that ecological strategies rationally focusing on efficiency and capacity issues, some scholars emphasized that the distinctive characteristics of SMEs empower to develop their capabilities for better environmental strategies. For example, being a SME firm, possesses high flexibility in environmental engagements, which allows SMEs to manage external relationships upon a firm’s critical resources than large counterparts (Aragón-Correa et al., 2008). It may include inter-firm relationships where they are subcontracted suppliers to large firms and those personal relationships enables to maintain the relationship with governing bodies to obtain technical and monetary assistance and to identify new market opportunities (Aragón-Correa et al., 2008). SMEs are more open to focus on innovation. Thus SMEs have the ability to respond to competitor’s moves easily. Torugsa et al., (2012), elaborate that the unique characteristics like “simpler organizational structures promoting closer interaction and communication within firm high flexibility, adaptive and innovativeness, better entrepreneurial alertness” may be facilitated to mitigate the sized related resource constraints of SMEs (Torugsa et al., 2012, p. 493). Furthermore, they suggest that SMEs may remain competitive even in tough economic times if it’s engaged in proactive in the uncertain environment (Torugsa et al., 2012). Moreover, environmental literature highlight that implementation problems are more burdensome for the SME sector and therefore they are lag in terms of their ‘green credentials’ (Lepoutre & Heene, 2006; Lewis & Cassells, 2010; Salim et al., 2018).

Notably, there is wealth of literature on the green responsiveness of large corporations but the green responsiveness of SMEs is informed by a small number of studies. Few kind of researches has embraced about environmental accounting literature in SMEs and it concluded that the increasing the wealth of literature on this sector would flourish the future development and improvement of the environmental accounting agenda in SMEs (Cho et al., 2019; Chung & Cho, 2018; Graafland & Smid, 2016). Hence this paper adopts a critical review to identify the theoretical frameworks towards the environmental engagement of SMEs to diminish the void in existing literature. The articles are selected from the journal databases in environmental management based on the relevance to environmental conduct. This review covered both conceptual papers where it provides the theoretical frameworks and empirical research papers which depict corporate environmental behavior in a variety of study context. The research papers are searched based on the keywords and some of those are pro-environmental behavior, green responsiveness, ecological responsiveness, environmental strategy, green initiative, corporate environmental sustainability, and environmental management. The following section explains the theoretical foundation relating to the green responsiveness of SMEs.

### Theoretical Frameworks

This section study the theoretical anchoring of the environmental studies in SME perspective. The majority of the studies lack theoretical foundations. However, environmental behavior has been explored from diverse theoretical perspectives in the extant literature in environmental research. According to table 1, amongst the theoretical perspectives found in environmental literature, institutional theory (DiMaggio & Powell, 1983), the theory of planned behavior (Ajzen, 1991), and resource-based view (Russo & Fouts, 1997) are the prominent theories in SME perspective. Other theories such as legitimacy theory, resource dependence theory, and diffusion of innovation and actor-network theory were used at less extent.

**Table 1:** Theoretical underpinning in ecological research in SME perspective

Theory	Key focus	Why for SME perspective?
Institutional Theory	Institutional actions are highly shaped by the network of external stakeholders. It focuses on the command-control approach. The bottom-line impact of the firm is determined by the degree to which the firm complies with environmental concerns.	Ecological concerns are predominantly in a voluntary basis, and SMEs focus on reactive strategies rather proactive strategies to avoid the sanctions, and other legal and regulatory burdens. and (Baah et al., 2020; Roxas & Coetzer, 2012; Shibin et al., 2020)
The Theory of Planned Behavior	It focuses on predicting human behavior in psychological perspective. It surmises human psychological factors responds towards environmental concerns at the individual level and firm level.	The owner plays a dominant role in decision making towards the environmental concerns. The owner’s ecological view is a key factor since he/she has comprehensive information about the green issues (Jenkins, 2006; Shibin et al., 2020; Yacob et al., 2019).
The Resource-Based view and Natural Resource-	It scrutinizes the firm resources to achieve a competitive edge. It focuses	SMEs are possessed with unique capabilities in engaging in environmental

Based View	on the proactive approach and firm size is a determinant in this approach.	concerns. Unique capabilities like effective communication, high flexibility in mainlining external networks, and entrepreneurial orientation facilitate achieving competitive advantage by SMEs (Andersén et al., 2020; Aragón-Correa et al., 2008; Baah et al., 2020).
------------	--	--

Source: Author Compiled

**Institutional Theory**

Institutional theory is drawn from the social science literature in particularly economics, political science, and sociology (Scott, 2003). This theory is fabricated on the belief of institutional environments are socially constructed and it explains the behavior of the organizations to adopt certain practices and policies. Hence, the institutional theory has frequently been applied to explain the interdependencies between organizational practices and its social environment (DiMaggio & Powell, 1983; Scott, 2003). In 2012, Lin & Sheu, emphasized that the managerial decisions of the organizations are highly influenced by firm’s external environment (Lin & Sheu, 2012). A firm is operated with a network of relationships with numerous stakeholders and the firm is exposed to various degrees of demands and threats of different stakeholders (Bansal & Roth, 2000). Thus firms need to address the external pressures based on the different levels of power of those forces. The three forms of institutional pressures would be influenced by the organizations’ attitudes towards social contact: namely, normative, mimetic, and coercive (DiMaggio & Powell, 1983). The coercive isomorphism stems from the government and regulatory bodies and it is mainly in two folds; imposition mechanisms and inducement mechanisms (DiMaggio & Powell, 1983). Generally, resource providing or controlling institutions are able to influence by coercion while controlling the resources (DiMaggio & Powell, 1983; Oliver, 1991). This isomorphism forces on the organization focally exert by the other organizations or the powerful stakeholders which they rely upon and the social desires in the community where the organization operates (DiMaggio & Powell, 1983; Lin & Sheu, 2012; Wang et al., 2018; Yang, 2018). ) Further, firms tend to adopt the models of industry giants that they perceive as to be the most prestigious in the industry in which they operate are relating to mimetic isomorphism (DiMaggio & Powell, 1983). Normative isomorphism associate with the acculturation of the firm within its business environment (Colwell & Joshi, 2013) and professionalism (Yang, 2018). Institutional theory has widely applied for corporate reporting, supply chain management, environmental behavior, etc. (Esfahbodi et al., 2016; Haque & Ntim, 2018; Singh et al., 2018; Testa et al., 2016; Yacob et al., 2019; Yang, 2018). Further, this theory has been extensively availed to the firm responsiveness to the environment at the conceptual level and several empirical studies (Colwell & Joshi, 2013; Wang, Li, & Zhao, 2018; Yang, 2018). Moreover, the institutional theory has widely used to comprehend the organizational sensitiveness towards the external environmental engagements (Colwell & Joshi, 2013; DiMaggio & Powell, 1983; Mzembe et al., 2018;

Wang, Li, & Zhao, 2018). With expanding cognizance of the need for ecological protection, coercive isomorphism is one of the primal factors for an organization to comply with diverse environmental regulations by engaging in a variety of environmental assignments (Yang, 2018). Some studies observed that mimetic isomorphism is important when choosing the superior strategies to meet pollution control/prevention targets (Colwell & Joshi, 2013). Ecological responsiveness is highly encouraged by the normative pressure since these social groups are more concerned about the environmental issues (Berrone et al., 2013) and it will cause to increase the reputation and positive bottom-line impact in long run (Colwell & Joshi, 2013). Predominantly this theory dictates the reactive response of the ecological demands and the corporate environmental performance (Cho et al., 2019) even at a less financial profitability level (Berrone et al., 2010). Since ecological engagement is predominantly voluntary engagement, organizations will respond to environmental issues heterogeneously even at an equal degree of institutional pressures (Colwell & Joshi, 2013). Due to this researchers ponder that institutional pressures can intensely influence firms’ vulnerability towards ecological security issues (Wang et al., 2018). Thus extant literature found mixed results on the institutional pressure and the green responsiveness (Wang et al., 2018). Moreover, scholars stated that developing countries are doing voluntary environmental activities and disclosures due to the institutional factors (Thoradeniya et al., 2015), and its impact on SMEs on green responsiveness remains unveiled (Aykol & Leonidou, 2015; Mata et al., 2018).

**The Theory of Planned Behavior**

Environmental psychology discusses the range of complex communications among people and the environment which focuses on attitudes and environmental behavior. In quantitative research paradigm is discussed with a discrepancy between attitudes and behavior (Newhouse, 1990). Temporal discrepancy; personal attitudes change over time and lack of attitude-behavior measurement model are frequently discussed in the research methodology (Kollmuss & Agyeman, 2002). The Theory of Reasoned Action (TRA) was developed to address these discrepancies. TRA views that humans are essentially rational organisms who use systematic information to make their decisions. Attitudes do not have a direct impact on behavior, rather it influences the behavioral intention together with the social or normative pressure shapes their actions hence person’s beliefs ultimately influence his/her attitudes, intentions, and behaviors (Fishbein & Ajzen, 1975). TRA focuses on the “attitude towards the behavior” and “subjective norms” and

the key limitation of the TRA is that it does not explain the individual behavior with the incomplete capacity to control the behavior (Thoradeniya et al., 2015). Thus, by extending TRA, the theory of planned behavior TPB was introduced with the “perceived behavioral control” by capturing the individual perceived capacity to control the behavior. Attitudes are the mental and neural states or the emotions of the individuals’ which influence to behave in a certain way (Singh et al., 2018). Attitudes towards certain behavior are nurtured by the high level of awareness about the market and society, main beliefs, and the culture (Singh et al., 2018). Subjective norms are the perception about the specific behavior by the individual or the institute due to social pressure (Papagiannakis & Lioukas, 2012; Singh et al., 2018; Thoradeniya et al., 2015). The perceived behavioral control emphasizes on the internal abilities of firms to execute the specific readiness and management sentiment of the individual and (Singh et al., 2018; Thoradeniya et al., 2015). It provides insights about easiness or challenges in a certain behavior (Ajzen, 1991). The individual or firm would have significant behavioral control if they possess sufficient skills, opportunities, and resources to execute the said behavior (Ajzen, 1991).

The TPB applies a range of social science research to understand the managerial decisions including accounting discipline that affect the outcomes of the firm (Papagiannakis & Lioukas, 2012; Roxas & Coetzer, 2012; Singjai et al., 2018; Thoradeniya et al., 2015; Weidman et al., 2010). This theory was prominently used to evaluate the internal contextual factors which shape particular practices such as attitudes, competencies, quality. TPB is the most influential psychological theory to examine the pro-environmental behavior at the individual level, and the institutional level (Singh et al., 2018; Weidman et al., 2010). Further TPB has been used by the environmental behavior in SMEs since owners/managers use their knowledge, values, and beliefs to make business decisions. Jenkins, (2006, p. 244) states that owners/managers “are helped by their relative freedom in being able to set the agenda, values, and principles for their company...”. Further, Yacob et al., (2019) claimed that owners/managers play a dominant role since “they have the first-hand knowledge and information on green issues, green initiatives, and show progressive environmental performance toward their firms” (Yacob et al., 2019, p. 9).

### Resource-Based view

Besides, it has explored the importance of scrutinizing the firm from a resource point of view rather than the product perspective to achieve a sustainable competitive edge (Wernerfelt, 1984). The Resource-Based view (RBV) focused on “examining idiosyncratic, immobile firm resources in creating sustainable competitive advantage of the firm” (Barney, 1991, p. 101). To create economic value to the firm, its immobile and divergent resources need to possess certain attributes: valuable, non-substitutable inimitable, and, rare (Barney, 1991). RBV has been used for analyses of corporate environmental engagement in sustainability (Russo & Fouts, 1997) Early applications of RBV on environmental engagement on competitive posture has concerned with internal analysis of the firm

(Shrivastava, 1995). However, Hart, (1995) argued that a firm’s capabilities and resource development will be posted by the ecosystem which was ignored by the traditional management theories. Hence, he proposed the Natural Resource-Based View (NRBV) for a firm to achieve a competitive edge based upon their ecological environment. NRBV is composed of interrelated strategies namely; “pollution prevention, product stewardship, and sustainable development” (Hart, 1995). Pollution avoidance related strategy drives on minimizing effluents, emissions and waste. This aimed to minimize the cost and maximized the operational efficiency of the firm. The product stewardship was focused on curtailing the product’s life-cycle cost that facilitate building the reputation and differentiate the product from the competitors (Hart, 1995) and which facilitate the firm to take first-mover advantage over the rivalries. The environmental driving force of sustainable development was to minimize the environmental burden throughout the lifecycle (Hart, 1995).

NRBV was utilized to investigate the relationships among ecological strategies and performance (Hart, 1995) for both large firms and SMEs (Andersén et al., 2020; Aragón-Correa et al., 2008). NRBV focuses on proactive environmental strategies. But, extant literature stated that firm size is one of the significant determinants of environmental proactivity (Sharma, 2000; Sharma & Vredenburg, 1998). On contrary to that even SMEs can embrace proactive environmental strategies to enhance firm performance (Aragón-Correa et al., 2008). The study explored that SMEs have organizational unique capabilities like “shorter lines of communication and closer interaction, the presence of a founder’s vision, flexibility in managing external relationships, and an entrepreneurial orientation” (Aragón-Correa et al., 2008, p. 98) and those are connected with the three strategies of NRBV. Andersén et al., (2020) highlighted the importance of the CEO’s environmental orientation to exploit green resources and capabilities of the small firm on firm growth. Based on the 304 Swedish small manufacturing firms, Andersén et al., (2020) found a significant relationship with green capabilities and growth. Their results are emphasized that CEOs genuine concern for environmental issues have an impact on the firm’s growth

### Discussion and Conclusion

The corporate business world is one of the major contributors to the global environmental issues. In this context, since the significant cumulative effect of the SME sector on environmental pollution, many scholars highlight the importance of way stimulating green orientation of the SME sector (Das et al., 2020; Testa et al., 2016; Tian & Lin, 2019; Uhlaner et al., 2012; Yacob et al., 2019). Research scholars elaborate on the greenness of SMEs by underpinning several theoretical bases. Along with that institutional theory dictates a reactive response rather proactive in terms of green engagement. Findings indicate that mixed results on the institutional pressure and green engagement (Wang et al., 2018) due to the heterogeneous response by the business enterprises even at a homogeneous level of isomorphism (Colwell & Joshi, 2013). Thus, the corporate response is depending on contextual factors. Furthermore, developing countries are engaged in



environmental activities, which are operating a predominantly voluntary basis due to isomorphism factors (Thoradeniya et al., 2015). Empirical investigations on isomorphism factors and SMEs are scant (Aykol & Leonidou, 2015). Moreover, scholars stated that developing countries are doing voluntary environmental activities and disclosures due to the institutional factors (Thoradeniya et al., 2015) and the impact on SMEs on green behavior remains unveiled (Aykol & Leonidou, 2015; Mata et al., 2018). According to TPB, the owners' value system, ethical conscience, and attitudes have a substantial effect on the environmental engagement of the SME sector (Yacob et al., 2019). NRBV focus on gaining a competitive edge based upon the firm's ecological environment. Extant literature elaborates that based on the distinctive capabilities and features, the SME sector could embrace proactive initiations (Aragón-Correa et al., 2008).

In conclusion, extant literature emphasized that SMEs are reactive rather than proactive when addressing their environmental concerns. Scholars elaborate on the reasons for being reactive based on the theoretical lenses. The institutional theory, resource-based view, and the theory of planned behavior are the most underpinning theories in the SME perspective. Apart from that behavioral characteristics of owner-manager like values, beliefs and attitudes are sharpened the environmental engagement of SMEs.

## References

- [1] ACCA. (2012). Environmental Aspects of Sustainability: SMEs and the Role of the Accountant. The Association of Chartered Certified Accountants.
- [2] Agan, Y., Acar, M. F., & Borodin, A. (2013). Drivers of environmental processes and their impact on performance: A study of Turkish SMEs. *Journal of Cleaner Production*, 51, 23–33. <https://doi.org/10.1016/j.jclepro.2012.12.043>
- [3] Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- [4] Andersén, J., Jansson, C., & Ljungkvist, T. (2020). Can environmentally oriented CEOs and environmentally friendly suppliers boost the growth of small firms? *Business Strategy and the Environment*, 29(2), 325–334. <https://doi.org/10.1002/bse.2366>
- [5] Aragón-Correa, J. A., Hurtado-Torres, N., Sharma, S., & García-Morales, V. J. (2008). Environmental strategy and performance in small firms: A resource-based perspective. *Journal of Environmental Management*, 86(1), 88–103. <https://doi.org/10.1016/j.jenvman.2006.11.022>
- [6] Arnold, C. (2019). The Foundation for Economies Worldwide Is Small Business. International Federation of Accountants. <https://www.ifac.org/knowledge-gateway/contributing-global-economy/discussion/foundation-economies-worldwide-small>
- [7] Aykol, B., & Leonidou, L. C. (2015). Researching the Green Practices of Smaller Service Firms: A Theoretical, Methodological, and Empirical Assessment. *Journal of Small Business Management*, 53(4), 1264–1288. <https://doi.org/10.1111/jsbm.12118>
- [8] Baah, C., Opoku-Agyeman, D., Acquah, I. S. K., Agyabeng-Mensah, Y., Afum, E., Faibil, D., & Abdoulaye, F. A. M. (2020). Examining the correlations between stakeholder pressures, green production practices, firm reputation, environmental and financial performance: Evidence from manufacturing SMEs. *Sustainable Production and Consumption*, 27, 100–114. <https://doi.org/10.1016/j.spc.2020.10.015>
- [9] Bansal, P., & Roth, K. (2000). Why Companies Go Green: A Model of Ecological Responsiveness. *The Academy of Management Journal*, 43(4), 717–736. <https://doi.org/10.2307/1556363>
- [10] Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120.
- [11] Berrone, P., Cruz, C., Gomez-Mejia, L. R., & Larrazza-Kintana, M. (2010). Socioemotional Wealth and Corporate Responses to Institutional Pressures: Do Family-Controlled Firms Pollute Less? *Administrative Science Quarterly*, 55(1),

- 82–113.  
<https://doi.org/10.2189/asqu.2010.55.1.82>
- [12] Berrone, P., Fosfuri, A., Gelabert, L., & Gomez-Mejia, L. R. (2013). Necessity as the mother of ‘green’ inventions: Institutional pressures and environmental innovations: Necessity as the Mother of ‘Green’ Inventions. *Strategic Management Journal*, 34(8), 891–909.  
<https://doi.org/10.1002/smj.2041>
- [13] Brammer, S., Hoejmoose, S., & Marchant, K. (2012). Environmental Management in SMEs in the UK: Practices, Pressures and Perceived Benefits: Environmental Management in SMEs. *Business Strategy and the Environment*, 21(7), 423–434.  
<https://doi.org/10.1002/bse.717>
- [14] Cassells, S., & Lewis, K. (2011). SMEs and environmental responsibility: Do actions reflect attitudes? *Corporate Social Responsibility and Environmental Management*, 18(3), 186–199.  
<https://doi.org/10.1002/csr.269>
- [15] Cho, C. K., Cho, T. S., & Lee, J. (2019). Managerial attributes, consumer proximity, and corporate environmental performance. *Corporate Social Responsibility and Environmental Management*, 26(1), 159–169.  
<https://doi.org/10.1002/csr.1668>
- [16] Chung, J., & Cho, C. H. (2018). Current Trends within Social and Environmental Accounting Research: A Literature Review: CURRENT TRENDS WITHIN SOCIAL AND ENVIRONMENTAL ACCOUNTING RESEARCH. *Accounting Perspectives*, 17(2), 207–239.  
<https://doi.org/10.1111/1911-3838.12171>
- [17] Colwell, S. R., & Joshi, A. W. (2013). Corporate Ecological Responsiveness: Antecedent Effects of Institutional Pressure and Top Management Commitment and Their Impact on Organizational Performance. *Business Strategy and the Environment*, 22(2), 73–91.  
<https://doi.org/10.1002/bse.732>
- [18] Das, M., Rangarajan, K., & Dutta, G. (2020). Corporate sustainability in SMEs: An Asian perspective. *Journal of Asia Business Studies*, 14(1), 109–138.  
<https://doi.org/10.1108/JABS-10-2017-0176>
- [19] DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147.  
<https://doi.org/10.2307/2095101>
- [20] Esfahbodi, A., Zhang, Y., & Watson, G. (2016). Sustainable supply chain management in emerging economies: Trade-offs between environmental and cost performance. *International Journal of Production Economics*, 181, 350–366.  
<https://doi.org/10.1016/j.ijpe.2016.02.013>
- [21] Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading.  
<https://people.umass.edu/aizen/f&a1975.html>
- [22] Graafland, J., & Smid, H. (2016). Environmental Impacts of SMEs and the Effects of Formal Management Tools: Evidence from EU’s Largest Survey: Environmental Impacts of SMEs and Management Tools. *Corporate Social Responsibility and Environmental Management*, 23(5), 297–307.  
<https://doi.org/10.1002/csr.1376>
- [23] Haque, F., & Ntim, C. G. (2018). Environmental Policy, Sustainable Development, Governance Mechanisms and Environmental Performance. *Business Strategy and the Environment*, 27(3), 415–435.  
<https://doi.org/10.1002/bse.2007>
- [24] Hart, S. L. (1995). A Natural-Resource-Based View of the Firm. *Academy of Management Review*, 20(4), 986–1014.
- [25] Hillary, R. (2004). Environmental management systems and the smaller enterprise. *Journal of Cleaner Production*, 12(6), 561–569.  
<https://doi.org/10.1016/j.jclepro.2003.08.006>

- [26] Hoogendoorn, B., Guerra, D., & van der Zwan, P. (2015). What drives environmental practices of SMEs? *Small Business Economics*, 44(4), 759–781. <https://doi.org/10.1007/s11187-014-9618-9>
- [27] Jenkins, H. (2006). Small Business Champions for Corporate Social Responsibility. *Journal of Business Ethics*, 67(3), 241–256. <https://doi.org/10.1007/s10551-006-9182-6>
- [28] Kollmuss, A., & Agyeman, J. (2002). Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239–260. <https://doi.org/10.1080/13504620220145401>
- [29] Kuruwitaarachchi, N., Yajid, M. S. A., Khatibi, A., & Azam, S. M. F. (2018). Enhance The Use of Internet Based Advanced Communication Technologies in Small And Medium Scale Enterprises in Sri Lanka. *European Journal of Social Sciences Studies*, 3(2). <https://doi.org/10.5281/ZENODO.1316934>
- [30] Lepoutre, J., & Heene, A. (2006). Investigating the Impact of Firm Size on Small Business Social Responsibility: A Critical Review. *Journal of Business Ethics*, 67(3), 257–273. <https://doi.org/10.1007/s10551-006-9183-5>
- [31] Lewis, K., & Cassells, S. (2010). Barriers and Drivers for Environmental Practice Uptake in SMEs: A New Zealand Perspective. *International Journal of Business Studies*, 18(1), 7–21.
- [32] Lin, R., & Sheu, C. (2012). Why Do Firms Adopt/Implement Green Practices?—An Institutional Theory Perspective. *Procedia - Social and Behavioral Sciences*, 57, 533–540. <https://doi.org/10.1016/j.sbspro.2012.09.1221>
- [33] Mata, C., Fialho, A., & Eugénio, T. (2018). A decade of environmental accounting reporting: What we know? *Journal of Cleaner Production*, 198, 1198–1209. <https://doi.org/10.1016/j.jclepro.2018.07.087>
- [34] Mzembe, A. N., Melissen, F., & Novakovic, Y. (2018). Greening the hospitality industry in the developing world: Analysis of the drivers and barriers: XXXX. *Business Ethics: A European Review*. <https://doi.org/10.1111/beer.12217>
- [35] Newhouse, N. (1990). Implications of Attitude and Behavior Research for Environmental Conservation. *The Journal of Environmental Education*, 22(1), 26–32. <https://doi.org/10.1080/00958964.1990.9943043>
- [36] Oliver, C. (1991). Strategic Responses to Institutional Processes. *Academy of Management Review*, 16(1), 145–179. <https://doi.org/doi:10.5465/AMR.1991.4279002>
- [37] Papagiannakis, G., & Lioukas, S. (2012). Values, attitudes and perceptions of managers as predictors of corporate environmental responsiveness. *Journal of Environmental Management*, 100, 41–51. <https://doi.org/10.1016/j.jenvman.2012.01.023>
- [38] Pushpakumara, W. D. H., Atan, H., Khatib, A., Azam, S. M. F., & Tham, J. (2019). Developing a Framework for Scrutinizing Strategic Green Orientation and Organizational Performance with Relevance to The Sustainability of Tourism Industry. *European Journal of Social Sciences Studies*, 4(3), 18.
- [39] Pushpakumara, W. D. H., Atan, H., Khatibi, A., Azam, S. M. F., & Tham, J. (2018). Contribution of Green Orientation for the Organizational Performance: A Review of Stakeholder Relationships and Ecological Modernization Perspectives on Sustainability. *International Journal of Business and Management Review*, 6(9), 56–72.

- [40] Reyes-Rodríguez, J. F., Ulhøi, J. P., & Madsen, H. (2016). Corporate Environmental Sustainability in Danish SMEs: A Longitudinal Study of Motivators, Initiatives, and Strategic Effects: Environmental Sustainability in Danish SMEs: A Longitudinal Study. *Corporate Social Responsibility and Environmental Management*, 23(4), 193–212. <https://doi.org/10.1002/csr.1359>
- [41] Roxas, B., & Coetzer, A. (2012). Institutional Environment, Managerial Attitudes and Environmental Sustainability Orientation of Small Firms. *Journal of Business Ethics*, 111(4), 461–476. <https://doi.org/10.1007/s10551-012-1211-z>
- [42] Russo, M. V., & Fouts, P. A. (1997). A RESOURCE-BASED PERSPECTIVE ON CORPORATE ENVIRONMENTAL PERFORMANCE AND PROFITABILITY. *Academy of Management Journal*, 40(3), 534–559. <https://doi.org/10.2307/257052>
- [43] Salim, H. K., Padfield, R., Lee, C. T., Syayuti, K., Papargyropoulou, E., & Tham, M. H. (2018). An investigation of the drivers, barriers, and incentives for environmental management systems in the Malaysian food and beverage industry. *Clean Technologies and Environmental Policy*, 20(3), 529–538. <https://doi.org/10.1007/s10098-017-1436-8>
- [44] Schaper, M. (2002). The challenge of environmental responsibility and sustainable development: Implications for SME and entrepreneurship academics. In U. Fuglistaller (Ed.), *Radical change in the world—Will SMEs soar or crash?* (pp. 525–534). University of St Gallen KMU-HSG.
- [45] Scott, W. R. (2003). *Organizations: Rational, natural, and open systems* (5. ed). Prentice Hall.
- [46] Sharma, S. (2000). Managerial Interpretations and Organizational Context as Predictors of Corporate Choice of Environmental Strategy. *Academy of Management Journal*, 43(4), 681–697.
- [47] Sharma, S., & Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic Management Journal*, 19(8), 729–753. [https://doi.org/10.1002/\(SICI\)1097-0266\(199808\)19:8<729::AID-SMJ967>3.0.CO;2-4](https://doi.org/10.1002/(SICI)1097-0266(199808)19:8<729::AID-SMJ967>3.0.CO;2-4)
- [48] Shibin, K. T., Dubey, R., Gunasekaran, A., Hazen, B., Roubaud, D., Gupta, S., & Foropon, C. (2020). Examining sustainable supply chain management of SMEs using resource based view and institutional theory. *Annals of Operations Research*, 290(1–2), 301–326. <https://doi.org/10.1007/s10479-017-2706-x>
- [49] Singh, M. P., Chakraborty, A., & Roy, M. (2018). Developing an extended theory of planned behavior model to explore circular economy readiness in manufacturing MSMEs, India. *Resources, Conservation and Recycling*, 135, 313–322. <https://doi.org/10.1016/j.resconrec.2017.07.015>
- [50] Singjai, K., Winata, L., & Kummer, T.-F. (2018). Green initiatives and their competitive advantage for the hotel industry in developing countries. *International Journal of Hospitality Management*, 75, 131–143. <https://doi.org/10.1016/j.ijhm.2018.03.007>
- [51] Suriyapperuma, H. P., Yajid, M. S. A., Khatibi, A., & Premaratne, S. P. (2015). The Impact of Internet Adoption on SME performance in Sri Lanka: Development of a Conceptual Framework. *International Journal of Arts and Commerce*, 4(1), 14.
- [52] Testa, F., Gusmerottia, N. M., Corsini, F., Passetti, E., & Iraldo, F. (2016). Factors Affecting Environmental Management by Small and Micro Firms: The Importance of Entrepreneurs' Attitudes and Environmental Investment: Environment Management by Small and Micro Firms. *Corporate Social Responsibility and Environmental Management*, 23(6), 373–385. <https://doi.org/10.1002/csr.1382>



- [53] Thoradeniya, P., Lee, J., Tan, R., & Ferreira, A. (2015). Sustainability reporting and the theory of planned behaviour. *Accounting, Auditing & Accountability Journal*, 28(7), 1099–1137. <https://doi.org/10.1108/AAAJ-08-2013-1449>
- [54] Tian, P., & Lin, B. (2019). Impact of financing constraints on firm's environmental performance: Evidence from China with survey data. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2019.01.209>
- [55] Torugsa, N. A., O'Donohue, W., & Hecker, R. (2012). Capabilities, Proactive CSR and Financial Performance in SMEs: Empirical Evidence from an Australian Manufacturing Industry Sector. *Journal of Business Ethics*, 109(4), 483–500. <https://doi.org/10.1007/s10551-011-1141-1>
- [56] Uhlaner, L. M., Berent-Braun, M. M., Jeurissen, R. J. M., & de Wit, G. (2012). Beyond Size: Predicting Engagement in Environmental Management Practices of Dutch SMEs. *Journal of Business Ethics*, 109(4), 411–429. <https://doi.org/10.1007/s10551-011-1137-x>
- [57] Wang, S., Li, J., & Zhao, D. (2018). Institutional Pressures and Environmental Management Practices: The Moderating Effects of Environmental Commitment and Resource Availability: Institutional Pressures and Environmental Management Practices. *Business Strategy and the Environment*, 27(1), 52–69. <https://doi.org/10.1002/bse.1983>
- [58] Weidman, S. M., Curatola, A. P., & Linnehan, F. (2010). An experimental investigation of the intentions to accrue and disclose environmental liabilities. In C. R. Lehman (Ed.), *Advances in Public Interest Accounting* (Vol. 15, pp. 195–243). Emerald Group Publishing Limited. [https://doi.org/10.1108/S1041-7060\(2010\)0000015011](https://doi.org/10.1108/S1041-7060(2010)0000015011)
- [59] Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180. <https://doi.org/10.1002/smj.4250050207>
- [60] Yacob, P., Wong, L. S., & Khor, S. C. (2019). An empirical investigation of green initiatives and environmental sustainability for manufacturing SMEs. *Journal of Manufacturing Technology Management*, 30(1), 2–25. <https://doi.org/10.1108/JMTM-08-2017-0153>
- [61] Yang, C.-S. (2018). An analysis of institutional pressures, green supply chain management, and green performance in the container shipping context. *Transportation Research Part D: Transport and Environment*, 61, 246–260. <https://doi.org/10.1016/j.trd.2017.07.005>