OPERATIONS AND SUPPLY CHAIN MANAGEMENT
Vol. 16, No. 2, 2023, pp. 214 - 228
ISSN 1979-3561 | EISSN 2759-9363

Sequential Impact of Green Supply Chain Initiatives on Sustainable Performance: Food and Beverage Processing SMEs in Australia

Adeline K Benjamin
Victoria University Business School, Victoria University, Australia

Himanshu Kumar Shee
Victoria University Business School, Victoria University, Australia
Email: Himanshu.Shee@vu.edu.au *(Corresponding Author)*

Tharaka de Vass
Victoria University Business School, Victoria University, Australia

ABSTRACT

External Pressure and Green Human Resource Management (GHRM) drive green initiatives but their synergistic effects on Green Supply Chain Initiatives (GSCIs) are yet to be explored. Moreover, results of three elements of the triple bottom line sustainability show mixed relationship in the order they affect each other. Drawing on the Natural Resource-Based View (NRBV) and institutional theory, this research empirically investigates a theoretical model by examining: first, the impact of GHRM practices and external pressures on GSCIs; second, the impact of GSCIs on environmental performance; and third, their sequential effects on social and economic performance. Cross-sectional survey data from 168 SMEs in the Food and Beverage sector in Australia were analysed using structural equation modeling. Results reveal that GHRM practices and external pressures have positive effects on GSCIs that in turn affects sequentially on environmental, social and economic performance. Social dimensions, however, have no significant effect on economic performance. Meanwhile, GSCIs mediate the relationships between GHRM practices and external pressures and environmental performance. Implications are drawn.

Keywords:*Environmental performance, external pressure, green human resource management, green supply chain initiatives, institutional theory, natural resource-based view, SME, sustainable performance, Australia*

1. INTRODUCTION

Increased environmental pollution caused at the level of firms as well as their supply chains is generating widespread environmental degradation (Tseng *et al*., 2019). Improvement of environmental performance includes practices around use of natural resources; minimising waste disposal, greenhouse gas emissions and water consumption (Latan *et al*., 2018). Ramli *et al*., (2022) argue that green supply chain management (GSCM) practices may have positive influence on firms' overall performance. These practices are very relevant to the Food and Beverage processing sector which is investigated in this research. GSCM is defined as an effective management philosophy to strategically integrate green operations to deliver environmentally friendly goods and services to customers (Yang, 2018), by reducing energy consumption, harmful chemical, and solid wastes, and supporting low carbon emissions (Luo, Gunasekaran, Dubey, Childe, & Papadopoulos, 2017). Adoption of ISO 14001 environmental management systems (EMS) in green production practices (Baah *et al*., 2021) has equipped many firms to manage green activities (Wang, Zhang, & Zhang, 2020). Going green is not the same thing as improving environmental performance, but both are well related. By adopting green ideas, companies do not seek only profitability, but importantly they attempt to preserve the natural environment. Assuming natural environment as a resource in natural resource-based view (NRBV) theory, Latan *et al*. (2018) suggest that environmental capabilities help address environmental regulations. Further, institutional pressure (e.g., government regulations, customer and competitor) plays vital role to fully initiate green activities (Ahmed *et al*., 2019; Zhu *et al*., 2013). Controlling emissions in manufacturing and processing, a firm can comply with external stakeholders' demands (Acquah *et al*., 2020).

Green initiatives (GSCIs) and practices (GSCMPs) are used interchangeably, where the former is the early stage of adoption, and the latter is implementation of these initiatives. Henceforth, we will use the term GSCIs, which is a proactive approach to environmental management practices such as green purchasing, eco-design, and reverse logistics (Hsu, Tan *et al*., 2013; Huang *et al*., 2017). Referring to Huang *et al*. (2017, p. 807), we define GSCIs as a transition from traditional manufacturing/service operations to innovative green activities along the supply chain having minimum damage to the environment. However, there is limited research on how GSCIs impact the environment.

Moreover, literature has addressed green practices from the perspective of green human resources. Green human resource management (GHRM) focuses on green hiring, green training and teamwork, appraisal, and incentives (known as the GHRM bundle) (Zaid *et al*., 2018). Enablement of common human resources (i.e., engaged in routine tasks) into a strategic green human resource enables a firm to execute green practices. This is what Laksmana, Shee & Thai (2020) call a bundling of common resources that offers firms a competitive edge over their competitors. Moreover, there is a growing consensus on the use of

institutional pressure (e.g., coercive, normative, and mimetic) as external forces to motivate firms to embrace green initiatives (Agarwal *et al*., 2018; Hsu *et al*., 2013; Huang *et al*., 2017; Vanalle *et al*., 2017; Yang, 2018). While GHRM provides firms with green-focused, environmentally oriented employees to help minimise carbon emissions (Nejati et al., 2017), institutional (external) pressures further accelerate these initiatives (Zhu *et al*., 2013). Synergy between GHRM and external pressure, and their joint impact on GSCIs in Australian Food and Beverages SMEs, is new and warrants further investigation to enhance our knowledge on this relationship. Acquah *et al*. (2020) have examined the impact GHRM has on GSCIs and then its concurrent effect on elements of triple bottom lines (TBL) sustainability (i.e., environmental, social, and economic dimension) (Pattnaik & Pattnaik, 2019). The study differs in two ways: it examines the joint effect of GHRM and external pressure on GSCIs, and then the sequential effect of GSCIs on sustainability dimensions.

Most studies have not considered social dimension while assessing the impact of GSCIs on sustainable performance (Agarwal *et al*., 2018; Baah *et al*., 2021; Micheli et al., 2020; Ramli *et al*., 2022; Sahoo & Vijayvargy, 2020). For instance, De Giovanni (2012) claims that the environment positively affects economic but not social performance. Addressing health and safety, minimizing injuries, absenteeism, and employee wellbeing can improve workers' satisfaction and health conditions (Zaid *et al*., 2018). Additionally, NRBV arguably focuses on economic growth and higher environmental performance while giving little emphasis on social performance that creates a gap in sustainability literature (Solovida & Latan, 2021). These authors prioritise economic performance over the other two, claiming that increased economic performance will positively influence environment and social performance. Additionally, Svensson *et al*. (2018) finds a positive effect of economic dimension directly on environment, and via social dimension. In contrast, environmental performance has been argued as the first pillar to affect the other two in a sequential order (Shee *et al*., 2021). This study therefore strengthens the mixed and inconsistent findings, and fills the gap where environment is believed to be the first dimension to be affected and as a catalyst it can determine the outcomes of social and economic dimensions. The underrepresented social dimension (Tate & Bals, 2018) is examined for its significant role within the context of sustainability.

The Food and Beverages SMEs in Australia are facing challenges to go green. These SMEs process fruits, vegetables, pasta, snacks, refrigerated products, soft drinks, and semi-alcoholic drinks, to name just a few. The sector has continued to grow despite lockdowns and social restrictions during the COVID-19 pandemic. Yusoff *et al*. (2013) report, however, that Australian SMEs, in general, are less likely to embrace social and environmental practices than larger firms. This is due partly to cost and time pressures and the inability to see economic benefits (Bressan, 2014). In general, SMEs have limited financial resources, knowledge and skills, and are unable to justify expensive investment (Brammer *et al*., 2012). Further, these SMEs are under increasing pressure due to the issues of obesity, food safety and alcohol abuse (Guthrie, Cuganesan, & Ward, 2008). Therefore, the question is what drives SMEs to adopt GSCIs.

The objective of the study is to: first, empirically investigate the effect of GHRM practices and external pressures on GSCIs; and second, investigate how environmental performance is affected, followed by social and economic performance.

The following two questions answer the above objectives:

RQ1: *Does the synergy between GHRM and external pressure affect GSCIs?*

RQ2: *What effect do the GSCIs have on environmental performance and then on social and economic performance?*

The remainder of the paper is structured as follows: Section 2 presents a literature review and develops hypotheses. Sections 3, 4, 5 and 6 presents, respectively, the research methodology, analysis and results, discussion and implications, and conclusions and limitations.

2. LITERATURE REVIEW

2.1 Natural Resource-Based View Theory

The resource-based view (RBV) theory claims that firm's resources are valuable, rare, inimitable, and non-substitutable (VRIN) that can be source of competitive advantage (Barney, 1991; Laksmana *et al*., 2020). Hart (1995) extended the idea of natural RBV (NRBV) theory to include the opportunities the natural environment can provide. NRBV recommends that organisations can maintain their competitive edge by implementing green techniques such as pollution prevention, product stewardship and sustainable development, and ensuring that operations along the supply chain are environmentally friendly (Hart & Dowell, 2011; Woo *et al*., 2016). These green strategies rooted in firms' capabilities and not easily copied by rivals will facilitate environmentally friendly operations (Woo *et al*., 2016). From NRBV perspective, effective green initiatives have potential to create differences in the organisations by reducing pollutants and creating a green image.

NRBV focuses on pollution prevention involving minimisation of waste, emissions and affluent (Solovida & Latan, 2021) which are linked with the origin of a product where its impact might be significant. It is a more collaborative approach not only to minimise the product's damaging environmental impact but also curtail cost. Green practices enhance a corporation's image by employing innovative ways to design and market eco-friendly products, redesigning packaging and profiting from the investment with new market opportunities (Choi & Hwang, 2015). From the NRBV perspective, Baah *et al*. (2021) argues that companies, in response to environmental issues, develop critical resources such as product/packaging improvement, stakeholder and innovation integration and better production practices that offer competitive advantage. The NRBV has successfully been argued as able to establish a relationship between resource efficiency and GSCM practices (Woo *et al*., 2016). However, NRBV is seen to have ignored social dimension (Solovida & Latan, 2021). Therefore, Tate and Bals (2018) suggest including social dimension in sustainability study for value creation.

2.2 Institutional Theory

Institutional theory can be viewed from institutional isomorphism, namely coercive, normative, and mimetic pressures that can influence firms' business practices (DiMaggio & Powell, 1983) and desire to conform to an industry's rules and norms (Tsinopoulos *et al*., 2018). As environmental issues are taking the center stage, as evidenced in Glasgow agreement (COP26), countries and businesses are taking additional initiatives on environmental practices. This is linked to stakeholders' pressure where any deviation from the industry practices will lead to their poor endorsement and negative organizational legitimacy (Baah *et al*., 2021). When a firm undergoes external pressure from stakeholders, it assesses its internal resources (e.g., green human resources) to initiate green activities.

The coercive pressure comes from regulatory authorities (e.g., Federal, and local government) that the SMEs depend on for their business continuity. They build awareness about general understanding of environmental obligation, request for a noticeable incident and keep track of harm caused by pollution. The regulations and directives exert coercive institutional pressure that motivates firms initiating environmental practices (Yang, 2018). Normative pressure expects organizations to adopt new practices which are consistent with the norms and values in a business environment (DiMaggio & Powell, 1983). This pressure comes from external organizations (e.g., professional group, International Organization for Standardization) who have key interest in the firms adopting the green initiatives (Yang, 2018). Normative pressure from customers and market forces helps implement green practices protecting the depletion of resources and degradation of human health (Vanalle *et al*., 2017). Food and Beverage processing sector is not different in this aspect. Mimetic pressure emerges under uncertain business conditions where managers/owners look towards other organizations in relation to structure and practices (DiMaggio & Powell, 1983). When customers favour the green initiatives taken by competitor organisations, it prompts other firms to adopt the same (Yang, 2018).

2.3 GSCM/GSCIs, Antecedents and Outcomes

Studies have suggested the relationship between GSCM practices and firm performance but produced mixed results (Agarwal *et al*., 2018; Baah *et al*., 2021; Sahoo & Vijayvargy, 2020; Vanalle *et al*., 2017; Wang *et al*., 2020).

Table 1. GSCM/GSCIs, Antecedents, and Outcomes

Authors	Antecedents	GSCM/ GSCIs/GHRM	Outcomes	Concurrent/Sequential Effect
Baah *et al*. (2021)	Organisational and regulatory pressure	Green production practices	Firm reputation, environmental, financial	Environmental→ Financial
Acquah *et al*. (2020)	GHRM	GSCM	Environmental, economic, social, operational, market	concurrent
Mousa and Othman (2020)	Green Hiring, Green Training, Green Performance & Compensation	GHRM	Environmental, economic, social	concurrent
Sahoo and Vijayvargy (2020)	-	Internal and external GSCM	Environmental, economic, operational	Environmental→ Economic
Micheli *et al*. (2020)	Internal and external drivers	GSCM	Environmental, economic (positive & negative), operational	Concurrent
Han and Huo (2020)	Internal-, supplier- and customer integration	-	Environmental, economic, social performance	Concurrent
Ahmed *et al*. (2019)	Coercive, normative and mimetic pressure	GSCM	Environmental, economic, customer effectiveness	Concurrent
Zaid *et al*. (2018)	GHRM	Inter and external- GSCM	Environmental, economic, social	Concurrent
Agarwal *et al*. (2018)	Regulation, market, supplier pressure	GSCM	Environmental, economic, operational	concurrent
Feng *et al*. (2018)	-	GSCM	Environmental, operational, financial	Environmental→ Financial Operational→ Financial
Saeed *et al*. (2018)	Coercive, normative, and mimetic pressure	Internal and external GSCM	Environmental, economic	Environmental→ Economic
Jabbour and Jabbour (2016)	GHRM	GSCM		Integration of both

For example, Baah *et al*. (2021) finds a positive effect of green production practices on financial and environmental performance. Sahoo and Vijayvargy (2020) reveal that GSCM has an indirect positive effect on economic performance by improving environmental performance. Wang *et al*. (2020) claim that GSCM has a positive effect on firm's economic performance. GSCM comprises environmental practices that support product sourcing,

manufacturing, distribution, and end-of-life product handling resulting in good economic and social outcomes (Tseng *et al*., 2019). Earlier studies, on the relationship between environmental and financial performance, have been criticised for mixed linear relationship (i.e., positive/negative/non-significant) (Latan *et al*., 2018; Trumpp & Guenther, 2017), while social dimensions are underrepresented (Tate & Bals, 2018). In contrast, Latan *et al*. (2018) found this relationship as non-linear (U-shaped) because they argued that doing too much would lead to an optimal position and then any extra investment would return negative result. In view of this, we have gone back to test and validate the linear relationship again because the relationship depends on the predictive power of antecedents and context under which they operate, that is, Australian SME in this context.

Research on GSCM has proliferated over the last two decades but further insights are needed (Tseng *et al*., 2019) on how green initiatives affect sustainability dimensions. Many authors have used GSCM/GSCIs, their antecedents and sustainability dimensions in various combinations. **Table 1** summarizes relevant research from 2016 to 2021. It shows either external/institutional pressure or GHRM drives GSCM/GSCIs; and sustainability outcomes are either concurrent, or mostly the environment has a significant effect on economic/financial performance. From NRBV perspective, some studies (Baah *et al*., 2021; Feng *et al*., 2018; Saeed *et al*., 2018; Sahoo & Vijayvargy, 2020) have focused on environmental performance for competitive advantage and having its positive effect on economic performance.

3. THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

3.1 External Pressures and GSCIs

Institutional theory asserts that firms receive significant pressure from stakeholders within the social context where they operate. Breaches of such obligations may endanger performance (Kalyar *et al*., 2019). Thus, government regulations (coercive), customer pressure (normative) and the influence of competitors (mimetic) play key roles in enabling SMEs to fully implement green activities. Government legislation is generally the most significant external pressure on GSCIs (Lai & Wong, 2012). Normative pressure originates from professional cultures and concomitant assumptions about how tasks should be done (Yang, 2018). Following consumers' demands, manufacturers adhere to environmental guidelines at every stage of production. Competitive pressure encourages firms to imitate successful firms and replicate their business practices. Previous studies detected a positive effect of institutional/external pressure on GSCM practices (Ahmed *et al*., 2019; Vanalle *et al*., 2017), and internal (but not external) green practices (Yang, 2018). Ahmed *et al*. (2019) and Huang *et al*. (2017) find normative pressure exerted by customers and supply chain partners has the highest effect on GSCIs. Among these mixed results, we are not yet sure how these pressures do influence SMEs to adopt GSCIs amidst resource constraints. Moreover, with GHRM practices we are not sure how these pressures transpire. Therefore, the following hypothesis is proposed:

H1: External pressures are positively associated with GSCIs.

3.2 Green Human Resource Management (GHRM) Practices and GSCIs

Turning the discussion to production and supply chain management, managers are likely to implement green initiatives internally (Jabbour & Jabbour, 2016), as well as externally with suppliers for green purchasing, reverse logistics, recycling of packaging materials, etc. (Sahoo & Vijayvargy, 2020). Extending human resources to incorporate green philosophy and motivational changes - known as green human resource management (GHRM) - can influence GSCIs (Acquah *et al*., 2020; Nejati *et al*., 2017; Zaid *et al*., 2018). Nejati *et al*. (2017) claim that green development and training, green employee empowerment, green pay and rewards have positive effects on green manufacturing. Yu *et al*. (2020) posit that GHRM does positively affect environmental cooperation with customers and suppliers. However, more nuanced understanding of the synergies between GHRM and GSCIs is needed to explore its full effect on sustainability.

Implementing green activities within the business is the first step to achieving external GSC initiatives (Yang, 2018), and demands considerable support from green human resources (Jabbour & Jabbour, 2016; Nejati *et al*., 2017; Teixeira *et al*., 2016). Green human resource activities enhance the execution of GSC activities (Zaid *et al*., 2018) and facilitate greater staff participation in sustainability programs (Teixeira *et al*., 2016). Studies have confirmed the relationship between GHRM practices and GSCM. For example, Jabbour and Jabbour (2016) propose a framework that explains GSCIs being supported by GHRM undertakings. Nejati *et al*. (2017) document the significance of GHRM in GSC practices. Combining NRBV and Institutional theory, GHRM supports the green activities to improving the environmental performance that conforms the external pressures from all stakeholders. Based on these theories, we hypothesise that:

H2: GHRM practices are positively associated with GSCIs.

3.3 GSCIs and Environmental Performance

In the early phase of greening operations, firms adopt internal green activities to minimise the effect of their internal procedures and practices on the environment, consolidate their own environmental objectives, and comply with legislation/regulations. Studies have found a positive relationship between internal GSCM practices and green performance (De Giovanni, 2012; Feng *et al*., 2018; Laari *et al*., 2018; Vanalle *et al*., 2017; Z. Wang *et al*., 2018). Another dimension of GSCIs is external (GSCM) practices which include business dealings with suppliers and consumers, such as green purchasing and cooperation with customers (Yang, 2018). This promotes discussion on green issues, such as goods, services, commodities, and better environmental packaging (Feng *et al*., 2018; Green *et al*., 2012; Z. Wang *et al*., 2018). Saeed *et al*. (2018) find internal-

GSCM has a positive effect on environmental performance while external-GSCM can improve economic performance. Solovida and Latan (2021) argue for financial dimension to be affected first among three pillars of TBL. Amidst the inconsistency in the order they affect, we hypothesise that environmental dimension to be affected first (Shee *et al*., 2021), and derive the following hypothesis.

H3: GSCIs are positively associated with environmental/green performance.

3.4 Environmental (Green) Performance and Economic Performance

While minimizing the damage to environment by manufacturing and processing activities, firms comply with regulatory requirements by reducing hazardous processes. While maximizing material efficiencies and simultaneous use of recyclable resources (Sahoo & Vijayvargy, 2020), firms seek to innovate products (eco-design) to enhance environmental performance (Green *et al*., 2012). For example, the efficient use of bio-degradable materials in production reduces the amount of waste going to landfill and controls costs. Thus, environmental practices (e.g., eco-design, investment recovery) positively guide economic performance (De Giovanni, 2012; Feng *et al*., 2018; Green *et al*., 2012). Customer satisfaction resulting from better environmental practices helps create more market share (Al-Sheyadi et al., 2019), which is echoed by Saeed *et al*. (2018). Trumpp and Guenther (2017) argue for proactive environmental strategies leading to higher benefits than cost. Although earlier studies found the relationship to be non-linear (u-shaped) (Fujii *et al*., 2013; Latan *et al*., 2018), we argue for a linear relationship among TBL elements because it depends on the predictive power of antecedents and the extent they are practiced (i.e., GHRM and External pressure in this case). Thus, we posit the following hypothesis:

H4: Green performance is positively associated with economic performance.

3.5 Environmental Performance and Social Performance

Studies on sustainability have emphasized only environmental and economic dimensions leaving social dimension mostly underrepresented (Tate & Bals, 2018). Svensson *et al*. (2018) state that NRBV does not focus on social dimension, creating a space for social resource-based view (SRBV) in literature (Tate & Bals, 2018). Carter and Rogers (2008) suggested earlier that investment in pollution-free approaches minimized carbon emissions and wastes, helping to improve staff members' health and safety, reduce absenteeism and turnover. Zailani *et al*., (2012) argue in favour of positive social outcomes such as workers' satisfaction and competence. The social dimension (e.g., diversity, philanthropy, human rights and safety), has tended to be ignored due to its non-financial implications, but is gradually gaining attention due to growing pressure from regulatory authorities, customers, suppliers, climate activists and other stakeholders (Mani *et al*., 2018). Further, the realisation is that inclusion of social dimensions assists organisations thrive for more than 20 years and beyond (Carter & Rogers, 2008). Hence, we propose the following hypothesis.

H5: Environmental performance is positively associated with social performance.

3.6 Social Performance and Economic Performance

Social undertakings include health and safety, stakeholder relationships, community engagement, occupier satisfaction and cultural issues. If managed well, these should lead to a solid return on investment (De Giovanni, 2012). Carter and Rogers (2008) urge firms to examine their role in creating a viable social bottom line strategically as it could yield long-term profits. As financial return is less likely to occur in the short run, firms have less interest in investing in social dimensions. However, integration of social obligations offers a meaningful return on investment over a period. With reference to Food and Beverage SMEs, we derive the following hypothesis as:

H6: Social performance is positively related to economic performance.

3.7 GSCIs as Mediator

External pressures push firms to embrace green initiatives and the environmental outcomes should ideally be positive (Huang *et al*., 2017; Vanalle *et al*., 2017; Yang, 2018). Regulations aim to make firms environmentally compliant, for example, minimising the disastrous effects of pollution (Yang, 2018). The quest to imitate competitors so as to sustain competitive advantage has also driven firms to implement GSCIs (Zhu *et al*., 2013). Customers, typically knowledgeable and eco-friendly, can put pressure on firms to adopt green initiatives. Thus, firms adopt green initiatives (GSCIs) to deal with environmental matters. However, firms seem to follow a reactive approach at times (Saeed *et al*., 2018), rather than proactively adopting GSCIs (Trumpp & Guenther, 2017). That is where GHRM plays a catalytic and proactive role in pursuing the GSC initiatives, including both internal and external green practices (Zaid *et al*., 2018). The green-oriented employees being competent to translate the green initiatives (Teixeira *et al*., 2016) help improve the environmental performance. This conforms to the institutional pressures. Thus, the hypothesis is proposed as:

H7 (a, b): GSCIs mediate the relationship between GHRM and environmental performance (H7-a); and between external pressure and environmental performance (H7-b).

The conceptual framework and the hypotheses are presented in **Figure 1**.

4. METHODS

4.1 Population and Sampling Frame

This research used the survey method to collect data. In total, 350 firms were chosen from a list of SMEs registered with the Chartered Institute of Logistics and Transport in Australia (CILTA), and 200 SMEs from the small business directory and involved in Food and Beverage processing in

Australia. These numbers were based on the respondents in senior management positions who have green/environmental knowledge. Australian SMEs are defined on employee size, where micro-Businesses have 1–4 employees, small businesses 5–19, medium businesses 20–199, and large businesses 200+ (ABS, 2021; Senarathna *et al*., 2018). The sector generates revenue to the value of $430.6 billion, employs 962,189 people, and is expected to generate annual revenue growth of 1.2% during 2021-2026 (IBISWorld, 2020). The survey returned 85 responses from the CILTA sample and 93 responses from the small business directory. Ten were discarded for incomplete information resulting in a final sample of 168 cases, meaning the response rate was 31%. The data were collected between May and October 2019. Respondents' demographic details are presented in **Table 2**. The SMEs represented 42% of small enterprises (<20 people) and 58% of medium-sized enterprises (between 20 to 200 people) (ABS, 2021). Respondents comprised senior employees in the positions of production/operations manager (32.7%), supply chain manager (26.2%), owner (13.1%), logistics manager (13.1%) and others. The majority were qualified with a bachelor's degree (44.6%) and master's degree (32.7%); and 66.5% have at least five years of work experience. Of these, 73.2% have ISO 9000 and 81.5% have ISO 14001 certifications. Regardless, it is still not known how the SMEs' green initiatives have impacted the environmental, social and economic performance.

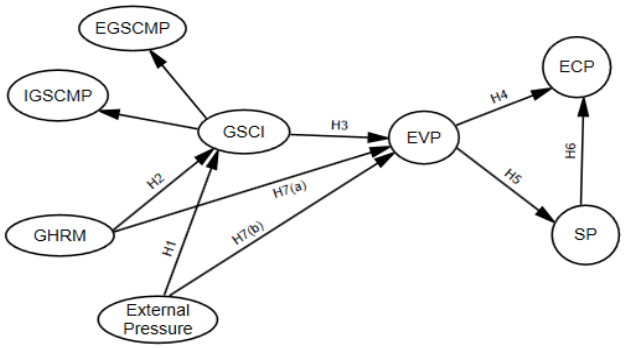

Figure 1 Theoretical research framework

Note: GSCI-green supply chain initiative, EGSCMP-external green supply chain management practices, IGSCMP- internal green supply chain management practices, GH- green human resource management practices, EVP-environmental performance, ECP-economic performance, SP-social performance

Table 2 Demographic Profiles

Demographic Information	N	%	Demographic Information	N	%
No of employees			*Duration of business(Yrs)*		
1 to 4	16	9.5	1 to 5	15	8.9
5 to 19	55	32.7	6 to 10	37	22.0
20-199	97	57.7	11 to 20	59	35.1
Total	168	100	> 20	57	33.9
Annual turnover			Total	168	100
$0 to $50K	1	0.6	*Organizational position*		
$50K to $200K	11	6.5	Owner	22	13.1
$200K to $2M	52	31.0	Logistics Manager	22	13.1
$2M to $5M	56	33.3	Supply Chain Manager	44	26.2
>$5M	48	28.6	Human Resource Manager	5	3.0
Total	168	100	Production/Operations Manager	55	32.7
ISO 9000 certification			Plant Manager	14	8.3
Yes	123	73.2	Other	6	3.6
No	45	26.8	Total	168	100
Total	168	100	*Length of experience (Yrs)*		
ISO 14001 certification			1 to 5	73	43.5
Yes	137	81.5	6 to 10	46	27.4
No	31	18.5	11 to 14	20	11.9
Total	168	100	> 15	29	17.3
Certification (Yrs)			Total	168	100
Less than a year	5	3.0	*Gender*		
1-2	7	4.2	Male	135	80.4
3-5	32	19.0	Female	33	19.6
> 5	101	60.1	Total	168	100
Not at all certified	23	13.7	*Qualification*		
Total	168	100	Secondary school	1	0.6
Age (Yrs)			VCE/High school	5	3.0
18-30	7	4.2	Certificate	3	1.8
31 to 45	75	44.6	Diploma	26	15.5
46 to 60	69	41.1	Bachelors	75	44.6
> 60	17	10.1	Masters	55	32.7
Total	168	100	Other	3	1.8
			Total	168	100

The survey questionnaire covered six factors: External pressures (i.e., regulatory, customer and competitor); Green HRM practices; GSCIs including internal (IGSCM) and external green supply chain management (EGSCM); and environmental, social, and economic factors. See **Appendix 1** for constructs, their measurement items, and their sources.

4.2 Data Analysis

The hypotheses were tested using the full measurement model and path analysis using AMOS-SEM. The non-response bias was evaluated by comparing age, education and experience of early versus late responses at a 60% to 40% division using independent sample t-test. The outcomes showed no significant variation at $p < 0.05$. Armstrong and Overton (1977) suggest that socio-economic (education, personality) differences between respondents make responses differ from earlier to later. Late respondents are more like non-respondents (Armstrong & Overton, 1977, p. 397). Fulton (2018) supports the fact that "informants who are full-time employees and have been in their position for several years will be more likely ----to complete a survey. ----, informants who have college degrees are more likely to ------be motivated to participate in a study" (p.246).

We examined common method bias (CMB) using Harman's single-factor test (Flynn, Huo, & Zhao, 2010) in two ways. First, exploratory factor analysis (EFA) generated more than 11 factors, with eigenvalues over 1.0, capturing 69.82% of total variance, with the first factor accounting for 34.11% of variance. Thus, CMB was not an issue. Second, confirmatory factor analysis (CFA) illustrated a poor model fit with chi-square ($\chi2$)=878.54, $\chi2$/df=3.82, root mean square error of approximation (RMSEA)=0.13, non-normed fit index (NFI)=0.58, goodness-of-fit index (GFI)=0.65, comparative fit index (CFI)=0.64 and Tucker–Lewis index (TLI)=0.61. Thus, no CMB issue was noticed. Further, CFA of full measurement model was also tested for unidimensionality of the theoretical constructs (Laksmana *et al*., 2020). The goodness-of-fit indices such as chi-square ($\chi2$)(264)=412.11, $\chi2$/df=1.561, GFI=0.844, AGFI=0.792, RMSEA=0.058, NFI=0.835, CFI=0.932, TLI=0.916 satisfy the threshold values moderately. The factor loadings and t-values are shown in **Appendix 1**. Additionally, we performed the test for heteroscedasticity (extent of variance) using linear regression and Breusch-pagan & Koenker test by using macro syntax (https://www.spsstools.net/en/syntax/syntax-index/regression-repeated-measures/breusch-pagan-amp-koenker-test/). Upon careful examination of histogram, pp-plot and scatterplot (between standardized residual and standardized predictors), it appears no issues of heteroscedasticity.

4.3 Reliability and Validity

Cronbach's alpha values between 0.68 and 0.7, and composite reliability (CR) values between 0.69 and 0.86 have satisfied the threshold values of 0.5 (Hair, Black, Babin, & Anderson, 2014). These findings confirmed the internal consistency of the measurement items. The reliabilities of the items were further confirmed by factor loadings (**Appendix 1**) that exceeded 0.50 ($t>1.96$, $p<0.001$) (Anderson & Gerbing, 1988). The highest correlation between the constructs was 0.739, so there was no multicollinearity issue found between constructs (Hair *et al*., 2014). See **Table 3** for inter-construct correlation coefficients, Cronbach's alpha, CR and AVE (average value extracted). These values were estimated through HTMT (Heterotrait-Monotrait) test. For more details, refer AMOS-plugin discriminate validity HTMT tool by Gaskin et al., (2019).

Convergent validity was confirmed by AVE values that range from 0.502 to 0.672 (more than 0.5) and signifies the measurement items' convergent validity (Fornell & Larcker, 1981). It explains a construct more than 50% of the variance in scale items. Discriminant validity was examined by comparing the square root of AVE along the diagonal which are found greater than the respective correlations below in the column and across in the row. Further, Heterotrait-Monotrait (HTMT) ratio, refer Henseler et al. (2015) for details, is a new procedure to test discriminant validity, and is superior to Fornell-Larcker criterion. **Table 3** presents HTMT values above diagonal, and all are less than the cut off value of 0.85 (Henseler *et al*., 2015; Rönkkö & Cho, 2022).

Table 3 Cronbach's Alpha, CR, AVE, HTMT and Correlation Coefficients

	M	SD	Cr. Alpha	CR	AVE	IG	EG	Reg	CUST	COMP	EVP	ECP	SP	GHRM
IG	3.51	1.05	0.78	0.79	0.559	*0.747*	0.742	0.414	0.587	0.514	0.441	0.602	0.635	0.600
EG	3.48	0.95	0.80	0.80	0.672	0.739	*0.820*	0.458	0.438	0.577	0.664	0.724	0.581	0.570
Reg	3.56	1.07	0.80	0.81	0.599	0.465	0.413	*0.774*	0.361	0.733	0.496	0.583	0.301	0.734
CUST	3.62	1.14	0.81	0.69	0.528	0.572	0.416	0.355	*0.727*	0.340	0.394	0.495	0.355	0.504
COMP	3.83	1.17	0.68	0.86	0.668	0.527	0.592	0.731	0.358	*0.818*	0.471	0.504	0.472	0.624
EVP	3.36	0.92	0.86	0.75	0.509	0.393	0.638	0.399	0.382	0.461	*0.714*	0.673	0.483	0.561
ECP	4.02	0.91	0.74	0.85	0.596	0.540	0.685	0.535	0.532	0.495	0.674	*0.772*	0.461	0.526
SP	3.45	0.92	0.84	0.83	0.614	0.595	0.599	0.316**	0.359	0.479	0.464	0.412	*0.783*	0.419
GHRM	3.87	0.94	0.83	0.80	0.575	0.593	0.531	0.735	0.508	0.624	0.515	0.504	0.427	*0.759*

Diagonal values (shaded) are square root of AVE
*All values below diagonal are the correlations at p<.001; **<01*
All values above diagonal are the HTMT values

4.4 Path Analysis

We used R-square change and variance inflation factor (VIF) to test the multicollinearity by using all variables in a regression analysis. From **Appendix 2**, the R-square indicates 49.9% (p<.001) change in dependent variable. The multicollinearity statistics show that tolerance values are more than acceptable value of at least 0.1 and VIF values are less than 3.3 (Latan *et al*. 2018). Further, we performed the test for normality and outliers using AMOS-SEM. Results indicate that skewness values vary from -1.656 to 0.064 which are within the recommended value of 3 (in absolute value); kurtosis values fall within -0.884 to 3.3 which are within the threshold 10, and Mahalanobis d-square shows one outlier but it was not a threat to parameter estimate.

Structural path analysis (**Figure 2)** yielded a moderately fit model with $\chi2(288)=595.775$, $\chi2/df=2.069$, RMSEA=0.08, CFI=0.86, TLI=0.84. The refinement of the model was stopped at this stage considering the fact that further drop of items will lead to minimisation of items per construct which may risk the examination of theory (Hair *et al*., 2014). Also note that GFI, AGFI and NFI values are reportedly dependent on sample size (Hair *et al*., 2014), so we decided not to report their values. Further, the indices CFI and TLI are close to 0.9 which is reasonably acceptable following the analysis by Yu *et al*. (2019) and Hsu *et al*. (2013). They suggest 0.9 is an acceptable value. The model can still be regarded as a moderately good fit even at slightly less than 0.9 (Kim *et al*., 2016).

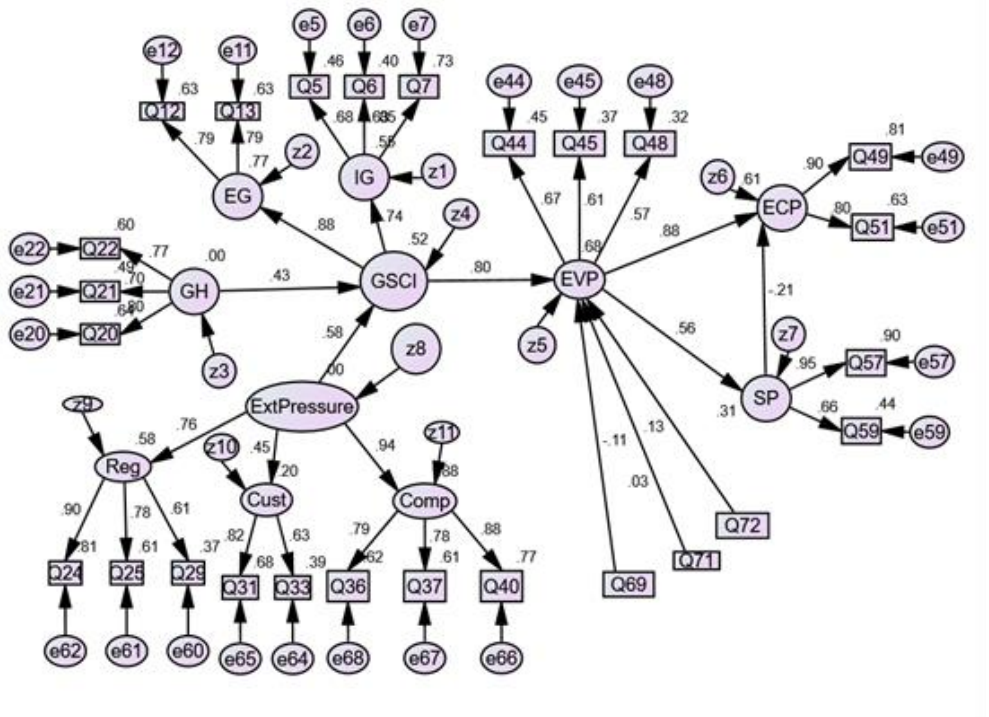

Figure 2 Structural Path Model

Q69: years of experience (years); Q71: educational qualification; and Q72: age

Note: GSCI-green supply chain initiative, EGSCMP-external green supply chain management practices, IGSCMP- internal green supply chain management practices, GH- green human resource management practices, Ext Pressure- external pressure, Reg-regulatory, Cust-customer, Comp-competitor, EVP-environmental performance, ECP- economic performance, SP-social performance.

The findings indicate that external pressure (B=0.59, p<.001) and GHRM practices (B=0.40, p<.001) have positive and significant effects on GSCIs supporting hypotheses H1 and H2. GSCIs have positive impact on EVP (supported H3, B=0.85, p<.001), which in turn impacts positively on economic (supported H4, B=0.90, p<.001) and social performance (supported H5, B=0.62, p<.001). The coefficients B=0.85 and B=0.90 appear to be inflated by multicollinearity. Upon checking the inter-construct correlations from SEM output, the highest correlation was 0.852 between GSCI and EVP. However, we did not include these coefficients here. Because the correlation coefficients from HTMT analysis are presented in **Table 3**. All values are just under 0.739 indicating no sign of multicollinearity. Further, social performance has no significant impact on economic performance (B= -0.19, p>0.05), so H6 is not supported. The negative relationship can be partly attributed to money spent on community health, safety and any form of social commitment where the SMEs, we believe, did not think they were a priority because resources were constrained.

Alternately, we tried with antecedents Reg, Cust and Comp as first order constructs to GSCIs. The model fit got worse with RMSEA=0.091, TLI=0.795, CFI=0.818. Moreover, the "Reg" became insignificant. Upon utilizing the chi-square difference test (684.986-595.775= 89.221 with df = 1) between two models, we found a significant difference (p<.001). But this option was not acceptable.

4.5 Mediation Analysis

Mediation analysis was carried out by joining direct paths connecting ExtPressure and GHRM with EVP. Both were found to be non-significant (B=0.15, t=1.255, p=0.209; B=0.11, t=1.167, p=0.243). Therefore, indirect effects were

estimated. GHRM was significant at B=0.34, P<.05. (i.e., GHRM→GSCI (0.40) x GSCI→ EVP (0.85) = 0.34, p<.05). ExtPressure was also significant at B=0.50, P<.05. (i.e., ExtPressure→GSCI (0.59) x GSCI→ EVP (0.85) = 0.50, p<.05). This supports earlier studies where ExtPressure drives GSCIs (Huang *et al*., 2017; Vanalle *et al*., 2017; Zhu *et al*., 2013) while GHRM is likely to facilitate the GSCIs (Teixeira *et al*., 2016; Zaid *et al*., 2018), and both affect indirectly and positively on EVP. Thus, GSCIs mediated the relationships fully. H7-a and H7-b are supported. The direct and indirect effects, and hypotheses testing results are presented in **Table 4.**

Table 4 Direct and Indirect Effects

Hypotheses	Path	Std Beta	Results
H1	ExtPressure → GSCI	0.59**	Supported
H2	GHRM → GSCI	0.40**	Supported
H3	GSCI → EVP	0.85**	Supported
H4	EVP → ECP	0.90**	Supported
H5	EVP → SP	0.62**	Supported
H6	SP → ECP	-0.19	Unsupported
H7(a,b)	GHRM→ GSCI → EVP	0.34* (indirect effect)	Supported (H7-a)
	ExtPressure → GSCI → EVP	0.50* (indirect effect)	Supported (H7-b)

*p<0.05, **p<0.001

5. DISCUSSION AND IMPLICATIONS

5.1 Discussion

The literature is limited on the joint influence of GHRM practices and external pressures on GSCIs, and investigation into the sequential impact of GSCIs on the triple bottom line sustainability. The synergistic positive relationship between external pressure and GHRM practices with GSCIs (supporting H1, H2) explains that firms under external pressure (i.e., regulations, customers and competitors) can factor in GHRM practices that help disseminate green ideologies and standards where employee training, rewards and teamwork can help in green initiatives. While GHRM provides firms with green-focused, dedicated and talented employees to help minimise carbon emissions (Nejati *et al*., 2017), from the NRBV perspective, it is firms' abilities that drive the environmental thinking in manufacturing, processing and logistics operations. This offers the SMEs a competitive advantage by harnessing the natural resources characterised as VRIN type at the firm level (Barney, 1991; Laksmana *et al*., 2020). GHRM practices, as organisational resources, are oriented to green initiatives that create a competitive advantage.

The finding is consistent with earlier research that considered these two antecedents separately. Acquah *et al*. (2020) discover a positive relationship between GHRM and GSCM practices; Zaid *et al*. (2018) claim that the GHRM bundle has a positive effect on internal- and external GSCIs. Ahmed *et al*. (2019) reveals a positive relationship between institutional pressure and GSCM practices, while Saeed *et al*. (2018) and Agarwal *et al*. (2018) find external pressure, albeit treated separately as coercive, normative and mimetic, is partially associated with internal- and external GSCIs. Our results also reveal that external pressure and GHRM have no direct effect on environmental performance but GSCIs mediate (supporting H7(a,b)). This agrees with Zaid *et al*. (2018) who report the GSCIs do mediate between GHRM and environmental performance. However, the joint effect of GHRM and external pressure is new in this study.

GSCIs have a positive effect on environmental performance (supporting H3), which then has a sequential impact on social and economic performance (supporting H4, H5). From the NRBV perspective, GSC initiatives enhance two things: firms' environmental orientation and competitive capabilities in deploying innovative activities (Shi *et al*., 2012), and profits (Baah *et al*., 2021; Saeed *et al*., 2018). Employee satisfaction, social commitment, health and well-being are the results of a good environmental orientation (Zaid *et al*., 2018). However, social dimensions had no significant effect on economic performance (H6 not supported) which indicated that social benefits (i.e., employee job satisfaction and social commitment) had no immediate effect on economic benefits but is instead perceived to have a delayed effect.

Earlier studies tested GSCIs' concurrent effect on sustainable dimensions (Acquah *et al*., 2020; Agarwal *et al*., 2018; Ahmed *et al*., 2019; Huang *et al*., 2017), but the order it affects is very important for SMEs. Examining sequential effect of environment on social and economic dimensions, and social on economic dimensions mark a valid contribution of this study. There are exceptions like Sahoo and Vijayvargy (2020), Feng *et al*. (2018), Saeed *et al*. (2018), and Baah *et al*. (2021) who note a significant effect of GSCIs/stakeholder pressure on environmental and then on economic performance. There is, however, no consideration of social dimensions in their study.

Among various enablers of successful implementation of GSCIs (Huang *et al*., 2017) under external pressure and GHRM, the sample SMEs take steps to reduce use of materials; operate state-of-the-art equipment/machinery with minimal carbon/pollutant emissions; and keep the use of hazardous products and processes to a minimum. Among external enablers, some initiatives are cooperation with customers for cleaner production methods and green packaging. Since GSCIs are gaining more attention, it is worth noting that SMEs do need to integrate environmental thinking because of resource constraints and lack of senior management commitment. This echoes research by Muduli *et al*. (2013) and Jabbour and Jabbour (2016) who argue for executive management support.

As GHRM is gaining momentum (Acquah *et al*., 2020; Zaid *et al*., 2018), and many challenges are encountered by firms while adopting GSCIs, practices such as green hiring, green training, green performance management, etc., help resolve these challenges, and promote environment-friendly attitudes within SMEs (Jabbour & Jabbour, 2016; Mousa & Othman, 2020). Sample SMEs in Food and Beverage sector have taken green initiatives through environmental stewardship and award systems. Environmental goals are now incorporated into employee performance measurements, and teamwork to resolve environment-related concerns. Further, GHRM capabilities assist firms to regularly monitor their progress, help meet regulatory obligations, and facilitate staff recruitment and training to drive green initiatives. This is consistent with what NRBV proposes. Revealed in this study is the significant role of institutional pressures from regulatory bodies (i.e., federal and state regulations), customers and competitors to implement green practices.

The sample SMEs have taken GSC initiatives such as reduction of effluent and solid waste which has led to reduced costs of materials, less fees for waste treatment and discharge, and social benefits like enhanced employee job satisfaction and commitment. However, social dimensions have no direct relationship with economic performance and it is an effect that is only realised over a long period of time.

5.2 Contributions

5.2.1 Theoretical Contributions

First, this study advances NRBV and institutional theories by adding previously missing the joint impact of GHRM and external pressure on SMEs' green initiatives. GHRM within SMEs can be an enabling factor to undertake environmentally friendly activities leading to a competitive advantage. These initiatives by GHRM are significantly influenced by external pressures from regulators, customers and competitors. Second, the tested and validated theoretical framework expands our understanding on how green initiatives improve the triple bottom line sustainability that fall under the constant scrutiny of external pressure. Third, while earlier studies have mixed results on the order the TBL elements affect each other (Solovida & Latan, 2021), this research contributes by revealing the environment that is affected first, followed by social and economic dimensions. Caring for social dimensions, which has been mostly ignored in previous studies, has enormous potential in improving wellbeing of employees and communities but it has a tardy effect on economic benefits.

5.2.2 Managerial Implications

Practically, first, the empirically validated green-initiative framework for SMEs helps managers to enhance their understanding of the triple bottom line sustainability. According to the NRBV, the findings suggest that GHRM practices should ideally be able to adopt green initiatives in response to external pressures. For example, the SME owners/managers need to adhere to green recruitment, awareness and environmental training, rewards/compensation and teamwork for achieving environmental objectives. From institutional theory perspective, while green initiatives meet the regulatory requirement, it satisfies the customer expectation and perform better than its competitors. Second, the results suggest managers that green initiatives can improve their companies' environmental performance and significantly the social and economic aspects in that order. However, the non-significant effect of social dimension on economic performance in this study suggest that owners/managers have reasons to prioritise activities other than social responsibilities due to time and resource pressures. While initially it appears costly, but in long run the social commitment wins consumers and community loyalty, subsequently leading to financial benefits.

6. CONCLUSION AND LIMITATIONS

6.1 Conclusion

This study investigated the green initiatives of SMEs in Food and Beverage processing sector to understand what drives the initiatives and what order it affects the elements of TBL. Amidst inconsistent findings on the relationship (i.e., positive/negative), and the variation in the order three elements affect each other (Svensson *et al*., 2018), this study in Australian context is vital to see how the effects are sequential. Although, SMEs are looking for profitability in business but it appears that they prioritise for environment that will have subsequent positive effect on economic performance. It has advanced the NRBV theory by incorporating fresh insights about the green initiatives to gain competitive advantage in the current uncertain environment. As the relationship between three elements (i.e., linear/U-shaped) depends on the influence of antecedents (Latan *et al*., 2018), the predictor variables like external pressures and GHRM practices play vital role in this linear relationship. It supports the fact that SMEs have limited resources to invest in green initiatives (i.e., investment in GHRM) and any extra investment over the cap will lead to financial loss. So, this study did not intend to test non-linear relationship. This also highlights the institutional theory and advanced it through the fact that GSCIs mediate the relationship between these two antecedents, and environmental performance was significantly improved through green initiatives. As per institutional theory, three pressures have significantly influenced the green initiatives. Further, the GSCIs are found to generate positive and significant effects on environmental performance, which then in turn influences the social and economic performance in that order. Social benefits, however, are found to have no direct effect on economic benefits and this is probably due to time lag and delayed effect.

6.2 Limitations and Future Research

This study has some limitations, which generate opportunities for future research. First, as the SMEs are generally engaged with large firms, future cross-sectional surveys with more responses, therefore, can use large firms' pressure as a moderator between GSCIs and sustainability dimensions, and environmental performance in particular. Second, GHRM practices have the potential to address the external pressure to adopt GSCIs. Future research can consider an interaction effect of both on GSCIs. Third, institutional pressure, as a lens underpinning this study, was used as a second order latent variable. It will be good to see how regulatory, customer and competitor pressure as first order constructs have their effects on GSCIs. Fourth, as environment preservation and eco-friendly products are increasingly demanded globally, this framework can be tested for its validity across non-food sectors (e.g., construction, mineral processing) within Australia. Fifth, instead of focusing on focal SMEs, future study can include buyers and suppliers for their responses to see how the model works in a dyadic supply chain context. Sixth, the negative association between social dimensions and economic performance can be tested further in a longitudinal study to see how the social effects are realised over time. Also, this study only considered the Australian context. Future studies can consider other nearby countries in Southeast Asia since they are emerging economies and are expected to industrialise and thus produce higher emissions which would not only impact the environmental dimension, but also the social and economic. Finally, cross-countries and comparative studies can be considered for future research.

APPENDIX

Appendix 1

Five-point Likert scale: "not at all" =1; "some degree" =3; "significant" =5.

Constructs	Measurement Item	Factor Loading	t-value (*p<.001)
Int-GSCM practices (Zhu *et al*., 2013)			
	Senior managers help in environmental initiatives	Dropped	
	Use of products with reduced materials/energy consumption (Q5)	0.68	7.598*
	Equipment/machinery with minimal pollutant emission(Q6)	0.64	7.814*
	Reduces/discourages hazardous products/process (Q7)	0.85	9.603*
Ext-GSCM practices (Green, Zelbst, Meacham, *et al*., 2012)			
	Cooperate with suppliers for environmental objectives	Dropped	
	Cooperate with customers for cleaner operations (Q12)	0.78	10.271*
	Cooperate with customers for green packaging (Q13)	0.81	9.913*
	Encourage customers to help collect packaging	Dropped	
GHRM practices (Acquah *et al*., 2020; Mousa & Othman, 2020; Zaid *et al*., 2018)			
	Employees provided with environmental training.	Dropped	
	Recognise employees/team for environmental awards (Q22)	0.77	9.642*
	Achieving environmental goal in performance appraisal (Q21)	0.70	8.254*
	Frequent teamwork to solve EMS problems (Q20)	0.80	9.442*
Regulatory (Reg) pressures (Vanalle *et al*., 2017; Zhu *et al*., 2013)			
	Environmental regulations imposed by federal government (Q24)	0.90	-
	Environmental regulations imposed by State government (Q25)	0.78	11.837*
	State/Regional resource saving and conservation.	Dropped	
	Environmental management driven by cost of pollution prevention (Q29)	0.61	7.752*
Customer (CUST) pressures (Hsu *et al*., 2013)			
	Environmental initiatives affect domestic customers (Q31)	0.83	7.628*
	Consumers influence company's green initiatives.	Dropped	
	Company's green image expands customer base (Q33)	0.63	6.989*
Competitor (COMP) pressure (Yang, 2018)			
	Follow competitors' green environmental strategy (Q36)	0.79	-
	Competitors are perceived favorably by customers (Q37)	0.78	10.771*
	Competitors with green strategy benefit greatly	Dropped	
	Environment friendly is a competitive differentiator (Q40)	0.88	10.655*
Environmental/Green performance (EVP) (Green, Zelbst, Meacham, *et al*., 2012)			
	Reduction of air emission	Dropped	
	Reduction of effluent waste (Q44)	0.66	6.154*
	Reduction of solid wastes (Q45)	0.59	5.799*
	Decrease of hazardous/harmful/toxic materials	Dropped	

Constructs	Measurement Item	Factor Loading	t-value (*p<.001)
	Improved green/environmental performance (Q48)	0.54	6.578*
Economic performance (ECO) (Zaid *et al*., 2018)			
	Decreased cost for materials purchase (Q49)	0.87	-
	Decreased cost for energy consumption (Q50)	0.62	8.409*
	Decreased fees for waste treatment and discharge (Q51)	0.82	11.979*
	Average market share growth over the last three years (Q53)	0.71	9.958*
Social performance (SP) (De Giovanni, 2012; Zaid *et al*., 2018)			
	Enhanced health and safety of employees	Dropped	
	Enhanced employee job satisfaction(Q57)	0.81	8.676*
	Improved community health and safety (Q58)	0.76	9.122*
	Improved social commitment (Q59)	0.75	9.079*

Appendix 2

Multicollinearity test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		R-square change
		B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	.256	.298		.858	.392			0.499
	IGmean	.121	.069	.138	1.759	.081	.510	1.959	
	EGmean	.255	.070	.288	3.666	.000	.509	1.963	
	GHmean	-.042	.066	-.050	-.643	.521	.523	1.914	
	Regmean	.195	.062	.246	3.146	.002	.516	1.939	
	CSmean	.079	.048	.105	1.648	.101	.771	1.297	
	CPmean	-.018	.073	-.019	-.249	.803	.518	1.929	
	EVPmean	.238	.073	.228	3.277	.001	.652	1.534	

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Adeline K Benjamin is a recent PhD holder from Victoria University, specialising in green supply chain management and its impact on triple bottom lines of sustainability. Adeline's research interest include the themes around sustainability addressing the climate change in manufacturing for SMEs. She has taught E-supply chain management at Victoria University, Melbourne, Australia. Her teaching interests include supply chain, green supply chain and logistics management. Adeline currently aspires to join as a full time academic in supply chain management.

Himanshu K. Shee is currently Associate Professor at Victoria University, specialising in operations, supply chain & logistics management as well as SAP-APO optimisation. With a good track record in research, publications, and higher degree research supervision, he has published in many highly reputed journals like International Journal of Logistics Management (IJLM), SCM: an Int. Journal, Int. Journal of Physical Distribution and Logistics Management (IJPDLM), Industrial Management & Data Systems, Australian Journal of Info Systems (AJIS), Int. Journal of Logistics Research & Applications, IIMB Management Review, and others. His interdisciplinary research includes supply chain digital transformation using emerging technology applications, sustainable supply chain management, circular economy, value-chain analysis, buyer-supplier dyadic relationship, and supply chain innovation. Dr Shee has been serving as editorial board member for IJPDLM, IJLM, IJL, Operations Management Research (OMR) Journal, IIMB management review, associate Editor of international Journal of Global Business and Competitiveness (IJGBC), and a regular reviewer for many reputed journals and conferences. His teaching experience spans across Australia, China, Singapore, Kuala Lumpur, Fiji, and India. Currently, he is the Course Chair of

Master of SCM and GradCert in Transport Systems. His teaching interests include supply chain, logistics, and operations management.

Dr Tharaka de Vass is a researcher associated with Victoria University Business School. His research primarily focuses on the critical themes of Circular Economy, Industry 5.0, and Lean optimisation from the perspectives of Operations and Supply Chain Management. His current research explores supply chain management in the industry 5.0 era and its effect on sustainability (i.e., environmental, social, and economic dynamics), how the application of Lean thinking can optimise Healthcare operations, and the adoption of Circular Economy in the Manufacturing Industry from SME and policy perspectives. Dr de Vass is supervising scholars in the areas of supply chain sustainability, food traceability and healthcare supply chains.