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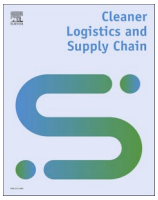

Examining the effects of stakeholder forces on sustainable practices in the Bangladeshi garment industry

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ABSTRACT

This paper aims to explore the current stakeholder forces for sustainable supply chain management (SSCM) in the Bangladeshi garment industry. The focal point is identifying which stakeholder forces could enhance sustainable practices in the factory premises, and whether there are conflicting forces which might obstruct the sustainable practices. A qualitative research design is adopted, drawing on data from 37 semi-structured interviews with stakeholders related to garment manufacturing. Thematic analysis conceptually guides the analytical process. The findings demonstrate the supporting and hindering forces currently influencing the garment industry in Bangladesh. This paper also identifies three conflicting forces relating to economic gain, employee empowerment and global image, where trade-offs towards SSCM implementation exist. This study extends existing research relating to SSCM within the garment industry of Bangladesh, identifying differences between different stakeholder groups and recognising the conflicting forces that exist.

1. Introduction

Recent years have seen significant research interest in the implications of SSCM in the garment industry, especially in emerging countries with challenging institutional contexts (Nath and Eweje, 2021; Huq and Stevenson, 2020). Gradually, SSCM has become an essential theme for the garment industry due to the industry's heightened sensitivity toward environmental protection and social responsibility (Lu et al., 2020; Kannan, 2018). Targeting sustainability supports firms in achieving economic viability and retaining a competitive advantage. Although accomplishing a successful SSCM strategy requires a firm to consider the views of multiple stakeholders (Rebs et al., 2019; Govindan et al., 2013), much of the existing literature on the garment industry in emerging countries focuses on one specific stakeholder group.

This study draws focus on Bangladesh, where the garment industry's annual revenue has gone from $19 billion to $34 billion between 2015 and 2022 – a 70 % rise (IFC Insights, 2023; Insights, 2023) with a growth rate of 12.55 % in 2020/21 fiscal year (BGMEA, 2023), despite having a pandemic and many questionable practices (Hoque et al., 2020; Nath and Eweje, 2021). This argument raises questions, like what is the most integral factor behind that? Or what makes Bangladesh so lucrative? Scholars focused on diverse issues regarding SSCM implementation while assessing the Bangladeshi garment industry. For instance, Reinecke and Donaghey (2021) highlighted the necessity of suppliers' auditing to ensure SSCM and how garment workers could be part of the corporate governance. Similarly, Chowdhury et al. (2020) explained that sustainability requirements mainly evolved around the upstream tiers of stakeholders including customer and retailer requirements, particularly from supplier assessment criteria. With this in mind, Nath et al. (2020) and Huq and Stevenson (2020) conceded how multi-stakeholder partnerships involving decision-makers and suppliers could support sustainable development goals through strategic implementation. In addition, Sarkar et al (2020) demonstrated how policymakers and owners could uphold environmental sustainability through green business strategy. Habib et al (2020) examined the impact of green entrepreneurial orientation on firm performance and, Yadlapalli et al (2019) reported how retailers enforced manufacturers to adopt social responsibility, while manufacturers believe collaboration supports sustainability. However, these researchers underlined how different supply chain actors linked to each other while implementing sustainable practices. Noticeably, several researchers focused on one group of stakeholders at a time – suppliers, decision-makers, policymakers, and retailers and have not talked about the downstream tiers of stakeholders' engagement. Hence, taking a stakeholder perspective appears

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fundamental to the question of whether or not SSCM of the garment industry flourishes. Or importantly, we note a research gap – what are the current sustainability phenomenon that drives Bangladeshi stakeholders to adopt SSCM practices?

Hence, drawing on stakeholder theory, this qualitative study tries to identify how available stakeholders' forces influence the implementation of SSCM in an emerging country like Bangladesh. Specifically, this paper responds to the call for an investigation of current SSCM practices from downstream tiers of stakeholders, predominantly from manufacturer perspectives (Nath and Eweje, 2021; Hoque et al., 2020). Furthermore, the stakeholder perspective is also beneficial for two key reasons: firstly, stakeholder logic offers attention to the participation of sustainability exercises, particularly in the form of pressures and incentives which triggered the SSCM implementation at the root level (Xiao et al., 2019). Secondly, stakeholders' intentions and unintentional consequences of SSCM could mutually be exclusive to paradoxical tensions and opportunistic tendencies in the firm's intrinsic sustainability performance (Roy et al., 2020; Rafi-Ul-Shan et al., 2018). Despite this, the SSCM literature acknowledges the divergence of stakeholder groups' logic, the capability of internal stakeholders, and the significance of contextual factors while prompting to embrace sustainability practices within the firm's boundary (Roy et al., 2020, Rebs et al., 2019, Jakhar, 2017). Surprisingly, knowledge of the upstream tiers of stakeholder sustainability drivers in an emerging country context still dominates research on SSCM, while extinction mainly stems from the downstream tiers of stakeholders (Yadlapalli et al., 2019, Huq et al., 2016). Accordingly, the purpose is to identify the available moderating forces for the garment industry. However, it is also possible that there is divergence in the forces and identifying these could help further improve sustainable practices. Hence, the research questions are:

RQ1: What are the existing stakeholder forces that dominate the implementation of SSCM in the Bangladeshi garment industry?

RQ2: What conflicting forces cause Bangladeshi garment stakeholders to disassociate with SSCM practices?

This study makes four important contributions to the contextual SSCM field. First, we particularly looked at the current sustainability forces in a manufacturing country context, which is significant for its low-cost sourcing feature for garment production. While there is considerable research emphasis on stakeholders' pressures and challenges for SSCM implementation, fewer studies highlighted the conflicting issues of the manufacturing stakeholders (Huq et al., 2021, Nath et al., 2020) in comparison to other supply chain actors. For instance, Huq et al (2021) examined the stakeholders' sustainability requirements and proposed a decision-support approach for suppliers' sustainability practices and Nath et al (2020), highlighted the sub-suppliers' decoupling behaviour for SSCM implementation. However, most empirical studies including Nath et al (2020) have not captured the conflicting forces beyond sub-suppliers. Accordingly, to bridge the gap we specifically examined the role of Bangladeshi garment stakeholders in SSCM implementation. Second, we highlighted the conflicting forces that could disassociate the SSCM practices, by suggesting several conflicting stages such as perception of economic gain, employee empowerment and global image. Third, drawing on stakeholder theory, we identified several groups of internal stakeholders (Maestrini et al., 2021; Silva et al., 2020) and theorised the connection between practices and conflict based on an empirical investigation. Fourth, although assessing the sustainability practices of outsourcing suppliers is challenging (Tseng et al., 2019), we argue that our findings would enable the global garment sourcing firms and upstream stakeholders to understand how to predict manufacturers' conflicts and consider how they can be tackled downstream.

The remainder of the paper is structured as follows. The next sections describe the theoretical underpinnings and review relevant research on sustainable practices and stakeholder forces in Bangladesh's manufacturing-based garment industry. The research methodology is presented in Section 4, followed by the findings on inbound stakeholder responses and associated performance in Section 5. Then, the discussions on the available stakeholder forces and the conflicts between them related to garment supply chains and the associated contributions are presented in section 6. The final section concludes the study with limitations and future research directions.

2. Theoretical underpinnings

There are two potential theoretical lenses which could be adopted to address the research questions – stakeholder theory or institutional theory. Stakeholder theory examines the connections between an organization and those with a stake in that organization. Value should be created for all of these stakeholders. According to Freeman (1984), stakeholders are 'any group or individual who can affect, or is affected by, the achievement of an organisation's objectives' (p. 46). Clarkson (1995) suggested internal stakeholder groups including workers, employees, management, owners, shareholders, investors, suppliers, and customers. By contrast, external stakeholders exert influence without engaging in survival-critical transactions (Clarkson, 1995). These include local communities, governments, legal authorities, the media, NGOs and other societal interest groups. Maignan et al., (2002) extend this to include communities and the environment. Although not directly involved in transactions, external stakeholders have a significant impact on public opinion about an organisation's sustainability practices (Silvestre, 2015).

An alternative lens is institutional theory. Selznick (1957) used an institutional framework to explain how both internal and external stakeholder groups could impact organizational performance. This highlights how institutional norms and practices affect practices within organizations. DiMaggio and Powell (1983) identify three dominant constructs – coercive, mimetic and normative logics. Coercive pressures can come from either social or cultural expectations of stakeholder groups, or from the need for compliance (Meyer and Rowan, 1977) while mimetic pressures exist where organizations follow the practices of competitors (Chowdhury et al., 2020). Normative pressures stem from professional expertise of the organization's activities (DiMaggio and Powell, 1983).

Numerous SSCM scholars have addressed the strategic use of stakeholders to achieve sustainability goals using both theoretical lenses. In this work, we adopt stakeholder theory as it explains why internal garment stakeholders implement SSCM practices in their shop floor activities, considering the benefits of these practices to all stakeholders.

In understanding stakeholder forces and the rationale behind implementing SSCM in a specific field, we initiated our inquiry by examining the stakeholder perspective within the context of an emerging country. Surprisingly, over the past decade, relatively little attention has been paid to stakeholder forces, especially in the context of the Bangladeshi garment industry, while aspects such as buyer requirements (Nath and Eweje, 2021), compliance initiatives (Roy et al., 2020), decoupling responses (Nath and Eweje, 2021), collaboration (Huq and Stevenson, 2020), governance mechanisms (Yadlapalli et al., 2019) have been considered from an institutional perspective rather than from a stakeholder perspective. Moreover, there has also been a strong focus on external stakeholder studies (Nath et al., 2020, Wilhelm et al., 2016) due to the scarcity of sustainability implementation in manufacturing factories' shopfloor activities, partly because there are norms and legitimacy aspects of stakeholder theory that overlap with institutional considerations. On the contrary, Wahl and Bull (2014) argue that "stakeholder theory shares common views with institutional theory" as it describes a homogeneous isomorphism that can influence the adoption of sustainability by manufacturers. Turning to the contextual evidence, Mausumi, and Rahman (2018) showed how stakeholder decisions improve the health and safety of garment workers, contributing to social responsibility. Sajjad et al. (2015) highlighted the need for garment businesses to meet the expectations of foreign retailers and address occupational health and safety value classes. Stakeholder

forces play a crucial role in understanding SSCM practices and driving garment stakeholders to adopt these practices on a daily basis (Sajjad et al., 2015). Studies, including those by Sajjad et al. (2015) and Klassen and Vereecke (2012), use stakeholder theory to examine the drivers and motivations behind SSCM practices and performance. Despite this, SSCM research often neglects sustainability forces in the context of the garment business (Nath et al., 2019; Huq et al., 2014).

Therefore, the use of stakeholder theory to explore dominant sustainable forces in SSCM implementation is an appropriate theoretical lens to start, which should be designed both to accommodate contextual characteristics as well as manufacturing-based sustainability goals (Mausumi and Rahman, 2018; Huq et al., 2016).

3. Literature review

3.1. Sustainable practices and stakeholder forces

Sustainable practices implement initiatives that advance internal goals and enhance external performance (Nguyen et al., 2020), while stakeholder forces are drivers influencing phenomena from their perspective to achieve these outcomes (Mani and Gunasekaran, 2018; Park-Poaps and Rees, 2010). These practices, widely represented by the triple bottom line, measure success in environmental, economic, and social dimensions. For instance, economic sustainability measures economic value, environmental sustainability assesses resource impacts, and social responsibility encompasses the supply chain and societal well-being (Huq et al., 2021; Marshall et al., 2015). Achieving sustainability in all areas is challenging; for example, companies like the Body Shop that emphasise environmental credentials are criticised for social issues (Purkayastha and Fernando, 2017). Clothing giants such as Nike, Gap and H&M have long faced accusations of poor worker conditions (Distelhorst et al., 2017). Initiatives such as the Clean Clothes Campaign (2009) enforce a 'code of conduct' through audits of social and environmental performance (Ablander et al., 2016). Previous research highlights the role of individual firms' stakeholders and supply chain initiatives in sustainable practices (Gold et al., 2010).

Stakeholder forces correlate with improved firm performance (Pagell and Wu, 2009), while sustainable practices such as environmental assessment and social awareness require collaboration between these stakeholder forces (Youn et al., 2013). For instance, legislation and government regulations (Esfahani et al., 2022), addressing delivery time, and cost sensitivity (Anner et al., 2013) require collaboration and transparency among SC stakeholders. Compliance practices and adherence to regulations are seen as pathways to sustainable performance (Nath et al., 2020; Hoque et al., 2020), but are sometimes perceived negatively due to their association with coercive stakeholder management forces (Boyd et al., 2007).

Furthermore, countries with a prominent role in the garment supply chain, such as Bangladesh, are facing scrutiny regarding ethical sourcing practices (Huq and Stevenson, 2020). This scrutiny is particularly intense concerning environmental and social issues (Zorzini et al., 2015). Key social issues such as workers' health and safety, well-being, human rights, and community welfare have been identified as critical factors that directly influence a firm's sustainable performance (Zorzini et al., 2015; Marshall et al., 2015). Environmental practices in this context include resource management, which includes efforts to reduce carbon emissions, engage in tree planting, mitigate noise, and use renewable resources in operations (Steurer et al., 2005). Despite this, most studies on SSCM in the garment industry have primarily focused on the influence of retail buyers on the implementation of sustainable practices and standards, such as lean orientation, codes of conduct, and third-party auditing (Nabelsi and Gagnon, 2016; Rahman and Haque, 2016; Ehrgott et al., 2011). However, the sustainable perceptions of other stakeholders play a critical role in shaping an organisation's sustainable practices (Huq and Stevenson, 2020).

These forces can be either internal forces or external forces, and we will now have a look at each in turn.

3.2. Internal forces practiced by the Bangladeshi stakeholders

There are a variety of internal forces which can contribute to the implementation of sustainable practices. Amongst those considered most important, researchers have identified working conditions, human rights, owners' commitment, and collaboration among SC partners (Kumar et al., 2020; Nguyen et al., 2020; Sajjad et al., 2015). In response to these forces, various potential Internal sustainability practices have been suggested as contributing to improved organisational performance, including risk assessments, operational efficiency, cost reduction, carbon emission, reuse of recycled products, and disposal of harmful materials (Sajjad et al., 2015; Chkanikova and Mont, 2015; Giunipero et al., 2012). However, research has emphasised that a resourceful firm could manage its social and environmental sustainability more positively than its competitors (Phan et al., 2020; Diabat et al., 2014). Hence, forces like awareness, owners' commitment, risk management, technological advancement, internal policy, and regulation have been identified as crucial forces for ensuring internal sustainable performance. In particular, Hoque et al. (2020) identified an interesting point that in the case of lean orientation, the involvement of top management is essential, especially when sustainable decisions are required. Hoque et al. (2020) also focused on limited commitment from top management, low competence, and role uncertainty as potential constraints for sustainable performance.

3.3. External forces practiced by the Bangladeshi stakeholders

External forces are those which originate beyond the focal firm's internal environment yet encourage organisations to implement sustainable performance (Walker and Jones, 2012). Previous research has identified a significant number of external forces, with the most important being retail buyers' requirements and governmental regulations (Nguyen et al., 2020; Sajjad et al., 2015). As an illustration of this, to meet buyer requirements, suppliers may be required to comply with regulations and codes of conduct (such as the Accord on Fire and Building Safety in Bangladesh), use green materials for eco-production (Samanta et al., 2017) or receive training and development assistance for garment workers (Rahman and Haque, 2016). Such operations between stakeholders can also lead to further external forces. Communication between partners (Cheng et al., 2008), knowledge sharing (Oelze, 2017), competitor pressure (Huq et al., 2014), and stakeholder participation in sustainable activities (Phan et al., 2020) were essential external components of stakeholder collaboration, which in turn enhance sustainable performance (Alvarez et al., 2010). Finally, in response to social and environmental disasters, such as the Rana Plaza disaster in Bangladesh (2013) or the contamination of waterways in India (2015) (UNI Global Union, 2023), forces like social responsibility and environmental assessment have been selected (Nath and Eweje, 2021; Chowdhury et al., 2020). Research has emphasised supporting forces for sustainable performance which indicate a preference for positive outcomes. Less research emphasised hindering forces against both internal and external sustainable practices like inappropriate factory infrastructure, backdated production processes, and heightened cost (Nath et al., 2020; Oelze, 2017). It is important to note that in practice it is often difficult to find exact examples that fall within a specific classification of hindering forces. The reality is that stakeholder practices present a mix of both supporting and hindering forces.

Nevertheless, despite having the breadth of stakeholders' sustainable practice types and definitions from the Bangladeshi garment industry, their underlying applications sometimes overlap the meanings. Clarity may be found by considering those forces identified in previous SSCM research. It appears that the sustainability grasp gained by authors from sustainable development and SSCM literature such as Steurer et al (2005), Carter and Rogers (2008), and Pagell and Wu (2009), together

with the support of Bangladeshi garment research papers such as MacCarthy and Jayarathne (2012) and Huq et al (2014) has helped focus attention on the early defined fundamentals of sustainable forces. Table 1 provides a summary of these forms of stakeholder sustainable forces, together with an overview of definitions that have been used as prior constructs in data analysis.

To sum up, while producing a classification of forces, it is essential to understand which forces are most intriguing and permit the highest form of SSCM implementation, particularly from a manufacturing contextual perspective. For instance, in their research on multi-tier supply chains, Nath and Eweje (2021) have identified institutional pressures and challenges that might be coupling and/or (de)coupling sustainable supply management. Despite this, SSCM research has yet to thoroughly examine various logic for sustainable practices, particularly in a developing country context (Xiao et al., 2019). Thus, more empirical explorations are required to understand the existing phenomenon of sustainable practices, specifically – exactly what criteria motivated manufactured-based stakeholders to employ sustainable practices. Accordingly, our paper is not only focusing on supporting responses but also attempting to understand the conflicting causes (trade-offs and decoupling) logic that might disassociate with SSCM practices.

4. Methodology

4.1. Research design

As this research aims to capture the dominant stakeholder forces that predominantly influence the implementation of sustainability in the Bangladeshi garment industry, an exploratory, qualitative research design with an abductive approach (Timmermans and Tavory, 2012) was adopted for this study. Several logical considerations were taken into account – first, the abduction approach starts with elementary theoretical knowledge, then collects and analyses data, stays with theory matching (going backwards and forwards), and continues with

Table 1
Prior constructs developed through the literature review.

Forces used as prior constructs in data analysis	Review reference	Forces definition	Examples of Bangladeshi garment industry research	Internal sustainable forces (emerged from data coding)
Compliance	MacCarthy and Jayarathne, 2012	The onsite verification activity includes environmental and social inspection to ensure the factory's compliance as well as the evaluation of the third party's selection.	Huq and Stevenson, 2020; Nath et al., 2020; Hoque et al., 2020	Manufacture auditing, owners' commitment, compliance initiatives, third-party assessment
Ethical sourcing	Blowfield, 2000	The evaluation of sources that includes inspections of products from each point of a business's supply chain has been attained ethically.	Nath and Eweje, 2021; Huq and Stevenson, 2020	Organic sourcing, use of organic materials, sustainable sourcing, green purchasing
Health & safety standards	Zorzini et al., 2015	A series of legal legislations, regulations and procedures intended to prevent accidents or injury in the workplace.	Sarkar et al., 2020; Huq et al., 2014	Occupational hazards, health & safety standards,
Employee well-being	Marshall et al., 2015	The state of employees' mental and physical health results from dynamics within and sometimes outside the workplace.	Kumar et al., 2020; Nguyen et al., 2020; Sajjad et al., 2015	Working conditions, employee benefits, decent work
Firm's resources	Steurer et al., 2005	The capability of an individual firm to accept innovation and developments for maintaining sustainable practises.	Sajjad et al., 2015; Diabat et al., 2014;	Building new infrastructure, carbon emission, disposal of harmful equipment, new investment
Lean management	Nabelsi and Gagnon, 2016	A continuous improvement process in work and people management, primarily reducing production times as well as response times from suppliers and customers.	Hoque et al., 2020; Fouji and Hoque, 2021	Lean orientation, lean manufacturing, just in time
Auditing	Rahman and Haque, 2016	A list of criteria that clarifies several steps of garment production, like material selection, process techniques, packaging etc.	Hoque et al., 2020; Chowdhury et al., 2020	Product responsibility, quality control
Technological advancement	Carter and Rogers, 2008	Where technologies or automation become more accurate and efficient, which also enhances capability in the production process	Goworek et al., 2012, Nath et al., 2019	Automation, latest technology, equipment, latest machineries
External Sustainable forces				
Governmental legislation	Sajjad et al., 2015	Mandates related to sustainable practices and enforced by governmental authorities.	Yadlapalli et al., 2019	Government mechanisms, policy regulation, local government policies
Codes of conduct	Samanta et al., 2017	A set of rules outlining the responsibility or practices of a business organization.	Rahman and Haque, 2016	Eco production, Bangladeshi ACCORD, and Alliance.
Training and development	Rahman and Haque, 2016	The action of teaching a person a particular skill to ensure growth and progress.	Habib et al., 2020.	Training and development, risk assessment, operational efficiency
Collaboration	Pagell and Wu, 2009	The way two or more supply chain partners work together to achieve a static goal.	Kumar et al., 2020; Nguyen et al., 2020; Sajjad et al., 2015	Trust, communication among SC partners, collaborative advantage
Knowledge sharing	Cheng et al., 2008	The exchange of expertise between supply chain partners with benefits including retaining intellectual assets and improving productivity.	Nguyen et al., 2020	Partners interaction, partners decision, networking, communication
Social responsibility	Youn et al., 2013	A state of knowledge and understanding that something is happening or exists in the supply chain which might interfere with sustainability practices.	Huq et al., 2016; Chowdhury et al., 2020	social awareness, customer awareness
Environmental assessment	Steurer et al., 2005	The assessment of the environmental consequences of a programme or actual project before the decision to move forward with the proposed action.	Nath and Eweje, 2021; Chowdhury et al., 2020	Carbon emissions, reuse of recycled products, disposal of harmful materials
Third party's audit/ assessment	Ehrgott et al., 2011	Confirmatory assessment activities operated by a third-party organization independent of the organization and providing the regulatory object and the business interests in that object.	Huq and Stevenson, 2020; Phan et al., 2020; Yadlapalli et al., 2019	Buyers' evaluation, Supplier's assessment.
Stakeholder perceptions/ engagement	Kannan, 2018	Stakeholder's involvement in the identification, analysis, planning and implementation of sustainable activities to achieve a certain outcome.	Phan et al., 2020	Supplier selection, performance evaluation,

proposing new suggestions and/or explaining the existing theoretical framework (Spens and Kovacs, 2006). Second, abduction shows 'how something might be' rather than how something must be (Meyer and Lunnay, 2013). Finally, abduction 'generates social science accounts from the accounts of social actors' (Ong, 2012), allowing them to see relationships, formulate new ideas and 'see something different' (Meyer and Lunnay, 2013). Stakeholder theory exists as a lens to guide our exploration of the relatively understudied issue of sustainability forces in an empirical context. In addition, the use of prior constructs developed from the existing literature on stakeholder theory allowed other themes to emerge intuitively from the data.

For data analysis, thematic analysis (Braun and Clarke, 2006) was embraced since it offers flexibility to analyse detailed accounts of textual data using a step-by-step framework in supply chain sustainability research (Soundararajan and Brown, 2016) and supports the qualitative data analysis using abductive reasoning logic (Sodhi and Tang, 2018). Data collection took place in the major important garment manufacturing regions in Bangladesh – Dhaka City, Gazipur, Narayanganj, Ashulia and Mymensingh –from late November 2019 to February 2020. Qualitative data was collected primarily through face-to-face in-depth semi-structured interviews with various garment and textile stakeholders, mostly employees of the manufacturing-based garment factories.

4.2. Interview protocol and pilot study

Background information on SSCM and the Bangladeshi garment industry was gathered through a literature review, contact with local experts via email, government agencies and informal discussions. Following debriefing, a semi-structured interview protocol was developed as it allows for both focus and flexibility, ensuring that interviewees have the freedom to develop their responses. A pilot study was conducted via Skype with two managers to justify the relevance and modify the interview questions and guide (Saunders et al., 2019). One of them emphasised the importance of a bilingual approach, to get the gist of the conversation. Based on their feedback, some changes were made to the interview protocol, particularly the use of hybrid linguistic terms in Bengali to get the most out of it. The questions were constructed around sustainability, sustainable practices, SSCM and sustainable performance. The full interview protocol can be found in Appendix A.

4.3. Data collection and interviewee selection

Participants in this study were purposively selected (Patton, 2015) based on several criteria recommended by Soundararajan and Brown (2016). Firstly, the level of involvement and relevance to the research context was important. The main focus was on garment and textile manufacturers in Bangladesh, although officials from the Bangladesh Garment Manufacturers and Exporters Association (BGMEA) and Bangladeshi academic experts were also involved. Secondly, it was important for participants to have a level of awareness of various aspects of sustainable practices. For manufacturing companies, the focus was on those that followed legislation such as Leadership in Energy and Environmental Design (LEED) for infrastructure, Accord, and Alliance regulations for compliance, along with their SC partners. A third consideration was practical accessibility, given the potential for geographical dispersion of participants. Finally, participants had to be willing to participate in the research process on a voluntary basis.

During the interview process, a snowball sampling technique suggested by Miles et al. (2014) was used to gain access to additional potential participants through referrals. For example, initial points of access were BGMEA officials and a LEED-certified garment manufacturer via email. These initial participants referred the researchers to other potential interviewees with whom they had a personal or professional relationship. Thirty-five interviews were then conducted, covering a range of manufacturing activities such as yarn production, weaving, knitting, compliance, logistics and quality control, as well as support activities such as facility maintenance. Each interview lasted between 25 and 70 min, with the interviewer making an audio recording and taking written notes. The interview process ended when responses became repetitive and reached theoretical saturation (Soundararajan and Brown, 2016). Table 2 provides an overview of the participants, along with the most frequently cited supporting and hindering forces, with detailed information summarised in Appendix B.

4.4. Unit of analysis

We followed a step-by-step thematic analysis process similar to that suggested by authors such as Braun and Clarke (2006), Creswell (2014) and Miles et al. (2014). The thematic analysis allows the researchers to identify themes relevant to the research questions (Joffe and Yardley, 2004); and also allows quasi-quantification (i.e., how many participants mentioned a specific theme) to be combined with the meaning of the particular context (Braun and Clarke, 2006). The unit of analysis followed each stakeholder as an individual opinion generator, e.g. at the individual level rather than at the firm level. Ultimately, these will influence the collaborative knowledge of lower-level management as well as top-level management disseminated throughout the hierarchy of the stakeholder group. It will also reflect the identification of types of internal stakeholders (i.e. who are the inbound stakeholders in the Bangladeshi garment industry?) and identification of stakeholder forces (i.e. how do these stakeholders exert sustainability practices to implement SSCM performance?).

Initially, the audio clips were transcribed and cross-checked with the written notes and within the research team to check continuity and reliability. The transcription file was then coded using open coding, with codes developed and modified as the coding process progressed. Fig. 1 illustrates the coding process. For instance, the quote by F2-PO was coded as 'incentives' and 'encouragement'.

Abductive reasoning guided the coding process: first, the initial coding within the first set of two interviews from different factories was cross-checked by the research team to identify any recurring initial codes and their relationship to the research questions. A manual Post-It note code chart was created and, following this stage, the remaining interviews were coded. Having done the coding, then clustering them into themes has taken place. Nevertheless, some of the sub-themes, such as lower level of inbound stakeholders, came from the literature and some did not and were essentially derived from the data, such as social recognition. Gradually, all the sub-themes were then further consolidated into broader themes, such as supporting or hindering forces, to support the content of the study. It is worth noting that the data analysis developed by moving back and forth between the literature and the empirical data. In the end, all themes were grouped as either internal or external forces.

The final stage involved reviewing the codes based on the research questions and consolidating them into first-order and second-order themes. Quotes from participants were highlighted as evidence to identify relationships between stakeholder practices and sustainable decision-making power authority. These thematic findings were also compared to the garment SSCM literature to identify new insights distinct from existing knowledge.

4.5. Research quality evaluation

As Strauss and Corbin (1990) stated, 'the rigour and trustworthiness of research outcomes stem from the strict implementation of procedures.' This study follows the criteria drawn from interpretive research to ensure trustworthiness and rigour (Stubbs and Cocklin, 2008), as outlined in Table 3.

Table 2
Overview of interview participants.

Stakeholder group	Clarifications	Examples of job roles	Number of participants	Top 3 supporting forces	Top 3 hindering forces
Garment manufacturer: top-level management	Personnel who worked as a decision maker for an individual manufacturing process	Logistic head, senior executive of research and development.	16	Quality assessment, ethical sourcing, collaboration	Governmental help, contractual agreement from buyers, SC partners' perception.
Garment manufacturer lower-level management:	Personnel who work to guide the subordinate employee or workers	Line manager, technician, quality checker	11	Employee benefit, compliance, buyers' assessment	Dissatisfaction, personal relationship, mock compliance
Proprietor	Owner of the garment/textile factory	Director, department head	4	Reputation, Lean management, community wellbeing	Investment, local politics, expensive (infrastructure)
Textile provider	Personnel who are directly related to thread and yarn production	Facilities maintenance, textile factory manager.	3	Use of organic materials,	Price uncertainty, global competition, buyer shifting
Enabler and influencer	Personnel who directly related to rules and regulations on authority	Legislative bodies, merchandisers.	3	Customer awareness, sustainability regulation, Infrastructure	Price dispute, vulnerability, visualization

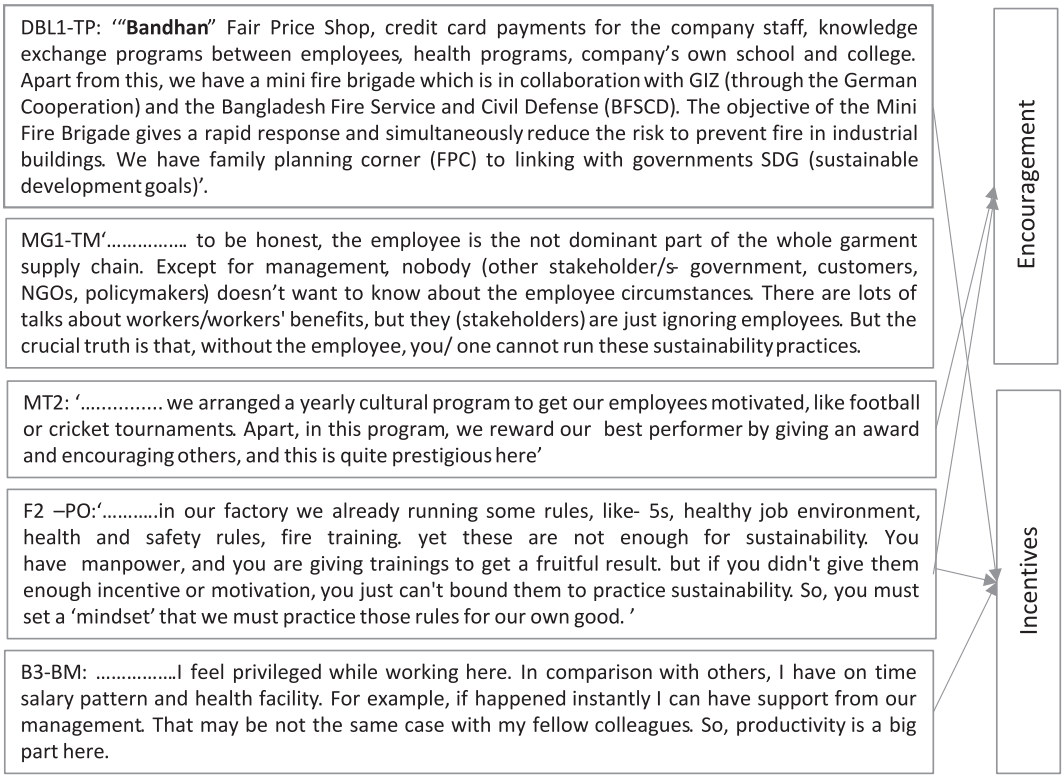

Fig. 1. Illustration of coding process (i.e., employees' involvement in SSCM).

5. Findings

To enhance the clarity of the findings, the coding process focused on the central concept of internal and external stakeholder practices. Consequently, a distinction was made between supporting forces (encouraging sustainability practices) and hindering forces (creating barriers to sustainability practices). All emerging codes are presented in relation to the practices of inbound stakeholders in the Bangladesh manufacturing-based garment industry. Furthermore, the identified forces have been organised into first and second-order codes as shown in Fig. 2. In addition, the findings have uncovered emerging forces that may affect sustainable practices in the Bangladesh garment industry, including those that may lead to conflicts between environmental, economic, and social sustainability goals. A sample of illustrative quotes is related to first-order codes also presented in Table 4.

5.1. Internal supporting forces

As Fig. 2 shows, there are a significant number of forces from internal stakeholders that influence the implementation of SSCM in the Bangladeshi garment industry. For example, **'value assessment'** is a significant force from internal stakeholders to use sustainability practices, and this theme relates to manufacturers auditing for quality checking of converting fabric and thread into finished garments, perceived by both top and bottom management (cited eleven times). For instance, proprietor BD1-O commented:

'*We maintained our value throughout the process, and we need to ensure a standard in production quality, like an exact match with the code of conduct [retail buyers' requirement], providing visibility for our raw material providers to transporters and vice versa. These ultimately increase our cost consideration, but we assure superior quality.'*.

Table 3
Criteria for evaluating trustworthiness and rigor i.e., interview (

Criterions	Way of addressing
Credibility	• Interviews conducted over a period between 2019 and 2020. Across all interviews, the averages duration is 47.5 min. The lead author personally visited each sample. The first set of transcriptions was checked with other members of the research team. Where necessary, appropriate changes were made.
Transferability	• Coded file was checked and compared with transcription and coded files, through highlighting the spreadsheets.
Dependability	• The participants provided numerous examples to support their opinions. For consistency, the explanations of the coded file were cross-matched across factories by the authors.
Integrity	• A rigorous coding protocol was followed. Initial coding was performed manually using a colour-coded board to guide the evaluation. The first set of interpretations was cross-checked with other members of the research team. The consent form was signed by all participants.
Validity	• The first findings were crosschecked with other members of the research team. The first findings were presented to pilot participants who confirmed rationality. An initial draft was presented at the academic conference.

adapted from Lincoln and Guba, 1986; Strauss and Corbin, 1990; Stubbs and Cocklin,2008).

The above-mentioned view supports the assertion that management value assessment characteristics influence business practices which are the basic requirements for sustainable corporate value. Similarly, stakeholder assessment is also related to the themes, like buyers' directing supplier selection procedures to maintain internal compliance and quality (cited nine times), product responsibility for continuing time and consistency in finished products (cited five times) and use of organic materials (cited seven times). A manager FT2-TM remarked:

'…. it's a chain……and while we select our partners (manufacturer, supplier, wholesaler, retailer) we need to follow sustainable development requirements [from the buyer] which ultimately helps us to sustain in future.'.

This viewpoint demonstrated that retail buyers imposed sustainable assessment criteria as a precondition to gain production orders and in turn pressurised management to follow sustainable practices. In terms of **decent work**, the findings revealed forces including working conditions (cited seven times), employee benefits (cited eight times) and compliance initiatives, like Organisation Health and Safety (OHS) checklists and retail buyers' governance (cited sixteen times) worked together for better sustainable practices. As the manager FT3-TM stated:

'We have our own fair price shop, credit card payment systems, knowledge exchange programs between workers and monthly health and safety trainings…Apart, we have a company-owned school for our children. And these motivate us to stay focused.'.

The quote indicates that the different incentives taken by the management to ensure a safer workplace along with sustainable practices increase employee commitment towards higher productivity which positively affects factories' economic viability. Another important force perceived as valuable by the participants is **organisational infrastructure**, which represents themes including LEED regulations (cited five times), building new infrastructure (cited eight times) the latest automation (cited four times) and better technological competence (three times) in factory premises. Participant FT3-TM mentioned:

'……. you can't think about employing LEED regulation while you are using your existing building. It takes lots of investment to renovate the old building as well as employ technological advancement to apply for the LEED certification…….'.

This assertion confirmed that LEED is expensive but at the same time might produce sustainable site development and infrastructure efficiency (cited ten times) including water efficiency, energy efficiency, and indoor and outdoor environmental quality. On the other hand, Bangladeshi Accord, and Alliances (cited five times) are the legal agreements to ensure occupational health and safety standards for the

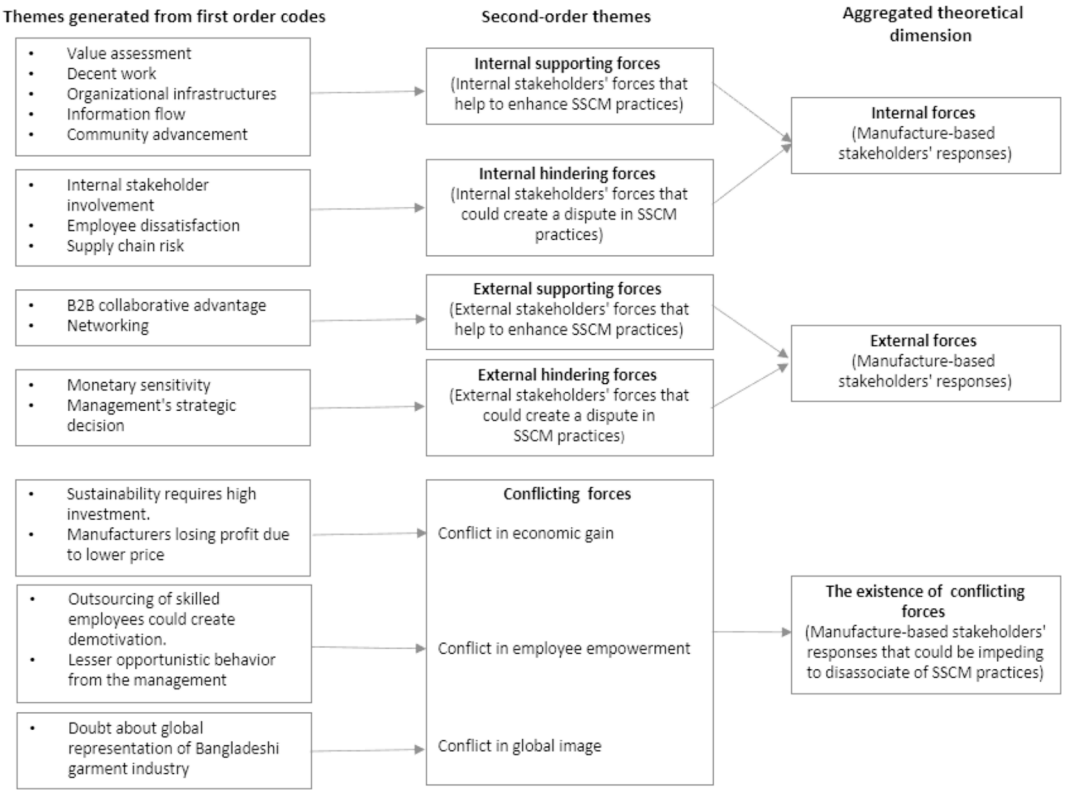

Fig. 2. Thematic coding into first-order themes to generate theoretical dimensions.

Table 4
Sample illustrative quotes representing code/s.

Initial code	Illustrative quotes from respondents	First-order codes
Internal Supporting Forces		
Manufactures audit (11 participants)	I think, ours' [manufacturers'] auditing team greatly shaped our supplier selection procedures…. although it is kind of forced by the buyers or else …. compliance wouldn't have happened (MG4-BM).	Value Assessment (19 participants)
Product responsibility (5 participants)	'We need to maintain our product quality to keep our buyers, like an exact match with the code of conduct……'(BD2-TM).	
Use of organic material (7 participants)	'To become more sustainable, particularly from material perspectives. We can offer to the buyer that we have organic material options in production' (LS1-TM).	
Supplier selection (9 participants)	'While we select our partners (manufacturer, supplier, wholesaler, retailer) we need to follow the orders [from the buyer], like from whom we can collect our materials and whom not' (FT2-TM).	
Working conditions (7 participants)	The garment sector is changing continuously. If you ask, a couple of years ago, workers were abundant, but now the scenario is quite the opposite. The compliance is not only for the buyers now, but workers also checked in between the factories about the working conditions, salaries, and other benefits (LS4-BM).	Decent Work (16 participants)
Employee benefit (8 participants)	'We have our own fair price shop, credit card payment systems, knowledge exchange programs between workers and monthly health and safety training… Apart, we have a company-owned school for our children. And these motivate us to stay focused. (FT3-TM).	
Compliance initiatives (16 participants)	'…All types of rules, like ACCORD or ALLIANCE… to maintain workers' safety and benefit, …… This is not only applied to the legislative issue now, the competition among factories is also quite severe now. Everyone tries to improve their [standards] to attract skilled employees and as well as buyers [retailers] (LS1-TM).	
LEED regulation (5 participants)	'……. It takes lots of investment to renovate the old building as well as employ technological advancement to apply for the LEED certification…….'(MD-O).	Organizational structure (15 participants)
Building new infrastructure (8 participants)	'It takes lots of investment to renovate the existing building…….' (DBL1-TM).	
Latest automation (4 participants)	……as well as employ automation to apply for the governmental certification…….'. (DBL1-TM).	
Infrastructure efficiency (10 participants)	'Particularly, we have washing and dyeing facilities and in every three months, we need clearance from regulatory bodies….' (ET2-TM).	
Bangladeshi ACCORD and Alliance (5 participants)	'…certifications, like Bangladeshi ACCORD and Alliance are setting some standards to maintain social compliance (EN1).	
Lean management (7 participants)	we need a supply chain head in our factory who can embed the structure. Like we have the grey section, yarn section, dying section and accessories section. To get better performance, we have to maintain a lean performance among them (LS4-BM).	Information flow (13 participants)
Knowledge sharing (8 participants)	we are quite strict when you talk about information sharing, and we normally do not share our R&D section with others (BD2-TM).	
Process transparency (6 participants)	……if we have coordination with our retailers …… we can adjust, reschedule our requirements quickly and be prepared for ……occasional changes'(PF5-BM).	
Community well-being (6 participants)	'As you know, I'm not a local here [Gazipur – factory situated]. I came here for a job, and there are hundreds like me. They [top management] created houses and schools for our living. These ultimately enhance the community structures (BD3-BM).	Community advancement (6 participants)
Social welfare (2 participants)	'Our motive is not only sustaining our factory's environment but also maintain[ing] the surrounding locality's sustainability. Say, the local tea stall opened at 8o'clock cause…. our factory's gate opened at that time. A major part of that shop's customers is the hundreds of employees, who work with us (PF2-TM).	
Hindering forces (internal)		
Stakeholder perception (19 participants)	'World Bank provides loans with low interest rates; we have tax exemptions from the government. It depends on the higher stakeholders, like what they think about us while adapting sustainability activities' (MF-O).	Internal stakeholder involvement (21 participants)
Sustainability requirements (9 participants)	'it's a chain of supply and while we select our partners (manufacturer, supplier, wholesaler, retailer) we need to follow sustainable development requirements which ultimately helps us to sustain in future' (DBL1-TM).	
New/Reinvestment (6 participants)	'Our cost of living is getting higher day by day while the profit level is becoming narrow. At this point, new investment for being sustainable (especially for compliance) is crucial for garment investors (LS-O).	
Return on investment (value of sustainability practices) (4 participants)	'If we can't measure the profitability from sustainability activities or can't have any visibility…. we may be then, will	

(*continued on next page*)

Table 4 (*continued*)

Initial code	Illustrative quotes from respondents	First-order codes
	not be enthusiastic to practice it further' (BD4-BM).	
Third-party involvement (6 participants)	The inspection is typically regulated by a third party [a businessperson or company who works on behalf of the retailer] (ET2-TM).	
Trust (4 participants)	'We have a strong reputation in the field [export garment market] and most of our current buyers have been doing business [outsourcing] with us for a long time. They have faith in us and are happy with our current compliance assessment.' (LS-O).	
Mock compliance (5 participants)	'Our main strength is our two green factories……. sometimes to keep up with the order, we might have outsourced some materials which may not follow sustainability requirement properly' (MF1-TM).	
Personal relationship in auditing (5 participants)	We need to update our clearance certificate [ETP] every couple of months, the auditor might not have profoundly checked every single time. He/she believes us…. (ET1-TM).	
Personal relationship in recruitment (2 participants)	'Sometimes, we use our network to recruit a skilled employee rather than job application or others' (MD-TM).	Employee dissatisfaction (4 participants)
Employee dissatisfaction for lack of appreciation (3 participants)	'I am ranking seven out of 10. we are a little bit behind from [….] company. They have employee gratuity but here we have a larger salary pack but no long-run incentive.' (LS3-TM).	
Employees' jobs switch (2 participants)	'If we don't follow these [social incentives for employee recognition] we can't just keep our skilled employees. They will switch to another factory.'(PF2-BM).	
Vulnerability (12 participants)	I feel non-compliant factories will not sustain any more in the businesses, competitions are not only in Bangladesh rather it's from all south Asia' (EN1).	Supply chain risk (12 participants)
Supply chain disruption (6 participants)	'As a knitting manager, if I know my monthly requirement of grey cotton then I can set up my performance. Further, I don't need to store grey fabric. Or if I have some surplus from the previous year, maybe I can inform the yarn section regarding that. so that they can adjust the requirements. for dying. But any disruption in between the channel could hamper the production process' (FT1-BM).	
Supplier assessment (4 participants)	'Some participants, we do [a] cost calculation, like we have [a] labelling department but we're not using that − instead, we outsource [the] labelling section. And this kind of supplier, maybe [doesn't] follow sustainability requirements.' (MF3 −TM).	
Supporting forces (external)		
Buyers' led inspection (20 participants)	'Typically, buyers [retailers]send an inspection team before proceeding with the order, or	B2B collaborative

Table 4 (*continued*)

Initial code	Illustrative quotes from respondents	First-order codes
	they [retailers] gather information from the reputed garment company. Either way, before approaching they inspect every detail of ours' (MG1-TM).	advantage (23 participants)
Performance evaluation (10 participants)	'It's all about the evaluation of our performance, if our practices enhance our order quantity and profit, maybe then we can have a successful supply chain management.'(MF2-BM).	
Supply chain finance (9 participants)	'Monetary consideration is important, specifically across the supply chain. We have to look out for our partners. If I can maintain a profit margin, maybe then I can help my suppliers……. to practice [compliance]' (PF3-TM).	
Sustainable materials (5 participants)	'We have organic fabrics, like you said sustainable materials, but these are more expensive than the regular ones.' (ET2- TM).	
Customer awareness (3 participants)	'After Rana Plaza, customers are more aware of the procurement process…. Specifically, when we talked about the 'Made in Bangladesh' brand' (EN2).	
Price flexibility (3 participants)	'We provide options, like we have these [from noncompliance factory] kind of button, and we have these [compliance factory] …. which want you [retailer] want.' (MF2-BM).	Networking (3 participants)
Organisational reputation (2 participants)	'Due to the sustainability reputation- workers have become more committed and loyal to the management. They feel some sort of empowered while working in our factory. (PF5-BM).	
Hindering forces (external)		
Price uncertainty (6 participants)	'Market is volatile, the price actually depends on the competitors' rate and as well as the availability of the raw materials' (MD-TM).	Monetary sensitivity (16 participants)
Price variation among garment manufacturers (4 participants)	'…. there is no unity between our garment factories, specifically on price. Everyone wants to keep the orders- if possible, with minimum profit' (BD2-TM).	
Price disagreement (5 participants)	There is a big price discrepancy between compliance and non-compliance factories, a compliant factory can't win over non-compliant… some buyers still choose them due to their lower price point (MD- O).	
Legislative role play (2 participants)	'……sometimes we [factory union] create pressure on the management to make a certain change which is good for us [workers]' (MG3-BM).	
Buyer shifting (5 participants)	We update [audit reports] ourselves for our own betterment, if a buyer [retailer] pays a sudden visit, we don't want to lose him [retailer]. They shift without any random reason. And we don't want to fall for that. (FT2-BM).	

(*continued on next page*)

Table 4 (*continued*)

Initial code	Illustrative quotes from respondents	First-order codes
Logistics based decisions (7 participants)	We, actually, don't have any common practice for supply chain or compliance, factories adapted their practices according to the buyers' [retailers'] requirements. (LS-O).	Managements' strategic decision (7 participants)
Local government policies (5 participants)	Local government can play an important part in sustainability practices, but as you can see, there is no campaign until it's a life-threatening incident. After Rana Plaza, factory management is more aware of LEED regulations. (LS3-TM).	
Knowledge share (2 participants)	'We are adopting compliance practices because our neighbours' [fellow factory] are doing these. Before that, we actually didn't adopt these practices'(MF3-BM).	

workers. A line manager PF1-BM commented:

'…certifications, like Bangladeshi Accord and Alliance are setting some standards. So that we can compete in the same range with other companies globally. As you know Bangladesh is the 2nd largest exporter in the world and these certificates [are] the justification that we are following the global standards.'.

This shows that in the aftermath of the Rana Plaza tragedy, Bangladeshi factory owners implemented various platforms to improve worker welfare and safety, which are closely linked to the social dimension of sustainable practices. Ten participants identified **information flow** as an important internal force, addressing issues such as sustainable knowledge sharing between SC partners (cited eight times), lean management for logistics-based activities (cited seven times), and process transparency to allow, for example, the rapid adaptation of product progression (cited six times). A sub-manager MT2-TM commented:

'…To get a better performance, we have to maintain lean management among these [production areas]. For example, if I know my monthly requirement of grey cotton in advance then I can set up my goals [depending] on the forecast, and I don't need to store any extra grey fabric. Similarly, if we have coordination with other sections we can adjust, reschedule our requirements quickly and be prepared for the sudden /occasional changes [from retail buyers].'.

This view clearly supports that information flow between stakeholders has a positive impact on both the economic and social dimensions of SSCM. Finally, five participants talked about their commitment to **community well-being** (cited three times) and effective commitment towards social welfare (cited two times); both are related to the theme of community advancement. For example, the *owner MF-O commented:*

'Our motive is not only sustaining our factory's environment but also maintain[ing] the surrounding locality's sustainability. Say, the local tea stall opened at 8o'clock cause…. our factory's gate opened that time. A major part of that very shop's customers is the hundreds of employees, who work with us.

This revealed that the factory's social management practices improved surrounding development as well as enabling public development (Huq et al., 2016).

5.2. Internal hindering forces

When looking at the overall internal hindering forces, several themes emerged that were not conducive to sustainable practices. In particular, participants mentioned **multi-stakeholder involvement** which includes issues such as stakeholder perception of new investments to meet sustainability requirements (cited nineteen times). To illustrate, owner LS-O commented:

'…honestly, we perceived sustainability as an expense, and it is quite the opposite of profit. But we are bound to [by retail buyers] follow these [sustainability] rules and all these regulations [ACCORD and Alliance] update frequently which requires new investment to meet them.'.

This implies that investment is really important, but at the same time, it becomes harder to justify. Similarly, participant PF2-TM remarked:

'….to get orders [from retail buyers] we have to follow all these LEEDS, Accord, and Alliance regulations. But you know…. it's hard to get these [certifications] and we have to update these [certifications] regularly. If you want to build a brand-new factory, then maybe it is possible to employ [LEEDS rules] but for [an] existing one…. it's tough. And all of these [require] huge investment.'.

This view pinpoints a few impediments to sustainable requirements. Firstly, significant reinvestment is required to improve social sustainability certifications, and retail buyers impose these assessment criteria as a precondition for receiving production orders. Secondly, environmental sustainability is difficult to implement without a strong financial base. Finally, manufacturers are struggling with a small profit margin while considering the return on investment of sustainable practices. In addition to this, six participants cited buyer audits and third-party involvement as a hindering force. As an example, the manager FT2-TM commented:

'…buyers visit the factory, audit inside and out whether we are following the sustainability requirements or not. But at the end of the day, they [retail buyers] squeeze the price. Sometimes, they place the order through a [third party] merchandiser who really doesn't care about compliance or anything….'.

This view is important, as management brings lots of changes, particularly in compliance management due to maintaining sustainability as well as the monetary benefits. As an argument manager, BD2-TM remarked: *'…in these days the cost of living is getting higher day by day while the profit level is becoming narrow. At this point, new investment for updated sustainable requirements is tight. Particularly, when new intervention is necessary…'* This insight outlined that updated requirements for sustainability are essential, but at the same time provide evidence for the necessity of new investment in business (cited six times). Other forces such as trust (cited four times), mock compliance (cited five times), personal relationships (cited five times), and recruitment of new employees (cited twice) are important here. A manager MF- BM validated the situation:

'We have a strong reputation in the field [export garment market] and most of our current buyers have been doing business [outsourcing] with us for a long time. They have faith in us and are happy with our current compliance assessment.'.

These quotes reveal a two-fold truth: that the management attitudes to sustainability are not always conducive and sometimes perceive sustainability requirements as an expense rather than an investment. It was also suggested that, where management has been through compliance procedures before, they may subsequently engage in mock compliance without being detected, because auditors trust them to be compliant. We also identified employee dissatisfaction due to a lack of appreciation (cited three times) as an internal hindering force, which occasionally leads to employees changing jobs (mentioned by two participants). For example, a line manager PF2-BM commented:

'If we don't follow these [social incentives for employee recognition] we can't just keep our skilled employees. They will switch to another factory.'.

This finding is important as it means management is aware of the significance of workplace-related initiatives, which might reduce employee turnover and absenteeism (Huq et al., 2014). The next important theme when considering logistics-based difficulties is supply chain risk. Twelve participants pointed out vulnerability as an important theme when talking about supply chain disruption while six participants highlighted issues with outsourcing some production activities, like

labelling. For example, participant MF3-TM commented: *'Sometimes, we do [a] cost calculation, like we have [a] labelling department but we're not using that – instead we outsource [the] labelling section. And this kind of supplier, maybe [doesn't] follow sustainability requirements.'* This view sheds light on the importance of sub-supplier's sustainability practices and how primary manufacturers try to conceal the hidden secrets of sustainability disruption to secure profitability.

5.3. External supporting forces

As illustrated in Fig. 2, the majority of these forces acted as hindering forces. In particular, we identified two second-order external forces that supported the implementation of sustainable practices, namely **B2B collaborative advantage** and **networking**. Themes such as buyers' led inspection (cited 20 times) and performance evaluation by other stakeholders (cited 10 times) are the most prominent here. These empirical findings suggest that manufacturers are encouraged by the assessment criterion of both buyers and external stakeholders (e.g., legislative bodies and governments) in enforcing sustainable practices on the factory shopfloor. Textile manager ET1-TM remarked:

'….even though we are certified producer[s], buyers inspect our automation, air quality, wastewater effluent and noise pollution frequently, specifically before finalising an order. It kind of forces us to be updated.'.

In a similar vein, garment manager MF3-TM asserted:

'*We have different certifications for different buyers. For example, we maintained BSCI and ISO 14001 certifications for US buyers. Sometimes, a specific type of buyer maintains certain regulations, and these are widely accepted by others [buyers], particularly for the UK, and we always try to maintain those at any cost. We also have to be careful while we are choosing sub-suppliers, like from where we are getting our materials. It's like a pictorial representation before getting orders.'*.

These views suggested B2B collaboration between stakeholders such as certification bodies and buyers could enhance sustainable practises through inspection, but at the same time, manufacturers have to be careful with their outsourced suppliers. Several participants also put forward the significance of supply chain finance (cited nine times) and sustainable materials (cited four times). As evidence, a supply chain manager of EN3-TM: *'…[retail] buyers gave us a sample before placing an order and we needed to deliver the exact type. Sometimes they [retail buyers] help us with the R&D and share the cost with us. For example, we covered 80 % and the buyer covered 20 % of the total expenses.'* Furthermore, a production manager DBL2-TM stated:

'All our big buyers have their contingency plan, say for 2025 or 2030. Maybe they will move to 100 % or 50 % recycled products in the coming season. So, we need to forecast their requirements and set our activities according to them.'.

This highlighted the fact that modern consumers are informed about the production procedures of high-street fashion brands, specifically how and where big brands outsource their product lines from emerging countries. This awareness is related to the theme of customer awareness (cited three times) and compels retailers to go for recycled and organic product portfolios, and similarly binds manufacturers to go for organic product lines. In terms of **networking**, there are also two themes which prompted manufacturers to adopt sustainable practices: price flexibility (cited three times) and organisational reputation (cited by two participants). Particularly, manufacturers' reputations helped them to secure a higher profit margin. As participant PF3-BM noted: *'If you linked with us that means you are following all rules and regulations appropriately, and buyers don't need to be worried regarding sub-supplier compliance conditions etc. This is some kind of uplifting [recognition] of your image for the mass suppliers.'* This statement clearly suggests that not only do sustainable practices enhance the quality of the production inside the factory premises, but they also serve as a trademark for the factory.

5.4. External hindering forces

In terms of external hindering forces, we have identified **monetary sensitivity** as one of the key reasons why stakeholders dissociate from sustainable practices. Several themes like price uncertainty (cited six times) and price variation among garment manufacturers (cited four times) are most common here. For instance, a participant from FT4-TM commented:

'…there is no unity between garment factories. if I charge $2.00 for a tee shirt, my competitors charge $1.50 for that same tee shirt, and this creates uncertainty in orders''.

This is also reflected by themes like price disagreement leading to differentiations between countries such as Vietnam, India, and Thailand (cited five times) and legislative role play (cited two times) relating to setting a standard rate for similar products. The same participant argues that:

'By contrast, Indian factories have unity in terms of a pricing point. They [stakeholders of India] fixed a rate for all garment companies and others [garment companies] have to follow it. But in Bangladesh, we don't have anything like that.'.

This statement was supported by other participants, including MG2-TM and LS2-TM, and these discussions also identified a link with buyer shifting (cited three times). Another comment from PF3- BM extended this argument with: *'The [garment] manufacturer is always the loser. If you give a 100 % sustainable product, that doesn't matter. I gave you a lower price, that's what matters. Whether the raw materials are organic or not, he [the retail buyer] didn't consider that. At the end of the day, price is what matters.'* These comments revealed that the global market consists of various types of garment buyers, and some do not want to use sustainable materials, even when the buyers have the opportunity to do so. This leads to a lack of consistency in embedding sustainable practices in SSCM. Twelve participants also identified **management's strategic decisions** as a significant theme related to logistics-based decisions (cited seven times) and local government policies (cited five times). As an enabler, EN2 remarked:

'…the major portion of the garment factories are established around Dhaka city, which caused [a] significant rate of air and water pollution… [the] government tries to push garment manufacturers away from [the] city area. But, if you consider transportation and other facilities, it may cause hindrance to the garment supply chain.'.

In a similar way, manager FT2-TM remarked:

'If we talk about transportation, we need to think about our drivers. Are they trained enough? Is it possible to deliver [promptly]? What about the route or zone? Another important thing is theft issues and maintenance of containers… The Bangladesh government is now maintaining a zone-based transport system for the garments industry, but that's not enough. We need to think about our ship [seaport] and cargo facilities.'.

This point showed garment manufacturers are aware of the severe impact of pollution and are considering their options while setting up infrastructure but are still struggling to decide on an actual solution. A comment from an influencer EN3 compared this situation with other countries:

'[China] moved their industrial sites far from the city area. Our [Bangladeshi] government is trying to initiate the same phenomenon by imposing more tax, lots of rules and regulations, hurdles to authentication and surprise visits from legislative bodies, while established garment manufacturers want to build new infrastructure.'.

The last theme which also functioned as a hindering force is knowledge sharing amongst competitors (cited by two participants) – sometimes competitors don't want to share the details of current practices, specifically for the research and development phases to maintain the status quo in the market.

6. Discussion

We now discuss the above findings, examining how they address the

research questions posed and reflecting upon the contributions made to both theory and practice.

6.1. Stakeholder forces affecting SSCM implementation

The first research question asked:

What are the existing stakeholder forces that dominate the implementation of SSCM in the Bangladeshi garment industry?

This paper provides nuanced insights into the dynamics of internal and external sustainability forces among inbound stakeholders in the manufacturing garment sector, thereby contributing to the existing body of empirical research on SSCM in the Bangladeshi garment industry (Nath and Eweje, 2021; Huq and Stevenson, 2020). Specifically, we examined the stakeholder forces that either support or hinder the adoption of sustainable practices. As outlined in Fig. 2, we highlight certain forces that have the potential to promote sustainable practices among both internal and external stakeholders. For example, regulations such as LEED certifications, Bangladeshi Accord and Alliance are relevant to both internal and external sustainable practices. LEED actively encourages the development of new infrastructure to address air, water, and noise pollution, while Accord focuses on ensuring health and safety standards for garment workers who rely heavily on the factory's infrastructure. In addition, certification contributes to a degree of standardisation for the company. This interpretation is consistent with the findings of a previous study by Huq et al. (2016), who refer to this type of collaboration as 'buyer-consortium auditing', where regulatory bodies facilitate the monitoring of sustainable practices (Nath et al., 2019).

Interestingly, in terms of the top support forces for sustainable practices, top-level management identifies collaboration as the dominant force, which contrasts with previous research (Nath et al., 2019) as well as lower-level management's perception of buyers' auditing. Nevertheless, it's important to note that top management recognises the importance of quality assessment, albeit with a focus on internal audits for finished garment quality checks.

By focusing on the forces that affect SSCM practises, this study has specifically identified the importance of decent work and the risk to the supply chain. In particular, a view from lower-level management expressed that compliance practices have a deep relation with supply chain finance. This agrees with previous studies (Nath et al., 2020; Tseng et al., 2019) which identified that economic struggles inhibit social sustainability practices, and that sustainability can be seen as excessively costly (Soundararajan and Brown, 2016). In particular, a comment from a top-level manager also justified the argument: '*I heard a rumour that [for those who want] to practise sustainability in their operations, [the] government will give them [a] loan with lower interest rate or other benefits, but [I'm not sure about the evidence. From buyers, we have not received any higher price prices or anything yet for our initiatives*. ' (PF2-TM).

The participants also shed light on the hidden side of SC actors, including unethical competition between partners and lack of consistency to make more money. However, in other instances, the internal stakeholder (i.e., top management) also explained how suppliers sometimes engaged in mock compliance with respect to social and environmental sustainability practises, for example, compliance certificates. Therefore, legislative certification is sometimes overlooked, but at the same time, it is justified that this only works when the supplier has already retained some statutory standard. From the above findings, the following proposition can be made:

Proposition 1: Superficial compliance exists only if suppliers already adhere to certain legal standards.

These findings slightly support previous research (Huq and Stevenson, 2020) where buyers are prepared to source from non-compliant factories to maintain their profits. This is a noticeable hindering force for sustainable practices and further supports the argument that developing countries' stakeholder's value price (monetary gain) over sustainability. Similarly, Glover et al. (2014) pointed out that economic security is stronger than environmental and social logic and occasionally inspires stakeholders to be noncompliant. Montabon et al. (2016) also identified that economic interest suppressed social and environmental interests while considering firms' sustainability. Process transparency among SC partners could be a probable solution for this situation

Surprisingly, the results for the most cited hindering forces in Table 2 argue against the opposite view, providing evidence that inbound stakeholders recognise the importance of sustainability regulations and infrastructure development (frequently cited by enablers), but fail to maintain them due to their costly characteristics (frequently cited by owners). This is important as it extends Nath and Eweje's (2021) finding that factory management only implements sustainability practices for higher economic and operational returns. Finally, there was evidence to suggest that both monetary sensitivity and strategic decision-making are strongly related to sustainable performance. In particular, there were many examples of stakeholders demonstrating their commitment to sustainable practices in the face of government mechanisms.

6.2. Conflicting forces discouraging SSCM adoption

The second research question considered:

What conflicting forces cause Bangladeshi garment stakeholders to disassociate with SSCM practices?

The overall findings show that there exists a large number of supporting forces for successful sustainability implementation but, simultaneously, several forces are impeding stakeholders. Three major areas were identified from the interview data: (1) conflict in sustainability cost and economic gain; (2) conflict in standardisation and employee sustainability; and (3) conflict in economic gain and social image.

6.2.1. Conflict in economic gain: Investment vs profit margin

Twelve participants suggested that garment manufacturers experienced financial difficulties while implementing SSCM. In evidence, the buyers didn't confirm any extra monetary benefit for sustainable initiatives. For example, manufacturers adopt different types of rules and regulations to enhance environmental and social sustainability through huge investments, yet then lose profits by not getting enough orders or an appropriate price point from buyers. As an example, the owner BD-O explained: '*…after the Rana Plaza and Tazreen fashion accidents, we are investing a lot in health and safety standards, building up new infrastructure. We perceived that order quantity, as well as the price point, would increase from buyers a little bit. But that does not actually come along… Price is at 15 the same level and at some point, it is quite down [than it was before], and the cost is growing… because of new infrastructure, rules and regulations, workers' salary and automation. And ultimately, [the] profit margin is shrinking up for shareholders.*' This quotation reflects the contradictory view that there is a dispute between sustainability-related costs and economic gain. Garment manufacturers are struggling with cost-related decisions while integrating environmental and socially sustainable investment in their premises. Specifically, after the Rana Plaza and Tazreen Fashion accidents in 2013, factory owners carried out huge health and safety improvements to their workplaces but perceived they didn't derive a tangible monetary gain in return. This finding is somewhat supported by Nath et al. (2020), in that Bangladeshi stakeholders perceived sustainability-related costs as an expense but not as an investment. However, it may be that there are long-term benefits. A remark from a top-level manager also agreed with this viewpoint: '*We have to be visionary while thinking about sustainable practices…. the initial training and rebuilding will be expensive, but we can hope that the ultimate result will be fruitful. At least it will create a brand image and that will help to get more [orders from buyers].*' (LS2-TM). Hence, the following proposition can be made:

Proposition 2: Financial difficulties impede SSCM implementation, with investments in sustainability not always yielding immediate profit gains.

6.2.2. Conflict in employee empowerment: Employee empowerment vs employee satisfaction

We found that forces like working conditions, employee benefits and compliance initiatives related to factors of employee sustainability which represent the second-order theme of 'decent work' (Soundararajan and Brammer, 2018). Despite numerous OHS (Occupational Health and Safety) compliance initiatives, progress on creating decent work is limited: *'…All types of rules, like Accord or ALLIANCE, talk about workers' safety and benefits, but what about us [middle managers]? Like, what will boost our engagement, or what will give us safety from [getting sacked] or anything…You need us…without us, you just cannot operate anything here"*. (FT3-BM). This quote reflects dissatisfaction from some employees, which is an internal hindering theme. Research suggests that engaged and motivated employees play a vital role in sustainability excellence (Diabat et al., 2014). Thus, improvements in employee social sustainability can significantly mitigate sustainability risks for manufacturing firms (Hoque et al., 2020). Apart from mitigating this, factories would be (or should be) motivated to increase employee social sustainability in the supply chain given that they are advised to abide by the Ruggie principles (2011). These principles require a variety of actions to uphold employee rights, and treat employees as 'responsible corporate citizens' and employ recognition for all employees (Kuruvilla and Li, 2021).

Interestingly, three participants acknowledged 'outsourcing of skilled employees' and 'lesser opportunistic behaviour from the management' as significant hindering forces in sustainable practices. These findings uncovered that there is a significant dispute between domestic employees' perception and outsourcing of skills. The domestic employee sometimes perceived 'outsourcing of skilled employees' as a threat rather than an opportunity to learn, with EN2 commenting '… meritocracy should be given priority over national and racial identity'. However, an ET3-TM countered: *'…with proper training and motivation from higher management we can do better in our performance. For example, management can send the existing employees to get higher education and learn new skills from overseas or can arrange training programs more frequently instead of getting foreign employees…. but you know money is a fact. Training a new bunch [a line of employees] needs lots of investment''*. This statement extends previous research showing that, with the intention of earning greater profits, management sometimes pretended to be opportunistic (Nath et al., 2020) and that for productive sustainable performance, management should focus on domestic culture and cognition rather than other aspects (Montabon et al., 2016). From the above findings, the following proposition can be made:

Proposition 3: Enhancing employee sustainability through investing in the workforce and cultural alignment mitigates sustainability risks.

6.2.3. Conflict in the global image: Economic gain vs social image

Another significant conflict arises from how Bangladesh is perceived globally. Despite having increasing numbers of LEED-certified factories, the global image/reputation of the Bangladeshi garment industry has not changed much (Dhaka Tribune, 2024). This leads to a disconnect between the global reputation of the Bangladeshi garment industry and the reality observed by stakeholders in Bangladesh: *'After the Rana Plaza accident, when buyers landed in Zia Airport [International Airport of Bangladesh] the first things came into the [buyer's] mind was that we are not practising social and environment sustainability appropriately here. But if you see the global picture, [Bangladesh has] the highest number of LEED-certified green factories compared to other countries. But this has not really changed our image'*. (BD3-TM). Internal stakeholders are well-informed about the global garment picture, and frustrated with this perception and see it as a possible hindering force for sustainable implementation. While Nath et al. (2020) suggested that confusion and a lack of awareness from stakeholder perspectives could be significant factors for dissociating sustainable practices, the evidence from this study confirms this to be the case. Hence, the following proposition can be made:

Proposition 4: The disparity between global perception and local reality hinders sustainable implementation, emphasizing the need for alignment between global reputation and local realities.

6.3. Theoretical contribution

Our paper underlined several sustainable forces influencing SSCM practices as well as performances from manufacturing-based stakeholders' points of view, with a particular focus on dominant stakeholder forces and the associated impact. By considering stakeholder theory and job responsibilities, this thesis highlights different types of inbound stakeholder groups and their operational activities and explains how garment inbound stakeholders (i.e., the top level of management and lower level of management) enhance business performance by adopting sustainable practices in their operational activities. Prior contextual research has explored sustainability, and sustainable supply management practice is based on literature (Sauer and Seuring, 2018; Schneider and Wallenburg, 2012). In particular, Nath et al., (2020,2019) explored sustainability from multi-tier suppliers and Huq et al., (2021,2020) explored SC disturbances from the managerial point of view, but did not explore the perspective of inbound stakeholders' participation in SSCM. To fill this research gap, this study has offered an in-depth understanding of the participation of inbound stakeholders in sustainable practices through an expansion of stakeholder theory based on empirical research.

In the wider stakeholder theoretical context, our analysis contributes to an enhanced understanding of the connection between manufacturing-based garment factories' inbound management process and shopfloor sustainability practices. As shown in Table 5, a summary of themes and subthemes derived from literature and also bred from empirical data showed the golden thread of contributions to the contextual field, particularly highlighting the contextual literature review, theoretical participation and empirical findings. Moreover, Table 5 also reflected a pictorial presentation of novel or counterintuitive findings. Under the influence of stakeholder forces, our paper highlighted several conflicting (self-contradictory) forces through qualitative findings, which could impede sustainable practices within factory boundaries. For instance, the empirical evidence provides greater insight into the initial findings from Nath et al. (2020) that manufacturer perceives sustainability-related costs as an expense but not as an investment. In particular, one additional contribution of this paper is toward the view of employee engagement in the Bangladeshi garment industry. Previous research identified different upstream management actors and how they linked each other while implementing sustainability decisions and have not actually focused on the downstream tiers of stakeholder engagement (Huq et al., 2021; Nath et al., 2019). A research gap is to note- as a key stakeholder of sustainability practices in the factory premises-how shop floor employees' engagement can enhance the sustainability practices. Specifically, Nath et al. (2019) explored through a secondary analysis that multi-tier apparel suppliers could influence governance mechanisms for sustainability practices, and Huq et al. (2021) explored disturbances in SC from a managerial point of view.

Moreover, this paper makes a significant contribution by revealing emerging conflicting forces such as employee empowerment and global image. It paves the way for further empirical analysis of sustainability practices within the garment industry and its supply chain and opens a new avenue of research on the institutional logic and implementation of sustainability. For example, Nath and Eweje (2021) used institutional theory to delve into the internal dynamics of sustainability within sub-supplier firms, while Huq and Stevenson (2020) identified socially sustainable practices within a specific context. Notably, these studies did not thoroughly investigate the employee dimension of institutional theory. The empirical evidence also points to a gap regarding the advanced stage of Mitchell et al.'s (1997) power dependence.

Table 5
An outline of the theoretical contribution, articulating the dominant theme(s) and sub-theme(s) explored in this paper.

Section	2nd order sub-section	3rd order sub-section	Emerging from literature?	Example key authors	Example contextual authors	Emerging from empirical data?	Example findings Interview/qualitative	Confirm (+) / disconfirm (−) / novel (new)
Stakeholder types	Internal External		✓ ✓	Freeman (1984) Clarkson (1995)	Fontana and Dawkins (2023); Mausumi and Rahman, (2018)	X	The categorisation of inbound stakeholders is confirmed by the qualitative findings of this study.	Confirm (+)
Organisation's management process	Descriptive	Assessment Technological advancement Familiarity	✓	Donaldson and Preston, 1995	Huq et al., (2016) Silvestre (2015) Uddin et al (2023)	X	The descriptive aspects of the organisation's management process are confirmed by the interview results.	Confirm (+)
	Instrumental	Compliance Operational activities Competitive advantages	✓			✓	The empirical findings support the instrumental argument of stakeholder theory and argue for the improvement of sustainable practices in garment factories, particularly for operational activities on the shop floor. The findings broaden both Huq et al. (2016) and Silvestre, 2015 that SC stakeholders should focus more on the lower level of management engagement. For example, employee engagement through motivation, training & development, and workshops will not only empower employees for their personal gains but also turn them into an unparalleled resource to gain competitive advantage.	Confirm (+) Novel (new)
	Normative	Ethical reasoning Awareness Legitimacy	✓			X	From a stakeholder perspective, the empirical findings of this study did not find this to be the case. Indeed, these aspects were mentioned more by the institutional side of the garment business.	Dis confirm (−)
Power Dependency		Competition Strategic decisions Discernment	✓	Mitchell et al (1997)	Ali and Rizwan, (2013)	✓	The empirical findings support the power dependency aspect of the manufacturing-based garment business. One of the key contributions was an extension of the previous work by Ali and Rizwan, 2013 that the top level of inbound management, i.e. the section manager or owner, was involved in the day-to-day management activities where it was necessary to oversee the activities of the lower-level management through monitoring and decision making. However, the lower level of inbound management, i.e., the line manager or compliance manager, who was directly involved in the operational execution procedures of the factory shop floor, gave them more power over compliance initiatives.	Confirm (+) Novel (new)
Mutual interest		Trust Quality/ clarity	✓	Hörisch et al. (2014)	Huq et al., (2016)	X	The empirical findings of this study did not support these issues from a stakeholder	Dis confirm (−)

(*continued on next page*)

Table 5 (*continued*)

Section	2nd order sub-section	3rd order sub-section	Emerging from literature?	Example key authors	Example contextual authors	Emerging from empirical data?	Example findings Interview/qualitative	Confirm (+) / disconfirm (−) / novel (new)
		Knowledge sharing Collaboration Communication Sense of accomplishment					perspective. However, they were more likely to be mentioned as institutional aspects of the garment industry. One notable contribution extends the work of Nath et al. (2020), which highlighted how economic struggles hinder social sustainability. However, it appears that supply chain finance from other SCM partners is more readily available than other forms of support.	
Conflicting aspects	Economic gain Employee empowerments Global image		X	X	X	✓	This research study put forward several evidence-based observations as conflicting forces, which could create confusion in sustainability practice. For instance, top management identified three areas i.e., economic gain, global image, and employee empowerment, that could conflict with sustainability practices. Although Nath and Eweje (2021) identified that employee empowerment might often be symbolic, the qualitative findings underline that active engagement can ensure sustainability practices on the factory shop floor.	Novel (new)

6.4. Practical contribution

Our research has important implications for practitioners and policymakers. First, by delineating job responsibilities at different levels of inbound management, our study sheds light on the integration of sustainability practices into operations. This insight highlights the importance of job responsibilities in determining the prevalence and effectiveness of sustainability practices, enabling management to identify areas for improvement in SSCM. Second, the study provides strong insights for policymakers to reassess economic policies aimed at incentivising retail buyers to engage in sustainability initiatives. This may include financial engagement based on the economic costs and benefits associated with sustainability initiatives to encourage greater participation. In addition, our findings provide empirical evidence for regional SCM partners to showcase LEED-certified factories as models of sustainable practices with enhanced brand value, resulting in a significant return on investment. In the aftermath of the Rana Plaza disaster, retail buyers are prioritising certifications such as LEED, Accord and Alliance when placing orders. Incorporating sustainable practices not only improves economic performance but also improves environmental and social performance by fostering a skilled workforce. In addition, our research identifies various sustainable forces associated with SSCM practices, including supporting, hindering, and conflicting forces. These insights help management make decisions and adopt sustainable practices, such as establishing robust compliance structures to protect manufacturers, especially during unexpected events such as COVID-19 and economic downturns. Working with SC partners also facilitates the adoption of sustainable practices by other stakeholders. Overall, our research highlights the importance of sacrificing short-term benefits for long-term gains, particularly in promoting sustainable practices on the factory shop floor.

7. Conclusions

This paper examines the stakeholder forces influencing the adoption of sustainable practices in the Bangladeshi garment industry. In response to the first research question, our findings highlight key emerging forces such as employee retention and supply chain finance as dominant forces. In addition, top-level stakeholders demonstrate an understanding of the long-term benefits of sustainable practices and engage in them on the basis of economic logic. For the second research question, potential areas of divergence include conflicts over economic gain, employee empowerment and global image. Our analysis highlights differences in perceptions among existing employees, particularly in terms of the perceived barrier to employee empowerment posed by the involvement of expatriates. Empirical evidence also supports divergent perspectives on the Bangladeshi garment industry, comparing local perspectives with those of expatriate stakeholders (Nath et al., 2019; Jamali et al., 2017). While this study makes important research and practical contributions, it is important to acknowledge certain limitations.

Our findings are primarily applicable to Bangladeshi manufacturers and their stakeholders, limiting their generalisability to other contexts. The sample consists predominantly of middle and upper management, potentially overlooking the perspectives of garment workers directly involved in production on the factory floor. Similarly, a sample of 37 managers may not reflect the opinions of the population. Future research should examine the long-term effects of stakeholders' sustainable practices with a broader sample, particularly in light of the ongoing

COVID-19 situation. In addition, it is essential to investigate the resilience of sustainability practices by measuring their impact on stakeholders' overall performance. Furthermore, the findings of this paper rely heavily on LEED-based factory practices, where stakeholders are already familiar with sustainability concepts and regulations and therefore benefit from sustainable practices. Research is needed that compares the performance of LEED and non-LEED factories, particularly with regard to SSCM practices that encompass social, economic, and environmental aspects. Exploring the perceptions of inbound stakeholders from non-LEED factories regarding sustainable practices and performance would provide valuable insights (Yadlapalli et al., 2019).

CRediT authorship contribution statement

Sharmin Julie: Writing – review & editing, Writing – original draft, Visualization, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Andrew Potter:** Writing – review & editing, Supervision, Project administration, Conceptualization. **Ruoqi Geng:** Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

No data was used for the research described in the article.

Appendix A. Supplementary material

Supplementary data to this article can be found online at https://doi.org/10.1016/j.clscn.2024.100162.

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