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Stakeholder Integration, Ethical Orientation, and Environmental Performance: Evidence From SMEs in Ghana

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Abstract

This paper offers a novel theoretical account of how and when stakeholder pressures translate into environmental performance. Building on the Natural Resource-Based View, we develop a moderated-mediation model showing a) stakeholder integration mediates the effect of primary and secondary stakeholder pressures on environmental performance (how) and b) organizational ethical orientation moderates this mediated effect (when). We tested our model in the context of Ghanaian manufacturing small and medium-sized enterprises (SMEs). A time-lagged survey of 367 firms showed that both primary and secondary stakeholder pressures positively influence environmental performance via stakeholder integration, and this mediated effect is stronger when ethical orientation is high rather than low. Our study advances research in three ways. First, it highlights the role of stakeholder integration as a relational capability distinct from traditional technical environmental capabilities. Second, it demonstrates the contingent role of ethical orientation in shaping sustainability outcomes. Third, it provides context-sensitive insights from SMEs operating in institutionally fragile environments.

Keywords: *stakeholders, Ghana, sub-Saharan Africa, sustainability, environmental performance*

1. Introduction

A growing body of research examining the relationship between organizations and the natural environment has made significant theoretical and empirical advances over the past three decades. Foundational contributions such as the Natural Resource-Based View (NRBV) (Farukh & Sajjad, 2025; Gabriel et al., 2025; Hart, 1995; Hart & Dowell, 2011) and stakeholder theory (Esposito et al., 2025; Freeman, 1999; Freeman et al., 2010; Matthews et al., 2025) have established that firms' environmental performance is shaped by external pressures and internal capabilities. A substantial body of empirical work demonstrates that stakeholders including regulators, customers, employees, communities, and activists exert pressures that influence firms' adoption of environmental practices (Charan & Murty, 2018a; Murillo-Luna et al., 2008; Sarkis et al., 2010, 2011; Trivedi et al., 2025; Wijen, 2014). At the same time, research grounded in capability perspectives argues that firms vary in their ability

to translate such pressures into performance outcomes (Grewatsch and Kleindienst, 2018; Helfat & Peteraf, 2003).

Despite these advances, the dominant theoretical lenses have been developed and tested primarily in the context of large corporations operating in industrialized economies. Prior review studies on corporate environmental performance and sustainability have consistently noted a strong empirical and theoretical bias toward large firms operating in developed and institutionally stable contexts (e.g., Asad et al., 2025; Islam et al., 2025). As a result, the mechanisms through which firms respond to environmental pressures are typically theorized under conditions of resource abundance and relatively effective regulatory enforcement. This leaves important gaps in our understanding of SMEs in developing countries, where firms face resource constraints, institutional voids, and rely more heavily on informal relationships and community embeddedness (Oyedele & Firat, 2020; Simba et al., 2025; Skalli et al., 2024). In particular, we know relatively little about how stakeholder pressures are translated into environmental performance in such contexts, and whether relational capabilities and ethical orientations operate differently under these conditions. Addressing these gaps requires more context-sensitive theorizing that reflects the institutional and socio-cultural realities of developing economies.

The need for context-sensitive theorizing is especially pressing in Africa. Sub-Saharan economies face acute environmental challenges, including biodiversity loss, pollution, and climate vulnerability, while simultaneously experiencing industrial expansion and institutional fragility (Boyomo et al., 2025; Kwablah & Amoah, 2022; Mbalyohere & Lawton, 2026). In such contexts, formal regulatory enforcement is often uneven, and firms operate within institutional voids that complicate the translation of environmental policy into practice (Amankwah-Amoah et al., 2018). At the same time, African firms are deeply embedded in local communities and influenced by relational norms emphasizing collective

welfare and moral obligation (Oyedele & Firat, 2020; Simba et al., 2025; Skalli et al., 2024). These contextual features raise important questions about how stakeholder pressures operate and how firms respond. Existing stakeholder theory suggests that firms adopt environmental practices in response to pressures from actors who can affect or are affected by firm activities (Freeman, 1999; de Sousa Jabbour et al., 2025; Zhang et al., 2025). Under instrumental stakeholder logic, managers engage in welfare-enhancing actions not solely out of moral motivation but to maintain access to critical resources and secure competitive advantage (Freeman et al., 2018b; Jones et al., 2018; Mitchell et al., 2016).

Empirical research confirms that stakeholder pressures are associated with improved environmental performance (Charan & Murty, 2018a; Sarkis et al., 2010). However, prior studies also highlight heterogeneity in responses. Not all firms subjected to similar pressures exhibit comparable environmental outcomes (Liston-Heyes & Vazquez-Brust, 2016). One explanation for this heterogeneity lies in organizational capabilities. The NRBV posits that environmental performance depends on the development of firm-specific capabilities that enable proactive environmental strategy (Hart, 1995; Hart & Dowell, 2011). Extending this logic, Bridoux and Stoelhorst (2016) argue that capabilities that foster stakeholder cooperation are central to joint value creation and social welfare. Previous work emphasizes that translating stakeholder pressures into performance requires not only environmental knowledge but also relational capabilities that facilitate engagement, coordination, and adaptation (Kazadi et al., 2016; Plaza-Úbeda et al., 2010; Shahzad et al., 2024; Sahoo, 2024; Trivedi et al., 2025; Wolf, 2014). Yet stakeholder integration, the capability to systematically know, interact with, and adapt to stakeholders has rarely been examined as a mediating mechanism between stakeholder pressures and environmental performance, particularly in SME contexts.

Furthermore, the ethical dimension of organizational response remains under-theorized. Stakeholder integration is not inherently normative; it can be deployed to create genuine collaborative value or, alternatively, to manage impressions and neutralize pressures (Bromley & Powell, 2012; Greenwood, 2007). Organizational ethical orientation, reflected in articulated values, codes of conduct, and shared moral norms may shape how managers interpret and act upon stakeholder demands (Hood, 2003; Hunt et al., 1989; Treviño et al., 2006). While prior research links ethical climate to social and environmental outcomes (Afzali et al., 2025; Blome & Paulraj, 2013; Erwin, 2011; López-Cabarcos et al., 2025), little is known about its moderating role in shaping the effectiveness of relational capabilities in sustainability contexts.

These gaps are amplified in African SME settings. Research on corporate social responsibility (CSR) in Africa has focused largely on multinational corporations and philanthropic or community-oriented initiatives (Kolk & Rivera-Santos, 2018; Kühn et al., 2018). Environmental performance among indigenous SMEs has received limited empirical attention (Essuman et al., 2026; Sarfo et al., 2025; Tawiah et al., 2024). Moreover, African business contexts are characterized by strong communal norms, customary authorities, and religious influences that may reshape stakeholder salience and ethical commitments (Egels-Zandén & Kallifatides, 2017; Metz, 2007). Secondary stakeholders such as local communities, NGOs, and media may exert influence comparable to, or greater than, primary contractual stakeholders in shaping environmental expectations.

Against this backdrop, we develop and test a framework that integrates stakeholder pressures, stakeholder integration capability, and ethical orientation to explain environmental performance among SMEs in Ghana. Ghana provides a theoretically meaningful setting: it is experiencing industrial growth alongside increasing environmental awareness and policy development, yet continues to face institutional constraints (Boyomo et al., 2025; Kwablah &

Amoah, 2022; Mbalyohere & Lawton, 2026). Using a time-lagged survey design with 367 manufacturing SMEs, we examine whether stakeholder integration mediates the relationship between pro-environmental stakeholder pressures and environmental performance, and whether organizational ethical orientation moderates this mechanism.

Our study contributes to three streams of research. First, we extend stakeholder theory by demonstrating that stakeholder salience is context-dependent and that secondary stakeholders may exert strong direct influence in institutionally fragile environments. Second, we integrate relational capabilities into the NRBV framework, identifying stakeholder integration as a key mediating mechanism linking external pressures to environmental outcomes. Third, we incorporate organizational ethical orientation as a boundary condition that shapes whether relational engagement translates into substantive environmental investment. By bringing together stakeholder theory, capability perspectives, and organizational ethics within an African SME context, we respond to calls for more contextually grounded and ethically informed theorizing in corporate sustainability (Freeman et al., 2018b; Jamali & Karam, 2018). In doing so, we provide a more nuanced account of how SMEs in developing economies navigate environmental pressures and contribute to sustainability transitions.

2. Theoretical background and hypothesis development

2.1 Stakeholders as Determinants of Environmental Performance

Stakeholders, defined as actors who can affect or are affected by a firm's activities (Freeman, 1999), are widely recognized as central drivers of corporate environmental practices (Appiah-Kubi et al., 2025; Charan & Murty, 2018a; Murillo-Luna et al., 2008; Sarkis et al., 2010, 2011; Shabbir, 2025; Wijen, 2014). Although firms may resist or deflect greening pressures, the stakeholder approach to strategic management (Freeman & McVea, 2001; Freeman et al., 2010; Jones et al., 2018) posits that organizations frequently adopt pro-environmental

practices to align with stakeholder expectations. Firms may engage in welfare-enhancing initiatives that do not yield immediate financial returns and are not solely morally motivated because doing so strengthens stakeholder relationships and secures access to critical resources (Freeman et al., 2018b; Mitchell et al., 2016). Under certain conditions, responding effectively to stakeholder expectations can also contribute to competitive advantage through enhanced value creation (Jones et al., 2018).

The Natural Resource-Based View (NRBV) further underscores the importance of organizational capabilities in achieving environmental performance (Azumah et al., 2025; Hart, 1995; Hart & Dowell, 2011; Siddiquei et al., 2025). Organizational capabilities, defined as the ability to perform coordinated tasks using firm resources to achieve specific outcomes (Helfat & Peteraf, 2003; Polas et al., 2025; Zacca, 2026), enable firms to translate external pressures into strategic action. Bridoux and Stoelhorst (2016) argue that capabilities that foster stakeholder cooperation are central to generating social welfare. Accordingly, firms require specific capabilities to respond to stakeholder demands and convert them into improved environmental performance (Grewatsch & Kleindienst, 2018; Plaza-Úbeda et al., 2010; Sarfo et al., 2025; Siddiqi et al., 2025). In this view, capabilities mediate the relationship between stakeholder pressures and organizational outcomes (Ferrell et al., 2010; Kazadi et al., 2016; Sarkis et al., 2010): greater pressures stimulate capability development, and the deployment of these capabilities enhances performance in stakeholder-relevant domains (Wolf, 2014).

Empirical research supports the mediating role of environmental capabilities such as environmental knowledge (Charan & Murty, 2018b; Guerci et al., 2016; Sarkis et al., 2010). Yet such capabilities do not fully account for heterogeneity in environmental performance under greening pressures (Liston-Heyes & Vazquez-Brust, 2016). A broader relational capability (i.e., stakeholder integration) may offer a more comprehensive explanation.

Stakeholder integration refers to a firm's ability to establish and sustain collaborative relationships with diverse stakeholders (Amankwah-Amoah et al., 2018; Kazadi et al., 2016; Plaza-Úbeda et al., 2010; Wolf, 2014). Failures to mitigate environmental challenges, such as climate change, often stem not from lack of intent but from insufficient capacity to coordinate multi-stakeholder partnerships (Pinkse & Busch, 2013). Stakeholder integration encompasses knowledge of stakeholders, the intensity of interaction with them, and adaptation to their claims (Plaza-Úbeda et al., 2010; Zhang et al., 2025). Firms possessing these capabilities are better positioned to interpret environmental demands, co-develop appropriate responses, and implement the necessary organizational and behavioral changes (Danso et al., 2019; Plaza-Úbeda et al., 2010).

Despite its theoretical relevance, stakeholder integration has not been fully conceptualized or empirically tested as a mediating mechanism between stakeholder pressures and environmental performance. The development of this capability depends on internally embedded processes and routines shaped by managerial interpretations (Grewatsch & Kleindienst, 2018; Rueda-Manzanares et al., 2008). These interpretations are influenced by a firm's ethical orientation—defined as the extent to which it adheres to and enacts ethical principles (Hood, 2003). Ethical orientation shapes how firms respond to stakeholder demands (Litz, 1996; Phillips, 2003; Weaver et al., 1999), yet stakeholder theory has rarely examined its role in enabling the effective deployment of capabilities in response to stakeholder pressures.

These theoretical gaps are compounded by contextual limitations in existing research. Evidence on SME environmental performance is predominantly drawn from developed economies (Clemente-Almendros et al., 2025; Mehmood et al., 2025; Ullah, 2025). Stakeholder theory has likewise focused primarily on large firms in developed countries or major emerging economies such as China and India (Dögl & Behnam, 2018). In

Africa, research on stakeholder pressures and non-financial performance remains limited and concentrates largely on multinational corporations and their social initiatives related to labor conditions, community development, and poverty alleviation (Kühn et al., 2018; Kolk & Rivera-Santos, 2018; Phiri et al., 2019; Yakovleva & Vazquez-Brust, 2018). Empirical studies examining stakeholder influence on environmental practices among African firms, particularly SMEs are scarce (Soundararajan et al., 2018).

2.2 Stakeholder pressures and stakeholder integration

Stakeholder theory conceptualizes the firm as a nexus of relationships linking managers and multiple stakeholder groups (Kock et al., 2012; Kumar et al., 2025; Mitchell et al., 2016; Valentinov, 2025). Stakeholder pressures, arising from regulation, social activism, rating agencies, and related monitoring mechanisms, raise the costs and risks associated with failing to respond to stakeholder claims (Shi et al., 2017). Managers are therefore incentivized to align organizational resources with the often-competing demands of diverse stakeholders to preserve stakeholder goodwill (Hill & Jones, 1992). As pro-environmental pressures intensify, so too does the strategic importance of addressing them.

Effectively managing such pressures requires the development of organizational capabilities that enable firms to identify priority stakeholders and engage them in ways tailored to specific issues (Freeman & McVea, 2001; Lee, 2011). This imperative is particularly salient for SMEs. Compared to large firms, SMEs typically maintain closer, more personal relationships with stakeholders (Fisher et al., 2009; Lähdesmäki et al., 2019; Spence, 2016), and their survival often depends heavily on stakeholder goodwill (Jenkins, 2004; Lepoutre & Heene, 2006). As a result, SME managers are likely to allocate resources toward developing stakeholder integration capabilities, enhancing their ability to understand stakeholder expectations, maintain relationships, and adapt to environmental claims (Delgado-Ceballos et al., 2012).

Increases in environmental stakeholder pressures should therefore stimulate greater efforts to integrate stakeholders and collaborate in addressing environmental concerns. These dynamics are amplified in SMEs, which cultivate close relational ties through both formal and informal interactions (Lähdesmäki et al., 2019). In developing-country contexts, stakeholder integration also functions as a survival mechanism. SMEs operating in institutionally fragile and resource-constrained environments depend on stakeholder relationships to navigate institutional voids and recurring crises (Abubakar et al., 2019; Soundararajan et al., 2018). Frequent communication and strong interpersonal ties enhance continued stakeholder support, particularly during periods of instability (Pajunen, 2006).

Stakeholder theory further distinguishes between primary and secondary stakeholders. Primary stakeholders are those “without whose continuing participation the corporation cannot survive as a going concern” (Clarkson, 1995, p. 106). These actors, such as shareholders, customers, governments, and employees, are directly linked to the firm through contractual relationships or formal authority (Eesley & Lennox, 2006; Savage et al., 1991). Because they control essential resources, including labor, capital, and institutional support, failure to address their demands can have immediate and severe consequences (Rueda-Manzanares et al., 2008). Empirical evidence suggests that environmental activism by primary stakeholders strongly shapes firms' perceptions of environmental risks and liabilities due to its direct operational implications (Vasi & King, 2012). Firms are thus motivated to develop capabilities that facilitate engagement with these stakeholders to mitigate such risks.

These arguments extend to SMEs in Africa. Shareholders, customers, governments, and employees remain critical for firm survival in developing economies (Asamoah et al., 2025; Billiet et al., 2025; Dögl & Behnam, 2018; Soundararajan et al., 2018), including African contexts (Amankwah-Amoah et al., 2019). Accordingly, we propose the following hypothesis:

H1a: *Primary stakeholder pressures positively relate to the degree of stakeholder integration*

Secondary stakeholders are indirectly connected to the firm and include actors such as non-governmental organizations, local communities, and the media (Eesley & Lennox, 2006). Although they lack formal contracts, legal authority, or direct control over essential firm resources, they can exert influence by shaping a firm's relationships with primary stakeholders (Eesley & Lennox, 2006). In particular, secondary stakeholders may either constrain or facilitate access to resources controlled by primary stakeholders (Su & Tsang, 2015). For example, NGO activism or adverse media coverage can affect customer purchasing behavior and damage firm reputation (Vasi & King, 2012).

Evidence from large firms suggests that the influence of secondary stakeholders is often indirect. Charan and Murty (2018b) report that, in India, secondary stakeholders affected environmental practices primarily through mediated channels. Similarly, Vasi and King (2012) show that large corporations frequently respond to activism by relying on public relations, lobbying, or advertising to neutralize secondary pressures rather than engaging substantively with these actors (see also Fooks et al., 2013).

Such assumptions, however, are less applicable to SMEs in African contexts. Unlike large corporations, SMEs lack the resources to counteract activism through sophisticated public relations strategies, making them more exposed to media and NGO pressures (Vasi & King, 2012). Moreover, SMEs are often deeply embedded in their local communities, where managers and employees maintain overlapping social and economic ties with local actors (Lepoutre & Heene, 2006; Soundararajan et al., 2018). This embeddedness heightens their sensitivity to secondary stakeholder claims.

Institutional conditions further amplify this effect. In many African countries, formal state institutions coexist with customary authorities and informal governance systems, which can carry comparable influence (Yakovleva & Vazquez-Brust, 2018). In such settings, the claims of secondary stakeholders may directly disrupt operations and threaten firm survival.

Yakovleva and Vazquez-Brust (2018) document how firms in Ghana actively pursued integration of secondary stakeholders to secure operational stability, even when doing so diverged from formal government policy. Additionally, in contexts characterized by low resource munificence, meeting the expectations of local communities and NGOs can provide SMEs with access to quasi-governmental support and protection of local assets (Jamali & Karam, 2018). Accordingly, as pressures from secondary stakeholders intensify, SMEs are likely to increase efforts to integrate these actors, developing capabilities to better understand their concerns, strengthen communication, and adapt organizational practices to their demands.

H1b: *Secondary stakeholder pressures positively relate to the degree of stakeholder integration*

2.3 Stakeholder Integration and Environmental Performance

Firms in developing countries are often portrayed as less instrumental and strategically oriented in their social and environmental engagement than firms in developed economies (Visser et al., 2017). In African contexts, responses to pro-social stakeholder demands are deeply embedded in social norms and moral expectations that position firms as contributors to community welfare and as substitutes for limited state capacity (Oyedele & Firat, 2020; Simba et al., 2025). Jamali (2008) documents the spontaneous philanthropic engagement of SMEs in developing countries, frequently grounded in personal morality and religious obligation. African moral philosophy places strong emphasis on duties to others, privileging relational obligations over individual advancement (Metz, 2007). SMEs in Africa are commonly guided by norms of care and benevolence toward communities (Oyedele & Firat, 2020; Simba et al., 2025), reflecting a relational moral framework that holds that “a person is a person through other persons” (Metz, 2007).

The Ubuntu philosophy, widely influential across sub-Saharan Africa, rejects decision-making that privileges some stakeholder claims over others on the basis of power or legitimacy and instead promotes consensus and collaboration, particularly in support of less salient or vulnerable groups (Metz, 2007). In this context, stakeholder relations theory provides a more appropriate lens. This perspective frames responsiveness to stakeholder demands as a duty of care (Cludts, 1999) and emphasizes that strong relational bonds facilitate collaboration and organizational adaptation (Bosse & Coughlan, 2016; Reynolds & Yuthas, 2008). Through stakeholder integration, firms can build relational assets that generate synergies and enhance environmental performance (Danso et al., 2019; Tantalo & Priem, 2016). For SMEs, broad stakeholder integration fosters community embeddedness (Soundararajan et al., 2018), unlocks reciprocity, and helps overcome financial and human capital constraints that impede environmental initiatives (Lepoutre & Heene, 2006). Given resource scarcity, firms in developing countries rely more heavily on relational assets and collaboration to advance environmental performance (de Souza Jabbour et al., 2017). In African settings, stakeholder integration may also provide access to local knowledge, customary authorities, and community networks that support environmental protection efforts (Amankwah-Amoah et al., 2019; Jamali et al., 2017a).

Research on SMEs in developing economies further suggests that these firms can navigate institutional voids through improvisation and recombination of stakeholder-provided resources, sometimes generating proportionally greater societal impact than larger firms (Soundararajan et al., 2018). Taken together, these arguments imply a positive relationship between stakeholder integration and environmental performance among African SMEs. Yet this relationship is not unambiguously positive. Firms often adopt stakeholder practices symbolically or selectively, even when they possess the capabilities to respond substantively (Bromley & Powell, 2012; Wijen, 2014). SMEs, like large firms, exhibit both responsible and

irresponsible behaviors (Soundararajan et al., 2018). Environmental concerns frequently rank below social initiatives in priority (Lepoutre & Heene, 2006), and managers in sub-Saharan Africa may perceive environmental improvements as economically disadvantageous (Amaeshi et al., 2016; Painter-Morland & Dobie, 2009). Where environmental objectives are viewed as conflicting with economic or social goals, managers may deprioritize environmental claims.

In such cases, stakeholder integration does not inherently guarantee environmental commitment. As Phillips et al. (2003) argue, stakeholder integration is morally neutral; it can be deployed without substantive social or environmental intent. Firms may cultivate stakeholder relationships instrumentally or even deceptively (Greenwood, 2007; Noland & Phillips, 2010). Strong relational bonds, including friendships and reciprocal ties, can reduce stakeholders' willingness or ability to withdraw resources when environmental demands are unmet (Bosse & Coughlan, 2016). Firms may therefore leverage relational capital to buffer against retaliation for weak environmental performance (Yakovleva & Vazquez-Brust, 2018).

Accordingly, stakeholder integration can either strengthen environmental performance by fostering genuine collaboration or weaken it if relational bonds are used strategically to reduce the costs of non-compliance. Whether the positive or negative effect prevails may depend on whether environmental protection is perceived as integral to social welfare and fulfillment of duty of care. African moral philosophy does not categorically prohibit instrumental use of relationships unless it undermines community welfare or core moral prescriptions (Metz, 2007). Thus, the impact of stakeholder integration on environmental performance may hinge on normative interpretations of environmental responsibility. Given these competing theoretical arguments and inconclusive empirical evidence, we advance two contrasting hypotheses to capture the divergent effects suggested in the literature.

H2a: *Stakeholder integration positively relates to environmental performance*

H2b: *Stakeholder integration negatively relates to environmental performance*

Having established linkages between stakeholder environmental pressures and stakeholder integration, and between stakeholder integration and environmental performance, we now consider the question of how stakeholder pressures improve environmental performance by influencing stakeholder integration development. Central to our argument is the idea that firms that have high levels of environmental performance will not necessarily be those who simply display high levels of stakeholder greening pressures; rather, it will be those who deploy stakeholder integration as a means to improve environmental performance in response to such pressures. Stakeholder integration, by providing organizations with capabilities to understand stakeholder pressures, collaborate with stakeholders and adapt to stakeholders' demands, is responsible for transmitting the effects of stakeholder pressures on improvements in environmental performance. On the other hand, stakeholder integration can also be developed as a means stakeholders' pressures without investing in the improvement of environmental practices, and therefore sustaining low levels of environmental performance despite pressures. In a nutshell, stakeholder integration is a central mechanism that indirectly channels, either positively or negatively, the influence of stakeholder environmental pressures into environmental performance. Thus, we propose the following hypotheses:

H3a: *The degree of stakeholder integration mediates the effect of primary stakeholder pressures on environmental performance.*

H3b: *The degree of stakeholder integration mediates the effect of secondary stakeholder pressures on environmental performance.*

2.4 Moderating role of ethical orientation

Whether stakeholder integration enhances or undermines environmental performance depends in part on moral considerations. Deploying stakeholder integration to buffer the risks of

underinvesting in environmental improvements constitutes a manipulation of stakeholder goodwill and can be viewed as ethically problematic. In contexts characterized by conflicts of interest, ethical standards play a critical role in constraining opportunistic behavior (Efelsberg & Solga, 2015; Freeman et al., 2012). Organizations embed formal and informal mechanisms that socialize members into accepted patterns of judgment and conduct (Treviño et al., 2006). Ethical orientation reflects the extent to which firms articulate and enact ethical values through codes, statements, and shared norms that guide decision-making (Cuadrado-Ballesteros et al., 2017; Stevens, 2008). Where ethical orientation is explicit and institutionalized, managers demonstrate greater sensitivity to ethical issues and lower incidence of unethical conduct (Hunt et al., 1989; Weaver et al., 1999), in part because ethical behavior is reinforced and misconduct sanctioned (Hollingworth & Valentine, 2015). Firms characterized by a strong ethical climate are more likely to adopt socially responsible practices (Blome & Paulraj, 2013) and to achieve superior environmental performance (Erwin, 2011; Lee & Ha-Brookshire, 2017). Notably, Erwin (2011) finds that ethical codes exert stronger effects on sustainability performance when managers are not already intrinsically motivated toward sustainability, suggesting that ethical orientation can discipline discretionary managerial choices. Accordingly, a strong ethical orientation reduces the likelihood that managers will instrumentalize stakeholder integration to shield weak environmental performance. Conversely, when managers seek to leverage stakeholder integration to improve environmental outcomes, ethical orientation can amplify collaborative intent and strengthen positive effects. While in some Western contexts formal ethical statements may serve primarily symbolic purposes, such instrumental signaling is less plausible in many developing countries, where ethical norms are closely intertwined with cultural and religious values and violations invite community sanctions (Hettihewa et al., 2019; Visser et al., 2017). Among African SMEs, ethical orientation frequently reflects the personal values and community commitments of owner-managers

(Oyedele & Firat, 2020; Simba et al., 2025). Publicly expressed ethical commitments may therefore heighten scrutiny and expose reputational risks, particularly in relation to community or religious leaders (Metz, 2007).

Prior research underscores the salience of values and ethics in African institutional environments (Egels-Zandén & Kallifatides, 2017; Hamann et al., 2017), where regulatory enforcement capacity is often limited (Reddy & Hamann, 2018). In such contexts, ethical orientation may substitute for weak formal institutions in guiding managerial conduct. We therefore argue that ethical orientation conditions how managers deploy relational bonds developed through stakeholder integration. Firms with strong ethical orientation are more likely to align stakeholder integration practices with stakeholder interests, thereby reinforcing the positive relationship between stakeholder integration and environmental performance.

H4: *The positive (negative) effect of stakeholder integration on environmental performance is increased (decreased) when a firm's ethical orientation is stronger.*

3. Method

3.1 Study setting

Ghana provides an appropriate empirical setting for examining our hypotheses. As a sub-Saharan economy that has increasingly specialized in pollution-intensive production, Ghana faces mounting environmental pressures. In response, the government has introduced policies targeting air and water pollution, as well as waste management, to strengthen environmental protection (Boyomo et al., 2025). Yet regulatory enforcement remains uneven, and firms continue to operate in a context characterized by institutional weaknesses and constrained access to critical resources (Adomako et al., 2019).

At the same time, Ghanaian firms display substantial engagement in activities aimed at enhancing social welfare, and environmental concerns are gaining prominence within corporate agendas (Agyei & Yankey, 2019; Amankwah-Amoah et al., 2019; Gruber &

Schlegelmilch, 2015). Environmental policymaking and practice in Ghana emphasize multi-stakeholder involvement, with broad participation by public authorities, civil society, and private actors (Gruber & Schlegelmilch, 2015; Lawson, 2016). This institutional emphasis on stakeholder inclusion aligns with a broader resurgence of pre-colonial philosophies and ethical traditions that foreground communal responsibility and duty of care.

These contextual features, growing environmental pressures, institutional fragility, active stakeholder engagement, and culturally embedded norms of communal responsibility, make Ghana a particularly suitable setting to test our theoretical arguments regarding stakeholder pressures, stakeholder integration, ethical orientation, and environmental performance.

3.2 Data collection

We collected data from manufacturing SMEs in Ghana. In developing economies, the manufacturing sector is widely regarded as a driver of economic growth, employment generation, and positive spillovers (Tybout, 2000). At the same time, manufacturing activities are a major source of environmental degradation in these contexts (World Bank, 2008), making the sector particularly relevant for examining environmental performance.

Our sampling frame was drawn from the database of the Association of Ghana Industries (AGI). From this population, we identified 860 SMEs that met four criteria: (1) independent firms not affiliated with a corporate group; (2) firms employing no more than 250 full-time employees, consistent with the Ghana Statistical Service definition of SMEs (Ghana Statistical Service, 2006); (3) firms engaged in the production of physical goods; and (4) availability of complete contact information for the founder or CEO and the finance manager. Founders/CEOs were selected because they are most knowledgeable about strategic issues such as stakeholder pressures, stakeholder integration, and ethical orientation, whereas finance managers were chosen to report on environmental performance due to their more objective

oversight of firm-level outcomes; this separation of respondents also helps mitigate common method bias.

We employed a two-wave survey design with a one-year time lag between waves to mitigate common method concerns (Podsakoff et al., 2003). At Time 1 (T1), questionnaires were delivered in person to the CEOs of all 860 firms to collect data on control variables, stakeholder pressures, stakeholder integration, and ethical orientation.

To further reduce common method bias, environmental performance was measured at Time 2 (T2), one year after T1, by surveying finance managers. Of the 389 firms that participated at T1, 373 finance managers responded at T2. A one-year time lag was chosen to allow sufficient time for stakeholder pressures and integration practices to translate into observable changes in environmental performance, while remaining short enough to minimize confounding effects from major structural changes. We excluded six cases in which the CEO also served as finance manager, resulting in a final matched sample of 367 firms, corresponding to a response rate of 42.67 percent. In addition, we compared firms that participated in both waves with those that dropped out after T1 and found no significant differences in key firm and CEO characteristics, suggesting that attrition bias is unlikely to affect the results. On average, sampled firms had operated for 34 years and employed 71 full-time staff.

3.3 Measure of constructs

All multi-item scales were measured on a seven-point scale with anchors ranging from 1=strongly disagree to 7=strongly agree. The measures were taken from previous studies.

3.3.1 Stakeholder pressure. This construct was measured with items taken from Charan and Murty (2018a). Primary stakeholder pressure was composed of four items whilst the secondary stakeholder pressure was measured with three items. We asked respondents to rate the extent to which they perceived pressures from stakeholders to take action on their environmental activities.

3.3.2 Stakeholder integration. We measured stakeholder integration using a three-dimensional scale capturing firms' knowledge of stakeholders, interaction with stakeholders, and adaptation to stakeholder demands (Plaza-Úbeda et al., 2010). Knowledge of stakeholders was assessed with four items, stakeholder interaction with four items, and adaptation to stakeholder demands with five items. The knowledge dimension is conceptualized as an organizational capability reflecting the systematic acquisition, codification, and prioritization of stakeholder-related information. Accordingly, the items capture complementary aspects of this capability, including documentation practices, managerial emphasis, and resource allocation, which together indicate the extent to which firms develop structured stakeholder awareness. Consistent with prior research (Adomako et al., 2019; Amankwah-Amoah et al., 2019; Plaza-Úbeda et al., 2010) stakeholder integration is conceptualized as a reflective higher-order construct comprising knowledge, interaction, and adaptation. These dimensions are theoretically distinct but represent interrelated manifestations of an underlying capability and are therefore expected to covary. Given this conceptualization and the absence of strong theoretical justification for differential weighting, we aggregate the three dimensions using an equal-weighted average, a common and parsimonious approach in multidimensional capability research. The average of the three dimensions thus represents the composite measure of stakeholder integration. To empirically substantiate this specification, Section 3.4 reports the inter-dimensional correlations, a second-order confirmatory factor analysis, and a comparison of alternative measurement structures (Table 1b). The three dimensions load comparably onto the second-order stakeholder integration factor (standardized loadings ranging from 0.78 to 0.82), supporting their treatment as approximately equally weighted reflective indicators. As a robustness check, we also re-estimated the focal models using a factor-score-weighted composite and a latent second-order specification of stakeholder integration; the pattern, direction, and

significance of the results were substantively unchanged.

3.3.3 Ethical orientation. We measured a firm's ethical orientation with two items from Hood (2003) and four items from Hunt et al. (1989) corporate ethics scale. Accordingly, CEOs were asked to rate their level of agreement with seven statements that capture the ethical culture of the firm in question.

3.3.4 Environmental performance. Previous studies investigating the relation between stakeholders' pressures and environmental performance use subjective self-evaluation of implementation of practices (Sarkis et al., 2010), or indicators such as carbon emissions and energy reduction (Berrone et al., 2007), where improvements may be the consequence of less productivity. Following the same approach, we measured environmental performance using four items from Judge and Douglas (1998). Finance managers or chief accountants were asked to provide answers to the environmental performance questions. This scale has been used to capture environmental performance (Chen et al., 2015). Table 1, below, displays the items used to measure our constructs.

3.3.5 Control variables. We controlled for firm size, age, financial slack, founder/CEOs' age, gender, and education. These variables have been found to influence environmental performance (Russo & Fouts, 1997; Shevchenko et al., 2016). Firm size was measured by using the logarithm of the number of employees, whilst firm age was measured as a logarithm of the number of years since a firm's inception (Akgün et al., 2012). Financial slack was measured with cash reserves at the end of the financial year 2022 (Voss et al., 2008). Gender was coded as 0=male; 1=female and *education* ("1" = "high school", "2" = "bachelor's degree", "3" = "master's degree", and "4" = "doctoral degree")

Table 1: Measures and results of validity tests of multi-item constructs

Measurement items	Standardized loadings (t-values)
Primary stakeholder pressure: $\alpha=0.86$; CR=0.86; AVE=0.62	
Government/ regulators	0.74
Customers/suppliers	0.78
Employees	0.83
Competitors	0.81
Secondary stakeholder pressure: $\alpha=0.88$; CR=0.89; AVE=0.73	
Local community	0.89
Nongovernmental organizations/activists	0.88
Media	0.80
Knowledge of stakeholders: $\alpha=0.86$; CR=0.89; AVE=0.68	
The company keeps documented information on the previous relationships with stakeholders	0.80
Knowledge of all stakeholders and their demands is very important for the managers	0.78
The company dedicates little time and few resources to knowing the characteristics of its stakeholders (r)	0.87
There is a lack of information and documentation on stakeholders' demands (r)	0.86
Stakeholders' interactions: $\alpha=0.84$; CR=0.85; AVE=0.59	
The company frequently has meetings with the stakeholders	0.70
The company consults the stakeholders and asks them for information before taking decisions	0.74
The company's formal or informal cooperation with the stakeholders is intense	0.88
Stakeholders participate in the company's decision-taking process	0.75
Adaptation to stakeholders: $\alpha=0.86$; CR=0.87; AVE=0.58	
The company makes a special effort to prepare the information for the different stakeholders	0.85
There is frequent managerial debate about the demands of the stakeholders	0.71
The company is willing to change its objectives in line with stakeholders' demands	0.69
The company dedicates little time and few resources to adapting to stakeholders' demands (r)	0.74
The company's policies and priorities are adapted to stakeholders' demands	0.80
Ethical Orientation: $\alpha=0.91$; CR=0.92; AVE=0.66	
This company has a formal statement of its ethical stance	0.75
The mission for this company includes a statement of ethical practices and behavior	0.87
Managers in my company often engage in behaviours that I consider to be unethical (reverse coded)	0.80
In order to succeed in my company, it is often necessary to compromise one's ethics (reverse coded)	0.84
Top management in my company has let it to be known in no uncertain terms that unethical behaviors will not be tolerated.	0.77
If a manager in my company is discovered to have engaged in unethical behavior that results primarily in personal gain (rather than corporate gain), he or she will be promptly reprimanded.	0.85
Environmental performance: $\alpha=0.86$; CR=0.87; AVE=0.63	
Complying with environmental regulations	0.80
Preventing and mitigating environmental crises	0.76
Limiting environmental impact beyond regulatory compliance	0.85
Educating employees and the public about the environment	0.87

Note: r =reverse coded; t-values are in parentheses; AVE=average variance extracted; CR=construct reliability; α =Cronbach alpha value

3.4 Potential biases, reliability and validity assessment

We assessed potential non-response bias by comparing respondents and non-respondents on key firm and CEO characteristics. Using Pearson's chi-square tests for categorical variables (Greenwood & Nikulin, 1996), we found no significant differences in firm size, firm age, CEO age, gender, or education. These results suggest that non-response bias is unlikely to threaten the validity of our findings (Armstrong & Overton, 1977; Rogelberg & Stanton, 2007).

To evaluate common method bias, we adopted multiple procedural and statistical remedies. First, following Lindell and Whitney (2001), we employed a marker variable approach. The item “I enjoy watching TV,” which is theoretically unrelated to the focal constructs, served as the marker. Correlations between the marker and study variables were small and non-significant, ranging from -0.01 to 0.02 , indicating minimal concern.

Second, we implemented the CFA-based approach recommended by Carson et al. (2007). We estimated a combined congeneric measurement model including all multi-item constructs and an unmeasured common method factor loading on all indicators. Two competing models were compared. Model 1, a trait-only model with each indicator loading on its respective latent construct, demonstrated acceptable fit ($\chi^2/\text{d.f.} = 808.11/238 = 3.39$; RMSEA = 0.06 ; NNFI = 0.95 ; CFI = 0.96 ; SRMR = 0.06). Model 2, a trait-method model incorporating a common latent factor, also exhibited acceptable fit ($\chi^2/\text{d.f.} = 748.02/215 = 3.48$; RMSEA = 0.05 ; NNFI = 0.96 ; CFI = 0.97 ; SRMR = 0.08). The improvement in fit was marginal, suggesting that common method variance does not substantially bias the results.

We report reliability and validity statistics in Table 1. Using LISREL 8.71, we conducted confirmatory factor analysis to assess the discriminant validity of the study constructs. We compared alternative models ranging from a seven-factor model, in which each construct was specified separately, to a one-factor model collapsing all constructs into a single latent factor. The hypothesized seven-factor model demonstrated superior fit ($\chi^2/\text{d.f.} = 2.52$; RMSEA = 0.06 ; NNFI = 0.92 ; CFI = 0.93 ; SRMR = 0.06) relative to the one-factor model ($\chi^2/\text{d.f.} = 1.24$; RMSEA = 0.09 ; NNFI = 0.56 ; CFI = 0.60 ; SRMR = 0.11), supporting discriminant validity. Composite reliability (CR) values exceeded the recommended threshold of 0.60 , and average variance extracted (AVE) values were above 0.50 for all constructs (Bagozzi & Yi, 2012). All factor loadings were significant at the 1 percent level, supporting convergent validity. Moreover, AVE values for each construct exceeded the highest shared

variance with other constructs, consistent with the Fornell and Larcker (1981) criterion for discriminant validity. Together, these results provide strong evidence of reliability and construct validity.

To further address the internal coherence of the knowledge-of-stakeholders dimension, we examined item-level evidence beyond the standardized loadings reported in Table 1. Table 1a presents the inter-item correlations and the corrected item–total correlations for the four knowledge items. All inter-item correlations are positive, statistically significant, and moderate-to-strong (ranging from 0.62 to 0.74; mean inter-item correlation = 0.68), comfortably exceeding the 0.30 benchmark commonly used to infer unidimensionality (Clark & Watson, 1995). The corrected item–total correlations range from 0.66 to 0.75, all well above the conventional 0.30–0.40 threshold (Nunnally & Bernstein, 1994), and Cronbach’s alpha would not increase upon deletion of any single item. Considered together with the strong loadings and the dimension’s reliability ($\alpha = 0.86$; CR = 0.89; AVE = 0.68), these results indicate that the items, capturing documentation practices, managerial emphasis, and resource allocation, coherently reflect a single underlying stakeholder-knowledge capability rather than conceptually disjoint processes.

Table 1a: Inter-item and corrected item–total correlations for the knowledge-of-stakeholders dimension

Knowledge item	1	2	3	4	Corrected item–total r	α if item deleted
K1. Keeps documented information on previous relationships with stakeholders	1.00				0.68	0.84
K2. Knowledge of all stakeholders and their demands is important for managers	0.62	1.00			0.66	0.85
K3. Dedicates little time and few resources to knowing stakeholders (r)	0.69	0.67	1.00		0.75	0.81
K4. Lack of information and documentation on stakeholders’ demands (r)	0.68	0.66	0.74	1.00	0.74	0.82

Note: N = 367. K1–K4 denote the four knowledge-of-stakeholders items reported in Table 1. (r) = reverse-coded item; reverse-coded items were recoded prior to computing correlations. All inter-item and corrected item–total correlations are significant at $p < 0.01$. Mean inter-item correlation = 0.68. α = Cronbach’s alpha (full-dimension $\alpha = 0.86$).

We further assessed the appropriateness of modelling stakeholder integration as a reflective higher-order construct. Table 1b reports the inter-dimensional correlations among the three first-order dimensions, the second-order confirmatory factor analysis (CFA) loadings, and a comparison of competing measurement structures. The three dimensions are moderately-to-strongly inter-correlated (knowledge–interaction = 0.61; knowledge–adaptation = 0.58; interaction–adaptation = 0.64; all $p < 0.01$), yet the correlations remain below the square root of each dimension’s AVE, indicating that the dimensions are related but empirically distinct. Each dimension loads substantially and comparably on the second-order stakeholder integration factor (standardized second-order loadings of 0.78, 0.82, and 0.80 for knowledge, interaction, and adaptation, respectively; all $p < 0.01$). The second-order model fits the data well ($\chi^2/\text{d.f.} = 2.41$; RMSEA = 0.06; CFI = 0.95; NNFI = 0.94; SRMR = 0.05) and is virtually indistinguishable from the more flexible correlated first-order three-factor model ($\chi^2/\text{d.f.} = 2.34$; RMSEA = 0.06; CFI = 0.95; NNFI = 0.94; SRMR = 0.05), yielding a target (Marsh & Hocevar, 1985) coefficient of 0.97. Both models clearly outperform a one-factor model in which all stakeholder integration items load on a single latent factor ($\chi^2/\text{d.f.} = 5.86$; RMSEA = 0.12; CFI = 0.74; NNFI = 0.69; SRMR = 0.11). The high target coefficient indicates that the second-order factor accounts for nearly all of the covariation among the first-order dimensions, supporting the reflective higher-order specification. Because the three dimensions contribute comparably to the higher-order factor, the equal-weighted composite used in our main analyses is empirically justified; as noted in Section 3.3, alternative weighting schemes produced substantively identical results.

Table 1b: Inter-dimensional correlations, second-order CFA loadings, and comparison of alternative measurement models for stakeholder integration

Panel A: Inter-dimensional correlations among the first-order dimensions
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Dimension	1	2	3		
1. Knowledge of stakeholders	1.00				
2. Stakeholder interaction	0.61	1.00			
3. Adaptation to stakeholders	0.58	0.64	1.00		
Panel B: Second-order CFA — standardized loadings on the stakeholder integration factor					
First-order dimension	Loading		t-value		
Knowledge of stakeholders	0.78		12.84		
Stakeholder interaction	0.82		13.97		
Adaptation to stakeholders	0.80		13.41		
Panel C: Comparison of alternative measurement models					
Model	$\chi^2/\text{d.f.}$	RMSEA	CFI	NNFI	SRMR
Correlated three-factor (first-order)	2.34	0.06	0.95	0.94	0.05
Second-order (stakeholder integration)	2.41	0.06	0.95	0.94	0.05
One-factor	5.86	0.12	0.74	0.69	0.11
Target coefficient (first-order χ^2 / second-order χ^2 ; Marsh & Hocevar, 1985) = 0.97					

Note: N = 367. Panel A reports latent-variable correlations from the correlated three-factor CFA; all are significant at $p < 0.01$. Panel B reports standardized loadings of each first-order dimension on the second-order stakeholder integration factor, with associated t-values; all are significant at $p < 0.01$. Panel C compares the fit of the three competing specifications. The target coefficient (Marsh & Hocevar, 1985) is the ratio of the first-order to the second-order model chi-square; values approaching 1.0 indicate that the second-order factor explains the covariation among the first-order dimensions. CFI = comparative fit index; NNFI = non-normed fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

Table 2: Descriptive statistics and correlations

	Variable	1	2	3	4	5	6	7	8	9	10	11
1.	Firm size (employees)											
2.	Firm age	0.14*										
3.	Financial slack #	0.09	-0.01									
4.	CEO age	-0.03	0.04	0.00								
5.	Education	-0.12	-0.13*	0.03	0.04							
6.	Gender	0.15*	-0.14*	-0.01	0.00	0.03						
7.	Ethical orientation	-0.09	-0.05	0.11	0.14*	0.12	0.01					
8.	Primary stakeholder pressure	0.07	-0.11	0.02	0.05	0.02	0.02	0.06				
9.	Secondary stakeholder pressure	-0.15*	-0.07	0.01	0.02	0.05	0.05	0.01	0.06			
10.	Stakeholder integration	-0.15*	-0.14*	0.18**	0.14*	0.11	0.09	0.18**	0.19**	0.20**		
11.	Environmental performance	0.19**	0.11	-0.09	0.06	0.04	0.06	0.15*	0.29**	0.36**	0.22**	
	Mean	71.54	34.34	10.87	49.61	2.23	0.47	4.27	4.81	4.47	4.96	4.38
	SD	121.38	58.18	9.59	12.69	1.01	0.51	1.36	1.32	1.24	0.84	1.15

* $p < 0.05$; ** $p < 0.01$; SD = Standard Deviation. #=Natural logarithm transformation of the original values and the mean value for this construct can be interpreted as a percentage.

4. Hypothesis testing

We tested the direct and moderating hypotheses using hierarchical regression analysis. Diagnostic tests indicated no violations of key regression assumptions. To mitigate potential multicollinearity in estimating interaction effects (Aiken & West, 1991), we mean-centered the continuous variables involved in the interaction terms. Post-estimation diagnostics confirmed that multicollinearity was not a concern; the highest variance inflation factor was 2.54, well below the conventional threshold of 10 (Neter et al., 1990).

Normality of residuals was supported by Kolmogorov–Smirnov tests (Massey, 1951), which indicated that standardized residuals were approximately normally distributed. The White test (White, 1980) further suggested the absence of heteroskedasticity.

We first examined the effects of primary and secondary stakeholder pressures on stakeholder integration (H1a and H1b) in Models 1–3. Next, we estimated the effect of stakeholder integration on environmental performance (H2) and tested the moderating role of organizational ethical orientation in this relationship (H4) in Models 4–6. Finally, we assessed the indirect effects associated with H3a and H3b using the PROCESS macro (Preacher & Hayes, 2008), with results reported in Table 4. This analytical approach is consistent with established practice in recent management research (Breugst et al., 2012; Oo et al., 2019).

Table 3: Regression Results

	Models 1–3: Stakeholder Integration			Models 4–6: Environmental Performance		
<i>Control variables</i>	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Firm size (employees)	-0.11	-0.11	-0.10	0.15*	0.14*	0.13*
Firm age	-0.08	-0.08	-0.06	0.05	0.04	0.04
Financial slack#	0.22**	0.21**	0.20**	-0.04	-0.04	-0.05
CEO age	0.12	0.11	0.11	0.06	0.05	0.04
Education	0.06	0.06	0.05	0.02	0.02	0.02
Gender	0.04	0.04	0.04	0.02		
<i>Independent variable</i>						
Primary stakeholder pressure			0.15*		0.28**	0.03
Secondary stakeholder pressure			0.17*		0.32**	0.04
<i>Moderator</i>						
Ethical orientation (EO)		0.14*			0.11	0.12*
<i>Mediator</i>						
Stakeholder integration (SI)					0.23**	0.19**
<i>Interaction</i>						
SI x EO						0.48**
<i>Model fit statistics</i>						
F	1.55	3.93**	4.95**	1.50	3.99**	5.85**
R ²	0.12	0.16	0.22	0.11	0.17	0.25
ΔR ²	-	0.04	0.06	-	0.06	0.08
Largest VIF	2.19	2.22	2.31	1.18	2.43	2.54

N=367; * p < 0.05; ** p < 0.01; standardised coefficients are shown. #=Logarithm transformation of original values.

Descriptive statistics and correlations are presented in Table 2. Prior to hypothesis testing, we examined plots of standardized residuals against predicted values; no substantial deviations from linearity or homoscedasticity were detected. To minimize multicollinearity in estimating interaction effects (Aiken & West, 1991), continuous variables involved in the interaction were mean-centered. Post-estimation diagnostics confirmed that multicollinearity was not problematic, with the highest variance inflation factor equal to 2.54, well below the threshold of 10 (Neter et al., 1990). Kolmogorov–Smirnov tests indicated that standardized residuals approximated normal distribution (Massey, 1951), and the White test suggested no evidence of heteroskedasticity (White, 1980).

Table 3 reports the hierarchical regression results. Model 1 includes control variables, and Model 2 introduces the main effects of the focal predictors. Hypothesis 1a posited a positive relationship between primary stakeholder pressures and stakeholder integration. As

shown in Model 3, primary stakeholder pressure is positively and significantly associated with stakeholder integration ($\beta = 0.15$, $p < 0.05$), supporting H1a. Hypothesis 1b predicted a positive relationship between secondary stakeholder pressures and stakeholder integration. Model 3 indicates that secondary stakeholder pressure is also positively and significantly related to stakeholder integration ($\beta = 0.17$, $p < 0.05$), supporting H1b.

Hypothesis 2 proposed that stakeholder integration would be positively related to environmental performance. Results from Model 5 provide support for H2, showing a positive and significant association between stakeholder integration and environmental performance ($\beta = 0.23$, $p < 0.01$).

Hypothesis 4 examined the moderating role of ethical orientation. Model 6 shows that the interaction between stakeholder integration and ethical orientation is positive and statistically significant ($\beta = 0.48$, $p < 0.01$), supporting H4. To interpret the interaction, we followed the procedure outlined by Cohen (2003) and plotted the relationship at ± 1 standard deviation of ethical orientation using mean-centered values. Figure 1 illustrates that the positive relationship between stakeholder integration and environmental performance is stronger among firms with high ethical orientation. Simple slope analyses indicate that the effect of stakeholder integration on environmental performance is significant at high levels of ethical orientation ($t = 2.99$, $p < 0.01$) but not at low levels ($t = 0.41$, n.s.), further corroborating the moderating effect.

We tested the mediation hypotheses (H3a and H3b) using bootstrapping procedures as recommended in prior research (Breugst et al., 2012; Oo et al., 2019). The results are reported in Table 4. The indirect effect of primary stakeholder pressure on environmental performance through stakeholder integration is positive and significant (indirect effect = 0.26; 95% CI = 0.05–0.45), supporting H3a. Similarly, the indirect effect of secondary stakeholder

pressure via stakeholder integration is positive and significant (indirect effect = 0.11; 95% CI = 0.02–0.33), supporting H3b.

Table 4. Mediation analysis with bootstrapped effect estimates

Hypothesized mediation paths	Bootstrap-indirect effect	SE ^a	95% CI ^b	95% CI ^b
Primary stakeholder pressure → stakeholder integration → environmental performance	0.26	0.14	0.05	0.45
Secondary stakeholder pressure → stakeholder integration → environmental performance	0.11	0.09	0.02	0.33

N = 367. ^a standard error, ^b confidence interval; CI are bias corrected based on 10,000 bootstrap samples

We further examined the conditional indirect effects of primary and secondary stakeholder pressures on environmental performance through stakeholder integration at varying levels of organizational ethical orientation using the PROCESS macro (Preacher et al., 2007). Ethical orientation was set at one standard deviation above and below the mean to represent high and low levels, respectively. The results indicate that the indirect effect of primary stakeholder pressure on environmental performance is contingent on ethical orientation. As reported in Table 5a, the indirect effect is positive and significant at high levels of ethical orientation (indirect effect = 0.06; 95% CI = 0.04 to 0.16), whereas it is weak and non-significant at low levels (indirect effect = -0.01; 95% CI = -0.02 to 0.05).

A similar pattern emerges for secondary stakeholder pressure. Table 5b shows that the indirect effect through stakeholder integration is stronger and significant when ethical orientation is high (indirect effect = 0.04; 95% CI = 0.05 to 0.18), but weak and non-significant at low levels of ethical orientation (indirect effect = -0.01; 95% CI = -0.01 to 0.04, including zero). These findings indicate that the mediating role of stakeholder integration is activated primarily in firms characterized by strong ethical orientation, thereby providing additional support for Hypothesis 4.

Table 5a. Moderated mediation effect of primary stakeholder pressure on environmental performance across levels of ethical orientation

Moderator	Environmental performance				
	Level	Conditional indirect effect	SE	LL 95% CI	UL 95% CI
Ethical orientation	Low (-1.09)	-0.01	0.01	-0.02	0.05
	High (1.09)	0.06	0.03	0.04	0.16

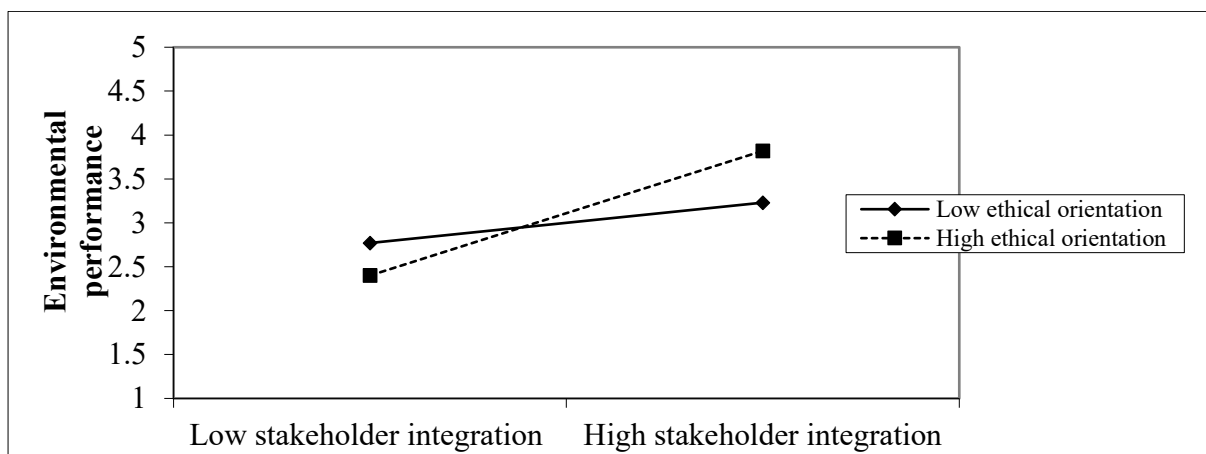
N = 367. Results are based on 10,000 bootstrap sample

Table 5b. Moderated mediation effect of secondary stakeholder pressure on environmental performance across levels of ethical orientation

Moderator	Environmental performance				
	Level	Conditional indirect effect	SE	LL 95% CI	UL 95% CI
Ethical orientation	Low (-0.93)	-0.01	0.00	-0.01	0.04
	High (0.93)	0.05	0.04	0.05	0.18

N = 367. Results are based on 10,000 bootstrap sample

Figure 1: Interaction Effect of Stakeholder Integration with Ethical Orientation on Environmental Performance



4.1 Post hoc analyses

We conducted several additional analyses to assess the robustness of our findings.

First, we re-estimated the regression models using randomly selected subsamples ranging from 90 percent to 50 percent of the full sample (Boling et al., 2016; Slevin & Covin, 1997).

Across these alternative specifications, the coefficients associated with our hypotheses remained stable and, in some cases, increased in statistical significance. These results suggest that the findings are not driven by particular sample compositions.

Second, we estimated an alternative model including market dynamism as an additional control variable (Helmig et al., 2016). Market dynamism was not significant, and the substantive results remained unchanged. This provides further confidence that the observed relationships are not attributable to omitted contextual factors (Stam, 2010).

Third, we employed environmental expenditure as an alternative dependent variable. Environmental expenditure was operationalized as spending on green activities relative to sales, return on investment, and profit, offering a more direct indicator of firms' financial commitment to environmental initiatives. We retested the mediation hypotheses using bootstrapping procedures to generate confidence intervals (Preacher et al., 2007). The indirect effect of primary stakeholder pressure via stakeholder integration remained significant ($ab = 0.19, p < 0.01; 95\% \text{ CI } [0.11, 0.28]$), supporting H3a. Similarly, the indirect effect of secondary stakeholder pressure was significant ($ab = 0.16, p < 0.01; 95\% \text{ CI } [0.10, 0.27]$), supporting H3b. In both cases, the 95 percent confidence intervals excluded zero, reinforcing the robustness of the mediation results.

5. Discussion and implications

Our results yield several nuanced insights regarding how and when stakeholder pressures translate into environmental performance in SMEs. First, stakeholder pressures enhance envi-

ronmental performance by fostering the development of stakeholder integration as a relational capability. Second, this capability-based mechanism is contingent on firms' ethical orientation, such that the positive effect of stakeholder integration on environmental performance is strengthened when ethical commitments are more pronounced. Next, we discuss the theoretical implications of these findings.

5.1 Implications for theory

Our findings offer several contributions to research on corporate sustainability and generate important implications for stakeholder theory, capability perspectives, and business ethics scholarship. First, consistent with our predictions, both primary and secondary stakeholder pressures positively influence stakeholder integration. As primary stakeholder pressures intensify, firms increase efforts to understand stakeholder demands, interact more frequently, and adapt organizational practices accordingly. This aligns with research emphasizing the strategic importance of cultivating relationships with core resource holders such as governments, customers, and employees (Charan & Murty, 2018a; Kock et al., 2012; Mitchell et al., 2016; Murillo-Luna et al., 2008; Sarkis et al., 2010, 2011). Importantly, our results highlight the strong influence of secondary stakeholders. While prior research often conceptualizes secondary stakeholders as indirectly influential—primarily shaping outcomes through their effects on primary stakeholders (Su & Tsang, 2015; Thijssens et al., 2015) our findings suggest that, in this context, secondary stakeholders exert direct and substantial influence. Pressures from local communities, NGOs, and media trigger even stronger stakeholder integration responses than those from primary stakeholders. If stakeholder salience is inferred from the level of firm investment in satisfying stakeholder demands (Garcia-Castro & Francoeur, 2016), then secondary stakeholders in our sample appear as salient as contractual stakeholders. Theoretically, this challenges static, hierarchy-based models of stakeholder salience and

reinforces calls for context-sensitive stakeholder theory. Saliency is not inherent to stakeholder categories but contingent on institutional environments and issue domains. In developing contexts characterized by institutional voids, informal governance structures, and dense community embeddedness, non-contractual actors may command influence comparable to, or exceeding, that of formal regulatory stakeholders (Visser et al., 2017). Our findings thus extend stakeholder theory by demonstrating that issue-specific and context-specific saliency must be theorized dynamically.

Second, we find that stakeholder integration positively affects environmental performance and mediates the relationship between stakeholder pressures and environmental outcomes. This supports arguments that the capacity to manage and reconcile multiple stakeholder demands is central to responsiveness (Mitchell et al., 2016, 2017). By conceptualizing stakeholder integration as a relational capability encompassing knowledge, interaction, and adaptation (Delgado-Ceballos et al., 2012), we extend the Natural Resource-Based View into the relational domain. Rather than focusing solely on technical or environmental capabilities, our results suggest that relational capabilities constitute a critical pathway through which environmental pressures translate into performance. Importantly, we theorized and tested the possibility that stakeholder integration could have negative effects if used instrumentally to shield poor environmental performance. Our results do not support this pathway. Instead, relational bonds appear to function as informal governance mechanisms that mitigate opportunism in contexts with limited formal monitoring (Amankwah-Amoah et al., 2018). This contributes to relational stakeholder theory by showing that integration practices can generate reciprocal accountability and reduce transaction costs through trust and knowledge sharing (Soundararajan et al., 2018). The findings resonate with Jones et al.'s (2018) concept of close relationship capabilities and suggest that communal sharing strategies, prevalent in embedded SME contexts (Jamali et al., 2017a), can facilitate joint environmental value creation.

Third, our results underscore the central role of ethical orientation in shaping the consequences of stakeholder integration. While stakeholder theory has increasingly incorporated ethical reasoning (Freeman et al., 2012), the moderating function of ethical orientation in relational capability deployment has received limited empirical attention. We demonstrate that ethical orientation strengthens the positive relationship between stakeholder integration and environmental performance. Theoretically, this positions ethical orientation as a boundary condition on the effectiveness of relational capabilities. Stakeholder integration enhances awareness of stakeholder claims; ethical orientation provides normative guidance regarding how to respond (Erwin, 2011; Treviño et al., 2006). Their interaction bridges instrumental and normative stakeholder perspectives, showing that capability deployment is not morally neutral. In contexts where formal enforcement is weak (Reddy & Hamann, 2018), ethical orientation may partially substitute for institutional regulation, aligning relational engagement with substantive environmental outcomes. This extends business ethics scholarship by integrating organizational ethical climate into models of sustainability performance and highlights ethics as a structural moderator rather than merely an antecedent of behavior. Future theoretical work could differentiate ethical philosophies and examine how variations in ethical depth, enforcement credibility, and cultural embeddedness shape sustainability outcomes.

Overall, our study advances theory by integrating stakeholder pressures, relational capabilities, and ethical orientation into a contingent model of environmental performance, demonstrating that sustainability outcomes emerge from the interaction of external pressures, internal relational infrastructure, and normative commitment.

5.2 Implications for Practice

Our findings indicate that SMEs operating in institutionally fragile environments retain meaningful strategic agency. Rather than viewing weak regulation and policy uncertainty as

insurmountable barriers, managers can leverage non-financial organizational resources, specifically stakeholder integration and ethical orientation to translate environmental pressures into substantive green investments. Cultivating systematic practices of knowing stakeholders, interacting with them frequently, and adapting to their claims enhances firms' ability to convert external demands into actionable strategies. Ethical orientation, in turn, functions as an internal governance mechanism that discourages symbolic compliance and reduces the likelihood that relational capabilities will be used opportunistically.

For SME managers, the implication is clear: environmental responsiveness is not solely a function of financial slack or regulatory coercion. It depends on deliberate investment in relational infrastructure and ethical clarity. Managers should institutionalize structured stakeholder mapping, regular dialogue platforms, and feedback mechanisms to anticipate environmental expectations early. Embedding ethical commitments in codes of conduct, leadership communication, and performance evaluation systems can further align day-to-day decisions with longer-term sustainability objectives.

The salience of secondary stakeholders carries important implications for policymakers and development agencies. In contexts where formal enforcement capacity is limited, environmental governance cannot rely exclusively on state regulation. Governments aiming to improve environmental performance should collaborate with customary authorities, community leaders, NGOs, media organizations, and religious institutions to embed environmental norms within local belief systems. Co-regulatory arrangements and community-based monitoring may enhance compliance more effectively than top-down mandates.

Our results also challenge the assumption that policy uncertainty necessarily depresses environmental investment (Teeter & Sandberg, 2017). Strong stakeholder integration and ethical orientation appear to buffer the negative effects of uncertainty by providing alternative sources of guidance and legitimacy. Through proactive engagement, firms can identify

opportunities for green innovation, co-develop solutions with stakeholders, and anticipate regulatory shifts (Goodman et al., 2017; Rueda-Manzanares et al., 2008).

For international organizations and NGOs, supporting SMEs in developing stakeholder engagement capabilities and strengthening ethical infrastructures may yield more durable sustainability outcomes than focusing solely on compliance training or financial incentives. In short, relational capacity and ethical commitment emerge as practical levers for advancing environmental performance in challenging institutional environments.

5.3 Limitations and future research directions

Several limitations warrant caution and open avenues for further research. First, our empirical setting is confined to a single country. Although Ghana provides a theoretically meaningful context, cross-national differences in institutional arrangements, cultural norms, religious traditions, and environmental regulation may shape the dynamics among stakeholder pressures, stakeholder integration, and ethical orientation. Future research should replicate and extend our framework across multiple African countries and other developing regions to assess boundary conditions and enhance external validity. Comparative designs would be particularly useful in disentangling cultural from institutional effects.

Second, the study relies on survey-based perceptual measures. Although we adopted a time-lagged design and multiple statistical remedies to mitigate common method bias, subjective assessments may still introduce measurement error or social desirability bias—particularly when addressing ethical orientation and environmental performance. Future studies could incorporate objective indicators, such as third-party environmental audits, emissions data, or archival measures of environmental investment, to triangulate findings.

Third, ethical orientation was operationalized using a concise scale capturing general ethical commitment. This approach does not distinguish between different ethical philoso-

phies (e.g., deontological versus consequentialist), nor does it capture the quality, enforcement, or credibility of ethical codes. Future research could develop multidimensional measures that assess ethical content, enforcement mechanisms, leadership exemplarity, and alignment between formal codes and informal norms.

Fourth, a further measurement consideration concerns the aggregation of the stakeholder integration dimensions. Although the second-order analysis reported in Table 1b shows that knowledge, interaction, and adaptation contribute comparably to the higher-order factor, and although factor-score-weighted and latent second-order specifications yielded substantively identical results, our main analyses rely on an equal-weighted composite. Equal weighting is parsimonious but assumes that the three dimensions contribute equivalently to stakeholder integration. Should future theory or evidence suggest that particular dimensions are more central to the translation of stakeholder pressures into environmental performance, differential or empirically derived weighting (e.g., factor-score or partial-least-squares weights) could refine the construct and potentially alter the relative magnitude of the mediated effects. We therefore encourage future research to test the sensitivity of these findings to alternative weighting schemes across different settings.

Fifth, while we theorize managerial interpretation as central, we did not directly measure managerial cognition, environmental values, or moral identity. Qualitative or mixed-method designs could explore how managers interpret stakeholder pressures and reconcile tensions between economic, social, and environmental objectives.

Finally, our framework focuses on stakeholder integration as the primary mediating capability. Future research could examine complementary or competing mechanisms, such as absorptive capacity, innovation capability, political networking, or digital transparency sys-

tems. Longitudinal studies would also help clarify causal dynamics and capture how stakeholder relationships and ethical climates evolve over time in response to environmental challenges.

6. Conclusion

This study demonstrates that stakeholder integration is a central mechanism through which SMEs respond to environmental pressures. The strength of this mechanism, however, depends on organizational ethical orientation. By integrating relational stakeholder theory, capability perspectives, and organizational ethics, we provide a framework that explains variation in environmental investment among SMEs in developing contexts. Our findings contribute to stakeholder theory by emphasizing context-specific salience, relational capability development, and the moderating role of ethics. They also advance research on environmental performance in SMEs, particularly in developing economies where sustainability challenges are most acute. Overall, the study highlights that relational engagement and ethical commitment jointly shape the translation of stakeholder pressures into substantive environmental action.

References

- Abubakar, A. M., Elrehail, H., Alatailat, M. A., & Elçi, A. (2019). Knowledge management, decision-making style and organizational performance. *Journal of innovation & knowledge*, 4(2), 104-114. <https://doi.org/10.1016/j.jik.2017.07.003>
- Adomako, S., Amankwah-Amoah, J., & Danso, A. (2019). The effects of stakeholder integration on firm-level product innovativeness: insights from small and medium-sized enterprises in Ghana. *R&D Management*, 49(5), 734-747.
- Adomako, S., Amankwah-Amoah, J., Danso, A., Konadu, R., & Owusu-Agyei, S. (2019). Environmental sustainability orientation and performance of family and nonfamily firms. *Business Strategy and the Environment*, 28(6), 1250-1259. <https://doi.org/10.1002/bse.2314>
- Afzali, M., Colak, G., & Vähämaa, S. (2025). Climate change denial and corporate environmental responsibility. *Journal of Business Ethics*, 196(1), 31-59. <https://doi.org/10.1007/s10551-024-05625-y>

- Agyei, S. K. & Yankey, B. (2019). 'Environmental reporting practices and performance of timber firms in Ghana: Perceptions of practitioners'. *Journal of Accounting in Emerging Economies*, 9(2), 268-286. <https://doi.org/10.1108/JAEE-12-2017-0127>
- Aiken, L.S. & West, S.G. (1991). *Multiple Regression: Testing and Interpreting Interactions*. SAGE Publications: Thousand Oaks, CA.
- Akgün, A. E., Keskin, H., & Byrne, J. (2012). Antecedents and contingent effects of organizational adaptive capability on firm product innovativeness. *Journal of product innovation management*, 29, 171-189. <https://doi.org/10.1111/j.1540-5885.2012.00949.x>
- Amaeshi, K., Adegbite, E., Ogbechie, C., Idemudia, U., Kan, K. A. S., Issa, M. & Anakwue, O. I. (2016). 'Corporate social responsibility in SMEs: a shift from philanthropy to institutional works?'. *Journal of Business Ethics*, 138(2), 385-400. <https://doi.org/10.1007/s10551-015-2633-1>
- Amankwah-Amoah, J., Danso, A. & Adomako, S. (2019). 'Entrepreneurial orientation, environmental sustainability and new venture performance: Does stakeholder integration matter?'. *Business Strategy and the Environment*, 28(1), 79-87. <https://doi.org/10.1002/bse.2191>
- Amankwah-Amoah, J., Danso, A., & Adomako, S. (2019). Entrepreneurial orientation, environmental sustainability and new venture performance: does stakeholder integration matter?. *Business Strategy and the Environment*, 28(1), 79-87.
- Amankwah-Amoah, J., Debrah, Y. A., & Nuerthey, D. (2018). 'Institutional legitimacy, cross-border trade and institutional voids: Insights from the cocoa industry in Ghana'. *Journal of Rural Studies*, 58, 136-145. <https://doi.org/10.1016/j.jrurstud.2018.01.002>
- Appiah-Kubi, E., Dura, C. C., Niță, D., Drigă, I., Preda, A., & Baltador, L. A. (2025). The effect of digitalization on sustainability reporting: The role of sustainability competence, green knowledge integration, and stakeholder pressure. *Business Strategy and the Environment*, 34(1), 1133-1153. <https://doi.org/10.1002/bse.4024>
- Armstrong, J. S. & Overton, T. (1977). 'Estimating non-response bias in mail surveys'. *Journal of Marketing Research*, 14(3), 396-402. <https://doi.org/10.1177/002224377701400320>
- Asad, S., Hennig, J. C., Oehmichen, J., Wolff, M., & Haas, V. (2025). From attention to action: How board environmental expertise influences corporate environmental performance. *Strategic Organization*, 23(2), 259-284. <https://doi.org/10.1177/14761270231197995>
- Asamoah, D., Mensah, J., & Andoh-Baidoo, F. K. (2025). Socially responsible supply chain: the roles of stakeholder pressure and supply chain ambidexterity. *Journal of Business Logistics*, 46(3), e70021. <https://doi.org/10.1111/jbl.70021>
- Azumah, S. S., Tetteh, F. K., Manu, D., & Owusu Kwateng, K. (2025). Circular supply chain practices and sustainable performance: the role of supply chain ethical leadership and green knowledge sharing. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.70277>
- Bagozzi, R. P. & Yi, Y. (2012). 'Specification, evaluation, and interpretation of structural equation models'. *Journal of the Academy of Marketing Science*, 40(1), 8-34. <https://doi.org/10.1007/s11747-011-0278-x>
- Berrone, P., Surroca, J. & Tribó, J. A. (2007). 'Corporate ethical identity as a determinant of firm performance: A test of the mediating role of stakeholder satisfaction'. *Journal of Business Ethics*, 76(1), 35-53. <https://doi.org/10.1007/s10551-006-9276-1>

- Billiet, A., Bruneel, J., & Dufays, F. (2025). Exit, voice, or both: Why organizations engage with stakeholders. *Business & Society*, 64(6), 1149-1184. 6
<https://doi.org/10.1177/00076503231182612>
- Blome, C. & Paulraj, A. (2013). 'Ethical climate and purchasing social responsibility: A benevolence focus'. *Journal of Business Ethics*, 116(3), 567-585.
<https://doi.org/10.1007/s10551-012-1481-5>
- Boling, J. R., Pieper, T. M. & Covin, J. G. (2016). 'CEO tenure and entrepreneurial orientation within family and nonfamily firms'. *Entrepreneurship Theory and Practice*, 40(4), 891-913. <https://doi.org/10.1111/etap.12150>
- Bosse, D. A., & Coughlan, R. (2016). Stakeholder relationship bonds. *Journal of Management Studies*, 53(7), 1197-1222. <https://doi.org/10.1111/joms.12182>
- Boyomo, H. A. A., Manga, L. A. A., & Ondoua, H. A. (2025). *Does climate change influence state fragility? Evidence for the countries of sub-Saharan Africa*. Environment and Development Economics, 30(5), 379–401.
<https://doi.org/10.1017/S1355770X25000087>
- Breugst, N., Domurath, A., Patzelt, H., & Klaukien, A. (2012). 'Perceptions of entrepreneurial passion and employees' commitment to entrepreneurial ventures'. *Entrepreneurship Theory and Practice*, 36, 171–192. <https://doi.org/10.1111/j.1540-6520.2011.00491.x>
- Bridoux, F. & Stoelhorst, J. W. (2016). 'Stakeholder relationships and social welfare: A behavioral theory of contributions to joint value creation'. *Academy of Management Review*, 41(2), 229-251. <https://doi.org/10.5465/amr.2013.0475>
- Bromley, P. & Powell, W. W. (2012). 'From smoke and mirrors to walking the talk: Decoupling in the contemporary world'. *Academy of Management Annals*, 6(1), 483-530.
<https://doi.org/10.5465/19416520.2012.684462>
- Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of management Journal*, 50(5), 1217-1234. <https://doi.org/10.5465/amj.2007.20159921>
- Charan, P. & Murty, L. S. (2018b). 'Institutional pressure and the implementation of corporate environment practices: examining the mediating role of absorptive capacity'. *Journal of Knowledge Management*, 22(7), 1591-1613. <https://doi.org/10.1108/JKM-12-2016-0531>
- Charan, P., & Murty, L. S. (2018a). Secondary stakeholder pressures and organizational adoption of sustainable operations practices: The mediating role of primary stakeholders. *Business Strategy and the Environment*, 27(7), 910-923. DOI: 10.1002/bse.204
- Chen, Y., Tang, G., Jin, J., Li, J., & Paillé, P. (2015). 'Linking market orientation and environmental performance: The influence of environmental strategy, employee's environmental involvement, and environmental product quality'. *Journal of Business Ethics*, 127(2), 479-500. <https://doi.org/10.1007/s10551-014-2059-1>
- Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7(3), 309–319. <https://doi.org/10.1037/1040-3590.7.3.309>
- Clarkson, M. B. E. (1995). 'A stakeholder framework for analyzing and evaluating corporate social performance'. *Academy of Management Review*, 20(1), 92-117.
<https://doi.org/10.5465/amr.1995.9503271994>

- Clemente-Almendros, J. A., González-Cruz, T., & Camisón-Haba, S. (2025). Does innovation practices enhance the impact of environmental criteria adoption over entrepreneurial SMEs' performance?. *International Entrepreneurship and Management Journal*, 21(1), 18. <https://doi.org/10.1007/s11365-024-01030-z>
- Cludts, S. (1999). 'Organisation theory and the ethics of participation'. *Journal of Business Ethics*, 21(2-3), 157-171. <https://doi.org/10.1023/A:1006242410572>
- Cohen, J. (2003). Applied multiple correlation/regression analysis for the behavioral sciences. *Taylor & Francis*.
- Cuadrado-Ballesteros, B., Rodríguez-Ariza, L., García-Sánchez, I. M. & Martínez-Ferrero, J. (2017). 'The mediating effect of ethical codes on the link between family firms and their social performance'. *Long Range Planning*, 50(6), 756-765. <https://doi.org/10.1016/j.lrp.2016.11.007>
- Danso, A., Adomako, S., Lartey, T., Amankwah-Amoah, J. & Owusu-Yirenkyi, D. (2019). 'Stakeholder integration, environmental sustainability orientation and financial performance'. *Journal of Business Research*, doi:10.1016/j.jbusres.2019.02.038.
- de Sousa Jabbour, A. B. L., Laguir, I., Stekelorum, R., & Gupta, S. (2025). The nexus of artificial intelligence and sustainability performance: Unveiling the impact of supply chain transparency and customer pressure on ethical conduct. *Journal of Environmental Management*, 379, 124847. <https://doi.org/10.1016/j.jenvman.2025.124847>
- de Sousa Jabbour, A. B. L., Vazquez-Brust, D., Jabbour, C. J. C., & Latan, H. (2017). Green supply chain practices and environmental performance in Brazil: Survey, case studies, and implications for B2B. *Industrial Marketing Management*, 66, 13-28. <https://doi.org/10.1016/j.indmarman.2017.05.003>
- Delgado-Ceballos, J., Aragón-Correa, J. A., Ortiz-de-Mandojana, N. & Rueda-Manzanares, A. (2012). 'The effect of internal barriers on the connection between stakeholder integration and proactive environmental strategies'. *Journal of Business Ethics*, 107(3), 281-293. <https://doi.org/10.1007/s10551-011-1039-y>
- Dögl, C. & Behnam, M. (2015). 'Environmentally sustainable development through stakeholder engagement in developed and emerging countries'. *Business Strategy and the Environment*, 24(6), 583-600. <https://doi.org/10.1002/bse.1839>
- Eesley, C. & Lenox, M. J. (2006). 'Firm responses to secondary stakeholder action'. *Strategic Management Journal*, 27(8), 765-781. <https://doi.org/10.1002/smj.536>
- Effelsberg, D., & Solga, M. (2015). Transformational leaders' in-group versus out-group orientation: Testing the link between leaders' organizational identification, their willingness to engage in unethical pro-organizational behavior, and follower-perceived transformational leadership. *Journal of Business Ethics*, 126(4), 581-590. <https://doi.org/10.1007/s10551-013-1972-z>
- Egels-Zandén, N. & Kallifatides, M. (2017). 'The corporate social performance dilemma: Organising for goal duality in low-income African markets'. In *Corporate citizenship in Africa* (pp. 82-92). Routledge.
- Erwin, P. M. (2011). 'Corporate codes of conduct: The effects of code content and quality on ethical performance'. *Journal of Business Ethics*, 99(4), 535-548. <https://doi.org/10.1007/s10551-010-0667-y>
- Esposito, P., Marrone, A., Pontrelli, V., & Rella, A. (2025). Exploring drivers and factors of benefit impact reports quality: Retracing a stakeholder theory approach. *Business Strategy and the Environment*, 34(1), 555-569. <https://doi.org/10.1002/bse.3974>

- Essuman, A. N., Karikari, F. A., Boateng, S. A., Asongu, S. A., & Fumey, M. P. (2026). An outlook at corporate environmental performance through the lens of green supply chain management, green innovation, sustainable dynamic capabilities, and governance quality in an emerging economy. *Business Strategy and the Environment*, 35(1), 1317-1334. <https://doi.org/10.1002/bse.70236>
- Farrukh, A., & Sajjad, M. S. (2025). A Natural Resource-Based View of Circular Economy Practices in the Pharmaceutical Industry. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.70413>
- Ferrell, O. C., Gonzalez-Padron, T. L., Hult, G. T. M. & Maignan, I. (2010). 'From market orientation to stakeholder orientation'. *Journal of Public Policy and Marketing*, 29, 93–96. <https://doi.org/10.1509/jppm.29.1.93>
- Fisher, K., Geenen, J., Jurcevic, M., McClintock, K., & Davis, G. (2009). Applying asset-based community development as a strategy for CSR: A Canadian perspective on a win-win for stakeholders and SMEs. *Business ethics: A European review*, 18(1), 66-82. <https://doi.org/10.1111/j.1467-8608.2009.01549.x>
- Fooks, G., Gilmore, A., Collin, J., Holden, C. & Lee, K. (2013). 'The limits of corporate social responsibility: techniques of neutralization, stakeholder management and political CSR'. *Journal of Business Ethics*, 112(2), 283-299. <https://doi.org/10.1007/s10551-012-1250-5>
- Fornell, C. & Larcker, D. F. (1981). 'Evaluating structural equation models with unobservable variables and measurement error'. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Freeman, R. E. & McVea, J. (2001). 'A stakeholder approach to strategic management'. In M. A. Hitt, R. E. Freeman, & J. S. Harrison (Eds.), *The Blackwell Handbook of Strategic Management* (pp. 189-207). Oxford: Blackwell. <https://doi.org/10.1111/b.9780631218616.2006.00007.x>
- Freeman, R. E. (1999). 'Divergent stakeholder theory'. *Academy of Management Review*, 24(2), 233-236. <https://doi.org/10.5465/amr.1999.1893932>
- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L. & De Colle, S. (2010). *Stakeholder Theory*. Cambridge: Cambridge University Press.
- Freeman, R. E., Phillips, R. & Sisodia, R. (2018b). 'Tensions in Stakeholder Theory'. *Business & Society*, doi:10.1177/0007650318773750.
- Freeman, R. E., Rusconi, G., Signori, S., & Strudler, A. (2012). Stakeholder theory (ies): Ethical ideas and managerial action. *Journal of business ethics*, 109(1), 1-2. <https://doi.org/10.1007/s10551-012-1374-7>
- Gabriel, K. P., Ezerins, M. E., Rosen, C. C., Gabriel, A. S., Patel, C., & Lim, G. J. (2025). Socioeconomic status and employee well-being: An intersectional and resource-based view of health inequalities at work. *Journal of Management*, 51(6), 2549-2588. <https://doi.org/10.1177/01492063241311869>
- Garcia-Castro, R. & Francoeur, C. (2016). 'When more is not better: Complementarities, costs and contingencies in stakeholder management'. *Strategic Management Journal*, 37(2), 406-424. <https://doi.org/10.1002/smj.2341>
- Goodman, J., Korsunova, A. & Halme, M. (2017). 'Our collaborative future: Activities and roles of stakeholders in sustainability-oriented innovation'. *Business Strategy and the Environment*, 26(6), 731-753. <https://doi.org/10.1002/bse.1941>

- Greenwood, M. (2007). 'Stakeholder engagement: beyond the myth of corporate responsibility'. *Journal of Business Ethics*, 74, 315–327. <https://doi.org/10.1007/s10551-007-9509-y>
- Greenwood, P. E., & Nikulin, M. S. (1996). *A guide to chi-squared testing*. John Wiley & Sons.
- Grewatsch, S. & Kleindienst, I. (2018). 'How organizational cognitive frames affect organizational capabilities: The context of corporate sustainability'. *Long Range Planning*, 51(4), 607-624. <https://doi.org/10.1016/j.lrp.2017.03.004>
- Gruber, V. & Schlegelmilch, B. B. (2015). 'MNEs' regional headquarters and their CSR agenda in the African context'. *International Marketing Review*, 32(5), 576-602. <https://doi.org/10.1108/IMR-03-2014-0100>
- Guerci, M., Longoni, A. & Luzzini, D. (2016). 'Translating stakeholder pressures into environmental performance—the mediating role of green HRM practices'. *The International Journal of Human Resource Management*, 27(2), 262-289. <https://doi.org/10.1080/09585192.2015.1065431>
- Hamann, R., Smith, J., Tashman, P., & Marshall, R. S. (2017). Why do SMEs go green? An analysis of wine firms in South Africa. *Business & society*, 56(1), 23-56. <https://doi.org/10.1177/0007650315575106>
- Hart, S. L. & Dowell, G. (2011). 'A natural resource-based view of the firm: fifteen years after'. *Journal of Management*, 37, 1464–1479. <https://doi.org/10.5465/amr.1995.9512280033>
- Hart, S. L. (1995). 'A Natural-Resource Based View of the Firm'. *Academy of Management Review*, 20(4), 986–1014. <https://doi.org/10.5465/amr.1995.9512280033>
- Helfat, C. E. & Peteraf, M. A. (2003). 'The dynamic resource-based view: Capability life cycles'. *Strategic Management Journal*, 24(10), 997-1010. <https://doi.org/10.1002/smj.332>
- Helmig, B., Spraul, K. & Ingenhoff, D. (2016). 'Under positive pressure: How stakeholder pressure affects corporate social responsibility implementation'. *Business & Society*, 55(2), 151-187. <https://doi.org/10.1177/0007650313477841>
- Hettihewa, S., Kopp, L. S., & Wright, C. S. (2019). 'Ethics/Virtues and Consequences: An Exploratory Study of Regional Small Businesses in Developed and Emerging Countries'. *International Journal of Business & Economics*, 18(1).
- Hill, C. W., & Jones, T. M. (1992). Stakeholder-agency theory. *Journal of management studies*, 29(2), 131-154. <https://doi.org/10.1111/j.1467-6486.1992.tb00657.x>
- Hollingworth, D. & Valentine, S. (2015). 'The moderating effect of perceived organizational ethical context on employees' ethical issue recognition and ethical judgments'. *Journal of Business Ethics*, 128(2), 457-466. <https://doi.org/10.1007/s10551-014-2088-9>
- Hood, J. N. (2003). 'The relationship of leadership style and CEO values to ethical practices in organizations'. *Journal of Business Ethics*, 43(4), 263-273. <https://doi.org/10.1023/A:1023085713600>
- Hunt, S. D., Wood, V. R. & Chonko, L. B. (1989). 'Corporate ethical values and organizational commitment in marketing'. *Journal of Marketing*, 53, 79–90. <https://doi.org/10.1177/002224298905300309>
- Islam, T., Arunachalum, M., Wellalage, N., & Benjamin, S. (2025). Corporate environmental performance leading financial performance: impacts of social media sentiment and

- corporate reputation. *Business Strategy and the Environment*, 34(4), 4274-4290. <https://doi.org/10.1002/bse.4201>
- Jamali, D. & Karam, C. (2018). 'Corporate social responsibility in developing countries as an emerging field of study'. *International Journal of Management Reviews*, 20(1), 32-61. <https://doi.org/10.1111/ijmr.12112>
- Jamali, D. (2008). 'A stakeholder approach to corporate social responsibility: A fresh perspective into theory and practice'. *Journal of Business Ethics*, 82(1), 213-231. <https://doi.org/10.1007/s10551-007-9572-4>
- Jamali, D., Karam, C., Yin, J. & Soundararajan, V. (2017a). 'CSR logics in developing countries: Translation, adaptation and stalled development'. *Journal of World Business*, 52(3), 343-359. <https://doi.org/10.1016/j.jwb.2017.02.001>
- Jenkins, H. (2004). Corporate social responsibility and the mining industry: conflicts and constructs. *Corporate social responsibility and environmental management*, 11(1), 23-34. <https://doi.org/10.1002/csr.50>
- Jones, T. M., Harrison, J. S. & Felps, W. (2018). 'How applying instrumental stakeholder theory can provide sustainable competitive advantage'. *Academy of Management Review*, 43(3), 371-391. <https://doi.org/10.5465/amr.2016.0111>
- Judge, W. Q. & Douglas, T. J. (1998). 'Performance implications of incorporating natural environmental issues into the strategic planning process: An empirical assessment'. *Journal of Management Studies*, 35(2), 241-262. <https://doi.org/10.1111/1467-6486.00092>
- Kazadi, K., Lievens, A. & Mahr, D. (2016). 'Stakeholder co-creation during the innovation process: Identifying capabilities for knowledge creation among multiple stakeholders'. *Journal of Business Research*, 69(2), 525-540. <https://doi.org/10.1016/j.jbusres.2015.05.009>
- Kock, C. J., Santaló, J. & Diestre, L. (2012). 'Corporate governance and the environment: what type of governance creates greener companies?'. *Journal of Management Studies*, 49(3), 492-514. <https://doi.org/10.1111/j.1467-6486.2010.00993.x>
- Kolk, A. & Rivera-Santos, M. (2018). 'The state of research on Africa in business and management: Insights from a systematic review of key international journals'. *Business & Society*, 57(3), 415-436. <https://doi.org/10.1177/0007650316629129>
- Kühn, A. L., Stiglbauer, M. & Fifka, M. S. (2018). 'Contents and determinants of corporate social responsibility website reporting in Sub-Saharan Africa: A seven-country study'. *Business & Society*, 57(3), 437-480. <https://doi.org/10.1177/0007650315614234>
- Kumar, V., Hollebeek, L. D., Sharma, A., Rajan, B., & Srivastava, R. K. (2025). Responsible stakeholder engagement marketing. *Journal of Business Research*, 189, 115143. <https://doi.org/10.1016/j.jbusres.2024.115143>
- Kwablah, E., & Amoah, A. (2022). Foreign direct investment and economic growth in Sub-Saharan Africa: the complementary role of economic freedom and financial market fragility. *Transnational Corporations Review*, 14(2), 127-139. <https://doi.org/10.1080/19186444.2022.2041159>
- Lähdesmäki, M., Siltaoja, M., & Spence, L. J. (2019). Stakeholder salience for small businesses: A social proximity perspective. *Journal of Business Ethics*, 158(2), 373-385. <https://doi.org/10.1007/s10551-017-3707-z>

- Lawson, E. T. (2016). 'Negotiating stakeholder participation in the Ghana national climate change policy'. *International Journal of Climate Change Strategies and Management*, 8(3), 399-417. <https://doi.org/10.1108/IJCCSM-04-2015-0041>
- Lee, M. D. P. (2011). Configuration of external influences: The combined effects of institutions and stakeholders on corporate social responsibility strategies. *Journal of business ethics*, 102(2), 281-298. <https://doi.org/10.1007/s10551-011-0814-0>
- Lee, S. & Ha-Brookshire, J. (2017). 'Ethical climate and job attitude in fashion retail employees' turnover intention, and perceived organizational sustainability performance: A cross-sectional study'. *Sustainability*, 9(3), 465. <https://doi.org/10.3390/su9030465>
- Lepoutre, J., & Heene, A. (2006). Investigating the impact of firm size on small business social responsibility: A critical review. *Journal of business ethics*, 67(3), 257-273. <https://doi.org/10.1007/s10551-006-9183-5>
- Lindell, M. K. & Whitney, D. J. (2001). 'Accounting for common method variance in cross-sectional research designs'. *Journal of Applied Psychology*, 86(1), 114-121.
- Liston-Heyes, C. & Vazquez-Brust, D. (2016). 'Environmental protection in environmentally reactive firms: Lessons from corporate Argentina'. *Journal of Business Ethics*, 135(2), 361-379. <https://doi.org/10.1007/s10551-014-2473-4>
- Litz, R. A. (1996). A resource-based-view of the socially responsible firm: Stakeholder interdependence, ethical awareness, and issue responsiveness as strategic assets. *Journal of business ethics*, 15(12), 1355-1363. <https://doi.org/10.1007/BF00411820>
- López-Cabarcos, M. Á., Ziane, Y., López-Pérez, M. L., & Piñeiro-Chousa, J. (2025). The ethical commitment of business strategy: ESG-related factors as drivers of the SDGs. *Journal of Business Ethics*, 202(4), 805-821. <https://doi.org/10.1007/s10551-025-06002-z>
- Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First- and higher order factor models and their invariance across groups. *Psychological Bulletin*, 97(3), 562-582. <https://doi.org/10.1037/0033-2909.97.3.562>
- Massey Jr, F. J. (1951). 'The Kolmogorov-Smirnov test for goodness of fit'. *Journal of the American Statistical Association*, 46(253), 68-78. <https://doi.org/10.1080/01621459.1951.10500769>
- Matthews, M. J., Su, R., Yonish, L., McClean, S., Koopman, J., & Yam, K. C. (2025). A review of artificial intelligence, algorithms, and robots through the lens of stakeholder theory. *Journal of Management*, 51(6), 2627-2676. <https://doi.org/10.1177/01492063241311855>
- Mbalyohere, C., & Lawton, T. (2026). Strategic sensemaking as dynamic capability: How MNEs navigate institutional challenges in Sub-Saharan Africa. *International Business Review*, 35(1), 102534. <https://doi.org/10.1016/j.ibusrev.2025.102534>
- Mehmood, K., Jabeen, F., Rashid, M., Alshibani, S. M., Lanteri, A., & Santoro, G. (2025). Unraveling the transformation: the three-wave time-lagged study on big data analytics, green innovation and their impact on economic and environmental performance in manufacturing SMEs. *European Journal of Innovation Management*, 28(6), 2189-2216. <https://doi.org/10.1108/EJIM-10-2023-0903>
- Metz, T. (2007). 'Toward an African moral theory'. *Journal of Political Philosophy*, 15(3), 321-341. DOI10.1111/j.1467-9760.2007.00280.x

- Mitchell, R. K., Lee, J. H., & Agle, B. R. (2017). Stakeholder prioritization work: The role of stakeholder salience in stakeholder research. Doi: <https://doi.org/10.1108/S2514-1759201700000006>
- Mitchell, R. K., Weaver, G. R., Agle, B. R., Bailey, A. D., & Carlson, J. (2016). Stakeholder agency and social welfare: Pluralism and decision making in the multi-objective corporation. *Academy of Management review*, 41(2), 252-275. <https://doi.org/10.5465/amr.2013.0486>
- Murillo-Luna, J. L., Garcés-Ayerbe, C. & Rivera-Torres, P. (2008). 'Why do patterns of environmental response differ? A stakeholders' pressure approach'. *Strategic Management Journal*, 29(11), 1225–1240. <https://doi.org/10.1002/smj.711>
- Neter, J., Wasserman, W. & Kutner, M. H. (1990). *Applied Linear Statistical Models*. Irwin: Homewood, IL.
- Noland, J. & Phillips, R. (2010). 'Stakeholder engagement, discourse ethics and strategic management'. *International Journal of Management Reviews*, 12(1), 39-49. <https://doi.org/10.1111/j.1468-2370.2009.00279.x>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.
- Oo, P. P., Allison, T. H., Sahaym, A., & Juasrikul, S. (2019). 'User entrepreneurs' multiple identities and crowdfunding performance: Effects through product innovativeness, perceived passion, and need similarity'. *Journal of Business Venturing*, 34(5), 105895. <https://doi.org/10.1016/j.jbusvent.2018.08.005>
- Oyedele, A., & Firat, F. (2020). Institutions, small local firms' strategies, and global alliances in sub-Saharan Africa emerging markets. *International Marketing Review*, 37(1), 156-182. <https://doi.org/10.1108/IMR-01-2019-0022>
- Painter-Morland, M. & Dobie, K. (2009). 'Ethics and sustainability within SMEs in Sub-Saharan Africa: Enabling, constraining and contaminating relationships'. *African Journal of Business Ethics*, 4(2).
- Pajunen, K. (2006). 'Stakeholder influences in organizational survival'. *Journal of Management Studies*, 43(6), 1261-1288. <https://doi.org/10.1111/j.1467-6486.2006.00624.x>
- Phillips, R. (2003). *Stakeholder Theory and Organizational Ethics*. Berrett-Koehler Publishers.
- Phillips, R., Freeman, R. E. & Wicks, A. C. (2003). 'What stakeholder theory is not'. *Business Ethics Quarterly*, 13(4), 479-502. DOI: <https://doi.org/10.5840/beq200313434>
- Phiri, O., Mantzari, E., & Gleadle, P. (2019). Stakeholder interactions and corporate social responsibility (CSR) practices: Evidence from the Zambian copper mining sector. *Accounting, Auditing & Accountability Journal*, 32(1), 26-54. <https://doi.org/10.1108/AAAJ-04-2016-2540>
- Pinkse, J., & Busch, T. (2013). The emergence of corporate carbon norms: Strategic directions and managerial implications. *Thunderbird International Business Review*, 55(6), 633-645. <https://doi.org/10.1002/tie.21580>
- Plaza-Úbeda, J. A., de Burgos-Jiménez, J. & Carmona-Moreno, E. (2010). 'Measuring stakeholder integration: knowledge, interaction and adaptational behavior dimensions'. *Journal of Business Ethics*, 93(3), 419-442. <https://doi.org/10.1007/s10551-009-0231-9>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.

- Polas, M. R. H., Afshar Jahanshahi, A., Islam, M. E., Kabir, A. I., Sohel-Uz-Zaman, A. S. M., & Fahad, A. A. (2025). A journey from traditional supply chain processes to Sustainability-Oriented blockchain supply chain: the critical role of organizational capabilities. *Business Strategy and the Environment*, 34(3), 3522-3543. <https://doi.org/10.1002/bse.4159>
- Preacher, K. J. & Hayes, A. F. (2008). 'Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models'. *Behavior Research Methods*, 40, 879–891. <https://doi.org/10.3758/BRM.40.3.879>
- Preacher, K. J., Rucker, D. D. & Hayes, A. F. (2007). 'Addressing moderated mediation hypotheses: Theory, methods, and prescriptions'. *Multivariate Behavioral Research*, 42(1), 185-227. <https://doi.org/10.1080/00273170701341316>
- Reddy, C. D. & Hamann, R. (2018). 'Distance makes the (committed) heart grow colder: MNEs' responses to the state logic in African variants of CSR'. *Business & Society*, 57(3), 562-594. <https://doi.org/10.1177/0007650316629127>
- Reynolds, M., & Yuthas, K. (2008). Moral discourse and corporate social responsibility reporting. *Journal of business ethics*, 78(1), 47-64. <https://doi.org/10.1007/s10551-006-9316-x>
- Rogelberg, S. & Stanton, J. (2007). 'Understanding and dealing with organizational survey nonresponse'. *Organizational Research Methods*, 10(2), 195–209. <https://doi.org/10.1177/1094428106294693>
- Rueda-Manzanares, A., Aragón-Correa, J. A. & Sharma, S. (2008). 'The influence of stakeholders on the environmental strategy of service firms: the moderating effects of complexity, uncertainty and munificence'. *British Journal of Management*, 19(2), 185-203. <https://doi.org/10.1111/j.1467-8551.2007.00538.x>
- Russo, M. V. & Fouts, P. A. (1997). 'A resource-based perspective on corporate environmental performance and profitability'. *Academy of Management Journal*, 40(3), 534–559. <https://doi.org/10.5465/257052>
- Sahoo, S. (2024). Assessing the impact of stakeholder pressure and green data analytics on firm's environmental performance—understanding the role of green knowledge management and green technological innovativeness. *R&D Management*, 54(1), 3-20. <https://doi.org/10.1111/radm.12602>
- Sarfo, C., Fakhra Manesh, M., & Caputo, A. (2025). Exploitative and exploratory search: dynamic capabilities enhancing SME adaptation, new product development, and environmental performance. *Journal of Small Business Management*, 63(5), 1978-2007. <https://doi.org/10.1080/00472778.2024.2418026>
- Sarkis, J., Gonzalez-Torre, P. & Adenso-Diaz, B. (2010). 'Stakeholder pressure and the adoption of environmental practices: The mediating effect of training'. *Journal of Operations Management*, 28(2), 163-176. <https://doi.org/10.1016/j.jom.2009.10.001>
- Sarkis, J., Zhu, Q. & Lai, K. H. (2011). 'An organizational theoretic review of green supply chain management literature'. *International Journal of Production Economics*, 130(1), 1-15. <https://doi.org/10.1016/j.ijpe.2010.11.010>
- Savage, G. T., Nix, T. W., Whitehead, C. J., & Blair, J. D. (1991). Strategies for assessing and managing organizational stakeholders. *Academy of management perspectives*, 5(2), 61-75. <https://doi.org/10.5465/ame.1991.4274682>
- Shabbir, M. S. (2025). Corporate Sustainability Reimagined: A Bibliometric–Systematic Literature Review of Governance, Technology, and Stakeholder-Driven Strategies for

- SDG Impact. *Business Strategy and the Environment*, 34(7), 9203-9222.
<https://doi.org/10.1002/bse.70070>
- Shahzad, M. F., Xu, S., An, X., Asif, M., & Jafri, M. A. H. (2024). Effect of stakeholder pressure on environmental performance: do virtual CSR, green credit, environmental and social reputation matter?. *Journal of Environmental Management*, 368, 122223.
<https://doi.org/10.1016/j.jenvman.2024.122223>
- Shevchenko, A., Lévesque, M. & Pagell, M. (2016). ‘Why firms delay reaching true sustainability’. *Journal of Management Studies*, 53(5), 911-935.
<https://doi.org/10.1111/joms.12199>
- Shi, W., Connelly, B. L., & Hoskisson, R. E. (2017). External corporate governance and financial fraud: Cognitive evaluation theory insights on agency theory prescriptions. *Strategic Management Journal*, 38(6), 1268-1286.
<https://doi.org/10.1002/smj.2560>
- Siddiqi, R. A., Codini, A. P., Ishaq, M. I., Jamali, D. R., & Raza, A. (2025). Sustainable supply chain, dynamic capabilities, eco-innovation, and environmental performance in an emerging economy. *Business Strategy and the Environment*, 34(1), 338-350.
<https://doi.org/10.1002/bse.3976>
- Siddiquei, A. N., Ahmed, Z., Zaman, K., Badar, K., Khosa, M., & Zameer, H. (2025). Top management's green inclusive leadership and sustainable competitive advantage in manufacturing firms: The enabling role of internal CSR communication. *Journal of Environmental Management*, 395, 127825. <https://doi.org/10.1016/j.jenvman.2025.127825>
- Skalli, D., Charkaoui, A., Cherrafi, A., Garza-Reyes, J. A., Antony, J., & Shokri, A. (2024). Analyzing the integrated effect of circular economy, Lean Six Sigma, and Industry 4.0 on sustainable manufacturing performance from a practice-based view perspective. *Business Strategy and the Environment*, 33(2), 1208-1226.
<https://doi.org/10.1002/bse.3546>
- Slevin, D. P., & Covin, J. G. (1997). Strategy formation patterns, performance, and the significance of context. *Journal of management*, 23(2), 189-209.
[https://doi.org/10.1016/S0149-2063\(97\)90043-X](https://doi.org/10.1016/S0149-2063(97)90043-X)
- Soundararajan, V., Jamali, D. & Spence, L. J. (2018). ‘Small business social responsibility: A critical multilevel review, synthesis and research agenda’. *International Journal of Management Reviews*, 20(4), 934-956. <https://doi.org/10.1111/ijmr.12171>
- Spence, L. J. (2016). Small business social responsibility: Expanding core CSR theory. *Business & Society*, 55(1), 23-55. <https://doi.org/10.1177/0007650314523256>
- Stam, W. (2010). Industry event participation and network brokerage among entrepreneurial ventures. *Journal of Management Studies*, 47(4), 625-653.
<https://doi.org/10.1111/j.1467-6486.2009.00909.x>
- Stevens, B. (2008). ‘Corporate ethical codes: Effective instruments for influencing behavior’. *Journal of Business Ethics*, 78(4), 601-609. <https://doi.org/10.1007/s10551-007-9370-z>
- Su, W., & Tsang, E. W. (2015). Product diversification and financial performance: The moderating role of secondary stakeholders. *Academy of Management Journal*, 58(4), 1128-1148. <https://doi.org/10.5465/amj.2013.0454>
- Tantalo, C., & Priem, R. L. (2016). Value creation through stakeholder synergy. *Strategic management journal*, 37(2), 314-329. <https://doi.org/10.1002/smj.2337>

- Tawiah, V., Matemane, R., Oyewo, B., & Lemma, T. T. (2024). Saving the environment with indigenous directors: Evidence from Africa. *Business Strategy and the Environment*, 33(3), 2445-2461. <https://doi.org/10.1002/bse.3603>
- Teeter, P. & Sandberg, J. (2017). 'Constraining or enabling green capability development? How policy uncertainty affects organizational responses to flexible environmental regulations'. *British Journal of Management*, 28(4), 649-665. <https://doi.org/10.1111/1467-8551.12188>
- Thijssens, T., Bollen, L., & Hassink, H. (2015). Secondary stakeholder influence on CSR disclosure: An application of stakeholder salience theory. *Journal of Business Ethics*, 132(4), 873-891. <https://doi.org/10.1007/s10551-015-2623-3>
- Treviño, L. K., Weaver, G. R. & Reynolds, S. J. (2006). 'Behavioral ethics in organizations: A review'. *Journal of Management*, 32(6), 951-990. <https://doi.org/10.1177/0149206306294258>
- Trivedi, R. H., Patel, J., & Fukukawa, K. (2025). Stakeholder green pressure and enviropreneurial marketing: Insights from Japanese SMEs. *Business Strategy and the Environment*, 34(2), 2485-2510. <https://doi.org/10.1002/bse.4110>
- Tybout, J. R. (2000). 'Manufacturing firms in developing countries: How well do they do, and why?'. *Journal of Economic Literature*, 38(1), 11-44. DOI: 10.1257/jel.38.1.11
- Ullah, B. (2025). Corporate environmental responsibility and firm growth: International evidence from SMEs. *Review of Financial Economics*, 43(3), 383-406. <https://doi.org/10.1002/rfe.70005>
- Valentinov, V. (2025). Three problems of business addressed by stakeholder theory: Insights from the institutional economics of John R. Commons. *Journal of Business Ethics*, 201(3), 717-733. <https://doi.org/10.1007/s10551-024-05854-1>
- Vasi, I. B. & King, B. G. (2012). 'Social movements, risk perceptions, and economic outcomes: The effect of primary and secondary stakeholder activism on firms' perceived environmental risk and financial performance'. *American Sociological Review*, 77(4), 573-596. <https://doi.org/10.1177/0003122412448796>
- Visser, W., McIntosh, M., & Middleton, C. (2017). 'Corporate citizenship in Africa: lessons from the past; paths to the future'. In *Corporate citizenship in Africa* (pp. 10-17). Routledge.
- Voss, G. B., Sirdeshmukh, D., & Voss, Z. G. (2008). The effects of slack resources and environmental threat on product exploration and exploitation. *Academy of Management journal*, 51(1), 147-164.
- Weaver, G. R., Treviño, L. K. & Cochran, P. L. (1999). 'Integrated and decoupled corporate social performance: Management commitments, external pressures, and corporate ethics practices'. *Academy of Management Journal*, 42(5), 539-552. <https://doi.org/10.5465/256975>
- White, H. (1980). 'A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity'. *Econometrica*, 48(4), 817-838. <https://doi.org/10.2307/1912934>
- Wijen, F. (2014). 'Means versus ends in opaque institutional fields: Trading off compliance and achievement in sustainability standard adoption'. *Academy of Management Review*, 39(3), 302-323. <https://doi.org/10.5465/amr.2012.0218>

- Wolf, J. (2014). 'The relationship between sustainable supply chain management, stakeholder pressure and corporate sustainability performance'. *Journal of Business Ethics*, 119(3), 317-328. <https://doi.org/10.1007/s10551-012-1603-0>
- World Bank (2008). *Review and analysis of the pollution impacts from Vietnamese manufacturing sector*. Washington D.C.
- Yakovleva, N. & Vazquez-Brust, D. A. (2018). 'Multinational mining enterprises and artisanal small-scale miners: From confrontation to cooperation'. *Journal of World Business*, 53(1), 52-62. <https://doi.org/10.1016/j.jwb.2017.08.004>
- Zacca, R. (2026). Leveraging network capability for small enterprise success: The critical roles of organizational capability and alertness. *Journal of Small Business Management*, 64(1), 287-310. <https://doi.org/10.1080/00472778.2025.2478448>
- Zhang, J., Noman, M., Ali, A., Ali, Z., Qayyum, S., Khan, A. A., & Sherwani, M. (2025). A moderated mediation model linking stakeholder integration to green innovation: a stakeholder theory perspective. *Business Strategy and the Environment*, 34(3), 3764-3780. <https://doi.org/10.1002/bse.4161>