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NEXUS AMONG STAKEHOLDER PRESSURE, ACCESS TO GREEN FINANCE AND GREEN INVESTMENTS: A MEDIATION MODERATION MODEL

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KEYWORDS

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ABSTRACT

Sustainable development goals attainment relies significantly on the green investments (GI), making it important factor. In this context, environmental awareness (EA) emerges as a potentially effective approach to accomplish these goals. This present study empirically investigates the impact of vital resources of EA, i.e., stakeholders pressure (SP) and access to green finance (AGF). Moreover, the study examines the mediating impact of EA between these resources and GI and the moderation impact of top management commitment (MC). In this regard, data were gathered from 315 managers of manufacturing firms in developing country. The study employs PLS-SEM to examine the relationships among the constructs. Thus, results provide significant information in reaching the conclusion and making decisions. The findings show that the SP and AGF are positively related to EA. The findings also confirmed the mediating role of EA between SP, AGF and GI. Moreover, the results confirmed the moderating role of MC between SP, AGF & EA. Consequently, the study offer recommendations for regulators in the formulation of regulations pertaining to the attainment of sustainable development goals.

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INTRODUCTION

The SDGs established by United Nations have emerged as prominent framework for achieving sustainable development. These goals encompass environmental, social & economic challenges requiring urgent attention. To accomplish these ambitious objectives, undergoing a significant overhaul in multiple sectors is imperative. The green investments (GI) have emerged as a crucial catalyst in promoting the favorable environmental results (Riaz & Ali, 2023). In light of this context, significance of environmental awareness (EA) becomes crucial as a possibly efficacious

strategy to promote conscientious environmental behaviors and facilitate advancement toward the SDGs (Galli, Iha, Pires, Alves, Zokai, Lin, Murthy & Wackernagel, 2020). The GI involves the allocation of financial resources towards the projects and initiatives that are environmentally sustainable, aiming to mitigate ecological degradation and promote the long-term well-being of society (Haldorai, Kim & Garcia, 2022). Through the strategic allocation of financial resources towards sustainable and environmentally conscious endeavors, nations, sectors and enterprises possess the capacity to exert the significant influence in the amelioration of climate change, the safeguarding of biodiversity, and the augmentation of overall societal well-being (Khan, Godil, Quddoos, Yu, Akhtar & Liang, 2021). The standing of EA becomes evident as vital determinant in achieving the sustainable development objectives. EA encompasses the cognitive recognition and comprehension of ecological concerns and ramifications of human activities on the natural environment.

The concept of sustainability involves various stakeholders, such as individuals, communities, organizations, and governments, all of whom are required to actively participate in developing and implementing the sustainable practices (Raub & Martin-Rios, 2019). This study aims to investigate the influence of SP and AGF on organizations' EA, to identify the underlying factors that drive the adoption of environmentally responsible practices. Gaining insight into various elements that contribute to forming the environmental consciousness is imperative in fostering societal ethos centered around sustainability and facilitating substantial advancements toward desired SDGs (Clark, Reed & Sunderland, 2018). This research investigates the role of EA as a mediating factor in relationship between SP, AGF, and GI. EA serves as a conduit, facilitating transformation of stakeholder concerns and financial resources into concrete and meaningful hoards in the sustainable practices (Galli, Iha, Pires, Alves, Zokai, Lin, Murthy & Wackernagel, 2020). Also, this research examines the moderating effect of the top management commitment (MC) on associations between SP, AGF, and EA. The commitment of top management is crucial factor in influencing organization orientation toward sustainability (Haldorai, Kim & Garcia, 2022). Ultimate goal is to provide valuable insights for policymakers, regulators, and business leaders, enabling them to develop plans and policies that effectively promote the attainment of sustainable development goals. Based on natural RBV theory, study examines following research questions:

RQ1. Is there a significant relationship between SP, AGF, and the environmental awareness?
RQ2. Does the environmental awareness significantly mediate between the SP, AGF, and GI?
RQ3. Does MC significantly moderates between SP, AGF, and the environmental awareness?

LITERATURE REVIEW

Stakeholders Pressure

The influence exerted by the stakeholders has been acknowledged as the prominent catalyst in promoting environmental consciousness within the organizations (Pintado et al., 2023). When various stakeholders, including customers, employees, investors, and civil society, express their concerns and expectations regarding the sustainable practices, organizations are motivated to enhance their awareness of their environmental impact & obligations (Benito & Benito, 2010). Thus, it is common for organizations to actively pursue the comprehensive comprehension of environmental concerns to fulfill stakeholders' expectations and uphold their reputation and legitimacy. In this connection, several scholarly investigations have already underscored the significance of stakeholders in shaping organizations' environmental behaviors and strategies.

Furthermore, it was argued that as organizations experience growing awareness of stakeholder demands, they acknowledge the significance of incorporating the environmental consciousness into their decision-making processes, which in turn facilitates the implementation of desired sustainable initiatives. In this linking, based on the above discussion, we propose the following hypothesis:

H1: The stakeholders pressure is positively related to environmental awareness.

Access to Green Finance

The field of green finance has experienced significant growth due to increased environmental consciousness, offering a wide range of financial instruments designed to support projects and initiatives that promote environmental sustainability. The recognition of this phenomenon acts as catalyst, stimulating an increased desire for sustainable practices and innovations, therefore establishing conducive environment for the expansion of green finance mechanisms (Wang & Zhi, 2016). With the growing awareness of the extensive ecological consequences of human actions, there is notable rise in the demand for sustainable solutions within societies (Riaz, Ali, et al., 2023). In light of the increasing demand, the availability of green finance emerges as a crucial catalyst for transformative shifts. Consequently, financial institutions allocate capital towards environmentally sustainable projects due to their recognition of the economic viability and societal advantages associated with such initiatives (Clark et al., 2018). Furthermore, the existence of the strong green finance alternatives enhances the influence of the environmental consciousness. By providing easily accessible means of financial support, both individuals and organizations are able to more efficiently translate their dedication towards sustainability into concrete measures (Verboven & Vanherck, 2016). Consequently, the following is the research hypothesis:

H2: The access to green finance is positively related to environmental awareness.

Mediating Role of Environmental Awareness

The complex network of sustainable finance is supported by multifaceted interaction among EA, SP, AGF, and GI. Environmental awareness plays the crucial role in promoting ecological responsibility by effectively mediating the influence of stakeholders' demands and facilitating the implementation of green finance and investments (Xu et al., 2020). An increased level of environmental consciousness is not solely driven by societal and regulatory forces but amplifies the expectations of stakeholders for the businesses to adopt sustainable practices (Babiak & Trendafilova, 2011). SP motivates companies to adopt environmentally sustainable strategies and catalyzes a shift in corporate culture towards promotion of environmental responsibility. Still, the increase in EA creates a favorable atmosphere for the expansion of GI. Stakeholders, who possess a growing awareness of the environmental consequences associated with financial decisions, are placing pressure on the financial institutions to embrace responsible lending and investment practices (Richardson, 2009). Thus, this phenomenon stimulates the advancement of novel sustainable investment portfolios specifically designed to meet the growing need for investment options that align with the social and environmental responsibility. Consequently, based upon the support from the existing literature, above discussion we propose the following hypothesis:

H3: The environmental awareness mediates between SP and green investments.
H4: The environmental awareness mediates between AGF and green investments.

Moderating Role of Top Management Commitment

The commitment of top management is a significant factor in driving corporate sustainability initiatives (Yong et al., 2022). The adoption of the environmentally responsible practices by corporations is influenced by stakeholders' pressure, which originates from a range of entities, including customers, investors, and regulatory bodies (Al-Swidi et al., 2023). Nevertheless, the degree to which this pressure is translated into the concrete strategic decisions and actions is contingent upon dedication of senior management (Wijethilake & Lama, 2019). Furthermore, the MC in bridging the gap between stakeholders' demands and allocation of resources, such as acquisition of green finance. When faced with pressure from stakeholders, top management that is dedicated and determined is more inclined to prioritize and allocate resources towards sustainability initiatives (Henriques & Sadorsky, 1999). Furthermore, it was argued that the impact of top management commitment is particularly significant when it comes to promoting environmental awareness. Top-level executives are crucial in promoting the dissemination of environmental consciousness within the company, thereby fostering the corporate culture that places importance upon the ecological accountability (Stone et al., 2004). The combination of internal consciousness and external stakeholder influence mutually enhances knowledgeable and ethically responsible approach to environmental issues. Thus, following are the proposed hypotheses:

H5: Top management commitment moderates between SP and environmental awareness.
H6: Top management commitment moderates between AGF & environmental awareness.

Green Investment

An increased level of EA plays pivotal role in motivating investments towards environmentally sustainable initiatives. Prioritization of environmentally sustainable projects and initiatives by stakeholders is driven by heightened EA, which is founded on a comprehensive comprehension of ecological challenges and their associated consequences (Thabrew et al., 2009). The state of heightened awareness creates conducive atmosphere where investors and institutions allocate their resources towards enterprises that are in line with their ecological principles, stimulating the growth of green investment. Furthermore, individuals increasingly recognize the enduring advantages of engaging in environmentally sustainable practices, and they are more inclined to allocate their financial resources towards endeavors that actively contribute to enhancement of ecological well-being (Sahoo et al., 2023). The GI embodies slow endeavor to allocate financial resources towards endeavors that yield favorable outcomes for the natural environment. The alignment of environmental consciousness and GI is apparent as both companies and investors react to societal demands and regulatory measures by allocating resources towards renewable energy, carbon mitigation, and sustainable technologies (Agrawal et al., 2023). Thus, research hypothesis is:

H7: The environmental awareness is positively related to green investments.

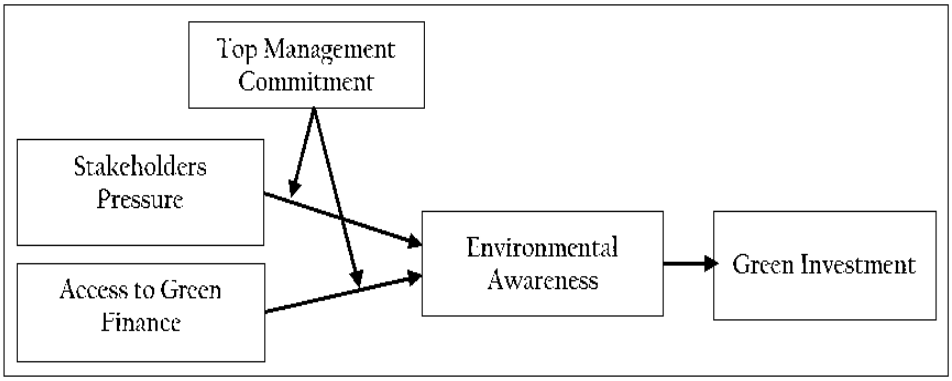
RESEARCH METHODOLOGY

Measures

The research framework has five constructs: SP, AGF, MC, EA and GI. The items utilized in this study were obtained from previously validated research studies. The SP comprises a set of nine items, as delineated by Henriques and Sadorsky (1999). The study conducted by Wang and Zhi (2016) encompasses a set of five items that were utilized to assess construct of AGF. The study conducted by (Bowen et al., 2001; Chatterjee et al., 2002; Dai et al., 2018) employed four-item

scale to assess the construct of MC. The measurement of EA was conducted using a set of five items, as outlined in the study by Xu et al. (2020). Finally, GI is comprised of a collection of seven items, as delineated by Akin et al. (2011). Therefore, research framework is depicted in Figure 1.

Figure 1
Research Framework



Population & Sampling

The data utilized in study was collected from manufacturing firms situated in Lahore, Pakistan. The Punjab province holds distinction of being the largest province in Pakistan, both in terms of its expansive geographical expanse and its substantial population. The Lahore Chamber of Commerce occupies a significant position within province, hosting a considerable number of firms in comparison to other Chambers (Bresciani et al., 2022; Riaz, Santoro, et al., 2023). The sample consists of managers of these firms. Preliminary evaluation was carried out to establish the validity of the variables, and questionnaire was subjected to an assessment to determine its clarity, coherence, and validity. According to (Comrey & Lee, 1992), sample size that surpasses 1000 is considered to possess exceptional quality. A survey was administered to a sample of 1000 participants so as to collect data. Total of 351 questionnaires were gathered, out of which 315 were deemed suitable for inclusion in ultimate analysis. Data collection process employed the use of simple random sampling technique in order to obtain information from participants. The demographic characteristics of the participants are presented in Table 1. Among entirety of participants, majority of 95.6% were male, whereas minority of 4.4% were female. In relation to the hierarchical structure, it was found that 22.5% of individuals occupied roles classified as junior managers, while the larger proportion, accounting for 77.5%, were identified as senior managers. In the realm of education, a majority of individuals, specifically 60.6%, possessed a bachelor degree. A significant proportion, amounting to 34.6%, held master's degree. A smaller fraction, about 2.9%, pursued an M.Phil. Degree, while a minority of 1.9% possessed alternative qualifications.

Table 1
Demographic Information

Demographics	Frequency	(%)
Gender		
Male	301	95.6

Female	14	4.4
Hierarchy level		
Junior Manager	71	22.5
Senior Manager	244	77.5
Education level		
Bachelors	191	60.6
Masters	109	34.6
M.Phil.	9	2.9
Others	6	1.9

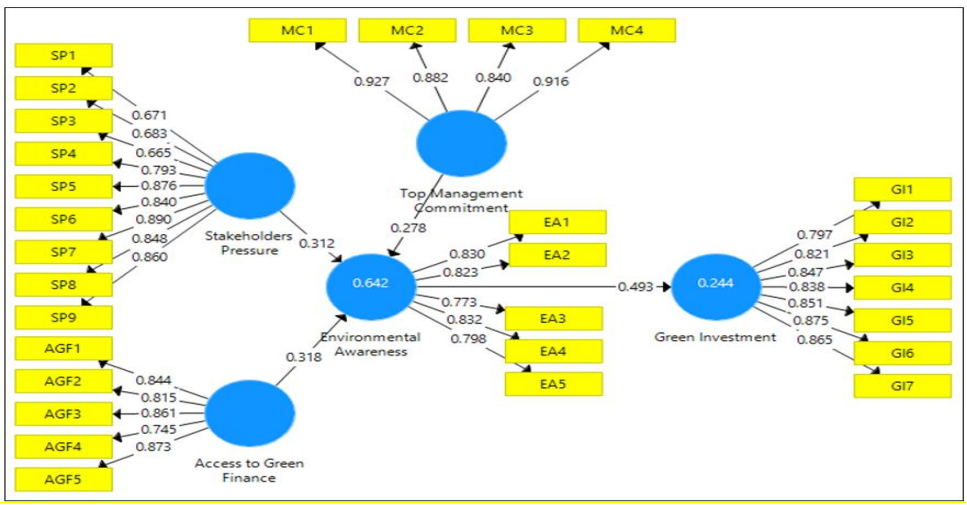
RESULTS OF STUDY

Common Method Bias

In primary research, Podsakoff et al. (2003) put forth procedural and statistical approaches to address issue of CMB. Procedural and statistical measures were implemented so as to evaluate and confirm that potential influence of CMB was mitigated. The questionnaire was designed to prioritize key informants who possessed a comprehensive understanding of the subject matter under study. We employed distinct scales to measure the exogenous and endogenous constructs, thereby mitigating potential biases that may arise from respondents. Besides, we performed a CMB test to address potential bias concerns commonly encountered in survey-based research. Harman's single-factor test was employed as a means to mitigate such biases. Findings suggest that solitary factor was responsible for 47.074% of total variance, that is below threshold value of 50%.

Figure 2

Measurement Model



Model Estimation

The PLS-SEM technique is commonly employed in evaluation of hypotheses, with assistance of the SmartPLS software. There exist multiple rationales for adoption of PLS-SEM. For example, it is advisable to employ regression analysis as a technique for performing estimations in order

to assess mediation (Preacher & Hayes, 2004). The PLS-SEM is a statistical methodology that proficiently assesses the presence of measurement error and provides a precise estimation of the mediation effect, as elucidated by researcher Chin (1998). Furthermore, (Hair et al., 2021) have recognized the PLS-SEM technique as a proficient method for managing models of varying complexity.

Table 2

Convergent Validity

Constructs	Items	FL	AVE	CR	R2	α	FC
Shareholder's Pressure	SP1	0.671	0.635	0.939		0.926	2.390
	SP2	0.683					
	SP3	0.665					
	SP4	0.793					
	SP5	0.876					
	SP6	0.840					
	SP7	0.890					
	SP8	0.848					
	SP9	0.860					
Access to Green Finance	AGF1	0.844	0.687	0.916		0.885	1.881
	AGF2	0.815					
	AGF3	0.861					
	AGF4	0.745					
	AGF5	0.873					

Table 2A

Convergent Validity

Constructs	Items	FL	AVE	CR	R2	α	FC
Top Management Commitment	MC1	0.927	0.795	0.939		0.914	2.486
	MC2	0.882					
	MC3	0.840					
	MC4	0.916					
Environmental Awareness	EA1	0.830	0.658	0.906	0.642	0.870	1.000
	EA2	0.823					
	EA3	0.773					
	EA4	0.832					
	EA5	0.798					
Green Investment	GI1	0.797	0.709	0.945	0.244	0.932	
	GI2	0.821					
	GI3	0.847					
	GI4	0.838					
	GI5	0.851					
	GI6	0.875					
	GI7	0.865					

The loadings observed in this study, as indicated in Table 2, fall within range of 0.665 to 0.927. The findings of this study are consistent with established standard that loadings should exceed threshold of 0.50, as noted by Becker et al. (2022). Composite reliability (CR) and Cronbach's

alpha are commonly utilized metrics for assessing internal consistency reliability of a construct (Chin, 2010). The analysis of the data presented in Table 2 reveals that the internal consistency reliability of the measures under examination is considered satisfactory. In this connection, this assertion is substantiated by the empirical evidence that both CR and the alpha values exceed predetermined threshold of 0.70. The assessment of convergent validity involves the utilization of average variance extracted (AVE), with a recommended threshold of 0.50, as suggested by Becker et al. (2022). Based on the results presented in Table 2 and Figure 2, it is evident that all constructs thus demonstrated an AVE value exceeding the established threshold of 0.50. This observation suggests that the constructs satisfy the criteria for convergent validity in the present study.

Table 3
Discriminant validity (HTMT)

	AGF	EA	GI	SP	MC
Access to Green Finance					
Environmental Awareness	0.789				
Green Investment	0.576	0.546			
Stakeholders Pressure	0.682	0.777	0.526		
Top Management Commitment	0.720	0.797	0.589	0.786	

Historically, assessment of discriminant validity was conducted using conventional metrics, as originally suggested by Fornell and Larcker (1981). Currently, the assessment of discriminant validity is commonly conducted using the heterotrait-monotrait (HTMT) method, which was first proposed by Henseler et al. (2015). There is the recommendation to establish the HTMT ratio at 0.85 for variables that possess discernible conceptual characteristics. Conversely, it is advised to set a threshold of 0.90 for variables that exhibit similarities. The empirical evidence presented in Table 3 demonstrates that the established criteria for discriminant validity have been met.

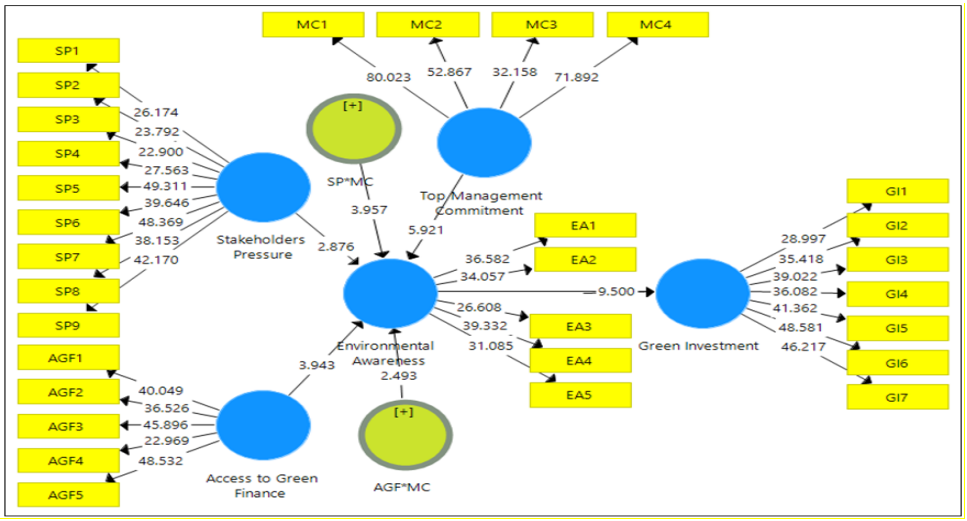
Table 4
Hypotheses Testing

Hypotheses	Paths	β-values	t-values	p-values	Remarks
H1	SP → EA	0.207	2.876	0.004	Yes
H2	AGF → EA	0.226	3.943	0.000	Yes
H3	SP → EA → GI	0.102	2.788	0.006	Yes
H4	AGF → EA → GI	0.112	3.378	0.001	Yes
H5	SP*MC → EA	0.296	3.957	0.000	Yes
H6	AGF*MC → EA	0.158	2.493	0.013	Yes
H7	EA → GI	0.493	9.500	0.000	Yes

Structural model is illustrated in Figure 3. Results given in Table 4 indicate that Stakeholder's Pressure has statistically significant positive effect on Environmental Awareness (β=0.207 and t=2.876), and H1 is supported. Similarly, Access to Green Finance is significantly determining Environmental Awareness (β=0.226 and t=3.943), and H2 is supported. Besides, the result of mediation analysis indicates that the Environmental Awareness significantly mediates between Stakeholder's Pressure (β=0.102 and t=2.788), Access to Green Finance (β=0.112 and t=3.378) and Green Investments, therefore providing support for H3 and H4, respectively. Moreover,

moderation effect of SP*Top Management Commitment on relationship between Stakeholder's Pressure and Environmental Awareness was found to be statistically significant (β=0.296 and t=3.957). Also, moderation effect of Access to Green Finance*Top Management Commitment on the relationship between Access to Green Finance and Environmental Awareness was found to be statistically significant (β=0.158 and t=2.493); providing support for H5 and H6. Lastly, results reported significant bond between Environmental Awareness and Green Investments (β=0.493 and t=9.500); therefore supporting H7. The moderating effect is depicted in Figures 4 and 5.

Figure 3
Structural Model



DISCUSSION

The results that demonstrate a positive correlation between SP and EA support the conclusions drawn from prior studies. Previous research conducted by Zameer et al. (2021) has verified that stakeholder pressure plays pivotal role in fostering environmental awareness in organizations. This pressure compels firms to address the societal expectations and comply with regulatory requirements. Likewise, the aforementioned alignment places significant emphasis on the role of stakeholders in influencing organization's awareness and understanding of environmental concerns. Similarly, the strong correlation between access to green finance and environmental awareness is consistent with the findings of Cen and He (2018), who highlight the significance of AGF in motivating the companies to prioritize sustainability endeavors. The provision of dedicated financial resources for green projects facilitates firms' capacity to participate actively in environmentally conscientious activities, by promoting heightened levels of environmental consciousness.

The study highlights the mediating function of environmental awareness in the relationship between SP, AGF, and GI. This finding emphasizes the role of EA as mechanism through which stakeholder pressure and financial resources are translated into the concrete, environmentally friendly investments. The aforementioned discovery aligns with scholarly work. It was argued

that environmental consciousness serves as a medium by which external influences as well as resource availability manifest into sustainable behaviors (Banwo & Du, 2019; Benito & Benito, 2006). Moreover, previous studies emphasize the importance of the managerial commitment in enhancing the impact of stakeholder pressure and access to green finance on environmental consciousness. The dedication exhibited by senior management has the potential to amplify the influence of these resources upon the company's awareness and strategic choices in relation to SDGs.

CONCLUSION

The empirical study yields significant findings regarding the complex interconnections among green investments, environmental awareness, stakeholders' pressure, access to green finance, and top management commitment. This study empirically investigates the impact of important resources of EA, i.e., stakeholders pressure (SP) and access to green finance (AGF). Moreover, the study examines mediating impact of EA between these resources and GI and moderation impact of top management commitment (MC). The data were gathered from 315 managers of manufacturing firms in developing country. Study employs PLS-SEM to examine relationships among the constructs. The findings show that the SP and AGF are positively related to EA. Through an analysis of these constructs within the specific context of manufacturing firms in a developing country, this study provides insights into ways in which these factors interact and influence the pursuit of SDGs. The analysis of the findings in relation to prior research enriches our grasp of the influence of environmental awareness, SP, green finance, and moral conviction in promoting environmentally friendly investments, thereby facilitating progress towards the SDGs.

Theoretical & Practical Implications

The findings of this study make a valuable contribution to Natural Resource-Based View theory by highlighting the complex relationships between environmental resources in the context of achieving SDGs. Through the empirical validation of interconnections among environmental awareness, stakeholders' pressure, access to green finance, and top management commitment, this study enhances our command of how organizations utilize these resources to facilitate green investments and therefore, promote achievement of SDGs. Theoretical understanding of how EA translate external pressures and financial resources into concrete actions that support sustainability. Moreover, this study highlights significant role of top management commitment in influencing the relationship between stakeholders' pressure and access to green finance and their impact on environmental awareness and green investments. This contributes to a deeper comprehension of the managerial agency in context of sustainable development. The findings of this study also have significant implications for the financial institutions and policymakers, underscoring the significance of enabling the availability and accessibility of the green finance to enhance environmental consciousness and promote investments in environmentally friendly initiatives.

REFERENCES

Agrawal, R., Agrawal, S., Samadhiya, A., Kumar, A., Luthra, S., & Jain, V. (2023). Adoption of green finance and green innovation for achieving circularity: an exploratory review and future directions. *Geoscience Frontiers*, 101669.

Akin, M., Ruwaard, J., Raaij, E., & Wynstra, F. (2011). Proactive environmental strategy in a supply chain context: the mediating role of investments. *International Journal of Production Research*. 22 (2), 115-135.

Al-Swidi, A. K., Hair, J. F., & Al-Hakimi, M. A. (2023). Sustainable development-oriented regulatory and competitive pressures to shift toward a circular economy: The role of environmental orientation and Industry 4.0 technologies. *Business Strategy and the Environment*. 76, 104431.

Babiak, K., & Trendafilova, S. (2011). CSR and environmental responsibility: Motives and pressures to adopt green management practices. *Corporate social responsibility and environmental management*, 18(1), 11-24.

Banwo, A. O., & Du, J. (2019). Workplace pro-environmental behaviors in small and medium-sized enterprises: Employee level analysis. *Journal of Global Entrepreneurship Research*, 9, 1-20.

Becker, J.-M., Cheah, J.-H., Gholamzade, R., Ringle, C. M., & Sarstedt, M. (2022). PLS-SEM's wanted guidance. *International Journal of Contemporary Hospitality Management (ahead-of-print)*.

Bello-Pintado, A., Machuca, J. A., & Danese, P. (2023). Stakeholder pressures and sustainability practices in manufacturing: Consideration of the economic development context. *Business Strategy and the Environment*. 18 (4), 215-235.

Bowen, F. E., Cousins, P. D., Lamming, R. C., & Farukt, A. C. (2001). The role of supply management capabilities in green supply. *Production and Operations Management*, 10(2), 174-189.

Bresciani, S., Rehman, U., Alam, G. M., Ashfaq, K., & Usman, M. (2022). Environmental MCS package, perceived environmental uncertainty and green performance: in green dynamic capabilities and investment in environmental management perspectives. *Review of International Business and Strategy*, ahead-of-print(ahead-of-print).

Cen, T., & He, R. (2018). Fintech, green finance and sustainable development. 2018 *International Conference on Management, Economics, Education, Arts and Humanities* (MEEAH 2018),

Chatterjee, D., Grewal, R., & Sambamurthy, V. (2002). Shaping up for e-commerce: institutional enablers of the organizational assimilation of web technologies. *MIS quarterly*, 65-89.

Chin, W. W. (2010). How to write up and report PLS analyses. In Handbook of partial least squares (pp. 655-690). *Springer*. Comrey, A. L., & Lee, H. B. (1992). A first course in factor analysis. Psychology press.

Clark, R., Reed, J., & Sunderland, T. (2018). Bridging funding gaps for climate and sustainable development: Pitfalls, progress & potential of private finance. *Land Use Policy*, 71, 335-346.

Dai, J., Chan, H. K., & Yee, R. W. (2018). Examining moderating effect of organizational culture on the relationship between market pressure and corporate environmental strategy. *Industrial Marketing Management*, 74, 227-236.

Galli, A., Iha, K., Pires, S. M., Alves, A., Zokai, G., Lin, D., Murthy, A., & Wackernagel, M. (2020). Assessing the ecological footprint and biocapacity of Portuguese cities: Critical results for environmental awareness and local management. *Cities*, 96, 102442.

González-Benito, J., & González-Benito, Ó. (2006). A review of determinant factors of environmental proactivity. *Business Strategy and the Environment*, 15(2), 87-102.

González-Benito, J., & Benito, Ó. (2010). A study of determinant factors of stakeholder environmental pressure perceived by industrial companies. *Business Strategy and the Environment*, 19(3), 164-181.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). A primer on partial least squares structural equation modeling (PLS-SEM). *Sage publications*.

Haldorai, K., Kim, G., & Garcia, R. F. (2022). Top management green commitment and green intellectual capital as enablers of hotel environmental performance: The mediating role of green human resource management. *Tourism Management*, 88, 104431.

Henriques, I., & Sadorsky, P. (1999). The relationship between environmental commitment and managerial perceptions of stakeholder importance. *Academy of Management Journal*, 42(1), 87-99.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.

Khan, S. A. R., Godil, D. I., Quddoos, U., Yu, Z., Akhtar, H., & Liang, Z. (2021). Investigating the nexus between energy, economic growth, and environmental quality: A road map for the sustainable development. *Sustainable Development*, 29(5), 835-846.

Podsakoff, M. P., MacKenzie, B. S., Jeong-Yeon, L., & Podsakoff, P. N. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology,* 88.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, & computers*, 36(4), 717-731.

Raub, S. P., & Martin-Rios, C. (2019). Think sustainable, act local–a stakeholder- filter- model for translating SDGs into sustainability initiatives with local impact. *International Journal of Contemporary Hospitality Management*, 31(6), 2428-2447.

Riaz, A., Ali, F., Ashfaq, K., Bhatti, A., & Rehman, S. U. (2023). Eco-innovation of food processing and manufacturing SMEs. *British Food Journal*. 14 (2), 115-135.

Riaz, A., & Ali, F. H. (2023). Responsible Innovation and Sustainable Competitive Advantage: A Moderated Mediation Model. *Global Economics Review*, 7(3), 1-8.

Riaz, A., Santoro, G., Ashfaq, K., Ali, F. H., & Rehman, S. U. (2023). Green Competitive Advantage and SMEs: Is Big Data the Missing Link? *Journal of Competitiveness*.

Richardson, B. J. (2009). Keeping ethical investment ethical: Regulatory issues for investing for sustainability. *Journal of Business Ethics*, 87, 555-572.

Sahoo, S., Kumar, A., & Upadhyay, A. (2023). How do green knowledge management and green technology innovation impact corporate environmental performance? Understanding the role of green knowledge acquisition. *Business Strategy and the Environment*, 32(1), 551-569.

Stone, G., Joseph, M., & Blodgett, J. (2004). Toward the creation of an eco-oriented corporate culture: a proposed model of internal and external antecedents leading to industrial firm eco-orientation. *Journal of Business & Industrial Marketing*, 19(1), 68-84.

Thabrew, L., Wiek, A., & Ries, R. (2009). Environmental decision making in multi-stakeholder contexts: applicability of life cycle thinking in development planning and implementation. *Journal of Cleaner Production*, 17(1), 67-76.

Verboven, H., & Vanherck, L. (2016). Sustainability management of SMEs and the UN sustainable development goals. uwf UmweltWirtschaftsForum, 24(2-3), 165-178.

Wang, Y., & Zhi, Q. (2016). The role of green finance in environmental protection: Two aspects of market mechanism and policies. *Energy Procedia*, 104, 311-316.

Wijethilake, C., & Lama, T. (2019). Sustainability core values and sustainability risk management: Moderating effects of top management commitment and stakeholder pressure. *Business Strategy and the Environment,* 28(1), 143-154.

Xu, X., Wang, S., & Yu, Y. (2020). Consumer's intention to purchase green furniture: Do health consciousness and environmental awareness matter? *Science of the Total Environment*, 704, 135275.

Yong, J. Y., Yusliza, M. Y., Ramayah, T., & Seles, B. M. R. P. (2022). Testing the stakeholder pressure, relative advantage, top management commitment and green human resource management linkage. *Corporate social responsibility and environmental management*, 29(5), 1283-1299.

Zameer, H., Wang, Y., & Saeed, M. R. (2021). Net-zero emission targets and the role of managerial environmental awareness, customer pressure, and regulatory control toward environmental performance. *Business Strategy and the Environment*, 30(8), 4223-4236.