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Driving Sustainable Business Performance through Green HRM: Examining the Mediating Roles of Green Technology Innovation and Green Organizational Culture

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ABSTRACT

Amid rising environmental challenges and competitive dynamics, organizations are progressively adopting sustainable human resource practices to secure a strategic edge. This study investigates the contribution of Green Human Resource Management (GHRM) to sustainable business performance (SBP), emphasizing the mediating roles of Green Technology Innovation (GTI) and Green Organizational Culture (GOC). Grounded in the Resource-Based View (RBV) and Ability-Motivation-Opportunity (AMO) theory, the research employs a quantitative approach, drawing data from multinational and local corporate organizations across the financial, telecommunications, and FMCG sectors in Dhaka and Chattogram, Bangladesh. Structural equation modeling (SEM) was employed to examine the proposed relationships. The results indicate that Green HRM positively influences business performance directly and indirectly through GTI and GOC, highlighting their strategic importance as intangible assets and capability-enhancing mechanisms. This study advances theoretical understanding by integrating RBV and AMO perspectives and offers practical insights for managers seeking to embed sustainability into core HR and innovation strategies.

Keywords: Green HRM, Green Technology Innovation, Green Organizational Culture, Sustainable Business Performance, Business Sustainability.

JEL Code: C83, M10, M14, M54.

I. Introduction

In today's interconnected world, social media has increased public consciousness regarding businesses' environmental and social duties, necessitating institutions and business organizations to attain superior sustainable performance to establish their position in domestic and global markets (Ch'ng et al., 2021). A corporation can achieve sustainable commercial performance by safeguarding the integrity of the natural environment and ensuring the welfare of the local communities in its operational areas. Today's competitive market requires business entities to protect consumers' environmental and social interests through their products and services (Schaltegger et al., 2019). The concept of sustainable business performance (SBP) has become a pivotal focus in contemporary studies, gaining considerable interest from scholars and industry professionals alike. Firms worldwide are progressively integrating their strategic objectives with sustainability principles. Zhao and Huang (2022) assert that sustainable performance is



attained when enterprises conduct their operations without compromising environmental and societal quality.

One of the strategies being developed to aid this shift is Green Human Resource Management (GHRM), which incorporates environmental management with human resource practices to encourage sustainable team member behaviors. Specifically, Green HRM emphasizes sustainability via training and development, connecting eco-friendly behavior to various pro-environmental policies (Zhu et al., 2021; Maheshwari et al., 2024). Green HRM promotes adopting pro-ecological values, beliefs, and behaviors among employees, thereby improving the organization's environmental performance (Tang et al., 2018). Employees with competencies are invaluable assets to a company. They must be cultivated, sustained, and safeguarded to guarantee they operate efficiently and with heightened enthusiasm, enhancing the efficacy of both the individual and the organization. Enhancements via human resources are essential for reinstating a company's operational performance. Human resources are intricate and distinct from other production variables; they necessitate effective management, training, and cultivating their natural capabilities and potential (Gustiah & Nurhayati, 2022).

Similarly, green organizational culture is a workplace paradigm where sustainability is central to its principles and operations, with managers proactively advocating environmentally friendly activities. Employees participate, disseminate information, collaborate on environmental matters, and make autonomous decisions, thereby endorsing the accountability for sustainable development (Sharma et al., 2021; Anggoro et al., 2024). Supportive human resource management can substantially influence the cultivation of an environmentally conscious culture internally and throughout the sector. A prior study by Aggarwal and Agarwala (2023) presents empirical evidence that adopting a green corporate culture can enhance sustainability and provide a competitive advantage to enterprises. Currently, technological issues are regarded as significant factors affecting the next generation's lives. Technological sustainability has become a focal point for prominent organizations striving for sustainable performance (Erkmen et al., 2020). Research indicates that utilizing integrated information systems and contemporary technology systems for effective HR management is crucial for the SBP of organizations (Lee et al., 2019; Alraja et al., 2022; Quosar et al., 2024).

Previous studies are limited to examining the link between green HRM and sustainable business outcomes (Al-Abadi & Rumman, 2023; Zihan & Makhbul, 2024). This limited perspective raises doubts regarding the adequacy of green HRM implementation in thoroughly protecting the natural environment, optimizing business resource utilization, and guaranteeing sustainable performance. Consequently, there is a critical need for a novel study avenue: do green technology innovation and organizational culture mediate the links between green HRM practices and sustainable business performance? To fill the literature gaps and respond to the aforementioned inquiries, we initially examine the relationship between Green HRM practices, green technical innovation, and green organizational culture. This research examines the dual mediating effects of GTI and GOC on the relationship between green HRM and SBP within the corporate sector of Bangladesh, a developing nation in South Asia.

The research offers substantial insights into how business entities in developing nations can leverage HR practices to drive environmental and economic sustainability. Kluza et al. (2021) and Liao and Li (2022) indicate that GTI is highly appropriate for achieving sustainable corporate performance. Because green organizational culture has been insufficiently addressed in the corporate literature, the significance of this contribution may be better understood. By integrating the Ability-Motivation-Opportunity (AMO) and Resource-Based View (RBV) framework, we studied and explained the mechanisms through which green HRM practices contribute to sustainable business performance. Several academics have investigated green HRM practices, which enhance employees' skills, motivation, and opportunities, ultimately resulting in improved organizational performance. Complementing this, the RBV highlights the internal capabilities, such as GTI and GOC, as a strategic resource and why these rare and inimitable organizational capabilities matter in order to gain a competitive advantage. The study's results will assist in developing a conducive GOC, where the environment will be safe and hazard-free. Therefore, the present study contributes to the literature of green

HRM by validating the mediating role of green consciousness and providing evidence-based recommendations for creating greener and more resilient business practices in developing regions. Overall, the study's outcomes will help design policies and plans to boost green HRM practices and organizational culture to bring sustainability to corporate institutions.

II. Literature Review

This study presents a theoretical structure designed to investigate the interconnections among the factors green HRM, GTI, and GOC in fostering sustainable business performance, viewed through the lenses of environmental management and organizational behavior. Anchored in the AMO and the RBV theory, the study aims to clarify the indirect effects of GHRM practices on team member work engagement and performance outcomes via GTI and GOC. AMO theory fundamentally conceptualizes that each feature of the AMO model, such as ability, motivation, and opportunity, may substantially involve green behavior development (Gill et al., 2021). Through the AMO theory, green HRM practices influence employees' ability to significantly contribute to the green innovation process in achieving sustainable organizational performance. In a previous study, researchers (Yong et al., 2020) confirmed that highly skilled and motivated workers are more likely to perform as needed for the business to achieve sustainable performance. Furthermore, within the Asian context, GHRM grounded in AMO theory has provided additional insights into firm performance in educational institutions in China (He et al., 2021).

RBV theory posits that a company identifies its key assets and resources, which are rare, unique, and irreplaceable, to attain enduring competitive advantage (Shahzad et al., 2020; Lin et al., 2021; Andersén, 2021). The RBV of an enterprise has been widely utilized to demonstrate varying perspectives on developing strategies and as a crucial factor influencing its success, as evidenced by studies in both human resource management (Malik et al., 2021; Willie, 2024) and environmental management (Belhadi et al., 2020; Kraus et al., 2020). Strategic resources confer sustained superior results and a continuous edge over competitors when they are challenging to duplicate or excessively expensive for rivals to imitate (Santos et al., 2020). According to the RBV, GHRM practices recognize, cultivate, incentivize, and enhance team member behavior to achieve the firm's sustained competitive edge and superior performance (Hameed et al., 2021). Our findings indicate that when human capital is wrapped into an organization's complex cultural system, supported by advanced technology, it typically meets the criteria of the RBV, potentially leading to enhanced performance and a competitive edge across the system. Organizations that utilize these assets and skills competently can attain enhanced performance regarding profitability, environmental responsibility, and stakeholder satisfaction (Hart, 1995). The present research wishfully contributes to a remaining pool of literature by scrutinizing GTI and GOC as mediators among the GHRM practices and sustainable business performance through AMO & RBV theories.

III. Hypothesis Development and Research Model

3.1. Green HRM and SBP

Green HRM involves incorporating environmental management principles into HR policies and practices. Administrators, especially those in the HR department, invest in human resources by green recruitment, training, assessing, and rewarding an environmentally aware workforce (Malik et al., 2021; Correia et al., 2024). Green HRM promotes effective operations and resource allocation in organizations while improving their commitment to environmental sustainability. It is crucial for managing an organization for various reasons, such as ecological advantages, workforce stability, and enhancing the organization's attractiveness. Numerous studies indicate that Green HRM positively influences Sustainable Performance in all three dimensions: society, economy, and environment (Paulet et al., 2021; Obeidat et al., 2022). The significance of Green HRM in fostering a sustainable corporate culture is underscored by Yong et al. (2020), who explored how Green HRM practices can assist organizations in aligning their business strategies with

environmental considerations. Consequently, this relationship illustrates the strategic importance of Green HRM in promoting sustainability-driven outcomes, thus aiding in the broader objectives of sustainable business performance. Therefore, the subsequent hypothesis may be put forth:

H1 Green HRM practices positively impact the sustainable business performance of corporate sectors in Bangladesh.

3.2. Mediating role of GTI

GTI is defined by an organization's ability to implement innovative concepts to create new functional processes and products and improve current operational methods with a focus on sustainability (Castellano et al., 2022; Rehman et al., 2021). Incorporating environmentally responsible practices within HR functions fosters a culture of sustainability and innovation. Consequently, organizations implementing robust Green HRM practices tend to foster innovative technologies to minimize environmental impact, enhance team member awareness, and facilitate the shift towards sustainable operations. Organizations that adopt a GTI orientation achieve a competitive advantage while also contributing positively to environmental preservation and promoting the social welfare of all the stakeholders (Pekovic & Bouziri, 2021; A.Wu & Li, 2020). Therefore, understanding the link between green HRM and GTI is particularly important in the corporate sector, where technological innovation capabilities often determine competitive advantage and long-term viability.

Aside from the corporate sector, adopting green strategies has become vital in enhancing sustainable performance across different sectors (Ullah et al., 2021). Industrial entities, emphasizing environmental issues and directing resources towards technological innovations for pollution reduction, have demonstrated a significant relationship with enhanced sustainable performance (Miroshnychenko et al., 2017). Leveraging new technologies, it is essential to acknowledge that the organization's workforce is a part of society and may be affected by technology, which may result in sustainable performance. This underscores the significance of innovation as a crucial connection, stressing that sustainability outcomes are not attained merely through green policies, but rather through ongoing enhancement and technological progress. Some recent studies have shown a positive link between GTI and sustainable performance (Abu Seman et al., 2019; Singh et al., 2022; Sahoo et al., 2022), yet the results from some earlier literature create uncertainty regarding these study results (Y.-S. Chen, 2008; Y. S. Chen & Chang, 2013). Consequently, the connection between GTI and sustainable performance is still ambiguous, prompting the development of the following hypotheses:

H2 = Green HRM has a positive association with GTI.

H3 = GTI has a positive association with SBP.

H4 = GTI positively mediates the relationship between the Green HRM and SBP.

3.3. Mediating role of GOC

Green organizational culture is a collection of principles, symbols, and underlying assumptions that reflect an organization's commitment to environmental sustainability (Shah et al., 2021). GOC inspires individuals to learn green knowledge and information, which may motivate organizations to prioritize these concepts. The relationship between Green HRM and organizational culture is inherently interconnected, as the successful implementation of GHRM within an organization fosters the advancement of GOC. Green HRM holds significant promises for fostering a GOC by instilling or cultivating environmental values, attitudes, and behaviors in workers through recruiting, selection, training, and performance management procedures (Roscoe et al., 2019). An increase in environmentally conscious employees will lead to a more robust pro-environmental corporate culture, ultimately fostering a highly aware workforce of environmental issues within the organization (Khammadee & Ninaroon, 2022). In turn, the significance of GOC in fostering sustainable performance is underscored by (Vargas-Hernández et al., 2023). It supports tackling environmental issues by taking various decisions and initiatives. GOC is prominent in managing and

developing green performance, green innovation, and environmental values, which ultimately support promoting sustainability and business performance (Imran & Jingzu, 2022; Premesti & Yuniningsih, 2023). The underlying assumption is that by embedding environmental consciousness within the organizational culture and workforce behavior, corporate organizations can simultaneously enhance their operational efficiency and long-term competitiveness.

Encouraging a culture of continuous environmental improvement necessitates granting employees the freedom to assess their practices and those of their colleagues. Research indicates that empowering employees with responsibility and independence improves their comprehension of environmental issues and notably impacts a company's sustainable performance (Hassanein et al., 2024). Consequently, this study posits that a GOC is the driving force behind attaining optimal sustainable business performance. Furthermore, business performance will probably be enhanced as organizations embrace an environmentally conscious culture through an effective Green HRM strategy that engages all employees. Therefore, this study aims to delve deeper into the connection between green HRM practices and SBP, focusing on the mediating influence of GOC. Also, an integrative framework that aligns green HRM with GOC offers a universal approach to driving sustainable performance (Maheshwari et al., 2024; Nima & Maksum, 2025). In light of the discussions presented above, it is suggested that:

- H5 = Green HRM has a positive association with GOC.
- H6 = GOC has a positive association with SBP.
- H7 = GOC positively mediates the relationship between the Green HRM and SBP.

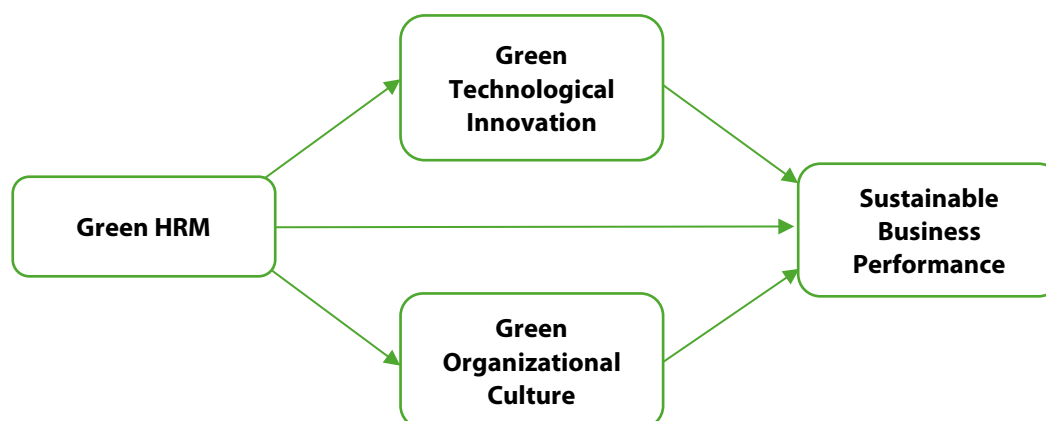


Figure 1. Research Model

IV. Research Methodology

4.1. Research Design

Research methodology is an organized approach designed to provide guidance and strategies for producing trustworthy and valid research results (Sekaran & Bougie, 2016). This study employs a structured method for addressing the research question and establishing the study's methodological framework. In alignment with the principles proposed by Hair et al. (2021), we adopted a quantitative research approach to investigate the interconnections depicted in Figure 1. The study further employed deductive reasoning to test the proposed hypotheses, aligning with the justification provided by Abu-Alhajja (2019), who highlights the suitability of combining deductive reasoning with a quantitative approach for hypothesis testing. Additionally, a positivist paradigm was adopted, allowing for the objective measurement and analysis of psychological phenomena using empirical data. According to Urbach and Ahlemann (2010), integrating

logical reasoning with quantitative methodologies within a philosophical framework enhances the overall rigor and validity of the research.

4.2. Study Instruments

A cross-sectional survey design was implemented to gather data, utilizing a multi-item structured questionnaire. As most participants were not proficient in English, the questionnaire was carefully translated into Bangla employing Brislin's (1970) method to ensure linguistic accuracy and comprehension. The survey instrument consisted of five key sections, with all research questions formulated using a 7-point Likert scale. In order to enhance the validity and reliability of the instruments, the questionnaire was reviewed by academic scholars and industry professionals, who evaluated its content for clarity, relevance, and overall validity. A pilot study was conducted to identify potential issues, such as multicollinearity, and ensure respondents found the questionnaire easy to understand. Based on feedback from experts and initial respondents, necessary refinements were made before printing the final version for data collection.

4.3. Data Collection Strategy

This study employed a survey-based methodology to investigate the interconnections among the proposed constructs. As a widely recognized and validated technique, survey research is particularly suited for capturing nuanced perspectives, personal attitudes, preferences, and behavioral tendencies of individuals. In order to strengthen the contextual relevance of the study's outcomes, researchers of this study select both MNCs and local corporate organizations from the financial, telecommunications, and FMCG & Consumer Goods sectors. The data collection process involved convenience sampling (a non-probability sampling technique) from firms located in Dhaka—Bangladesh's administrative capital—and Chattogram, the key hub for the nation's commercial and financial activities. A screening procedure was implemented to maintain methodological rigor, resulting in a final dataset of 237 valid responses for further analysis. The data collection process spanned over two months, from January 12th, 2025, to March 28th, 2025. All participants voluntarily participated in the survey, and strict ethical measures were followed to protect their privacy and confidentiality. The collected data were used exclusively for academic purposes. A detailed overview of the participants' demographic profiles is presented in Table 1.

Table 1. Description of important demographic profiles (N=237)

Demographic Overview		Number	Percentage (%)
Gender	Female	73	31%
	Male	164	69%
Age Group	Above 30	96	41%
	Above 40	81	34%
	Above 50	31	13%
	Above 60	29	12%
Level of Education	Bachelor	56	24%
	Masters	167	70%
	PhD	14	06%
Job Position	Lower Level	119	50%
	Mid-Level	86	36%
	Top Level	32	14%
Tenure	Above 5 Years	132	56%
	Above 10 Years	64	27%
	Above 15 Years	23	10%
	Above 20 Years	18	07%
Level of Income	31000-45000	108	46%
	46000-60000	92	39%
	Above 60000	37	15%

V. Results and Discussion

5.1. Analysis Tools

The suggested model was assessed utilizing PLS-SEM, a regression-based analytical technique well-suited for examining intricate causal linkages. Renowned for its capability to handle complex research models. PLS-SEM is widely utilized in business and management research contexts (Gudergan et al., 2008). Researchers prefer PLS-SEM over traditional regression methods because it evaluates the overall model, rather than focusing only on specific relations (Hair et al., 2021). This method was selected due to its proven effectiveness and robustness in delivering dependable outcomes, making it suitable for exploring complex cause-and-effect relationships (Abu-Alhaja, 2019). The analytical process followed a structured sequence of steps. The analysis began with evaluating the measurement model's reliability and validity. The structural model was then examined to interpret the hypothesized relationships and derive the study's conclusions. This approach provided a thorough and systematic evaluation of the proposed relationships.

5.2. Measurement Model Evaluation

Measurement and structural models were evaluated per the methodological framework recommended by Henseler et al. (2012). To ensure the reliability of individual indicators, the standard threshold of item loadings greater than 0.70 was applied. As shown in Table 2 All item loadings met this threshold, confirming adequate reliability. Additionally, internal consistency was evaluated using composite reliability (CR) scores and Cronbach's alpha values, both of which should be greater than 0.70, as recommended by Bacon et al. (1995) and Sarstedt et al. (2021). A reassessment of the measurement model indicated that all values exceeded the minimum acceptable level, demonstrating strong reliability. Convergent validity was analyzed using the extracted average variance, ensuring that latent variables explain more than 50% of the variance in their respective indicators (Hair et al., 2021). Table 2 Confirms that all AVE values surpass the 0.50 threshold, establishing convergent validity. Furthermore, discriminant validity was assessed using two key approaches. The Fornell and Larcker (1981) criterion required that the square root of each construct's AVE (diagonal elements) exceed the correlations between any two constructs. This assessment validated the distinctiveness of the study's constructs, ensuring the robustness of the model. Table 3 Illustrates that the square root of the AVE, highlighted in bold, exceeds the correlations among the constructs, satisfying the discriminant validity. These results validate the constructs' unique statistical characteristics, making them appropriate for subsequent structural model analysis.

Table 2. Measurement model (N=237)

Construct	Factor Loading	α	CR	AVE
Green Human Resource Management (GHRM)		0.833	0.858	0.667
GHRM1	0.894			
GHRM2	0.822			
GHRM3	0.837			
GHRM4	0.700			
Green Technology Innovation (GTI)		0.919	0.922	0.754
GTI1	0.879			
GTI2	0.886			
GTI3	0.842			
GTI4	0.877			
GTI5	0.858			
Green Organizational Culture (GOC)		0.899	0.901	0.770
GOC1	0.928			
GOC2	0.889			
GOC3	0.900			
GOC4	0.787			

Construct	Factor Loading	α	CR	AVE
Sustainable Business Performance (SBP)		0.828	0.831	0.663
SBP1	0.894			
SBP2	0.837			
SBP3	0.782			
SBP4	0.735			

Table 3. Fornell-Larcker Criterion (N=237)

	GHRM	GOC	GTI	SBP
GHRM	0.816			
GOC	0.622	0.878		
GTI	0.502	0.682	0.868	
SBP	0.635	0.573	0.688	0.814

5.3. Structural Model

To test the hypotheses, we applied a bootstrapping technique with 5,000 resamples to assess t-values, p-values, and explanatory power, as outlined by Hair et al. (2017). Data presented in Table 5 indicate that GHRM ($\beta=0.202$, $t=4.525$, $P=0.012$) exerts a significant positive influence on SBP, with an f^2 value of 0.157, thus confirming Hypothesis 01. The findings also indicate that GHRM ($\beta=0.502$, $t=7.674$, $P=0.000$), with an f^2 value of 0.337, significantly influences GTI. In turn, GTI was also identified as a substantial positive predictor of SBP ($\beta=0.693$, $t=6.633$, $p < 0.000$), with an F^2 value of 1.623. Thus, H2 and H3 are supported. Moreover, the study supports the significance of Hypotheses 05 and 06, where GHRM ($\beta=0.622$, $t=11.854$, $P=0.000$) impacts GOC, and consecutively GOC ($\beta=0.137$, $t=2.179$, $P=0.029$) influences SBP positively, with f^2 values of 0.632 and 0.092, respectively. Additionally, the coefficient of determination (R^2) reflects the extent to which the variance in endogenous variables is explained, with values of 0.75, 0.50, and 0.25 indicating strong, moderate, and weak explanatory power, respectively (Hair et al., 2014). As illustrated in Figure 2, the R^2 values for SBP, GTI, and GOC are 0.844, 0.252, and 0.387, respectively. This indicates that the model accounts for 84.4% of the variance in SBP, 25.2% in GTI, and 38.7% in GOC, demonstrating satisfactory explanatory power and predictive capability within the sample.

Table 4. Validation outcomes for the research model (N=237)

SL No	Relationship	β	Std. Dev	T-values	P-values	Decision	f^2	R^2
H1	GHRM -> SBP	0.202	0.080	4.525	0.012	Supported	0.157	SBP (0.844)
H2	GHRM -> GTI	0.502	0.065	7.674	0.000	Supported	0.337	GTI (0.252)
H3	GTI -> SBP	0.693	0.105	6.633	0.000	Supported	1.623	GOC (0.387)
H5	GHRM -> GOC	0.622	0.052	11.854	0.000	Supported	0.632	
H6	GOC -> SBP	0.137	0.063	2.179	0.029	Supported	0.092	

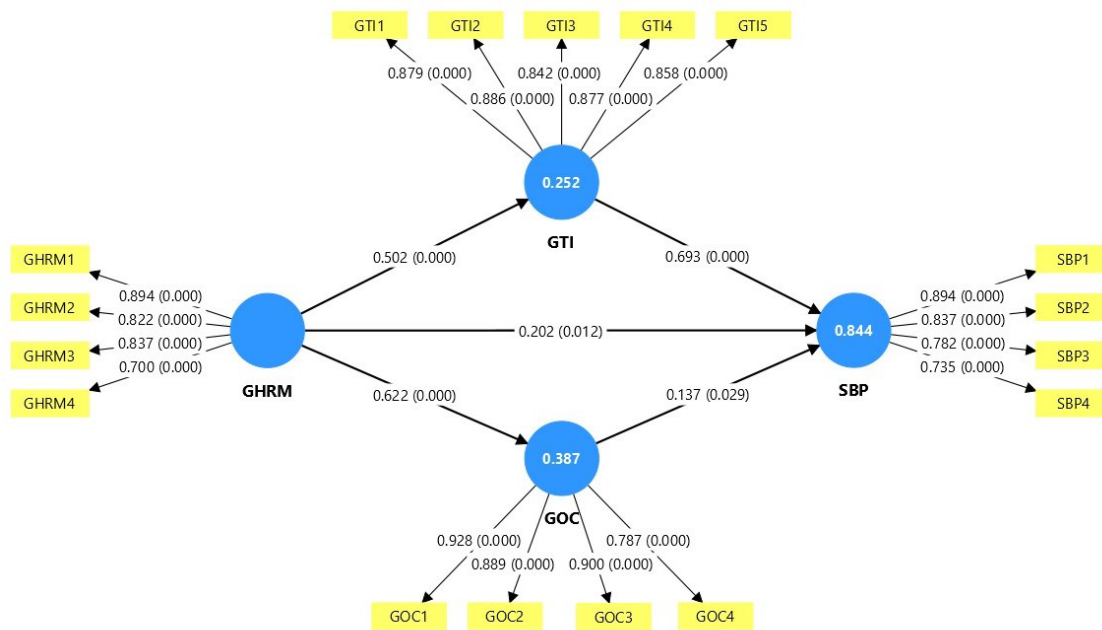


Figure 2. PLS Path Model and Result

5.4. Mediation Result

This study explored the potential mediating effects. In this context, H4 investigates the role of the variable GTI as a potential mediator in the relationship between GHRM and SBP. The results demonstrate a significant total impact of GHRM on SBP ($\beta = 0.635$, $t = 13.983$, $p < .01$). After incorporating mediator variable into the predictive equation, direct effect remained positive and statistically significant ($\beta = 0.202$, $t = 2.525$, $p < .03$). Additionally, the findings indicated that the indirect effect was substantial ($\beta = 0.348$, $t = 4.366$, $p < .01$, with no zero between LLCI and ULCI). This suggests that GTI partially mediates the impact of GHRM on SBP. Consequently, H4 is deemed acceptable. Finally, H7 investigates the role of the variable GOC as a potential mediator in the relationship between GHRM and SBP. Results demonstrate a significant overall impact of GHRM on SBP ($\beta = 0.635$, $t = 13.983$, $p < .01$). Upon including the mediator, direct impact remained statistically positive and significant ($\beta = 0.202$, $t = 2.525$, $p < .03$). The incorporation of the mediator demonstrated a substantial indirect impact at ($\beta = 0.085$, $t = 2.070$, $p < .05$, with no zero between LLCI and ULCI). The study results indicate that GOC partially mediates the association between GHRM and SBP. Consequently, H7 has been confirmed. Table 6 and Table 7 Show detailed mediation analysis results.

Table 5. Result of Mediation Analysis (N=237)

Total Effects (GHRM->SBP)			Direct Effects (GHRM->SBP)			Indirect Effects of (GHRM on SBP)					
β	t-value	p-value	β	t-value	p-value	Hypothesis	β	t-value	p-value	LLCI	ULCI
0.635	13.983	0.000	0.202	2.525	0.012	GHRM->GTI->SBP	0.348	4.366	0.000	0.201	0.500

Table 6. Result of Mediation Analysis (N=237)

Total Effects (GHRM->SBP)			Direct Effects (GHRM->SBP)			Indirect Effects of (GHRM on SBP)					
β	t-value	p-value	β	t-value	p-value	Hypothesis	β	t-value	p-value	LLCI	ULCI
0.635	13.983	0.000	0.202	2.525	0.012	GHRM->GOC->SBP	0.085	2.070	0.039	0.017	0.179

5.5. Discussion

The study investigated the mediating mechanism of GTI and GOC between GHRM and the sustainable performance of the corporate organizations, as shown in Figure 2. Analysis conducted in this study identified a positive relationship between GHRM and SBP, thereby supporting and advancing the findings of previous research on GHRM's impact on SBP (Al-Shammari et al., 2022; Kanan et al., 2023). This result underscores the growing strategic importance of incorporating environmental considerations into human resource practices, particularly in emerging economies where environmental degradation, resource constraints, and corporate accountability are becoming increasingly pressing. GHRM provides a pathway to align internal operations with broader environmental objectives in the context of Bangladeshi corporations, which are increasingly exposed to global sustainability pressures and stakeholder demands. This alignment improves a firm's ecological footprint and enhances its reputation, operational efficiency, and long-term profitability—key components of sustainable business performance. In light of these insights, it is evident that GHRM should be viewed not merely as a supplementary HR initiative but as a core strategic function that directly contributes to organizational sustainability. This study adds crucial new insights to the body of knowledge on RBV theory by integrating the GTI and GOC variables as an essential component for achieving sustainable performance. Researchers of this study explore the relationships between GHRM, GTI, and SBP. GHRM catalyzes firms to invest in and adopt green technologies by embedding environmental values in organizational processes and team member mindsets. GTI contributes to environmental preservation, competitive advantage, operational efficiency, and stakeholder satisfaction (Quaosar et al., 2024). This positive association reinforces the role of innovation in achieving bottom-line goals. It demonstrates that technological innovation is not merely a cost, but a strategic investment that can enhance business performance. The mediating effect highlights the strategic role of HRM not only in building environmental awareness but also in translating that awareness into innovative technological practices that enhance sustainability outcomes (Istiqhotsah et al., 2024; Shoaib et al., 2024; Zhou et al., 2023; Wu et al., 2024). Next, the study results prove the proposed relationship between GHRM, GOC, and SBP. Findings confirm that GHRM has a statistically positive and significant association with GOC, indicating GHRM fosters shared values and beliefs that promote a green organizational culture, where sustainability becomes a normative expectation and a central aspect of organizational identity. Further, a similar result was found between GOC and SBP, reinforcing the idea that a strong green culture contributes to long-term sustainable outcomes (Arifin & Purwanti, 2023). Moreover, the study reveals that GOC mediates the relationship between GHRM and SBP, highlighting how HRM influences sustainability outcomes indirectly. In other words, the effectiveness of green HRM initiatives in driving performance is significantly enhanced when they contribute to building a collective green mindset and shared environmental norms within the corporate organization. Our result aligns with the conclusions of the existing literature (Ahmad et al., 2023; Lin et al., 2024; Tran, 2023; Bhatti et al., 2024; Doghan et al., 2024). Collectively, these findings contribute to a deeper understanding of how GTI and GOC act as strategic enablers of business performance. Emerged as critical components as described in the RBV theory that emphasizes the role of valuable, rare, and inimitable resources in driving long-term strategic advantage.

VI. Conclusion

This study investigated the strategic roles of GTI and GOC in enhancing business performance within the corporate landscape of Bangladesh. Drawing on the RBV theory, this research established that GTI and GOC function as critical intangible assets—valuable, rare, and inimitable—contributing to sustainable competitive advantage. In addition, the findings resonate with the AMO theory, highlighting the necessity to improve an organization's capacity to enhance team member abilities, nurture them toward environmental goals, and create meaningful opportunities for involvement in green initiatives. This synergy between organizational systems and human capital reinforces that sustainability-driven performance gains are maximized when green HRM strategies are supported by empowered, engaged, and capable employees. The empirical results demonstrate that organizations investing in technology innovation and fostering a responsive work culture are more likely to achieve improved performance outcomes. By selecting multinational and local corporate organizations from key sectors such as finance, telecommunications, and FMCG in Dhaka and Chattogram, Bangladesh, this study offers contextually grounded insights into how green capabilities are leveraged in diverse corporate settings. Ultimately, this research enhances the existing information on sustainable business practices in emerging economies and emphasizes the necessity of integrating environmental issues into the fundamental organizational strategy.

This research presents significant implications for both theoretical and practical applications. Theoretically, the findings extend the RBV theory by illustrating how intangible assets, specifically GTI and GOC, serve as strategic resources that significantly enhance business performance. Additionally, the results align with the AMO theory, proposing that organizations can optimize performance outcomes by improving team member capabilities, fostering motivation toward sustainability, and providing opportunities to engage in green initiatives—thereby reinforcing the role of human capital in achieving environmental and strategic goals. By integrating environmental sustainability into strategic resource planning, this research emphasizes the evolving nature of strategic advantage from the viewpoint of a developing nation.

Practically, the results of this study provide significant guidance for business leaders and managers aiming to enhance sustainable performance. Especially, corporate organizations should recognize the strategic importance of investing in GTI, which can lead to operational efficiencies, cost reductions, and differentiation in competitive markets—simultaneously, fostering GOC that supports environmental values, team member engagement in sustainability, and eco-conscious decision-making. These elements act as strategic assets that fulfill environmental responsibilities and contribute to long-term profitability and market positioning. Therefore, companies seeking sustainable growth should embed green practices into their core strategies, provide training and incentives to nurture a green mindset among employees, and allocate resources to innovate eco-friendly processes and products continuously.

Exploring the mediating roles of GTI and GOC offers meaningful insights, yet certain limitations must be acknowledged. A key limitation is the exclusive dependency on quantitative methods; the sole use of quantitative analysis restricted the researchers' ability to explore the aspects deeply influenced by qualitative psychological factors. Other important factors, such as leadership style, organizational justice, and employees' perceptions, may not be fully addressed through numerical data alone. Future studies should employ a mixed-method approach combining qualitative and quantitative techniques to gain a more holistic perspective. Additionally, longitudinal studies are recommended to examine how green HRM initiatives influence technology innovation, culture, and performance over time. Moreover, this study's sample has been confined to a specific sector, a limited number of corporate organizations, and geographic regions, which constrains the broader applicability of the results. To enhance the generalizability, future research should consider diverse organizational settings, industries, and cultural contexts to examine the robustness of the identified relationships. Lastly, exploring potential moderating and mediating variables may offer deeper insights into how green HRM impacts business performance.

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