



From Green Policies to Green Practices: The Role of Top Management Support in Higher Education Institutions

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ABSTRACT

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Sustainability has become a key priority worldwide, and Higher Educational Institutions (HEIs) are no exception. Sustainable practices in HEIs are increasingly embedded through governance structures, human resource policies and leadership support. In this context, this study examines the impact of Green Human Resource Management (GHRM) practices on university staff's green behaviour towards sustainability. It further investigates the mediating role of Top Management Support (TMS) in strengthening this relationship. Data were collected from university staff in India across different disciplines and analyzed using SmartPLS to assess both direct and mediated effects. The results indicate that GHRM practices have a significant positive influence on employees' green behavior. Additionally, TMS partially mediates this relationship by fostering an enabling environment that reinforces sustainable practices. This study contributes to the growing literature on GHRM in the education sector and provides actionable insights for policymakers and institutional leaders to effectively align human resource practices with sustainability objectives and drive meaningful behavioral change.

1. INTRODUCTION

Organisations today encounter significant environmental issues like climate change, environmental degradation and other natural disasters. In response, public interest in environmental issues has risen, leading to stricter environmental regulations [1]. However, effective environmental management not only requires strict regulatory compliance but also the adoption of strategies that help boost Employee Green Behavior (EGB), thereby improving the organisation's environmental performance [2]. This has led to the inclusion of practices like Green Human Resource Management (GHRM), which will help to achieve environmental performance [3-5]. Furthermore, on a broader scale, GHRM can integrate sustainable development goals into HRM functions such as hiring, training, and appraisal, thereby helping achieve environmental sustainability [6]. The concept of GHRM has gained recognition worldwide for its advantages, like enhancing organisational sustainability, fostering innovation, motivating employees to participate in green initiatives and strengthening their environmental commitment [5]. Previous literature has also highlighted the role of GHRM in fostering EGB [7].

GHRM research is widely carried out in the manufacturing sector [8], Banking [9, 10], Hotel industry [11-12], Healthcare [13, 14] and the IT sector [15]. Little investigation is carried out in the education sector. However, GHRM, EGB and Top Management Support (TMS) are relatively underexplored concepts in the HEI context, mainly in a developing nation like

India. Haldorai et al. [16] argued that TMS plays a key role in the sustainable development of an organisation. A study by Lee et al. [17] claims that employees getting support and recognition from top management contribute more to organisational success. Thus, the role of top management in fostering green behavior needs to be examined further.

1.1 Research context: Indian Higher Educational Institutions

India provides a particularly relevant context for examining GHRM and EGB due to its dual position as both a major contributor to GHRM scholarship and a setting where the institutionalisation of green practices remains uneven. While bibliometric evidence indicates that India is among the top contributors to GHRM literature [18, 19], empirical findings suggest that the implementation of GHRM practices varies considerably across sectors and remains at an early stage in many public and service-oriented organisations, especially in developing economies like India [20]. This divergence between scholarly attention and practical maturity makes India a theoretically meaningful context to examine how GHRM translates into EGB.

Within this national context, higher education institutions represent a distinctive and influential setting. Indian Higher Educational Institutions (HEIs) are largely mission-driven and resource-constrained, operating under centralised governance structures where strategic priorities and resource allocation are strongly shaped by top management. At the same time,

universities function as centres of knowledge creation and social influence [21], where faculty members play a central role in achieving SDG 4 (Quality Education) and are explicitly identified by UNESCO as critical actors in sustainability transitions [22]. Their green behaviour therefore has multiplier effects, shaping students' sustainability awareness, attitudes, and behaviours, and extending organisational sustainability initiatives to broader societal outcomes. Despite this pivotal role, existing research has largely focused on sustainability awareness and attitudes, with limited empirical attention to the organizational mechanisms that shape educators' actual green behavior. Thus, investigating GHRM practices and TMS within HEIs offers critical insights into how institutional structures and leadership commitment translate sustainability intentions into consistent pro-environmental behavior among academic staff.

Accordingly, this study makes several contributions to the existing literature. First, it extends GHRM research by focusing on the HEI context, an area that has received limited empirical attention despite universities' responsibility as role models and centres for sustainability-oriented knowledge creation. Second, the study introduces novelty by conceptualising TMS as a mediating mechanism rather than a moderator, offering deeper insights into how leadership commitment and strategic involvement translate GHRM practices into tangible EGB. Third, by examining this mediating process, the study enhances understanding of the underlying mechanisms through which GHRM influences green behaviour, explaining not only whether such effects occur but also how and why they emerge through leadership support. This nuanced perspective strengthens the explanatory power of the proposed framework and contributes to advancing sustainability research in higher education.

2. LITERATURE REVIEW

2.1 Theoretical foundations

The framework of the study is based on Ability Motivation Opportunity (AMO), Theory of Planned Behavior (TPB) and Social Exchange Theory (SET). AMO theory suggests that employee performance and behavior are shaped by ability, motivation and opportunity [23]. The theory also asserts that these three factors can be improved through HR practices [24]. Thus, GHRM practices equip employees with the ability through green training and development, provide motivation through green rewards and compensation, and offer opportunities through green policies to exhibit green behaviour. Thus, AMO theory is widely used in GHRM literature [25]. Similarly, the TPB proposed by Ajzen [26] suggests that human behaviour is determined by three main components: attitude, perceived behavioral control, and subjective norms. In the context of sustainability, GHRM can positively influence these determinants, thereby encouraging employees to exhibit green behaviour.

However, the effectiveness of GHRM practices that drive EGB is strongly contingent on TMS. From the perspective of SET, employees interpret visible support from top management, such as commitment to environmental policies and active participation in environmental initiatives, as a signal of the organisation's genuine intent towards sustainability and thus will likely exhibit more green behaviour. Especially in the context of academic institutions,

top management plays a key role in making green practices an institutional priority. Thus, under the lens of SET suggested by Blau [27], when staff observe top management's effort towards environmental initiatives like integrating sustainability into strategic planning, or allocating resources to green projects, they perceive these actions as a genuine organisational commitment. In reciprocation, staff exhibit green behavior by inculcating eco-friendly practices into their daily activities.

2.2 Green Human Resource Management

With the rising global concern for environmental issues, companies face the challenge of attaining ecological sustainability and organisational environmental performance. Thus, companies have started to embed environmental goals into organisational objectives, thus bringing GHRM into practice [28]. GHRM is the integration of environmental management principles into day-to-day HR operations that helps to reduce the carbon footprint and achieve organisational ecological sustainability. GHRM practices typically include green recruitment, green training and development, and green performance appraisal, which collectively contribute to improved green performance [29, 30]. Various scholars have defined GHRM differently. GHRM refers to the alignment of HR practices with organisational objectives [31]. In contrast, GHRM aligns employee behaviour with the organisation's environmental responsibilities [32]. In this way, some definitions highlight the structural aspects of GHRM, while others focus on its behavioral aspects. Additionally, some scholars view GHRM as a subset of sustainable HRM that integrates environmental sustainability principles into HRM practices [33].

2.3 Green Human Resource Management and Green Behaviour

Though organisations have begun to implement various environmental initiatives, the success of the initiatives solely relies on employees' green behaviour [34]. Literature reveals that HRM practices impact organisational performance through employees' work behaviour [35]. Aboramadan [36] suggested an important research area of how GHRM can foster green behavior. A qualitative study conducted among academicians in Malaysia emphasizes the importance of green initiatives in achieving employee ecological behavior [37]. Thus, recent research has given much emphasis on GHRM and EGB literature. GHRM practices stimulate environmental consciousness among employees and further refine their work attitude in an environmentally friendly way [38]. Research has increasingly examined the relationship between GHRM and EGB [6, 39, 40]. Empirical evidence suggests that GHRM significantly enhances employees' pro-environmental behaviors [41]. Green behavior is commonly conceptualised into two dimensions: task-related or in-role green behavior and voluntary or extra-role green behavior, both of which contribute to sustainability [7, 35]. It encompasses environmentally friendly actions performed by employees that support organisational environmental objectives. Prior studies have often focused on mediators such as employee engagement [10], environmental knowledge [40], organizational identification [7], psychological green climate [35], green culture, and green satisfaction to explain the GHRM–EGB relationship. Despite growing interest, the field

remains in an emerging stage, necessitating further investigation to uncover the mechanisms through which GHRM influences green behaviour. The AMO theory is widely employed to explain this link [25, 40], alongside other theoretical perspectives such as SET and Supply Value Fit theory [35, 36]. Several empirical studies in Malaysia, Palestine, and Pakistan confirm that GHRM significantly impacts EGB, particularly among academic staff [36, 40]. Most studies report that indirect effects via mediators are often stronger than direct effects, highlighting the importance of identifying robust mediating mechanisms. Thus, the following hypothesis is put forth,

H1: *GHRM has a positive and significant influence on EGB.*

2.4 Green Human Resource Management and Top Management Support

From the perspective of the AMO theory, GHRM enhances the ability (through training), motivation (through rewards and appraisal), and opportunity (through participative systems) for leaders to engage in environmental management [31]. Thus, well-designed GHRM systems send strong institutional signals that sustainability is a strategic priority, encouraging top management to commit resources and provide visible support for green initiatives. Empirical studies have also provided evidence of this link. For instance, Pinzone et al. [39] found that hospitals with comprehensive GHRM systems experienced higher levels of managerial involvement in sustainability programs. Similarly, Yong et al. [41] reported that organizations with robust GHRM practices fostered leadership emphasis and managerial advocacy for environmental initiatives. In the context of HEIs, where administrative and academic leadership play a critical role in driving sustainability culture, GHRM practices can serve as an important lever to engage top management in promoting environmental goals. Thus, the following hypothesis is put forth,

H2: *GHRM is positively associated with TMS.*

2.5 Top Management Support and Green Behavior

TMS plays a pivotal role in the successful implementation of GHRM practices and in achieving enhanced environmental performance. According to the TPB [26], supportive leadership strengthens employees subjective norms and perceived behavioral control, thereby enhancing their intention and ability to act sustainably. Similarly, Social Learning Theory [42] suggests that employees emulate leaders who model green practices, reinforcing environmentally responsible behavior across the organization. In higher education institutions, where leadership plays a pivotal role in embedding sustainability, management support serves as a key driver in translating policy commitments into behavioral outcomes [43]. Thus, the following hypothesis is put forth,

H3: *TMS is positively associated with EGB.*

2.6 Top Management Support as a mediator

Consequently, TMS has frequently been employed as a mediator between GHRM and environmental performance [44]. Dumont et al. [35] found that strong managerial support helps in the better translation of GHRM practices into employee outcomes. Strong TMS not only motivates employees but also aligns organizational resources and culture

with sustainability objectives, making it a cornerstone of successful green initiatives. Zibarras and Coan [45] highlighted that top management commitment increases the effects of HR based sustainability initiatives. Thus, when the TMS is poor, employees are less motivated to pursue green goals and exhibit green behavior. An effective top management serves as a role model by fostering a culture of sustainability and providing opportunities to increase the green competencies to champion the green initiatives [46]. By bridging the strategic and operational levels, TMS ensures that GHRM practices translate into meaningful organizational and environmental outcomes.

Educational institutions in India are characterized by centralised governance structures, where strategic decisions and resource allocations are predominantly controlled by top management. While GHRM practices such as green training, recruitment, or curriculum design may provide the structural framework for sustainability, their actual impact on employees' behavior often depends on the extent to which top management embraces and institutionalizes these practices. Thus, positioning TMS as a mediator between GHRM and EGB becomes appropriate.

H4: *TMS mediates the relationship between GHRM and EGB.*

Based on the above hypotheses, the following research model Figure 1 was proposed.



Figure 1. Conceptual model

3. RESEARCH METHODS

3.1 Data analysis and survey questionnaire

A self-administered survey in the English language was employed for the study. The target population consisted of academic staff from universities in India, and data collection took place between June 2025 and August 2025. Convenience sampling was used due to the insufficient data available about the whole target population. The questionnaire was distributed through Google Forms. Before the main survey, a small pilot study was conducted to ensure the validity of the questionnaire. A total of 350 questionnaires were circulated, of which 325 were returned. Among those, only 300 responses were found to be valid due to missing information. The response rate of 85% was sufficient to conduct the data analysis.

The study adapted validated scales from previous studies. The survey instrument was divided into three parts. The first part consisted of a small introduction about the topic and disclosed the study objectives and guidelines to fill out the survey. The second part investigated the demographic details of the respondents (Age, Gender, Type of Institution, and Years of Experience). The third part focused on the main objectives of the study by measuring the perceptions of green HR practices prevailing in their organisation, organisational

support provided by the top management, and the EGB of academic staff. A total of three variables with 18 items were used for the study. A 5-point Likert scale ranging from (1 = Strongly Disagree to 5 = Strongly Agree) was used to collect data. The items for GHRM practices were adapted from Dumont et al. [35]. Six items of EGB were adapted from Bissing-Olson et al. [47]. TMS items were adapted from Chu et al. [48].

3.2 Demographic details

The demographic profile of the respondents reveals a diverse representation across gender, age, qualification, department, and institutional characteristics. Among the participants, a majority were female (65%), while males constituted 35%. In terms of age distribution, around 54% respondents were below 30 years, and the rest (46%) were above 30 years. Regarding educational qualifications, over half of the respondents (50.7%) held a PhD, while 40.7% possessed a postgraduate degree and 8.7% had completed an M.Phil. Disciplines were broadly classified as STEM (Science, Technology, Engineering and Management) and non-STEM. Concerning the type of institution, a larger proportion (63%) were from state universities or colleges, while 37% belonged to deemed universities. In terms of designation, the majority were Assistant Professors (62%), followed by Associate Professors (21%), Professors (10.3%), and Research Scholars (6.7%). When examining years of experience, 77% of respondents had less than 5 years of teaching experience, 10.3% had between 5 and 10 years, 7% had more than 21 years, 4.7% had between 16 and 20 years, and only 1% had 11 to 15 years of experience, which can be seen in Table 1.

3.3 Convergent and discriminant validity results

To validate the model, two important types of validity must be checked: convergent and discriminant validity. The convergent validity of the measurement model was assessed using factor loadings, Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). As shown in Table 1, all item loadings exceeded the recommended threshold of 0.70 [49], confirming strong indicator reliability. Cronbach's alpha values for all constructs were well above the suggested cut-off of 0.70, demonstrating excellent internal consistency. Similarly, the CR values were high, well above 0.90, thereby indicating strong construct reliability. The AVE values for all constructs were above the 0.50 benchmark, ranging from 0.670 (GHRM) to 0.802 (TMS), thus establishing convergent validity. Overall, these results confirm that the measurement model possesses satisfactory reliability and convergent validity, providing a sound basis for further structural model analysis. To avoid the multicollinearity issues, the Variance Inflation Factors (VIF) for each item were checked. VIF values must be below 5 to avoid multicollinearity [50]. In this study, all the VIF values are below 5, as given in Table 2. Secondly, discriminant validity was assessed to verify that all constructs are distinct from one another using the Heterotrait-Monotrait (HTMT) ratio [51]. Table 3 reports the Fornell-Larcker criterion results, which further confirm that the constructs are empirically distinct [52]. As presented in Table 4, all HTMT values were below the recommended threshold of 0.85, thereby supporting discriminant validity.

Table 1. Demographic details

		Frequency	Percent
<i>Gender</i>	Male	105	35
	Female	195	65
<i>Age</i>	Below 30 years	162	54
	Above 30 years	138	46
<i>Educational Qualification</i>	PG	122	40.7
	M.Phil	56	8.7
	PhD	152	50.7
<i>Department</i>	STEM	158	52.6
	Non - STEM	142	47.3
<i>Type of Institutions</i>	State	189	63
	Deemed	111	57
<i>Designation</i>	Asst. Prof.	186	62
	Associate Professor	20	6.7
	Professor	31	10.3
	Research Scholar	63	21
<i>Years of experience</i>	< 5 years	231	77
	5-10 years	31	10.3
	11-15 years	3	1
	16-20 years	14	4.7
	> 21 years	21	7

Table 2. Reliability and validity results

Items		CR	Ave	VIF	
GHRM1	0.824			3.2	
GHRM 2	0.841			3.3	
GHRM 3	0.848			3.7	
GHRM 4	0.782	0.901	0.904	0.670	2.6
GHRM 5	0.809			2.8	
GHRM 6	0.804			3.2	
GB1	0.882	0.951	0.951	0.802	3.5
GB2	0.891			3.6	
GB3	0.892			3.8	
GB4	0.907			4.0	
GB5	0.903			4	
GB6	0.897			3.8	
TMS1	0.900			3.8	
TMS2	0.885			3.3	
TMS3	0.880	0.949	0.949	0.759	3.3
TMS4	0.897			3.9	
TMS5	0.887			3.4	
TMS6	0.902			3.8	

Note: GHRM = Green Human Resource Management; GB = EGB = Employee Green Behavior; TMS = Top Management Support.

Table 3. Fornell-Larcker criterion results

	EGB	GHRM	TMS
EGB	0.895		
GHRM	0.567	0.818	
TMS	0.640	0.673	0.892

Note: EGB = Employee Green Behavior.

Table 4. Heterotrait–Monotrait (HTMT) results

	EGB	GHRM	TMS
EGB			
GHRM	0.609		
TMS	0.672	0.726	

3.4 Structural model

For structural model evaluation, Partial Least Squares Structural Equation Modeling (PLS-SEM) was used. Figure 2 shows the Structural Equation Modeling (SEM) model. PLS-SEM was chosen for its robustness and appropriateness for survey-based primary data. As noted by Hair et al. [49] and Henseler [52], PLS-SEM is effective in assessing the predictive capability of structural models. Moreover, PLS-SEM is considered as a contemporary approach for evaluating hypothesised structural relationships. The bootstrapping method was used for hypothesis testing and a resampling of 5000 was performed. T-value, p-value and confidence interval bias were obtained. Based on these values, hypothesis acceptability was checked. Previous studies have also emphasised its advantages for behavioral research, particularly when the aim is to explore individual behaviors and perceptions.

From Table 5, it can be seen that the direct path between GHRM and EGB was found to be significant ($\beta = 0.249$, $p = 0.000$). Second, the direct path between GHRM and TMS was found to be significant ($\beta = 0.673$, $p = 0.000$). Third, the direct path between TMS and EGB was found to be significant ($\beta = 0.472$, $p = 0.000$). Thus, hypotheses H1, H2, and H3 were supported. The indirect effect of GHRM on EGB through TMS was statistically significant ($\beta = 0.318$, $p = 0.000$), indicating the presence of mediation. The mediating role of TMS between GHRM and EGB was examined through both direct and indirect paths. The total effect, which is the sum of the direct and indirect effects, was 0.567 ($0.249 + 0.318 = 0.567$). The Variance Accounted For (VAF) was calculated as the ratio of the indirect effect to the total effect ($VAF = 0.318/0.567 = 0.561$). According to Hair Jr et al. [51], a VAF value between 0.20 and 0.80 indicates partial mediation.

Therefore, the results reveal that TMS partially mediates the relationship between GHRM and EGB, thus supporting Hypothesis H4.

Table 5. Structural Equation Modeling (SEM) results

	Regression Path	Effect Type	β	P Values	Remarks
H1	GHRM \rightarrow EGB	Direct Effect	0.249	0.000	Accepted
H2	GHRM \rightarrow TMS	Direct Effect	0.673	0.000	Accepted
H3	TMS \rightarrow EGB	Direct Effect	0.472	0.000	Accepted
H4	GHRM \rightarrow TMS \rightarrow EGB	Indirect Effect	0.318	0.000	Accepted

3.5 Predictive relevance

The explanatory power of the structural model was assessed using the coefficient of determination R^2 and Q^2 values. As shown in Table 6, the R^2 value for EGB was 0.443, while the R^2 for TMS was 0.453. According to Hair et al. [49], these values can be considered moderate, indicating that the model explains a substantial proportion of the variance in both constructs. Furthermore, the Q^2 values obtained through blindfolding were 0.313 for EGB and 0.446 for TMS. Since all Q^2 values are above zero, the model demonstrates predictive relevance for the endogenous constructs [50]. Collectively, these results confirm that the model possesses adequate explanatory power and predictive accuracy.

Table 6. Predictive relevance results

Construct	R^2	Effect Size	Q^2 Predict	Predictive Relevance
EGB	0.443	Moderate	0.313	Supported
TMS	0.453	Moderate	0.446	Supported

Table 7. Multi-group analysis

Moderator	Group	Indirect Effect (β)	T-Value	P-Value
Age	Below 30	0.287	4.18	< .001
	Above 30	0.374	5.03	< .001
Discipline	Non-STEM	0.331	4.174	< .001
	STEM	0.306	4.950	< .001

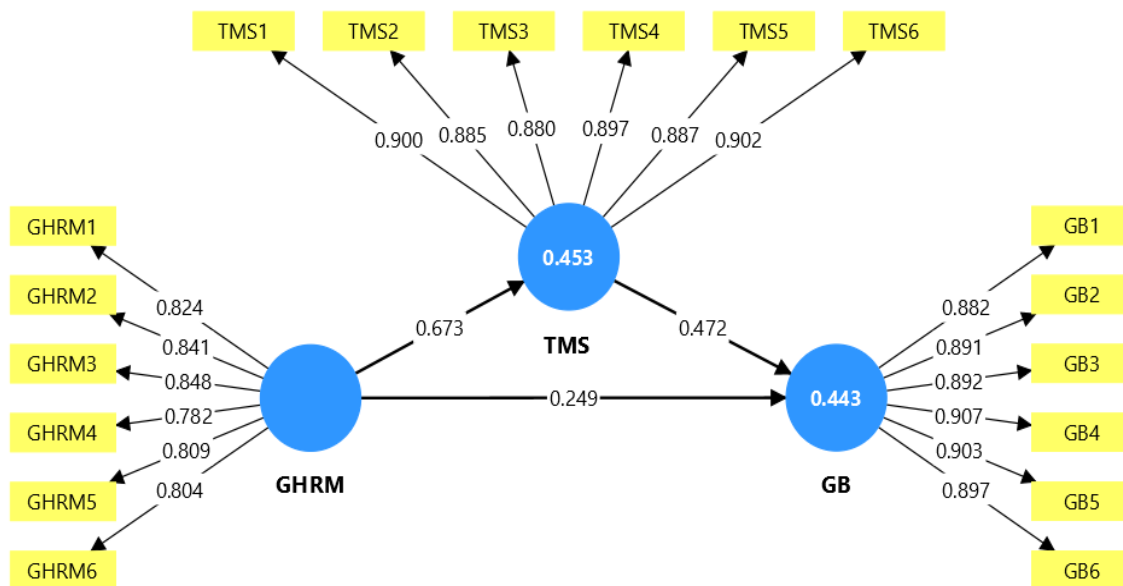


Figure 2. SEM diagram

3.6 Multi-group analysis

The PLS-MGA approach [53] is an extension of Henseler's MGA technique [54] and serves as a robust non-parametric procedure for comparing group-specific results obtained from bootstrapped PLS-SEM analyses. A statistically significant difference between groups is indicated when the p-value is below 0.05 or above 0.95, reflecting a deviation from the assumed probability threshold. Thus, MGA was employed to examine whether structural relationships and indirect effects differ significantly across predefined groups. In the present study, MGA was used to assess whether faculty age and academic discipline (STEM vs. non-STEM) influence the strength of the indirect effect of GHRM practices on faculty EGB through TMS. To examine the potential moderating role of faculty age, the sample was divided into younger faculty (below 30 years) and older faculty (above 30 years). The bootstrapping results in Table 7 indicate that the indirect effect of GHRM practices on faculty EGB via TMS is positive and statistically significant for both younger faculty ($\beta = 0.287$, $t = 4.18$, $p < 0.001$) and older faculty ($\beta = 0.374$, $t = 5.03$, $p < 0.001$). However, a comparison of the indirect effects across age groups revealed that the difference was not statistically significant ($\Delta\beta = 0.087$, $p > 0.05$). These findings indicate that faculty age does not significantly moderate the mediating role of TMS, suggesting that the mediation mechanism operates similarly across age groups.

In addition, a multi-group analysis was conducted to examine whether academic discipline moderates the mediating role of TMS by comparing STEM and non-STEM faculty. The results show that the indirect effect of GHRM practices on faculty EGB through TMS is positive and statistically significant for both non-STEM faculty ($\beta = 0.331$, $t = 4.174$, $p < 0.001$) and STEM faculty ($\beta = 0.306$, $t = 4.950$, $p < 0.001$). Further comparison of the indirect effects between the two groups revealed no statistically significant difference ($\Delta\beta = -0.026$, $p = 0.797$). This finding suggests that academic discipline does not significantly moderate the mediating role of TMS, indicating that faculty responsiveness to GHRM initiatives is comparable across STEM and non-STEM disciplines.

4. DISCUSSION

The analysis demonstrates that GHRM significantly influences both EGB and TMS, highlighting its dual role in fostering sustainability within organizations. Specifically, GHRM has a significant positive effect on EGB ($\beta = 0.249$, $p < 0.001$), indicating that green HR practices directly encourage employees to adopt environmentally responsible behaviors. This finding is consistent with the TPB, which posits that organizational practices shape employees' attitudes, perceived behavioral control, and normative beliefs toward sustainability. By implementing practices such as green training, recruitment, and performance management, organizations provide employees with the knowledge, motivation, and social cues necessary to engage in effective EGB. Thus, HRM acts as a powerful lever in creating the conditions necessary for pro-environmental action.

The stronger indirect effect suggests that GHRM practices influence employees' green behaviour more effectively when reinforced by TMS. In higher education institutions, GHRM initiatives are frequently perceived as formal or symbolic unless they are visibly endorsed, resourced, and role-modeled

by top leadership. TMS, therefore, acts as a critical translation mechanism that legitimises GHRM practices and signals their strategic importance to employees, resulting in stronger behavioral outcomes. This pattern reflects the leadership-dependent nature of sustainability initiatives in academic and public-sector contexts rather than a methodological artifact.

This is consistent with both TPB and prior empirical evidence; the significant effect of TMS on EGB underscores the critical leadership role in shaping sustainability outcomes. When top management visibly endorses environmental initiatives through clear communication, resource allocation, and recognition of green efforts, it strengthens employees' perceptions of normative expectations and behavioral feasibility, thereby motivating pro-environmental action. In academic institutions, where faculty autonomy is high, such leadership signals play an especially important role in legitimizing sustainability as an institutional priority rather than an optional or peripheral concern.

The mediation analysis further confirms a significant indirect effect of GHRM on EGB through TMS ($\beta = 0.315$, $p < 0.001$), indicating that GHRM does not operate in isolation. Instead, it strengthens managerial commitment and leadership engagement, which in turn amplifies EGB. The presence of partial mediation suggests that while HR systems independently shape EGB, their effectiveness is substantially enhanced when top management actively endorses and resources sustainability initiatives. This finding aligns with the Resource-Based View (RBV), which conceptualizes GHRM as a strategic capability that creates valuable and inimitable organizational resources by embedding sustainability simultaneously within managerial structures and employee practices [31]. At the same time, it reinforces TPB by highlighting TMS as a salient normative and control mechanism that signals the legitimacy and importance of sustainability to employees.

Importantly, the multi-group analysis extends these findings by demonstrating that the mediating role of TMS remains stable across key faculty demographics, namely age groups and academic disciplines (STEM vs non-STEM). The indirect effect of GHRM on EGB via TMS was found to be significant for both younger and older faculty members, as well as for STEM and non-STEM faculty, with no statistically significant differences between groups. These results suggest that the mechanism through which GHRM translates into EGB via leadership support is not contingent on individual demographic or disciplinary characteristics. Rather, TMS functions as an institution-wide normative signal that shapes faculty behavior consistently across heterogeneous groups.

From a theoretical perspective, the absence of significant moderation effects strengthens the institutional interpretation of the findings. In higher education institutions, sustainability initiatives are often embedded through formal governance structures, policies, and leadership communication, which may override individual differences related to career stage or disciplinary orientation. This highlights the dominant role of organizational context and leadership in shaping EGB, complementing TPB's emphasis on subjective norms and RBV's focus on system-level strategic capabilities.

5. CONCLUSION

The study offers both theoretical and practical implications. Theoretically, it contributes to the GHRM literature by

empirically demonstrating its dual role in influencing both employees and top management, thereby exploring an under-explored mediation mechanism of TMS in EGB. By integrating RBV theory and the TPB, the findings establish a framework that integrates HR practices, managerial support, and green behaviour, thereby emphasising multi-level mechanisms. Furthermore, the study contributes to sustainability literature by showing that EGB is not just a bottom-up approach but is shaped by managerial commitment and organisational practices, underscoring a need for a multi-dimensional approach.

Furthermore, the research enhances the theoretical comprehension by applying the SET in the academic context. SET explains the reciprocal relationship between organisation and employees. It shows how employees are motivated to reciprocate to the organisation when provided with proper resources and recognition [27]. This work provides novelty and a fresh theoretical perspective by providing empirical evidence for the mediating effect of TMS. The multi-group analysis confirms that the mediating role of TMS is stable across faculty age groups and academic disciplines (STEM vs non-STEM). This indicates that leadership-driven GHRM mechanisms operate consistently across heterogeneous faculty groups, reinforcing the institutionalized nature of sustainability in higher education. This finding gives new avenues for scholarly works and invites exploration into the multidimensional nature of TMS. It provides a strong foundation for future research on how HRM practices and organisational commitment can together drive green behavior of employees.

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