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Pro-environmental behavior, *green* HRM practices, and *green* psychological climate: Examining the underlying mechanism in Pakistan

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The success of an organization's environmental sustainability objectives is contingent on the environmental behavior of its personnel. The present study was conducted to observe how the green human resource management (GHRM) practice improves environmental performance (EP) through psychological green climate (PGC) and pro-environmental behavior (PEB). It also evaluates the moderating role of the individual green value (IGV). Data were collected from HR professionals and health officers directly engaged in human resource practices in private hospitals in Sialkot, Pakistan. To gather the responses, questionnaires were distributed and PLS analysis was used to analyze the data. The findings showed that GHRM explains that the PGC stimulates employees to perform pro-environmental behaviors for better environmental performance. Furthermore, the individual green value moderates the employee's behavior for better environmental performance. This research paper gives vital practical implications to the top management and regulators in assuring employee engagement in applying green human resource management practices.

KEYWORDS

green human resource management (GHRM), environmental performance (EP), green psychological climate (GPC), green behavior (GB), green self-efficacy (GSE)

1 Introduction

In recent times, irreparable changes in the environment, increase in environmental pollution, damage to the natural environment, and imposition of laws related to environmental organizations have the immense force to make efforts for the reduction of pessimistic effects on the environment (Ahmed et al., 2020). The healthcare sector is critical in a country because it influences related sectors and the environment (Javed et al., 2019). Developing a healthy workforce is one of the important tasks for the health sector. The hospital staff has been involved in the environmental sustainability (McMillan, 2014). Healthcare services are linked to water and energy, both extremely harmful and non-

harmful to the society. The healthcare sector has guided patients and staff with the value of quality service and environmental sustainability (Karlsson and Öhman, 2005). Growing environmental concerns have bound healthcare units to take up environmental practices at an escalating rate, which helps such companies to be green and competitive (Mostafa, 2013; Afsar et al., 2020).

The hospital environment profoundly relies on workers' pro-environmental behaviors (Robertson and Barling, 2013). As a result, the environmental performance of the healthcare sector is largely ensured by the pro-environmental behavior (Blok et al., 2015). As a result, the healthcare sector worldwide, particularly in Pakistan, has launched several pro-environmental measures (Ahmad and Umrani, 2019). Many hospitals in the healthcare sector are motivated to eliminate the waste produced during service delivery for the patient treatment, which would improve the environmental performance (Rawashdeh, 2018). According to previous research, an effective description of the organizational environment is highly trusting workers' pro-environmental behavior; as a result, pro-environmental behaviors help assure and drive the environmental performance (Vicente-Molina et al., 2013; Wesselink et al., 2017; Rawashdeh, 2018).

To supplement the findings of previous studies, this current study examines organizational environmental performance with GHRM practices. The GHRM practice is a concept that has acquired a lot of impetus in the debate over environmental management (Ahmed et al., 2021). Employees who spend much time at work will show sustainable action and aim for environmental success as catalytic agents of green human resource activities (Ruepert et al., 2016). As a result, organizational employees may substantially impact greening of the organization and improve the environmental performance by fetching them into a wide range of pro-environmental behaviors (Aboramadan, 2020). However, there has been a growing academic interest in the function of GHRM practices and environmental performance (EP); the latest studies emphasize more research on the employee pro-environmental behavior (Dumont et al., 2017; Hameed et al., 2020). Organizations can feel less socially responsible if they do not turn green when compared to employees so that it can be damaging to the environmental behavior and psychological environment (Whitmarsh et al., 2012). Therefore, organizations need to be clear to stakeholders, from job design to environmental management, which improve environmental performance (Saeed et al., 2019). There were many studies that emphasize on PEB and EP; in those studies, GHRM practices outline a worker's psychological climate, which stimulates them to exhibit pro-environmental behaviors in the workplace (Li et al., 2011; Kim S. H. et al., 2019). Organizational environmental management and its success depend upon pro-environmental behaviors. Individuals' work-related practices are influenced by their norms, values, and convictions (Chwialkowska et al., 2020). Human beliefs and environmentally sustainable activities have been linked in the literature. The truancy of individual values may intimidate the employees, which affects their pro-environmental behavior and environmental performance. For individuals who respect the atmosphere, it is supplementarily possible for them to connect to environmentally forthcoming actions (Chou, 2014; Ajitha and Sivakumar, 2017). Recent research asserts that green values influence human actions and that stipulation shows there is a match connecting individuals and corporate green values; hence, good environmental policies can be established (Saeed et al., 2019; Naz et al., 2021).

A decent amount of research has been conducted on the said variables. However, there is still the enquiry that GHRM practices play an intense role in nurturing environmental performance through psychological green climate and pro-environmental behavior (PEB) (Ojo et al., 2019). Psychological and individual values may be more appropriate for interpreting the impact of green human resource management practices on the pro-environmental behavior and environmental performance (Shen et al., 2018), and the current study investigates this relationship. This study included green human resource management practices as a predictor of pro-environmental behavior (Shen et al., 2018) to promote environmental performance in their model. According to a thorough investigation, GHRM practices and swaying pro-environmental behaviors are still lacking and should be investigated in a different business setting, such as the healthcare sector (Yong et al., 2019). Given that such a link has been overlooked (Saeed et al., 2019), researchers should further study the phenomenon to find other psychological and behavioral underpinnings. In addition, a recent study (Saeed, Afsar, Hafeez, Khan, Tahir, Afridi, et al., 2019) suggests that mediating and moderating roles between GHRM practices and pro-environmental behaviors should be developed to discover underlying processes. According to a more recent study, individual green values (IGVs) have been studied less in the context of GHRM practices (Ren et al., 2018).

A noticeable paucity of research has examined how GHRM enabled organizations to improve their performance in terms of environmental sustainability. To fill the research gaps described previously, this research aims to explore the green psychological climate as an antecedent of the pro-environmental action and investigate how individual green values act as a moderator in private healthcare hospitals between pro-environmental behavior and environmental performance. To respond to the recent study's call, the study goes above and beyond to assess the role of the green psychological climate as a mediator between the relationship of green human resource management and the pro-environmental behavior (Saeed et al., 2019). This paper consists of sections such as the literature review, methodology, results and discussion, practical implications, and future directions, and the end section is the paper's conclusion.

2 Literature

2.1 Theoretical background

The current research approach is focused on two models: the social cognitive theory and the norm activation model. People who engage in constructive actions look for self-management due to the socio-cognitive process and view (Dumont et al., 2017). A "person's convictions" are at the core of these theories. Individual beliefs and values inspire a person to engage in PEB, decreasing negative environmental impacts while positively affecting the environment (Ajitha and Sivakumar, 2017). The STC theory is based on subjective experiences, neural influences, and the surrounding environment. These hypothesis elements are linked and impact one another (Dace

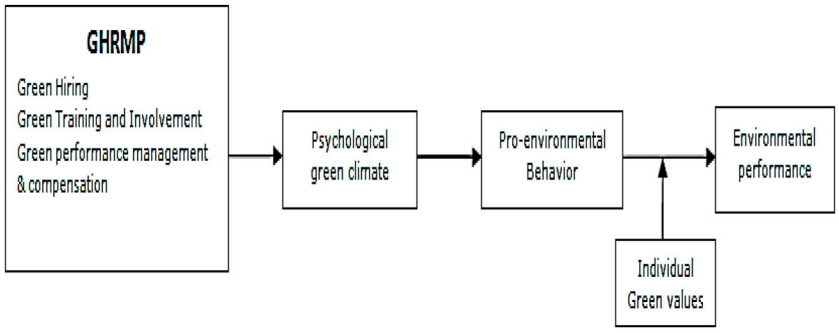

FIGURE 1
Conceptual framework.

et al., 2020). The norm activation model (NAM) is being considered for the current analysis. In the 1960s, Schwartz postulated the general activation model and began a series of papers to change it. Common model activation typically includes recycling and sustainability considerations (Xiao and Buhrmann, 2019). According to this report, GHRM practices improve the corporate environmental performance by developing a green psychological climate (GPC) and behavioral intentions with individual green values. People have associated more with pro-environmental behaviors due to the moderation effect (Chou, 2014).

2.2 Hypothesis development

2.2.1 Green human resource management practices and the psychological green climate

It is becoming increasingly important when the health sector is concerned about environmental protection and pollution prevention (Pinzone et al., 2016; Agrawal and Puri, 2020). Following the current scenario, organizational goals are related to environmental goals. Organizations are involved with enhancing and bringing social and environmental sustainability. HR managers can influence the adoption and implementation of environmental policies and procedures (Yusliza et al., 2017). Green human resource management has gained great consideration (De Stefano et al., 2018; Podgorodnichenko et al., 2020). Green human resource practices are based on the long-term sustainability of achieving a social and economic balance that aligns with long-term organizational goals (Dumont et al., 2017). Green human resource management practices place a premium on natural concerns to follow significant standards and speculations through human asset administration. The widespread adoption of green human resource practices has highlighted that this framework spans many dimensions (Tang et al., 2018). The term "psychological green climate" implies that firms want to achieve long-term objectives and priorities by enacting a wide variety of environmentally friendly policies (Chou, 2014). According to the most recent studies, the psychological green climate substantially impacts workers' green behavior on an interpersonal basis (Dumont et al., 2017). Similarly, the workplace encourages employees to seek information, and ecologically friendly practices may successfully generate a psychologically green climate (Nisar et al., 2021). The literature has shown that the climate affects employees' behaviors (Dumont et al., 2017; Pham et al., 2020). The betterment in environmental performance can constantly be achieved by taking into consideration the GHRM practices.

H1: Green human resource management (GHRM) practices are associated with the psychological green climate (PGC).

2.2.2 Psychological green climate and pro-environmental behaviors

The terms psychological green climate (Zhou et al., 2018), green organizational climate (Zientara and Zamojska, 2018), and green working climate (Norton et al., 2017) are used interchangeably. These constructs contribute to similar organizational outcomes, such as the green product development performance. Organizations can feel less socially responsible if they do not turn green when compared to employees; hence, it can be damaging to the environmental behavior and the psychological environment (Corner et al., 2012). Therefore, organizations need to be clear to stakeholders, from job design to environmental management, which improve the organizational environmental performance (Saeed et al., 2019). If organizations do not turn green, the workforce of an organization perceives that the company may be less conscientious in a social context and, as a result, may prejudice the pro-environmental behavior and psychological climate perception (Whitmarsh et al., 2012). Therefore, organizations must be clear to their stakeholders about the organizational environmental performance. As a result, workers become conscious of their role in engaging in pro-environmental behaviors (Pinzone et al., 2016).

H2: Psychological green climate is positively associated with the pro-environmental behavior.

2.2.3 Pro-environmental behavior and environmental performance

The terms "pro-environmental behavior," "environmentally responsible behaviors," or "green behavior" have been widely used to describe behaviors that protect the environment (Lee et al., 2013). The pro-environmental behavior encompasses any individual actions that minimize the depressing of human activities that harm the environmental quality and performance (Kim and

TABLE 1 Convergent validity.

Construct	Item	Loading	Alpha	CR	AVE
Environmental performance	EP1	0.822	0.865	0.895	0.552
	EP2	0.81			
	EP3	0.727			
	EP4	0.716			
	EP5	0.613			
	EP6	0.794			
	EP7	0.697			
Green hiring	GH1	0.896	0.907	0.935	0.783
	GH2	0.903			
	GH3	0.906			
	GH5	0.833			
"Green performance management and compensation"	GPM1	0.791	0.71	0.822	0.537
	GPM2	0.728			
	GPM3	0.655			
	GPM4	0.75			
"Green training and development"	GT1	0.824	0.783	0.854	0.544
	GT3	0.8			
	GT4	0.706			
	GT7	0.778			
	GT8	0.546			
	GHRM	0.933	0.933	0.942	0.507
Individual green values	IGV2	0.772	0.733	0.85	0.654
	IGV3	0.87			
	IGV5	0.78			
Pro-environmental behavior	PEB1	0.798	0.623	0.8	0.572
	PEB3	0.774			
	PEB5	0.693			
	PGC1	0.824	0.728	0.845	0.646
	PGC2	0.819			
	PGC4	0.767			

Stepchenkova, 2020). The pro-environmental behavior is intended to promote the wellbeing of an individual, group, or organization (Bassi et al., 2007; Sawitri et al., 2015). Employees' pro-environmental behaviors have increased as they develop a greater awareness of the negative effect that human behaviors have on the environment (Sawitri et al., 2015). The environmental success is "a firm's effectiveness in fulfilling and overcoming society's standards of respect for the natural environment" (Judge and Douglas, 1998). Organizations are concerned about the environmental management and organizational performance (Suganthi, 2019). Specifically, significant signs for the environmental performance assessment are pollution preclusion and a disposal decline and reprocess actions. Similarly, another study found that organizations that see the protection of the environment as part of the HR process add value to environmental success by educating their workers, especially in the natural environment's shield (Sawitri et al., 2015).

H3: Pro-environmental behaviors are positively linked to the environmental performance.

2.2.4 Psychological green climate as a mediator

The psychological green climate is a shared organizational sense of environmental wellbeing (Chatelain et al., 2018). Through green

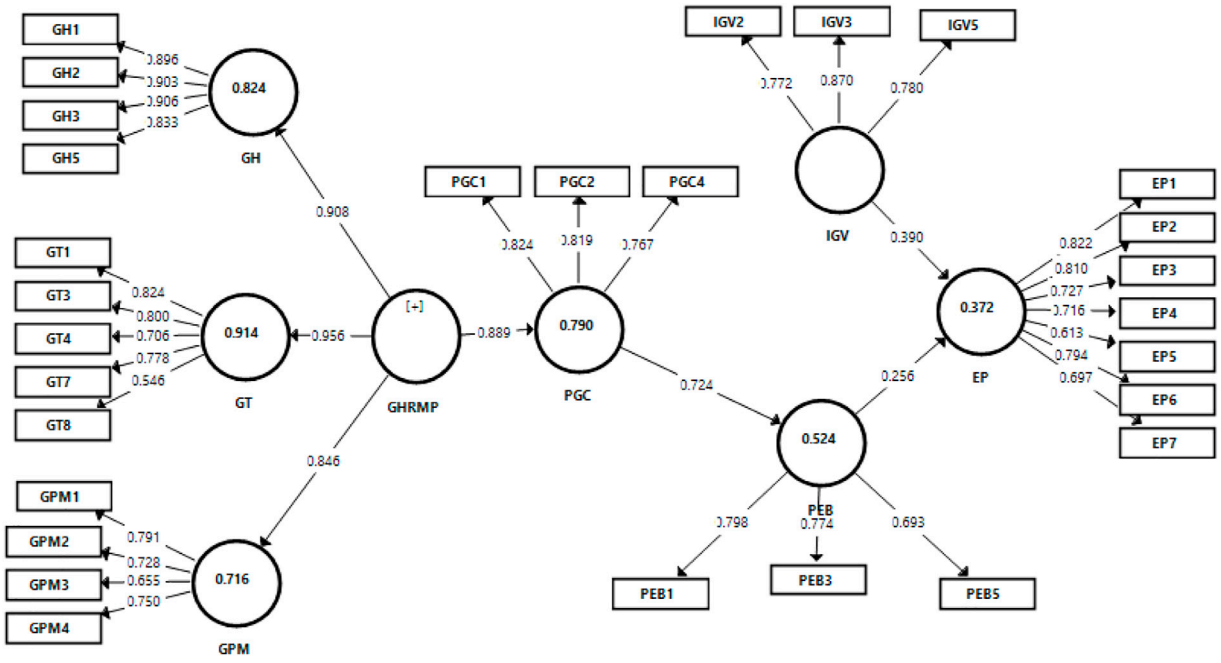

FIGURE 2
Measurement model.

human resource strategies and pro-environmental attitudes, employees' mutual opinions on environmental issues will be further reflected by the organization's laws, legislation, policies, and procedures. The psychological green climate is built on the process of social cognition (Dumont et al., 2017). The psychological environment strongly correlates with work fulfillment, burnout, position actions, and extra-role job success (Phillips and Dickie, 2015). Recent research has discovered a correlation between institutional environment policies, green environment activity, and successful green actions among employees (Norton et al., 2017). Employee interaction and management strategies form the psychological atmosphere if the goal is to help the organization. Green human resource management practices usually establish the requirements that workers must adhere to. Furthermore, by building a green psychological climate, green human resource management practices aid workers in addressing their anxiety about pro-environmental practices (Saeed et al., 2019). The psychological green climate encourages environmentally friendly behaviors (Capstick et al., 2019).

H4: Psychological green climate mediates the relationship between GHRM and pro-environmental behaviors.

2.2.5 Role of pro-environmental behaviors as a mediator

Employees' pro-environmental behaviors increase an organization's productivity and environmental performance. Green human resource policies and a positive psychological atmosphere boost environmental results (Naz Alt and Spitzeck, 2016). Typically, an organization's staff discovers this by monitoring others (Suganthi, 2019). Due to this, research has found that an organization's sustainability initiatives affect employee behaviors. The management identifies workers to respond in ways that are appreciated and desired in the workplace in a consistent approach to environmentally positive attitudes (Naz et al., 2021).

H5: The relationship between the psychological green climate and environmental performance mediated by pro-environmental behaviors.

2.2.6 Individual green values as a moderator

Karadag and Kayabasi, 2013 defined values as "what people believe to be fundamentally right or wrong." Therefore, they are "likened to 'building blocks of behavior by providing foundations for attitudes, which in turn, provide bases for action" (Schminke et al., 2015). Individuals' apprehension about the environment significantly influences their environmental behaviors (Chou, 2014). Previous research has established a momentous alliance between the green value of individuals and their behaviors toward the environment. Individuals with green values exhibit proof of green behavior; according to Chou (2014), individual green values have the potential to influence environmental efficiency. On the other hand, individual green values play a critical role in generating innovative ideas for business development (Esty and Winston, 2009) and innovative solutions aimed at corporate growth (Chou et al., 2012).

H6. Individual green values moderate the relationship between pro-environmental behaviors and environmental performance.

2.3 Control variable

Enormous studies have shown that some individual-level characteristics, including gender, organizational tenure, age,

and education, can also influence green behaviors in any business (Aljarah, 2020). Employee cognitive capacities can be influenced by years of experience and other socio-demographic factors. Controlling these components might be effective (Li et al., 2020). Moreover, with age, experience, and education, employees become more capable, skilled, and innovative, which may influence their green perspectives (Zhang, Xu, and Wang, 2020). In consistence with the previous research and the present theoretical model, this study employed the gender, age, experience, and education of current employees as control variables.

3 Methodology

3.1 Population and samples

In the present study, the population includes people from private hospitals located in the district of Sialkot, Pakistan; at the same time, these hospitals are following green practices. Convenience sampling was used for the collection of data from respondents. Data were gathered from the general managers and HR managers of private hospitals in Sialkot, Pakistan. To reduce the likelihood of bias, each responder was given specific instructions regarding their involvement (Tabachnick et al., 2007). The questionnaires were distributed among 160 private hospitals, out of which 120 responses were returned. After the screening of incomplete responses, 110 responses were found to be useful for the analysis.

3.2 Measures

This research included variables such as green human resource management practices, psychological green climate, pro-environmental behavior, individual green value, and environmental performance, all of which were measured using a five-point Likert scale to a rating scale from 1 (strongly disagree) to 5 (strongly agree). Green human resource management practices were measured, which consist of three dimensions. Mousa and Othman's (2020) six-item scale was adopted to measure green hiring, green training, and the involvement scale used by Yusoff et al., 2020, and the four-item scale of green performance management and compensation was used by Tang et al., 2018 in their study.

The seven-item scale of pro-environmental behaviors was developed by Robertson and Barling (2013). A total of three items from Chou's (2014) personal environmental scale were used to calculate an individual's green rating. The environmental performance eight-item scale was also used, which was developed by Kim Y. J. et al. (2019).

4 Results and data analysis

Researchers used a smart PLS for data analysis in Figure 1 since it is widely utilized as a modern evaluation method in business research. To evaluate the convergent validity by loading, Table 1 and Figure 2 explain loading, which was above .50 after deleting the items whose loading was below .50. Similarly, all constructs have a composite

TABLE 2 Discriminant validity (HTMT) (first-order).

	EP	GH	GHRM	GPM	GT	IGV	PEB	PGC
EP								
GH	0.709							
GHRM	0.725	0.875						
GPM	0.656	0.737	0.652					
GT	0.808	0.745	0.675	0.575				
IGV	0.703	0.872	0.488	0.761	0.655			
PEB	0.724	0.805	0.467	0.544	0.776	0.702		
PGC	0.629	0.833	0.679	0.736	0.697	0.638	0.735	

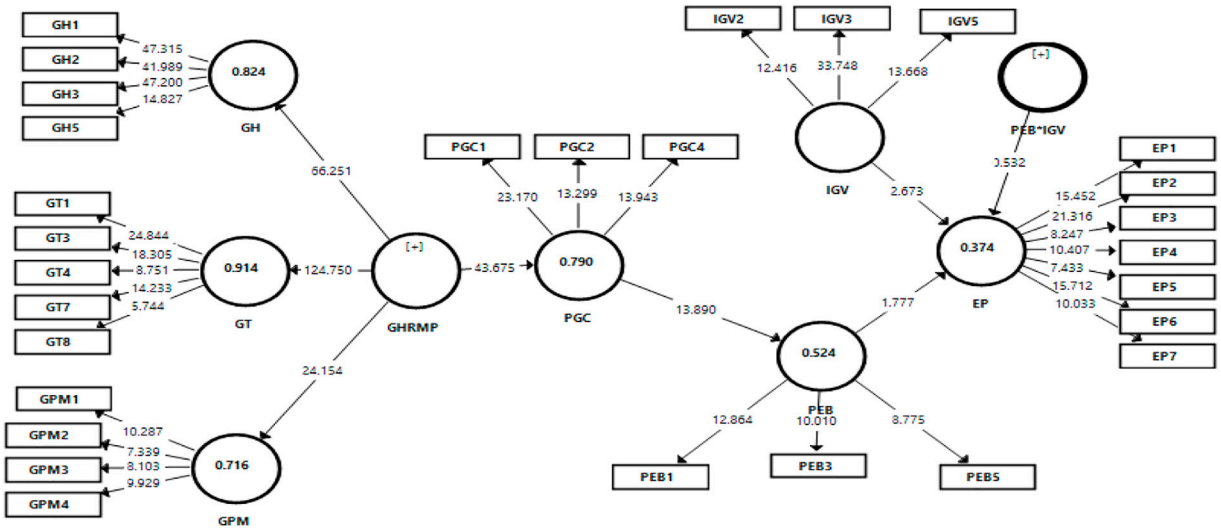

FIGURE 3
Structural model.

TABLE 3 Path analysis.

	"Relationships"	"Beta"	S.D	T-value	*p*-value	L.L	U.L	"Decision"
H1	GHRM---> PGC	0.89	0.021	42.755	0.000	0.85	0.917	Supported
H2	PGC-> PEB	0.72	0.049	14.856	0.000	0.63	0.795	Supported
H3	PEB-----> EP	0.26	0.156	1.692	0.046	0.02	0.524	Supported
H4	GHRM----> PGC--> PEB	0.64	0.052	12.313	0.000	0.55	0.716	Supported
H5	PGC---> PEB---> EP	0.19	0.118	1.618	0.053	0.01	0.395	Not supported
H6	Moderating effect---> EP	0.05	0.098	0.483	0.315	0.12	0.223	Not supported

reliability above the recommended value of .70 and also all AVE values above the recommended value, which is .50. On the whole, there was no issue in the present study regarding the discriminant validity.

Table 2 and Figure 3 shows that there was an HTM, which validated the discriminant validity. The given values are less than the value of .85, as discussed by Kiline (2011).

4.1 Structural assessment models

Structural modeling was executed to test the hypothesis of this study. Path coefficients and T-values are computed to explain the relationships of the hypothesis. The bootstrapping procedure was adopted for the mediation and moderation effect.

Table 3 shows that H1 green HRM practices were significantly associated with the psychological green climate (β = 0.122, t = 42.755, L.L = 0.85, U.L = 0.917, and *p*-value is 0.000). Therefore, H1 supported the results showing the H2 psychological green climate positive link with pro-environmental behaviors (β = 0.72, t = 14.856, L.L = 0.63, U.L = 0.917, and *p*-value = 0.000), in the same way that this H3 pro-environmental behavior is the link to the environmental performance (β = 0.26, t = 01.692, L.U = 0.02, U.U = 0.524, and *p*-value = 0.046). Therefore, H3 was supported besides the H4 psychological green climate, and it mediated the relationship of green HRM and pro-environmental behaviors (β = 0.64, t = 12.313, L.L = 0.55, and U.L = 0.716). H4 is also supported. The H5 pro-environmental behavior mediated the association with the psychological green climate and environmental performance (β = 0.19, t = 1.618, L.L = 0.01, and U.L = 0.395). H5 is not supported. Lastly, the H6 individual green value moderated the pro-environmental behavior (β = 0.05, t = 0.483, L.L = 0.12, U.L = 0.223, and *p*-value = 0.315). H6 is not supported.

5 Discussion

The previous study has demonstrated that pro-environmental behavior among workers improves environmental performance (Robertson and Barling, 2013). However, the relevance of such activities is expanding in the present global period as nations make concentrated attempts to achieve organizational greening through acclimating workers to connect with pro-environmental proposals (Paillé et al., 2014; Norton et al., 2017). The psychological green climate as a predictor of pro-environmental behavior studied the degree of the individual green value influence on the relationship between pro-environmental behaviors (Dumont et al., 2017). According to the present study's results, green human resource

management practices have a significant relationship with the psychological green climate. According to previous studies, environmental workplace practices and the devotion to green human resource practices affect employee behaviors when operating in a psychological green environment (Dumont et al., 2017; Yusliza et al., 2017; Pham et al., 2020; Ali et al., 2022). The present study followed the hypotheses by collecting data from healthcare workers employed in the Hospital District of Sialkot, Pakistan, and analyzing the results. As a result, we investigated the function of the green psychological climate in mediating the link between green human resource management practices and pro-environmental activities. The green psychological environment is shown to be a valuable resource for enhancing the link between green human resource management practices and pro-environmental behaviors. Despite the significance of the green psychological climate for pro-environmental activities, there is a vacuum in comprehensive observational evidence linked with the proposed study paradigm; as a result, the authors of this study looked at the moderation of the individual green value with pro-environmental behaviors and environmental performance (Dumont et al., 2017; Naz et al., 2021). Empirical research does not support this moderating relationship, and it has been claimed that individual values for the environment do not affect the pro-environmental behavior or environmental performance.

5.1 Theoretical contributions

As previously stated, environmental sustainability has become a crucial study issue due to the growing apprehension for environmental protection. Despite the research that has been carried out in this area, it is still unclear how employees' behaviors toward the environment and green human resource management practices develop a system to improve environmental sustainability (Saeed et al., 2019; Naz et al., 2021). The current study potentially adds to the body of knowledge in various ways. To begin with, the current study theoretically contributes to bridging the research gap by studying linkages between study components in the context of the Pakistani healthcare business using the combined academic paradigms of the social cognitive theory and norm activation. It is still unknown despite the numerous works of research that have been undertaken on the topic, how environmental and personal elements boost the behavior of employees that contribute toward the fulfillment of green corporate goals to safeguard the environment. Second, when investigating rising research trends in Pakistan, the existing research is performed to cover the investigative gap and learn more about the multifaceted phenomena of the employee pro-environmental behavior and how it relates to the environmental performance. Finally, this study adds to the knowledge by including individual green values as a moderator with pro-environmental behaviors and environmental performance, thereby addressing a knowledge gap found in the prior research (Dumont et al., 2017; Naz et al., 2021).

5.2 Practical implications

The study has practical implications for company managers who want their staff to embrace pro-environmental behaviors and implement green human resource management practices for improved environmental performance at the organizational level. A previous study (Podsakoff and Organ, 1986; Saeed et al., 2019) indicated that organizations focus on GHRMP for efficient green policy implementation. Organizations should make a concerted effort to create a green psychological climate by using green human resource strategies. The managerial level's concern for the environment pushed them to be in charge of developing green HRM policies. As a result, managers must hold themselves accountable for implementing HRM practices for environmental sustainability. The study reveals that the presence of organizational green shared visions raises the beneficial influence of GHRMPs on employees' convictions so that they can effectively accomplish environmental objectives, address environmental difficulties, and carry out green missions. Therefore, the highest level of management should ensure that sustainable human resource management methods are supported by appropriate environmentally conscious visions. Finally, study findings point practitioners toward rewarding workers in financial and non-financial ways to incentivize them to engage in eco-friendly actions. Managers should solicit their ideas for resolving environmental challenges to encourage workers to engage in pro-environmental practices. Employees' interests grow as a result of participating in pro-environmental behavioral activities.

5.3 Limitations and future research

First, the current study has the limitation that the manufacturing sector has addressed; future studies need to address this model and framework in other sectors just as the pharmaceutical and chemical industries, which will ensure the present study results in other sectors. Second, the current research was conducted in a developing economy, such as Pakistan's; future research should be conducted in a country with a cultural difference in the developing world. Third, future researchers should consider different mediators in the present study model as corporate social responsibilities, job satisfaction, and moderator roles (organizational citizenship behavior, green creativity, and green self-efficacy) will make a greater contribution to the literature of green human resource management practices and environmental performance.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The patients/participants provided their written informed consent to participate in this study.

Author contributions

ML and SUQ contributed equally as first author. SUQ: conceptualization. RQ : methodology and interpreted results. SUQ: formal analysis, investigation resources, and visualization. SUQ, ZM, RZUA, SQ, MKK, ML, HA, SM: validation, and writing original draft preparation, review and editing. SUQ and SM: data curation. ZM, HK and ML: project administration. All authors have read and agreed to the published version of the manuscript.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

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