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Article

# Promoting Employee Green Values Beyond the Office Walls Through Green HRM Utilizing Employee Environmental Knowledge as a Mediator

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Abstract: Organizations are adopting green initiatives in response to global environmental crises and climate shifts. While previous research has examined how green HRM affects employees' inrole and extra-role working behaviors, less is known about how it influences employees' behavior outside of work due to their green values (GV) that develop because of implementing organizational green actions. The study addresses the issue, while also considering employees' environmental knowledge (EK) as a mediating factor, utilizing social learning theory and psychological contract theory. Data were collected using the convenience sampling method, where the sample size was 320, from ten selected large-sized ceramic companies operating in Bangladesh. The structural equation modeling (SEM) was used to analyze the data. Results infer that green HRM effectively enhances EK among employees and redirects their GV beyond the workplace. Additionally, EK substantially and positively mediates between the green HRM and GV relationship. The conclusions correspond to the recommendations are indicated in the relational psychological contract theory and the social learning theory. The findings have imperative theoretical and managerial ramifications since they address the knowledge gap in the literature and outline knowledgeenhancing green HRM practices that organizations may adopt to improve their green performance. The study also outlines actions for adopting green HRM activities in organizations, aligning the scope for improving employees' EK and giving them the opportunities to practice green actions for sustainable social outcomes through their increased sense of GV.

**Keywords:** Green HRM; Green Values; Environmental Knowledge; Out-of-work Behavior; Employee Value Orientation; Employee Green Behavior; Environmental Behavior; Environmental Crisis

## 1. Introduction

Addressing environmental issues has become the new norm of today's organizations for encountering rapid changes in global climate. Worldwide, nearly all industries have started adopting green initiatives and introducing green goals to achieve environmental targets [1]. For instance, the manufacturing industries are focusing on eco-friendly systems to procure waste materials or reduce waste, and the service industries are thriving to preserve resources and increase green knowledge among their employees to keep pace with the expected green performance [2]. Green human resource

management (HRM) is one of the strategies to achieve organizational green goals through employee green awareness [3—4]. Those green goals of the organizations contribute to enhancing the green performance of the firms where green HRM plays a major role [3, 5]. At the same time, green HRM actions also affect employees' green behavior [6—7], environmental attitude [8] and value orientation [9]. Previous studies have concluded a positive association between the organization's green actions especially green HRM initiatives and employees' green behavior [6, 10—11]. However, most of the studies have focused on evaluating the employees' workplace green behavior [10, 12—13]. For this instance, we have come to know about the consequences of green HRM initiatives in organizational settings. Consequently, a limited number of studies investigate whether employees also exercise those green behaviors outside their workplace. This study aims to investigate this gap concerning employees' green values (GV) and their environmental knowledge (EK).

Existing literature has explored that green HRM practices are integrated with employees' environmental knowledge (EK) [14-15]. Green HRM practices like green training, green reward systems, green performance assessment, green recruiting and selection, and other related activities enrich employees' ecological awareness and pro-environmental behavior [16-17]. These green HRM practices boost employee green skills to demonstrate green behavior and participate in workplace greening [17]. Acquisition of green knowledge and skills promotes green attitudes among others through knowledge transfer [15]. EK influences decision-making and attitude among employees [17]. Once the employees are aware of the outcomes of green actions like waste reduction, resource savings, waste recycling and so on, they promote green behaviors in their professional, societal, and personal decision-making. In this regard, Chan et al. [18] propose that customers with a greater sense of EK have a higher tendency to avail of green products and services. And employees with enhanced EK tend to demonstrate voluntary pro-environmental attitudes [17]. Afsar et al. [19] also advocate that employees' emotional attachment to eco-friendly behavior requires a convinced extent of EK and responsiveness. Therefore, green HRM contributes to increasing EK among employees by integrating organizational green actions such as training, recruitment and selection, performance management and others in its strategic endeavors. Additionally, EK redefines individuals' decision-making and emotional involvement in green actions, which designate their GV.

In recent days, Bangladesh is experiencing dramatic changes in every perspective from politics to economy as an emerging nation. Though the presence of turmoil and corruption, Bangladesh has performed an uprising and stable growth in economic and social development. Consequently, Bangladesh is about to graduate from least developed country in 2026. Notwithstanding domestic and international unrests, it is certain that the country's per capita income in the current fiscal year (2023–24) has reached to \$2,784, an increase of 1.27 percent [20]. Despite a high incidence of unemployment and inflation, Bangladesh has made commendable progress in numerous areas including GDP, literacy, poverty alleviation and the health services. Based on the performance, the economy has ranked 2nd in the South Asia and 35th in the world economy, and projected that it will be the 20th largest by 2037 at its current pace [21].

The ceramic industry is one of the country's most promising and growing industries. Approximately half a million people are engaged with the local companies, which satisfy almost 85% of all domestic demands. Given that over fifty countries are now export destinations and are continuing to grow, the growth tendency suggests that this sector will rank among the top exporting industries in a few years. After all, the industry is contributing to nation's economy by engaging more

local and foreign companies, facilitating foreign direct investments and friendly policy, and introducing sophisticated technologies and skilled workforce.

Green HRM has emerged as a significant concept in recent years in academia [13]; henceforth, various aspects of its influences remain unexplored [22]. Recent studies have explored green HRM concerning employees' environmental behavior [23], citizenship behavior [24], organizational commitment [25], organizational performance [26] and related areas. Most of the studies emphasize exploring employees' workplace behavior as a whole [27]. Several other studies investigate in-role and extra-role working concerning organizational green HRM [10, 13, 28—31]. However, limited studies mention the significance of assessing employees' out-of-work behavior and their green value attribute because of adopting organizational green HRM practices [10]. In addition, as a newly developed concept, both the theoretical foundation and empirical investigation are not explored thoroughly in developing countries like Bangladesh. For this instance, this study will contribute to enlightening the existing gaps in the literature as well as persuading the urgency of adopting green HRM in organizational settings. The main purpose of this study is to measure the effect of organizational green HRM initiatives on employees' out-of-work behavior because of their enhanced green values. It also investigates whether green HRM strategies enhance employees' environmental knowledge and how green HRM affects GV through EK.

## 2. Conceptual Foundation and Hypothesis

#### 2.1. Green HRM

Considering the deteriorating effects on the environment and rapid shifts in climate, organizations are switching to eco-friendly policies in which they undertake green actions in all their operational aspects [32]. Therefore, organizations are setting ecological strategic goals for achieving green targets and satisfying their pro-environmental stakeholders [31]. In this instance, HRM practices must also need to be aligned with the corporate green goals. Green HRM is one of the eco-friendly initiatives in which organizations adopt environmentally friendly HRM activities including green recruitment and selection, green training, green performance appraisal and management, green reward management and so on initiatives [33—34]. To achieve productive outcomes of green HRM, the participation of related stakeholders especially the employees and performing organization's decision makers is essential. In this case, Milliman and Clair [35] advocated for the presence of four key factors: top management's vision, green training for employees, alignment of green behavior to performance appraisal, and integration of green behavior to reward systems.

## 2.2. Employee Green Values

Values are the decision state of individuals among right, wrong or desirable conduct in personal and social contexts inhibiting a person's motivation and attitude [36]. Values also define the behavior of a person in a socially preferable manner by extracting the good from the bad [37]. In other words, values are expressed as the individual's matter of importance among alternatives [38]. Therefore, green values (GV) refer to choosing eco-friendly alternatives instead of conventional ones and behaving in a pro-environmental manner. The employees' green value proposition will be attributed once they demonstrate green actions in their social and personal interactions, and they show self-motivation to exercise those actions.

Robbins and Judge [36] discuss a range of individual value properties in two dimensions: terminal and instrumental. Terminal values are mostly concerned with individuals' self-interests and accomplishments including freedom, luxury, desires, appreciation, life lessons, and so on. On the contrary, instrumental values are mostly group and social satisfiers including responsibility, politeness, honesty, helpful mentality, and others. Understanding the instrumental attributes of the employees' value proposition is important as we expect that they are supposed to show responsible behavior in their personal and social dealings because of practicing green HRM initiatives at the workplace. We primarily emphasize on instrumental values of the individuals in this study because these attributes are concerned with the greater good and the urge to live for others by submitting their self-interests, which is exceptionally aligned with the GV concept. Instrumental values like accountability, a sense of duty, a sound mentality and so on uplift altruistic attitudes toward the surroundings including the environment, society, people and others, which lead to a greater sense of GV among them [39].

#### 2.3. Environmental Knowledge

Environmental knowledge (EK) refers to the pro-environmental understanding and awareness about the consequences of performing and non-performing eco-friendly actions. Zsóka et al. [40] refer to EK as the consciousness of environmental struggles and their possible resolutions. In an extended study, Fryxell and Lo [41] describe EK as the general state of knowledge an individual possesses regarding the common environmental phenomena, natural ecosystems and interconnectedness among the components of the ecosystems. Scholars have identified different dimensions of EK. Boerschig and De Young [42] focus on understanding, strategies and abilities to handle environmental concerns. Jensen [43] emphasizes understanding the impact size and reasons for environmental problems, formulation of action policy and understanding of human-environment interaction. Therefore, EK states that the employees have the basic knowledge of the environmental difficulties, they understand the possible causes of those problems, and they are aware of their individual level responsibilities to tackle the problems.

## 2.4. Theoretical Foundation

#### 2.4.1. Psychological Contract Theory

Psychological contract theory (PCT) suggests that individuals perform or bind themselves to other parties in exchange for mutual expectations or obligations [44]. Therefore, in an organization, employees owe themselves to the organization or employer when they feel that their contribution is a result of the promises delivered by the organization. As per the theory, employees perceive that there is an unwritten contract between the organization and employees in which the organization offers training, appraisal, rewards and other factors and, in exchange, the employees demonstrate positive actions [45]. Hence, in exchange for green HRM initiatives, the employees show a green attitude toward the organization [46]. However, employees' green workplace attitude inhibits green value properties in their personal doings and out-of-work behavior. In this regard, Robinson and Morrison [47] indicate that PCT exceptionally signifies the assessment of employees' out-of-work behavior, which defines their value properties. Researchers have classified the PCT as transactional and relational contracts [44]. The transactional dimension illustrates the individual's self-interests,

while the relational dimension represents group and social interests [48]. In our study, the relational dimension of the PCT is substantially important because it posits that employees gladly embrace organizational green HRM initiatives and show positive behavior toward green actions [45].

## 2.4.2. Social Learning Theory

The social learning theory (SLT) explains the influence of the learnings of people on their behavior [49]. The theory posits that people imitate the behavior of their role models who can be their supervisor, leader, co-worker or other associated individuals. The influencers' green behavior is supposed to be followed by their followers. Therefore, following the propositions of the SLT, the employees gather environmental knowledge from their leaders, managers, peers or supervisors when the organization implements green policies like green HRM practices [49]. The organization's environmental initiatives and green policies elicit environmental knowledge of the employees and a sense of obligation concerning implementing green practices grows among them [50]. In addition, the employees' green concerns are reflected in the workplace [51]. Hence, it is also true that their workplace green behaviors are reflected in their personal and social interactions, which become an integral part of their values orientation [52]. Through social interactions and knowledge sharing, the employees who accept the organizational green actions also inspire others to adopt GV [53]. Therefore, SLT is uniquely relevant to understand the influence of green HRM on employees' out-of-work values in light of their environmental understanding.

## 2.5. Green HRM and Green Values

Studies have classified green HRM systems into two segments: control-base and commitmentbase [54]. In the first case, the employees are forced to initiate green HRM practices in the organization, while employees enthusiastically adopt green HRM practices in the second case [45]. The controlbased HRM systems are aligned with the transactional concept of the psychological contract theory. On the other hand, commitment-based HRM systems support the proposition of the relational psychological contract. As this study is primarily focused on the relational aspects of the PCT, we primarily focused on the commitment-based green HRM systems in which the employees show positive motivation to implement green HRM systems and behave pro-environmentally [55]. Peng et al. [56] illustrate that once the employees adopt organizational green HRM practices, they actively alter or adjust their motivation, attitude and interactions according to the new standards. Furthermore, employees tend to judge their behavioral requirements based on the responsibilities they are provided in the organization and standardize their attitude accordingly [57]. Moreover, green HRM influences employees to take greater responsibility for environmental services [58]. In other words, organizational green HRM adoption makes the employees adjust their work attitude or behavioral standards. Therefore, the adjusted attitude and standard behavior become the new value proposition for the employees. As values are related to the individual's attitudes and behaviors [36], the new values replicate in employee's personal and social interactions outside the workplace. Zhu et al. [45] prescribe that people become satisfied by demonstrating GV and acknowledging green actions in social dealings. In this regard, a sense of accomplishment and belongingness grows within the individual, which underpins the relational psychological contract. Researchers conclude a positive affiliation between relational psychological contracts and employees' green attributes and actions including commitment, trust, beliefs and values [45, 59]. Moreover, research also concludes

that individuals with a greater sense of GV show a higher degree of pro-environmental behavior [60]. Therefore, with the notion of PCT and related literature, we propose our first hypothesis as:

H1: Green HRM has a positive impact on employee GV.

## 2.6. Green HRM and Environmental Knowledge

The functioning area of green HRM ranges from recruiting and selecting individuals with a sense of pro-environmental behaviors, providing green training and skill enhancement programs, integrating performance appraisal with green actions, aligning green behaviors with reward system, and many more [3, 26, 61-63]. Saeed et al. [17] explain that organizations promote EK among employees through these functional strategies and actions. Organizations that adopt green HRM extensively focus on providing green training and awareness-building programs for their employees so that they can perform and achieve organizational environmental goals. By this means, the employees receive in-depth knowledge regarding environmental concerns and are aware of the actions to mitigate those in environmental settings. After receiving the training and awareness programs, the employees also have the opportunity to implement them in the work, and employees with environmental skills have an emotional tendency to participate in green actions [64]. Therefore, the employees understand the theoretical issues of the environment and get the scope to implement them. In this sense, the employees of green organizations become aware of the green behavior which brings environmental performance [65]. In addition, employees also try to acquire environmental knowledge (EK) on their own accord to demonstrate greater green performance with you to receive rewards and appreciation from the organization. When performance appraisal and performance management are aligned with employees' green behavior, the employees want to show their greatest performance by learning more about environmental actions. For this instance, organizational green HRM practices and associated skill, ability and awareness-building programs enhance employees' EK [66] and the process signifies more when organizations hire individuals with GV [22]. The organizational green climate helps those employees to demonstrate green actions and develop habits of performing eco-friendly when they are provided with skills and knowledge [22].

With reference to SLT, employees are prone to implement the acquired EK gained from their leaders, coworkers and others at work in their social interactions and even influence others to behave eco-friendly through knowledge sharing. Baumgartner and Winter [67] indicate that organizational green HRM initiatives enlighten environmental understanding and facts to encounter ecological problems. Employees' EK also enhances their participation in green actions, and it further expands if organizational green HRM is aligned with the EK [19]. Bhattarai et al. [68] also point out that EK plays a crucial role in defining the effectiveness of green HRM. Hence, based on the SLT and discussed literature, we posit that:

H2: Green HRM has a positive impact on enhancing employee EK.

#### 2.7. Environmental Knowledge and Green Values

As employees' EK increases in an effort to practice green HRM and receive green skills, they are more prone to inhibit green attitude in organizational settings and also in the social arena for their social and emotional satisfaction. Considering the propositions of SLT, employees become more aware of the environmental issues due to the company's environmental activities and green policies, and they also feel more obligated to adopt green practices [50]. Furthermore, workplaces are

reflective of individuals' environmental concerns and values [51]. Employees who embrace the organization's green initiatives encourage others to embrace GV through shared experiences and social exchanges [53]. Moreover, individuals' involvement in green initiatives including waste procurement, environmental protection and others enhances their motivation to adopt green actions [69]. Zhu et al. [45] infer that individuals want to engage in more and more eco-friendly activities with the increase of EK among them as they believe their actions are directly improving environmental performance. Therefore, the individuals recognize organizational green HRM to a greater extent, which fosters a sense of accountability and cohesiveness among them [45]. This sense of accountability and cohesiveness funnels individuals' relational psychological contract [45], which defines the attitude of performing actions related to social interests [48]. As PCT effectively defines individuals' out-of-work behavior, the individuals who inhibit relational psychological contracts are more likely to demonstrate higher GV in social actions.

The mentioned illustration defines how SLT promotes EK among employees, while PCT demonstrates how that learning reflects in individuals' behavior and values. Therefore, based on the discussion and suggestions of SLT and PCT, we formulated the following hypothesis.

H3: EK is positively aligned with employee GV.

# 2.8. Mediating Role of Environmental Knowledge

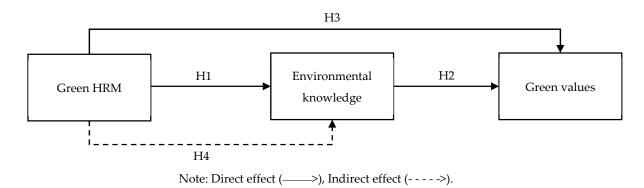
An individual's value state improves with the acquisition of knowledge and skills to understand a specific situation comprehensively as knowledge is considered a key factor in decision-making [70]. Therefore, people participate in those actions in which they are aware of [71]. Organizational green actions enhance the employees' understanding of environmental issues systematically [72]. Additionally, EK unleashes the interests and motivation of the employees to understand the responsibilities they must play in protecting ecological balance [70]. The employees also have the opportunity to participate in the implementation process of green strategic actions, which increases their tacit knowledge when they experience implementation hurdles. These skills and knowledge create confidence among employees to perform pro-environmentally [67]. However, once they experience the organization's green performance and green goal attainment, they can make a difference between conventional ways and greenways. When employees understand that the organization is making substantial performance along with ensuring environmental protection, they become enthusiastic to take part in organizational green revolutions [73]. At some point, they start implementing those green initiatives outside the workplace as they understand the consequences of ignoring environmental factors, and they have the skills to follow green actions instead of conventional ones. Afsar et al. [19] conclude that workers who have a greater understanding of the environment are more dedicated and optimistic in ecological safeguarding. They also positively recognize organizational green HRM policies that uplift employees' positive emotions, which leads to a green attitude [70]. In addition, employees' engagement in green actions if the organization integrates EK with green HRM initiatives [19]. Hameed et al. [74] also note that the degree of accomplishment in achieving green goals is determined by the employees' EK.

Furthermore, SLT proposes that individuals learn by imitating their role models or influencers [49]. When they observe that their role models or managers are switching off the lights or air conditioners when not required, or using natural lights whenever available instead of electricity, or so on green behaviors, the employees imitate those behaviors. Usman et al. [72] suggest that green

practices such as providing training, recycling materials and reducing resource consumption have a positive impact on employees' out-of-work behavior. By practicing those green actions, a sense of obligation and attachment grows within them [75], which, in turn, defines the person's value attributes. As per the PCT, when individuals think of the greater good, a relational psychological contract grows within which reflects in individuals' attitudes and even out-of-work behavior. Therefore, on one hand, SLT proposes that organizational green HRM practices and associated awareness programs like green training, green skill development, green performance management, and so on enhance EK among employees. On the other hand, PCT suggests that an enhanced understanding of EK reflects in their values even outside of the workplace. Therefore, we propose—

H4: EK mediates the relationship between green HRM and employee GV.

# 2.9. Conceptual Model



**Figure 1.** Conceptual framework.

## 3. Methodology

To examine our proposed framework, we gathered data from ten selected ceramic companies operating in Bangladesh. We targeted large-scale firms with at least 500 employees working. Data were collected by in-person visits using a structured questionnaire. Considering the difficulty in understanding the questionnaire, individual items were explained to the operations level workers and marked respective scales based on their answers. Conversely, hard copies of the questionnaire were delivered to the mid-level and corporate-level employees. Conveyance sampling, a non-probability sampling technique, was used to collect data [76]. The sample size of the study was 320. Data were collected between January 2024 and April 2024. As this study deploys the PLS-SEM approach, the sample size is sufficient according to the propositions of Churchill and Iacobucci [77].

The questionnaire was designed using measurement scales from existing literature. Green HRM was measured using 6-items adopted from Dumont et al. [13]; GV were measured using 5-items adopted from Dumont et al. [13] and Chou [78]; and EK was measured using 5-items retrieved from Fawehinmi et al. [15] and Gatersleben et al. [79]. All the questions were designed using a 5-point Likert scale ranging from "not at all" to "very much".

Analysis was conducted using SmartPLS v4.1 deploying partial least squares structural equation modeling (PLS-SEM). Firstly, the reliability and validity of the collected data were tested using the PLS-SEM algorithm. Secondly, a bootstrapping service was used with a subsample of 5,000 to measure relationships between and among the stated latent variables. In this case, correlation

coefficients and hypothesis testing were used to understand the direct and mediating effect of the research model.

## 4. Results

## 4.1. Demographics

Most of the respondents were between 30 years and 40 years of age (33.75%), male (60.31%) and operations-level workers (48.75%). Moreover, most of them hadn't received graduation or post-graduation degrees (47.50%). Detailed demographic profiles of the respondents are presented in Table 1.

Table 1. Respondents' demographic profile.

Index	Demographics	Frequency	Percentage
Age	18-30	86	26.87
	31-40	108	33.75
	41-50	95	29.69
	51-60	31	9.69
Gender	Male	193	60.31
	Female	127	39.69
Education	Higher secondary and below	152	47.50
	Graduation	101	31.56
	Post-graduation	67	20.94
Job position	Operations level	156	48.75
	Mid-level	134	41.87
	Corporate level	30	9.38

Note: Total respondents (n) = 320.

## 4.2. Data Reliability and Validity

Table 2. Data reliability and validity.

Constructs	Code	Loadings	Alpha	CR (rho_a)	CR (rho_c)	AVE
	GHRM1	0.887				
	GHRM2	0.904				
Green HRM	GHRM3	0.898	0.873	0.927	0.905	0.626
	GHRM4	0.870				
	GHRM5	0.729				
	GV1	0.800				
Green values	GV2	0.783	0.828	0.858	0.876	0.588
	GV3	0.845				
	GV4	0.787				
	EK1	0.766				
	EK2	0.897				
Environmental knowledge	EK3	0.943	0.921	0.934	0.941	0.764
	EK4	0.813				
	EK5	0.937				

Note: Alpha = Cronbach's alpha, CR = Composite reliability, AVE = Average variance extracted.

Before testing the proposed model, we examined Cronbach's alpha, composite reliability (CR) and average variance extracted (AVE) for data reliability, and heterotrait-monotrait (HTMT) ratios and Fornell-Larcker (F-L) matrix for data validity. In addition, the items' loading values are also measured to assess the correlations between items and constructs [80]. The threshold cut-off values

for factor loadings, Cronbach's alpha and CR (for both rho\_a and rho\_c) have been considered as 0.70 and for AVE as 0.50 as suggested by Hair et al. [81]. The results illustrate that all the study data satisfy all the measurement criteria related to reliability statistics. However, GHRM6 and GV5 have been excluded from further analysis due to poor factor loadings (0.440 and 0.595 respectively). Table 2 shows the statistical outputs of reliability measurements.

Kline [82] proposes a maximum value of 0.85 for HTMT ratios. Our study explores that all the values of HTMT ratios (presented in Table 3) are within the suggested scale. Likewise, the matrices between the same constructs of F-L matrix are higher than the matrices with other variables (i.e. the F-L matrix value of GHRM-GHRM is 0.791, while the value is 0.271 for GHRM-GV matrix), which confirms the discriminant validity of the study (Kline, 2011) [82]. Table 3 describes the results for HTMT ratios and F-L matrix respectively.

HTMT Ratios	GHRM	GV	EK
GHRM	-	-	-
GV	0.227	-	-
EK	0.275	0.328 -	
F-L Matrix	-	-	-
GHEM	0.791	-	-
GV	0.271	0.767 -	
EK	0.257	0.301	0.874

Table 3. HTMT ratios and F-L matrix.

## 4.3. Correlation Coefficients

Correlations (r) between latent variables are presented in Table 4. The correlation coefficients show positive relationships between GHRM and GV (r = 0.294), GHRM and EK (r = 0.257), and GV and EK (r = 0.304). Additionally, all the coefficients are significant (p < 0.001).

Table 4. Latent variables correlations.

Correlation	GHRM	GV	EK
GHRM	1		
GV	0.294*** (0.049)	1	
EK	0.257*** (0.056)	0.304*** (0.055)	1

Note: \*\*\*p < 0.001, Standard errors in parentheses.

## 4.4. Hypothesis Testing

The model summary presented in Table 5 describes the  $R^2$  values for GV ( $R^2$  = 0.142) and EK ( $R^2$  = 0.066), which illustrate that 14.2 percent changes in green values and 6.6 percent changes in environmental knowledge can be explained by Green HRM, the independent variable.

Table 5. PLS-SEM model summary.

Dependent variable	$\mathbb{R}^2$	Adjusted R <sup>2</sup>
GV	0.142	0.137
EK	0.066	0.063

Table 6 and Table 7 describe hypothesis testing results in relation to path coefficients and level of significance measured using t statistics and p values. The results show that all the proposed relationships between dependent and independent variables are significantly positive. Green HRM

and GV share the greatest positive coefficients ( $\beta$  = 0.294, p < 0.001), followed by green HRM and EK ( $\beta$  = 0.257, p < 0.001), and EK and GV ( $\beta$  = 0.244, p < 0.001) respectively. Therefore, green HRM is positively aligned with green values and environmental knowledge, and environmental knowledge is positively related to green values. For this instance, we have strongly supported H1, H2 and H3. Furthermore, as Table 7 illustrates, EK plays a significant positive mediating role in defining the relationship between green HRM and GV ( $\beta$  = 0.063, p < 0.01), which supports H4. For this instance, green HRM practices increase employees' EK, which conveys higher out-of-work GV among employees. In turn, employees show pro-environmental motivation and attitude, which defines their values, as a result of practicing green HRM actions in the workplace.

**Table 6.** Total effect.

Hypotheses and paths	β	Std. error	t-values	p-values	Remarks
H1: Green HRM $\rightarrow$ Green values	0.294	0.049	6.024	0.000	Supported
H2: Green HRM → Environmental knowledge	0.257	0.056	4.631	0.000	Supported
H3: Environmental knowledge → Green values	0.244	0.057	4.294	0.000	Supported

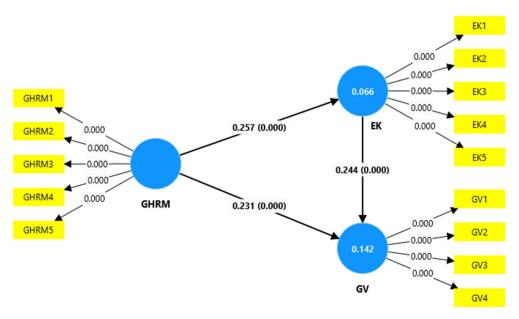
Note:  $\beta$  = Path coefficient.

Table 7. Specific indirect effect.

Hypothesis and path	β	Std. error	t-values	p-values	Remarks
H4: Green HRM → Environmental knowledge →	0.063	0.021	2.940	0.003	Cummontod
Green values		0.021	2.940	0.003	Supported

Note:  $\beta$  = Path coefficient.

The SmartPLS output model is presented below for better perusal and understanding the results in a prompt view.



Note: Path coefficients and p-values in inner models, p-values in outer models and R<sup>2</sup> in constructs.

Figure 2. PLS-SEM resulted model.

## 5. Discussion

With an aim to comprehend the consequence of organizational green HRM practices on employees' out-of-work behavior, we assess the causal association between green HRM and GV with

the mediating influence of EK. The mediating effect produces a better picture in explaining the nature of relationships between independent and dependent variables in the presence of external factors [83]. Therefore, this study represents a comprehensive view in understanding the impact of green HRM on individuals' values and behavior beyond their working relationships. The results interpret that green HRM enhance employees' green values and environmental knowledge. Firstly, as the impact is positive, it can be concluded that organizational green HRM initiatives enhance employees' environmental knowledge. It is also substantial that organizational green HRM practices promote GV beyond the workplace. In other words, employees who are acquainted with green goal setting, environmental training, eco-performance and green rewards are supposed to demonstrate green values in their out-of-work dealings. In addition, they are also enriched with environmental knowledge. Secondly, employees with an enriched environmental understanding also show greater GV beyond the workplace as EK is positively related to GV. Several existing studies support the results that are indicated in our investigation [15, 50, 84—85].

Moreover, EK significantly stands between green HRM and GV as a mediator, which infers that green HRM will have a more influential impact on GV if organizational green HRM initiatives are aligned with enhancing EK among employees. Alternatively, employees with increased environmental understanding are prone to show greater GV in response to green HRM. As the study assessed employees' state of GV outside their working environment because of practicing green HRM in organizations, it can be stated from the results that organizational green HRM initiatives effectively enhance employees' GV beyond the workplace, and their EK helps to produce better results in this case. EK is also adopted by the researchers as a mediating variable to explain the outcomes of green HRM and conclude a positive mediating effect [45, 86–87].

This study assesses several Green HRM practices including green goal setting, green training, green skill development, green performance appraisal and management, green performance in deciding career advancement, and green reward and compensation systems [13]. However, we have excluded green reward and compensation from further analysis due to insignificant factor loading. Among the green HRM practices that influence GV and EK, employees have imparted distinctive considerations to the availability of green training, green skill development opportunities and setting of green goals. As it is evident that the measured green HRM practices have beneficial impacts on employees GV and EK, we are suggesting that the organizations should focus on all of the stated practices, while exclusively leaning on the specified three distinctive practices for bringing positive outcomes in employees' out-of-work behavior and attitude.

The findings can be better explained with the help of relational psychological contract as advocated in the PCT, social learning theory and relevant studies. Raza and Khan [70] concluded that employees with higher GV are more concerned with environmental concerns, which creates their emotional attachment to organizational green actions. In addition, GV enhance individuals' ecofriendly behavior, and they demonstrate those behaviors once they have the opportunity [13]. Additionally, employees are more prone to exhibit pro-environmental behavior with their increasing state of green skills and knowledge of environmental challenges [70]. In this regard, previous studies suggest introducing green initiatives in the organization and advocated sponsoring green action by the top management so that the employees have the opportunity to demonstrate green behavior within the workplace [13, 45, 70]. According to the provisions of SLT and PCT, these workplace green behaviors reflect the employees' values [52], which leads to exhibiting green attachment in their

personal and social interactions outside the professional arena [47]. Therefore, we suggest that organizations should implement green HRM initiatives that raise employees' awareness of environmental issues. This will allow employees to take on green initiatives within the organization and cultivate personal green values which will help create a better future by exhibiting proenvironmental behavior even outside of the workplace.

The implication and significance of this work are as follows:

The study has both theoretical and managerial implications. First, it contributes to understanding employees' out-of-work attitudes, which are largely unexplored in existing literature, unlike workplace green behaviors. Secondly, the research underscores the importance of enhancing environmental knowledge among employees as it contributes to enhancing GV among employees and strengthening the outcomes of green HRM in relation to GV. Finally, the outcomes suggest the managerial adoption of green HRM practices in organizations and outline the importance of several green HRM initiatives for enhancing EK and GV among employees. This provides a guide for managers to implement effective green HRM practices and design a green atmosphere in the organization to achieve better green performance through people.

#### 6. Conclusions

Given the significant void in the literature concerning the assessment of employees' behavior outside of work in response to organizational green initiatives, the study investigates how green HRM influences the GV of the employees mediated by EK. The results denote both direct and indirect positive impacts suggesting that employees' GV develop in response to organizational green HRM initiatives, while their EK also helps to exhibit higher GV beyond the working environment. Therefore, employees who are accustomed to green HRM practices in their workplace demonstrate more out-of-work green actions in their personal and social interactions. Additionally, their environmental understandings convey positive attitudes toward pro-environmental behaviors defining the person's state of GV. To promote the adoption of pro-environmental values, the study recommends sponsoring knowledge-enhancing comprehensive green HRM activities such as green skill development, green training, and green incentive systems. It also recommends providing employees the chance to exhibit green behavior in the workplace. By this means, their workplace GV will reflect in their out-of-work behavior, which will help to project a sustainable future.

The limitations and future research of this work are as follows:

The study acknowledges a few limitations. Firstly, it focuses on the overall impact of green HRM on employees across different management levels, without specific investigation into operations, mid-level, and top-level impacts. Impact sizes may vary among employees at different managerial levels Secondly, this study is concentrated on the ceramic industry. The nature and extent of impact may not be true for other industries or sectors. Thirdly, we have focused on large-sized firms; therefore, the results may not reflect the view of small or medium-sized organizations. Fourthly, the ceramic industry of Bangladesh is primarily a labor-intensive manufacturing industry. Consequently, the findings may differ for service industries or capital-intensive industries. Finally, the impacts of individual green HRM actions are not examined in this study. In this regard, we recommend conducting comprehensive studies for different levels of employees considering a wide range of measures including firms with varieties in sizes, industries, operational mechanisms, and others.

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