



IMPACT OF GREEN PERFORMANCE MANAGEMENT ON PRO-ENVIRONMENTAL BEHAVIOR: MEDIATING ROLES OF ENVIRONMENTAL KNOWLEDGE AND GREEN LIFESTYLE

Impacto da gestão do desempenho verde no comportamento pró-ambiental: papéis mediadores do conhecimento ambiental e do estilo de vida verde

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ABSTRACT

Environmental issues such as the phenomenon of global warming, the exhaustion of natural resources, and the escalating levels of air and water pollution have garnered significant scrutiny from governmental bodies, non-governmental organizations (NGOs), corporate entities, and the worldwide populace. The primary objective of our study is to address knowledge deficiencies by posing inquiries regarding the influence of an organization's Green Human Resource Management (GHRM) policies on employees' environmental behavior.

Keywords: Green Human Resource Management (GHRM), Green Performance Management (GPM), Environmental Knowledge, Green Life Style.

ACEITO EM: 15/03/2024

PUBLICADO EM: 01/08/2024



RISUS - Journal on Innovation and Sustainability
volume 15, número 2 - 2024
ISSN: 2179-3565
Editor Científico: Arnaldo José de Hoyos Guevara
Editor Assistente: Vitória Catarina Dib
Avaliação: Melhores práticas editoriais da ANPAD

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Impact of green performance management on pro-environmental behavior: mediating roles of environmental knowledge and green lifestyle

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RESUMO

Questões ambientais como o fenômeno do aquecimento global, o esgotamento dos recursos naturais e a escalada dos níveis de poluição do ar e da água têm recebido escrutínio significativo de órgãos governamentais, organizações não governamentais (ONGs), entidades corporativas e da população mundial. O objetivo primário do nosso estudo é abordar as deficiências de conhecimento por meio de questionamentos sobre a influência das políticas de Gestão Verde de Recursos Humanos (GHRM) de uma organização no comportamento ambiental dos funcionários.

Palavras-chave: Gestão Verde de Recursos Humanos (GHRM), Gestão de Desempenho Verde (GPM), Conhecimento Ambiental, Estilo de Vida Verde.

INTRODUCTION

Environmental issues such as the phenomenon of global warming, the exhaustion of natural resources, and the escalating levels of air and water pollution have garnered significant scrutiny from governmental bodies, non-governmental organizations (NGOs), corporate entities, and the worldwide populace. The aforementioned pressure has resulted in the establishment of numerous international accords among governments with the aim of promoting ecologically sustainable practices (Lülfes & Hahn, 2013). The promotion of research pertaining to environmental management and its associated industrial advantages, as well as investigations of employees' environmental conduct within the workplace, was fostered. The global emphasis on organizations is seen in the prioritization of high-quality environmental behavioral research and activities (Zsóka et al., 2013). According to Robertson and Barling (2013), empirical evidence suggests that the effectiveness of employee behavior is contingent upon the organizational context in which individuals operate. Enhancements in the natural environment and organizational work efficiency were achieved as a result of the adoption of environmentally friendly behaviors by personnel inside the organization (Blok et al., 2015). For instance, Norton et al. (2015) examined many factors such as employee job satisfaction, managerial effectiveness, financial performance, and corporate working hours. At its inception, GHRM was regarded as an integral component of HRM with a focus on sustainable management (Longoni et al., 2018). Initially, the exploration of GHRM was limited to its examination as a strategic management choice and practice within HR departments. A number of scholars have since put forth a complete framework that pertains to the active involvement of employees in attaining engagement, attitudes, and behavior within the context of GHRM, as outlined by Owoyemi et al. (2011). Consequently, although there remains ongoing debate on the precise definition of GHRM, there is an increasing focus on the many measurements employed and their tangible implications. In recent years, there has been a significant focus among scientists and academics on the significance of employees' ecologically responsible behavior (Paillé et al., 2014). An examination of existing scholarly literature indicates that there are still misconceptions surrounding certain aspects of employees' environmentally responsible behavior. Dumont et al. (2017a) proposed Green Human Resource Management (GHRM) as a compelling subject for fostering environmentally conscious behavior among employees. Nevertheless, there is an alternative viewpoint that posits the influence of employees' ecological behavior can be better understood by considering their adoption of an environmentally conscious lifestyle. Hence, this study holds significant value in investigating the relationship between GHRM procedures and employee environmental behavior. The existing body of research provides evidence on the relationship between GHRM practices and absentee behavior (Dumont et al., 2017a). The subsequent stage is the manifestation of boundary condition failure through the influence of her Green Human Resource Management (GHRM) practices on the environmentally conscious conduct of employees (Zibarras & Coan, 2015a). The primary objective of our study is to address knowledge deficiencies by posing inquiries regarding the influence of an organization's Green Human Resource Management (GHRM) policies on employees' environmental behavior. The objective of this study is to investigate the mediation of a green lifestyle in the relationship between an employee's environmentally conscious behavior and the reaction of their Green Human Resource Management (GHRM), as discussed by Saeed et al. (2019).

1 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

1.1 Green performance management and appraisal (GPMA)

The concept encompasses a comprehensive framework for investigating employee performance within the context of management operations (Jabbour et al., 2008). Previous research studies have specifically examined the many aspects of green performance management, such as the distribution of feedback and the adjustment of measures (Zibarras et al., 2015a). The green performance management system establishes a framework of principles for all stakeholders involved in performance evaluation. These principles encompass several aspects such as environmental

duties, communication of policies and concerns, management of environmental incidents, and the mitigation of carbon emissions.

The domain of green performance appraisal (PA) encompasses various aspects, including the incorporation of green duties, effective communication of green policy and concerns, and the management of green occurrences. Numerous organizations are formulating environmental objectives for their employees, a prerequisite within organizational performance evaluation programs that assess individual performance and influence the variable component of an official's compensation and rewards. The integration of ecological considerations is a key aspect in the evolution of compensation procedures. The primary objective of incentive plans is to effectively recruit, retain, and inspire exceptional people, thereby fostering the cultivation of favorable attitudes, abilities, and knowledge that contribute to the accomplishment of a company's predetermined objectives (Gupta, 2018).

According to Hermann et al. (2007), an important aspect of green performance management for both employees and managers is the implementation of operating assessments. These appraisals have a substantial impact on the effectiveness and method of compensation and awards. In the context of performance management systems, the presence of well-defined green performance indicators holds significant importance. Recognizing the environmental consequences and empowering managers to assume responsibility for environmental management performance is of utmost importance.

1.2 Pro-environmental Behavior (PEB)

The employee's pro-environmental behavior has been described as their "willingness to participate in activities that promote environmental sustainability" (Scherbaum et al., 2008). As stated by Wesselink et al. (2017), the term "PEBs" encompasses measurable environmentally responsible behaviors and actions that support the advancement of environmental sustainability within organizational settings. Ansari et al. (2020) define pro-environmental behaviors (PEBs) as the voluntary participation of individuals in actions that contribute to the advancement of environmental sustainability. Uncompensated employee-extra role behaviors, commonly known as PEBs, are utilized as tactics to augment the efficiency and welfare of an organization (Zibarras & Coan, 2015b).

Within the existing body of literature, numerous exercises have been acknowledged as effective measures for promoting environmental sustainability. These include actions such as switching off office lights upon leaving, refraining from using disposable cups, utilizing bicycles for commuting purposes, printing documents on both sides of the page, facilitating the implementation of greening practices within organizations, reducing waste generation, and innovating new techniques to mitigate environmental degradation and safeguard the planet. The promotion of environmental performance is significantly influenced by the pro-environmental conduct exhibited by employees (Vicente-Molina et al., 2013). The active participation of employees in addressing environmental issues and engaging in pro-environmental behavior is regarded as an effective approach for organizations to cultivate environmental responsibility and enhance environmental performance (Tu et al., 2023; Djellal & Gallouj, 2016; Kangasniemi et al., 2014).

1.3 GPMA and PEB

In the present day, there is a significant focus on the crucial organizational goals of environmental preservation and sustainability. As a result, there is a growing tendency among corporations to adopt ecologically friendly business operations and management methods. In order to attain environmental sustainability, it is imperative to consistently and regularly involve employees in pro-environmental behaviors (Cheema et al., 2020; Saeed et al., 2019). Additionally, green performance management has been found to have a positive impact on employees' green outcomes (Veerasingam et al., 2023; Longoni et al., 2018).

The successful attainment of organizational performance in the implementation and execution of various environmentally conscious initiatives at the corporate level is reliant on the attitudes and behaviors exhibited by employees towards pro-environmental actions (Robertson & Barling, 2013). The implementation of GHRM strategies, such as the adoption of green performance management and appraisal methods, contributes to the development of environmentally sensitive attitudes among individuals, both in their personal lives and within the scope of their professional pursuits. GPMA encompasses a range of activities aimed at creating and utilizing indicators and metrics to evaluate the efficiency and productivity of personnel. The utilization of feedback systems within enterprises has been demonstrated to fulfill several objectives. Significantly, this tool not only enables the delivery of valuable feedback to employees, but also assists in the identification of areas in need of improvement and the development of plans to enhance their environmentally sustainable performance (Cherian, Jacob, et al., 2012). The attainment of this objective is facilitated by the active involvement and participation of employees in ecologically sustainable endeavors. Employees are inclined to exhibit higher levels of motivation to participate in environmentally conscious behaviors when they are provided with incentives that recognize and reward their contributions and accomplishments in the domain of sustainability. Tseng et al. (2013) suggest that the optimal approach for designing occupations and their associated performance management systems is to prioritize the recruitment of individuals who demonstrate a comprehensive comprehension of environmental concerns and exhibit a strong motivation to actively participate in environmental enhancement efforts. When a company incorporates environmentally friendly practices into their human resource management (HRM) domain, it becomes crucial for employees to conform their behavior to these greening policies, thus incorporating them into the overall organizational culture. According to Renwick et al. (2013), when organizations openly recognize and provide incentives to employees who exhibit a dedication to ecologically sustainable practices, it serves to heighten employees' consciousness of green efforts and encourages their active participation in such endeavors.

H1. Green performance management and appraisal practices positively impact on pro-environmental behavior of the employees

1.4 Environmental Knowledge

Environmental knowledge includes all human knowledge and perceptions of various environmental problems and possible solutions (Zsóka et al., 2013). An employee's degree of environmental knowledge influences their environmental intentions, decisions, and actions (Afsar et al., 2016). Due to the lack of knowledge about the environment, they remain indifferent to the state of the environment. On the contrary, employees with extensive knowledge of various environmental issues, processes and solutions show greater interest and intentions in protecting the environment (Zsóka et al., 2013). Therefore, their enhanced knowledge of various environmental management systems, waste prevention and management, and green corporate policies are expected to drive their environmental protection actions. This is reflected in employees turning off lights, computers, printers and air conditioners, using eco-efficient means of energy conversion, and prioritizing biodegradable materials over single-use packaging. Additionally, companies that adopt, implement, or reinforce GHRM practices motivate, monitor and reward employees have a positive impact on employee environmental knowledge (Rubel et al., 2021). Opportunity and autonomy to take green initiatives as well as green performance reviews or green rewards. Environmental knowledge has the potential to sensitize individuals and create incentives for certain behaviors. Environmental knowledge and environmental values predict the environmental behavior of employees. It can be learned from the media in general or through specific environmental training and development, leading to an understanding and trend towards more environmentally friendly behavior (Chaudhary, 2019). Moreover, Saeed et al. (2019) stated that increasing employee environmental knowledge strengthens the positive relationship between GHRM practices and employees' environmentally responsible behavior. Studies investigating how environmental knowledge influences employees' environmental behavior (Saeed et al., 2019) or how environmental knowledge influences the relationship between GHRM and employees' environmental

behavior is still in its early stages (Ren et al., 2018), we further hypothesize that the relationship between motivating practices of green HRM and employees' environmental behavior will strengthen as environmental awareness among employees increases.

H2a: GPMA is positively associated with environmental knowledge

H2b: Environmental knowledge positively influence employee's pro-environmental behavior

H2: Environmental knowledge mediates the relationship between GPMA practices and employees' pro-environmental behavior

1.5 Employees' Green Lifestyles

A green lifestyle is one that reflects environmentally friendly values through consumption patterns, waste reduction, disposal of surplus, residue or waste, and general behavior in everyday life (Muster & Schrader, 2011). Employees' personal lives and events influence their attitudes and behavior at work (Datta, 2015). Similarly, learning and environmental skills acquired in the workplace are expected to permeate into one's personal life. The extent to which employees have an environmentally conscious lifestyle is thought to have a direct impact on their environmental awareness and behavior in the workplace (Rashid et al., 2006). In addition, bundled with motivation oriented GHRM practices and green knowledge, a strong green lifestyle is expected to reinforce and support the green behavior of employees. However, in some cases, an employee may exhibit opposite behavior in these two situations, personal and professional life. For example, employees can demonstrate green behavior in the workplace to comply with standards, obtain certain environmental benefits, or avoid other penalties. However, those same employees may not demonstrate this level of commitment to environmental values when away from work. An organization's GPMA system should be a sum of rewards and punishments to make them thinking environmentally friendly behaviors all the time. Therefore, in the light of this discussion, we propose the following hypothesis.

H3a: GPMA is positively associated with green lifestyle

H3b: Green lifestyle positively influence employee's pro-environmental behavior

H3: Green lifestyle mediates the relationship between GPMA practices and employees' pro-environmental behavior

2 RESEARCH METHODS

2.1 Participants and Procedure

The data was gathered from manufacturing firms that are operational in the Dhofar region of the Sultanate of Oman. The meetings with general managers and human resource managers were conducted to assess the presence of green performance management and appraisal practices inclination of top management toward improving pro-environmental behavior of employees. Additionally, the managers were provided with information regarding the objective of the study and the need of maintaining the confidentiality of the data. Every participant was provided with a comprehensive explanation of the survey procedure and guaranteed the option to participate voluntarily, in order to mitigate the potential influence of social desirability bias. (Podsakoff and Organ, 1986).

2.2 Measures

This study has adopted already validated instruments in the literature by using a 5-point Likert scale (1 =Strongly Disagree & 5= Strongly Agree). The construct of performance management and appraisal was measured using the scale of (Saeed et al., 2019) with eight items. A sample item from this scale is "Employees know their specific green targets, goals and responsibilities.". Pro-environmental behavior construct is also measured with the help of eight items adopted from (Robertson & Barling 2013). A sample item from this scale is "At work, I turn off lights when out

of office”. Environmental knowledge comprises nine items and borrowed from (Gatersleben et al., 2002). A sample item from this scale is “*I am aware about climate change.*”. The last construct of this study is Green Lifestyle, which is adopted from (Ragas et al., 2017) and measured using nine items. A sample item from this scale is “*I segregate my trashes to biodegradable and nonbiodegradable*”.

3 RESULTS

3.1 Measurement Model

The two-stepwise strategy was employed in the application of Partial Least Squares (PLS). Initially, the measurement model was assessed to ascertain the absence of any issues pertaining to reliability and validity. As indicated in Table 1, the findings demonstrate that the Cronbach's α coefficient exceeds 0.70, the average variance extracted (AVE) surpasses 0.50, and each variable exhibits a composite reliability of 0.70. The aforementioned evidence indicates a congruence with the commonly used evaluation method for measurement models as advised in the pertinent scholarly works (Ringle et al., 2023). This implies that all the constituent elements inside this model possess both reliability and validity.

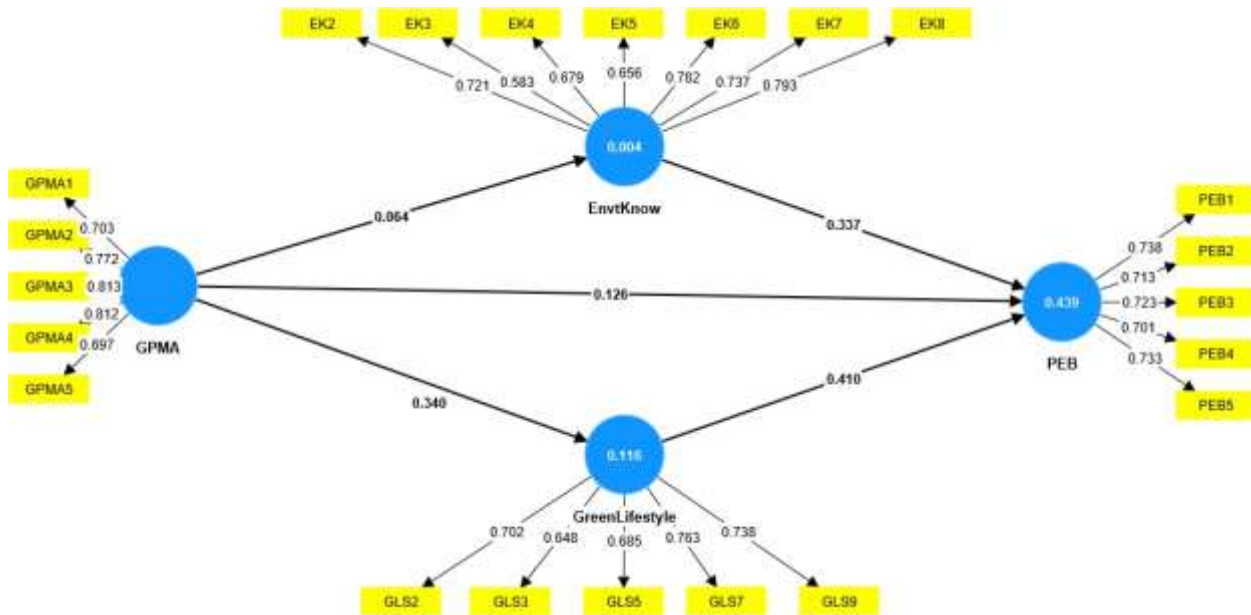
Table 1 - Construct reliability and convergent validity

Construct	Item	Loading	Alpha	CR	AVE
Green Performance Management & Appraisal	GPMA1	0.736	0.8	.862	.557
	GPMA2	0.78			
	GPMA3	0.808			
	GPMA4	0.827			
	GPMA5	0.727			
Environmental Knowledge	EK3	0.614	.849	.884	.524
	EK4	0.71			
	EK5	0.671			
	EK6	0.787			
	EK7	0.735			
	EK8	0.794			
Green Life Style	GLS11	0.765	.769	.844	.520
	GLS13	0.702			
	GLS14	0.71			
	GLS3	0.675			
	GLS9	0.749			
Pro-environmental Behavior	PEB1	0.759	.788	.855	.540
	PEB2	0.718			
	PEB3	0.743			
	PEB4	0.719			
	PEB5	0.735			

Source: The authors

Next criteria involve evaluating the discriminant validity, which pertains to the degree of distinction between a given construct and other constructs. Discriminant validity is evaluated by using two techniques. First the traditional Fornell and Larcker and second the most recent the heterotrait-monotrait ratio of correlations (HTMT) method developed by Henseler et al (2015). Fornell and Larcker approach necessitates that the square root value of the average variance extracted (AVE) for a given construct should exceed its correlation with all other constructs (Fornell et al., 1981).

Figure 1: Measurement Model



Source: The Authors

Table 2 presents the results pertaining to the discriminant validity of the measurement model. Notably, the diagonal elements of the table correspond to the square root of the Average Variance Extracted (AVE) for the corresponding constructs, and are denoted in bold. The values obtained provide evidence supporting the validity of the discriminant condition. Similarly, data shown above the bold values demonstrates the HTMT readings (ranging from 0.133 to 0.72) fell below the recommended threshold for relatively acceptable cut-off point 0.9 (Henseler et al.,2015). The constructions are established universally.

Table 2 - Discriminant Validity

	EnvtKnow	GPMA	GreenLifestyle	PEB
EnvtKnow	0.724	0.133	0.461	0.536
GPMA	0.097	0.777	0.467	0.411
GreenLifestyle	0.38	0.372	0.721	0.72
PEB	0.456	0.336	0.57	0.735

Source: The authors

Note: Abbreviations: EnvtKnow= Environmental Knowledge; GPMA Green Performance Management and Appraisal; GreenLifeStyle= Green Lifestyle; PEB= Pro-environmental Behavior

3.2 Structural Model Evaluation

Next, we conducted an evaluation of our structural model in order to ascertain its predictive accuracy and relevance. Additionally, we sought to determine the significance of the hypothesized paths and the strength of the path coefficients between the theme components. By using SmartPLS4, this study utilized a bootstrap resampling technique with 10,000 repeats and a sample size of 172 instances to evaluate the relevance of the path coefficients (Ringle et al.,2023). The coefficient of determination, denoted as R², is a statistical measure that assesses the accuracy of a predictive model. It represents the proportion of variability in the dependent variables that can be explained by the independent variables incorporated in the model. In the current study, 43.9% of variance in the dependent variable PEB is explained by the independent variables. The evaluation of the study hypotheses occurs following the analysis of the interconnections among the dimensions in our proposed model. Additionally, we considered the acceptance of

the hypothesis based on a crucial t-value exceeding 1.96 or a p-value lower than .05. Analysis confirmed that four out of five direct hypotheses are confirmed while only one i.e. GPMA-> EenvtKnow is not supported. GPMA positively and significantly affect the PEB ($\beta = .41$ and t-value = 8.432) and GreenLifestyle ($\beta = .34$ and t-value = 5.384) but non-significant impact on EenvtKnow ($\beta = .064$ and t-value = 0.976). EenvtKnow positively and significantly affect the PEB ($\beta = .337$ and t-value = 6.738). Additionally, GreenLifestyle is also positively and significantly affecting the PEB ($\beta = .41$ and t-value = 8.432). Therefore, as visible in Table 3 this study supports four direct hypotheses while not supporting one.

Table 3 - Direct Hypotheses Results

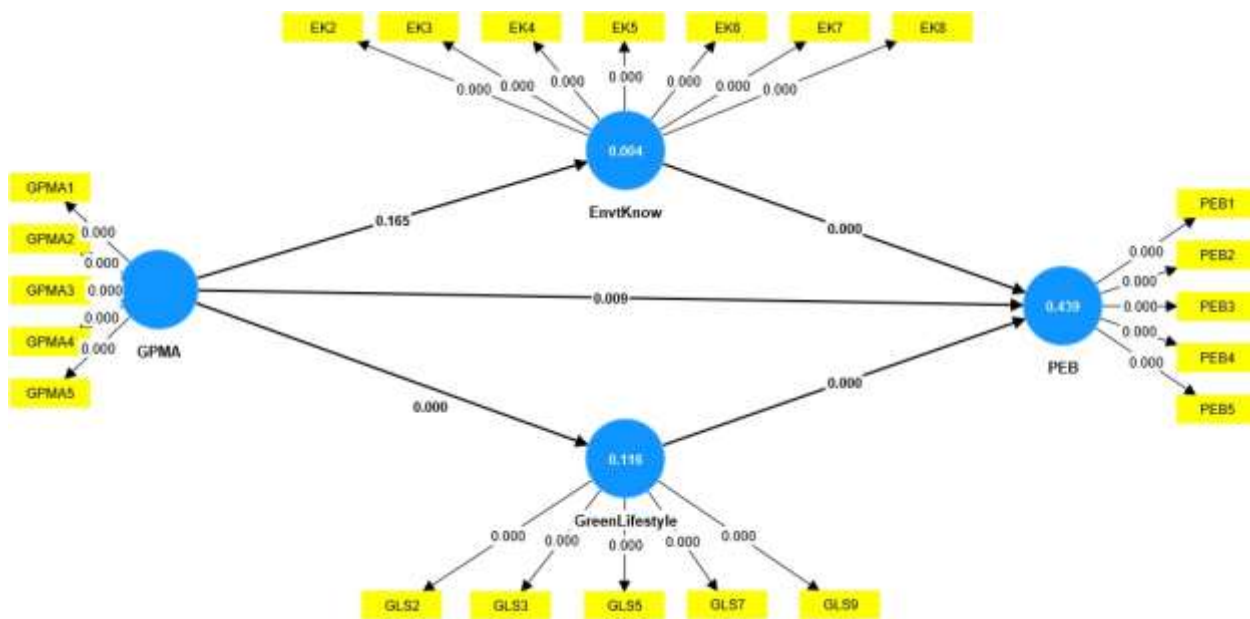
Relationship	β	t-value	p-value	Decision
GPMA -> PEB	0.126	2.366	0.009	Supported
GPMA -> EenvtKnow	0.064	0.976	0.165	Not Supported
GPMA -> GreenLifestyle	0.34	5.384	0.00	Supported
EenvtKnow -> PEB	0.337	6.738	0.00	Supported
GreenLifestyle -> PEB	0.41	8.432	0.00	Supported

Source: The authors

Note: Abbreviations: EenvtKnow= Environmental Knowledge; GPMA Green Performance Management and Appraisal; GreenLifeStyle= Green Lifestyle; PEB= Pro-environmental Behavior

Two mediating relationships between green performance management and appraisal and pro-environmental behavior are also tested. First mediating variable is environmental knowledge while other is green lifestyle. Hypothesis 3 with the relationship GPMA -> GreenLifestyle -> PEB, is supported ($\beta = .139$ and t-value = 4.275). This relationship is additionally confirmed by lower level confidence interval (LLCI) and upper level confidence interval (ULCI) values of 0.087 and 0.193 which are both positive, showing that there is no zero value between the two intervals, hence mediating relationship is significant.

Figure 2 - Structural Model



Source: The Authors

The other mediating relationship of GPMA -> EenvtKnow -> PEB defined through hypothesis 2 is not supported ($\beta = .021$ and t-value = 0.95). The lower level confidence interval (LLCI) and upper level confidence interval (ULCI)

values of -0.018 and 0.057 shows the presence of zero in the range, hence this also proves that hypothesis 2 is not supported.

Table 4 - Mediation Results

Relationship	β	t-value	p-value	LLCI	ULCI	Decision
GPMA -> GreenLifestyle -> PEB	0.139	4.275	0	0.087	0.193	Supported
GPMA -> Envtknow -> PEB	0.021	0.95	0.171	-0.018	0.057	Not Supported

CONCLUSION

This study presents significant implications for managers seeking to foster pro-environmental behavior inside the corporate sector. The implementation of motivating practices within the framework of Green HRM is of utmost significance for organizations aiming to attain enduring and sustainable growth. It is advisable for organizations to promote environmental behavior among their employees at the individual level, as this not only contributes to environmental well-being but also facilitates the sustainable development of the firm. Organizations are advised to adopt effective environmentally-friendly policies by using green human resource management (HRM) practices (Dumont et al., 2017a) specifically performance-oriented rewards-based practices. Organizations ought to prioritize their dedication to implementing Green Human Resource Management (GHRM) practices and adopting environmentally conscious behaviors in order to attain sustainability. It is imperative for employees to possess a comprehensive understanding of their ecological obligations, objectives, and benchmarks. The integration of environmental objectives into the performance management system is essential to ensure that employees are assessed based on their environmental performance. The concept of green performance is employed as a metric for assessing an employee's performance in relation to environmental considerations. It is recommended that organizations provide both monetary and non-monetary incentives to employees who actively engage in environmentally sustainable practices. By using this approach, additional employees are likely to be inspired and encouraged to contribute to environmental conservation efforts as well.

This study has several theoretical implications as well. The first one is that green performance management & appraisal has significant positive impact on improving the pro-environmental behavior of the employees in manufacturing sector of Oman. Secondly, how the green lifestyle of employees is not only affecting pro-environmental behavior of employee directly but also as an intervening variable. Thirdly, environmental knowledge is playing a very interesting role in this model. It has a significant positive impact on the pro-environmental behavior of employee but not acting as a mediator between green performance management & appraisal and pro-environmental behavior. Environmental knowledge is also not affected by the GPMA showing that it is not enough to increase the knowledge about environment benefitting activities of the employees. For this purpose, perhaps green training and development practices of GHRM needs to play a significant role. Hence, human resource policies should design in such a way that they should focus on the green aspect of the job so that employees should become environmentally proactive.

Limitations and future research

Like any research endeavor, this study is not exempt from certain constraints. The collection of cross-sectional data is limited to the Dhofar region within the Sultanate of Oman. Future research endeavors may include employing longitudinal data collection methods that span across several regions of the country. This study examines the exclusive utilization of green performance management and assessment practices within the context of Green Human Resource Management (GHRM) to assess its direct influence on employees' pro-environmental behavior. In the future, additional motivating practices may be incorporated to enhance the comprehensiveness of the analysis. The present study has employed a mediator mechanism to examine the relationship between the independent and dependent

variables. Research can also be conducted by integrating specific moderating factors, such as leadership commitment, into the study design.

REFERENCES

- Afsar, B., Badir, Y., & Kiani, U. S. J. J. o. E. P. (2016). *Linking spiritual leadership and employee pro-environmental behavior: The influence of workplace spirituality, intrinsic motivation, and environmental passion*. 45, 79-88.
- Ansari, N. Y., Farrukh, M., Raza, A. J. C. S. R., & Management, E. (2020). *Green human resource management and employees pro-environmental behaviours: Examining the underlying mechanism*.
- Blok, V., Wesselink, R., Studynka, O., & Kemp, R. (2015). Encouraging sustainability in the workplace: a survey on the pro-environmental behaviour of university employees. *Journal of Cleaner Production*, 106, 55-67.
- Chaudhary, R. (2019). Green human resource management and job pursuit intention: Examining the underlying processes. *Corp. Soc. Responsib. Environ. Manag.* 26 (4), csr.1732–937. doi:10.1002/csr.1732
- Cheema, S., Afsar, B., Javed, F. J. C. S. R., & Management, E. (2020). *Employees' corporate social responsibility perceptions and organizational citizenship behaviors for the environment: The mediating roles of organizational identification and environmental orientation fit*. 27(1), 9-21.
- Cherian, J., Jacob, J. J. I. j. o. b., & Management. (2012). *A study of green HR practices and its effective implementation in the organization: A review*. 7(21), 25.
- Cincera, J., & Krajhanzl, J. J. J. o. C. P. (2013). *Eco-Schools: what factors influence pupils' action competence for pro-environmental behaviour?* , 61, 117-121.
- Datta, M. (2015). Green work- life balance: A new concept in green HRM. *International Journal of Multidisciplinary Approach and Studies*, 2(2), 83-89.
- Djellal, F., & Gallouj, F. (2016). Service innovation for sustainability: paths for greening through service innovation. In *Service innovation* (pp. 187-215): Springer.
- DuBois, C. L., & Dubois, D. A. J. H. R. M. (2012). Strategic HRM as social design for environmental sustainability in organization. *51(6)*, 799-826.
- Dumont, J., Shen, J., & Deng, X. (2017a). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human resource management*, 56(4), 613-627.
- Dumont, J., Shen, J., & Deng, X. J. H. r. m. (2017). *Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values*. 56(4), 613-627.
- Ferguson, J., & Milliman, J. J. I. J. o. P. A. (2008). *Creating effective core organizational values: A spiritual leadership approach*. 31(4), 439-459.
- Fornell, C., & Larcker, D. F. J. J. o. m. r. (1981). *Evaluating structural equation models with unobservable variables and measurement error*. 18(1), 39-50.
- Gatersleben, B., Steg, L., & Vlek, C. (2002). Measurement and determinants of environmentally significant consumer behavior. *Environment and behavior*, 34(3), 335-362.
- Gupta, H. J. J. o. e. m. (2018). *Assessing organizations performance on the basis of GHRM practices using BWM and Fuzzy TOPSIS*. 226, 201-216.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43, 115-135.
- Hermann, B. G., Kroeze, C., & Jawjit, W. J. J. o. c. p. (2007). *Assessing environmental performance by combining life cycle assessment, multi-criteria analysis and environmental performance indicators*. 15(18), 1787-1796.
- Jabbour, C. J. C., & Santos, F. C. A. J. J. o. C. P. (2008). *Relationships between human resource dimensions and environmental management in companies: proposal of a model*. 16(1), 51-58.
- Jabbour, C. J. C., & Santos, F. C. A. J. T. I. J. o. H. R. M. (2008). *The central role of human resource management in the search for sustainable organizations*. 19(12), 2133-2154.
- Jackson, S. E., Renwick, D. W., Jabbour, C. J., & Muller-Camen, M. J. G. J. o. H. R. M. (2011). *State-of-the-art and future directions for green human resource management: Introduction to the special issue*. 25(2), 99-116.
- Kangasniemi, M., Kallio, H., & Pietilä, A. M. J. J. o. a. n. (2014). *Towards environmentally responsible nursing: a critical interpretive synthesis*. 70(7), 1465-1478.

- Kuo, L., Yeh, C. C., Yu, H. C. J. C. S. R., & Management, E. (2012). *Disclosure of corporate social responsibility and environmental management: Evidence from China*. 19(5), 273-287.
- Longoni, A., Luzzini, D., & Guerci, M. J. J. o. B. E. (2018). *Deploying environmental management across functions: the relationship between green human resource management and green supply chain management*. 151(4), 1081-1095.
- Lülf, R., & Hahn, R. (2013). Corporate greening beyond formal programs, initiatives, and systems: A conceptual model for voluntary pro-environmental behavior of employees. *European Management Review*, 10(2), 83-98.
- Marcus, A. A., Fremeth, A. J. B. M., & Action, E. S. E. T. a. a. P. t. M. (2009). Strategic direction and management. 38-55.
- Norton, T. A., Parker, S. L., Zacher, H., & Ashkanasy, N. M. (2015). Employee green behavior: A theoretical framework, multilevel review, and future research agenda. *Organization & Environment*, 28(1), 103-125.
- Owoyemi, O., Oyelere, M., Elegbede, T., Gbajumo-Sheriff, M. J. I. J. o. B., & Management. (2011). *Enhancing employees' commitment to organisation through training*. 6(7), 280-286.
- Paillé, P., Chen, Y., Boiral, O., & Jin, J. (2014). The impact of human resource management on environmental performance: An employee-level study. *Journal of Business Ethics*, 121(3), 451-466.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531-544.
- Ragas, S. F. P., Tantay, F. M. A., Chua, L. J. C., Sunio, C. M. C. J. I. J. o. P., & Management, P. (2017). *Green lifestyle moderates GHRM's impact on job performance*.
- Rashid, N., Wahid, N., & Saad, N. (2006). Employees involvement in EMS, ISO 14001 and its spillover effects in consumer environmentally responsible behaviour. Paper presented at the *International Conference on Environment Proceedings (ICENV 2006)*, 13th-15th November.
- Ren, S., Tang, G., & Jackson, S. E. J. A. P. J. o. M. (2018). *Green human resource management research in emergence: A review and future directions*. 35(3), 769-803.
- Renwick, D. W., Redman, T., & Maguire, S. J. I. J. o. M. R. (2013). *Green human resource management: A review and research agenda*. 15(1), 1-14.
- Ringle, C. M., Sarstedt, M., Sinkovics, N., & Sinkovics, R. R. (2023). A perspective on using partial least squares structural equation modelling in data articles. *Data in Brief*, 48, 109074.
- Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of organizational behavior*, 34(2), 176-194.
- Rubel, M. R. B., Kee, D. M. H., & Rimi, N. N. (2021). Green human resource management and supervisor pro-environmental behavior: The role of green work climate perceptions. *Journal of Cleaner Production*, 313(May), 127669. <https://doi.org/10.1016/j.jclepro.2021.127669>
- Saeed, B. B., Afsar, B., Hafeez, S., Khan, I., Tahir, M., Afridi, M. A. J. C. S. R., & Management, E. (2019). *Promoting employee's proenvironmental behavior through green human resource management practices*. 26(2), 424-438.
- Muster, V., & Schrader, U. (2011). Green work-life balance: A new perspective for green HRM. *German Journal of Human Resource Management*, 25(2), 140-156.
- Scherbaum, C. A., Popovich, P. M., & Finlinson, S. J. J. o. A. S. P. (2008). *Exploring individual-level factors related to employee energy-conservation behaviors at work I*. 38(3), 818-835.
- Tseng, M.-L., Tan, R. R., & Siriban-Manalang, A. B. J. J. o. C. P. (2013). *Sustainable consumption and production for Asia: sustainability through green design and practice*. 40, 1-5.
- Tu, Y., Li, Y., & Zuo, W. (2023). Arousing employee pro-environmental behavior: A synergy effect of environmentally specific transformational leadership and green human resource management. *Human Resource Management*, 62(2), 159-179.
- Veerasamy, U., Joseph, M. S., & Parayitam, S. (2023). Green Human Resource Management and Employee Green Behaviour: Participation and Involvement, and Training and Development as Moderators. *South Asian Journal of Human Resources Management*, 23220937221144361.
- Vicente-Molina, M. A., Fernández-Sáinz, A., & Izagirre-Olaizola, J. J. J. o. C. P. (2013). *Environmental knowledge and other variables affecting pro-environmental behaviour: comparison of university students from emerging and advanced countries*. 61, 130-138.
- Wesselink, R., Blok, V., & Ringersma, J. J. J. o. c. p. (2017). *Pro-environmental behaviour in the workplace and the role of managers and organisation*. 168, 1679-1687.
- Zibarras, L. D., & Coan, P. (2015a). HRM practices used to promote pro-environmental behavior: a UK survey. *The International Journal of Human Resource Management*, 26(16), 2121-2142.

Zsóka, Á., Szerényi, Z. M., Széchy, A., & Kocsis, T. (2013). Greening due to environmental education? Environmental knowledge, attitudes, consumer behavior and everyday pro-environmental activities of Hungarian high school and university students. *Journal of Cleaner Production*, 48, 126-138.