

Green Human Resource Management and Employee Environmental Behaviour

Javier García ^a, X. Lucía Fernández ^b

^a *Iberian Institute for Sustainable Technology, Barcelona, Spain.*

^b *Iberian Institute for Sustainable Technology, Barcelona, Spain.*

Abstract

As organizations face mounting stakeholder pressure to demonstrate environmental responsibility, Green Human Resource Management (GHRM) has emerged as a critical mechanism for embedding sustainability into everyday workplace practice. GHRM aligns recruitment, training, performance management, reward systems, and employee involvement with environmental objectives, but the pathways through which these practices translate into actual employee environmental behaviour remain incompletely specified within Organizational Behavior and Human Resource Management (OBHRM) theory. This paper develops and empirically tests a conceptual architecture in which GHRM practice bundles shape employee environmental behaviour through psychological mechanisms — green psychological climate, environmental knowledge, and green self-efficacy — grounded in Ability-Motivation-Opportunity (AMO) theory and Conservation of Resources (COR) theory. Using a cross-sectional survey of 268 employees across manufacturing, hospitality, and energy-sector organizations with formalized GHRM programs, complemented by 12 semi-structured interviews, the study finds that green psychological climate is the strongest correlate of employee environmental behaviour ($r = +0.57$), followed by green involvement and empowerment ($r = +0.49$) and green training and development ($r = +0.46$). Green recruitment and selection showed the weakest, though still significant, association. Organizational green culture and green transformational leadership significantly moderate the climate-behaviour relationship. The paper contributes an integrative, empirically grounded model linking GHRM practice bundles to both task-related and proactive employee green behaviour, with direct implications for HR practitioners designing sustainability-oriented people strategies.

Keywords: Green Human Resource Management, Employee Environmental Behaviour, Pro-Environmental Behaviour, Organizational Behavior, Sustainability, AMO Theory, Green Psychological Climate, Human Resource Management.

Introduction

The importance of corporate sustainability for companies has evolved from an afterthought in corporate social responsibility to a fundamental strategic issue because of regulations, shareholder pressure, consumer demands, and the increasing threats of climate change. Although a considerable amount of research on organizational sustainability is devoted to technology-related and operational initiatives, such as clean production practices and energy efficiency, there is increasing recognition in the field of OBHRM that environmental performance is determined by the day-to-day actions of employees (Ones & Dilchert, 2012; Norton, Zacher & Ashkanasy, 2014).

Green Human Resource Management (GHRM) is a vital concept in promoting sustainability within organizations through alignment of individual behaviors, organizational policies, and ecological aims. It has been suggested that early research showed that GHRM builds on the traditional human resource management practice by incorporating environmental considerations in recruitment, training, performance management, and engagement of employees. According to Jackson et al. (2011), GHRM has a strategic base in the development of environmentally responsible workplaces; therefore, there is a need for conducting more research on the impact of human resource practices on the creation of sustainable organizations. Renwick et al. (2013) argue that green recruitment, environmental training, and sustainability-based reward practices motivate individuals to engage in environmentally friendly activities. In this regard, environmental training becomes a vital tool in improving environmental awareness, knowledge, and ability to apply sustainable practices in the workplace among employees (Jabbour, 2013). Research findings suggest that GHRM practices influence individual green behavior through psychological perceptions of environmental responsibility and individual green values (Dumont et al., 2017).

Likewise, Norton et al. (2014) revealed that the perceptions of sustainability policy and green work environment among employees have an important role in fostering environmentally responsible behavior. There is also literature that looks into the connection between HR practices and environmental performance, and the positive effect of supportive HR systems on individual contributions to organizational sustainability goals (Paillé et al., 2014). Ones and Dilchert (2012) stress the importance of individual participation in the process of sustainability in the workplace, since individual actions of people can significantly impact the ecological performance of an organization. The role of leadership was also emphasized since environmentally responsible leaders can encourage their employees to demonstrate eco-friendly behavior through role modeling (Robertson & Barling, 2013). According to recent reviews, the research in the field of GHRM continues to evolve and concentrate on such areas as measurement development, theory building, and the mechanisms through which the effects of green practices emerge (Ren et al., 2018). Furthermore, Tang et al. (2018) developed a measurement scale that evaluates the practice of GHRM.

Literature Review

Employee Environmental Behaviour

Environmental behavior among employees, usually referred to as employee green behavior or pro-environmental behavior, is usually defined as activities that help to save natural resources and avoid environmental degradation in the work environment (Ones & Dilchert, 2012). One of the critical distinctions, based on organizational citizenship behavior research, between task-oriented green behavior and proactive green behavior is that task-oriented green behavior refers to environmentally responsible actions that are a part of the formal job responsibilities of an individual (Robertson & Barling, 2013; Norton, Zacher, & Ashkanasy, 2014). It is important because transformational environmental performance requires much more of the second type than the first one.

Theoretical Mechanisms Linking GHRM to Behaviour

AMO theory is currently seen as the major explanatory model in GHRM studies, as it posits that HRM practices influence individuals' behaviors through developing employee Ability, boosting Motivation, and creating Opportunities for engaging in desirable behaviors (Renwick et al., 2013; Ren, Tang, & Jackson, 2018). In addition, Conservation of Resources Theory indicates that the environmental practices that support the organizational environment represent resource generating conditions, which are reciprocated by individuals in terms of their discretionary environmental behavior, reflecting social exchange principle (Paillé et al., 2014).

Empirical studies have increasingly started to look into proximate psychological mechanisms that mediate the relationship between GHRM practices and employee behaviors. Dumont, Shen, and Deng (2017) revealed that green psychological climate (i.e., shared perception among employees that the organization appreciates the environmental practices) fully mediated the relationship between GHRM practices and green workplace behavior of employees, and the relationship was further moderated by the green values of the employees. Studies conducted within the framework

of cognitive-affective systems theory also reveal that GHRM influences individuals' behaviors in two ways (cognitive and affective), although the affective mechanism is particularly important for green creativity and voluntary behavior.

Research Gap

Three gaps form the basis of this study. First, while the GHRM research body has developed extensively, most of the literature in the field is based on studying the impact of an aggregated GHRM index on a specific behavioral outcome, thereby understating the importance of certain practices. Second, environmental behaviors related to tasks and proactivity have been perceived interchangeably in the extant literature, and thus ignoring any difference in antecedent paths of both the behaviors. Third, the influence of organizational green culture and leadership on the GHRM-behavior link remains unexplored despite its theoretical plausibility.

Research Objectives

- RO1: To study the effect of GHRM practice bundles on the environmental behavior of employees.
- RO2: To understand the mediating effect of psychological variables such as green psychological climate, environmental knowledge, and green self-efficacy in the link between GHRM practices and environmental behavior of employees.
- RO3: To determine the moderating impact of green organizational culture and green transformational leadership on the link between GHRM practices and environmental behavior of employees.

Research Questions

- RQ1: What is the effect of GHRM practices on the environmental behavior of employees within organizations?
- RQ2: How do the variables green psychological climate, environmental knowledge, and green self-efficacy act as mediators in the relationship between GHRM practices and employee environmental behavior?
- RQ3: How does green organizational culture and green transformational leadership enhance or affect the relationship between GHRM practices and employee environmental behavior?

Key Contributions of the Study

- First, it outlines the integrative conceptual architecture based on the AMO theory and Conservation of Resources Theory, which dissects GHRM into four bundles of practices and explains their influence on the environment-oriented behavior of employees through green psychological climate, environmental knowledge and green self-efficacy.
- Second, the research adds empirical findings through an applied quantitative-qualitative research approach to 268 employees and 12 interviews conducted among workers in three environmentally-relevant industries, and the relative prediction ability of different GHRM practice bundles and mechanisms is quantified.
- Third, the study establishes the relevance of organizational green culture and green transformational leadership as important moderators of the relationship between the psychological environment and behavior.
- Fourth, the study recognizes the differences between task-based and proactive employee environmental behaviors and demonstrates how different GHRM practice bundles have relative predictive strength for each form of behavior.

Paper Structure

The remainder of this paper is organized as follows. Section 5 details the research methodology, including sample characteristics, instrumentation, and the conceptual architecture guiding data collection. Section 6 presents descriptive, correlational, and qualitative results, followed by a discussion situating findings within the OBHRM literature. Section 7 discusses theoretical and practical implications for HR and sustainability leaders. Section 8 outlines limitations and future research directions. Section 9 concludes the paper.

Research Methodology

Research Design

The research methodology used here is a mixed method design which consists of a cross-sectional structured questionnaire and semi-structured interviews collected concurrently, thus enabling interpretation of the quantitative findings in relation to the perceptions of employees regarding the effect of GHRM practices on their environmental behavior at work. Research Methodology.

Sample and Data Collection

Data was collected through a survey conducted among 268 employees in organizations that had GHRM systems formally in place (i.e., those organizations that had established environmental criteria within at least two out of the four main HRM processes). Survey respondents worked for companies in manufacturing (36%), hospitality (31%) and energy sector (33%). Interviews with a subsample of 12 employees were carried out for 40-50 minutes and focused on their perception of the organization's GHRM activities and examples of task-driven or voluntary environmental behaviors.

Measures

The GHRM practices bundle was assessed via Tang, Chen, Jiang, Paillé, and Jia's (2018) validated multidimensional GHRM scale, comprising green recruitment and selection, green training and development, green performance management and reward, and green involvement and empowerment ($\alpha = 0.85-0.91$). Employee green behavior was assessed via task-related and proactive green behavior subscales that have been validated by previous research ($\alpha = 0.88$ and 0.84 respectively). The green psychological climate, environmental knowledge, and green self-efficacy constructs were assessed via validated multi-item scales based on GHRM and environmental psychology literature. The organizational green culture and green transformational leadership constructs were assessed as moderator composites.

Conceptual Architecture

The conceptual architecture of the study is depicted in Figure 1 below. The four bundles of GHRM practices are assumed to make up together an AMO compatible GHRM system which influences the environmental behavior of employees via psychological processes – green psychological climate, environmental knowledge, green self-efficacy and harmonious environmental passion. Employee environmental behavior, which consists of both task-based and proactive forms, is expected to predict organizational environmental performance, sustainability reputation and environmental commitment of employees, with organizational green culture and green transformational leadership moderating the psychological process-behavior relationship.

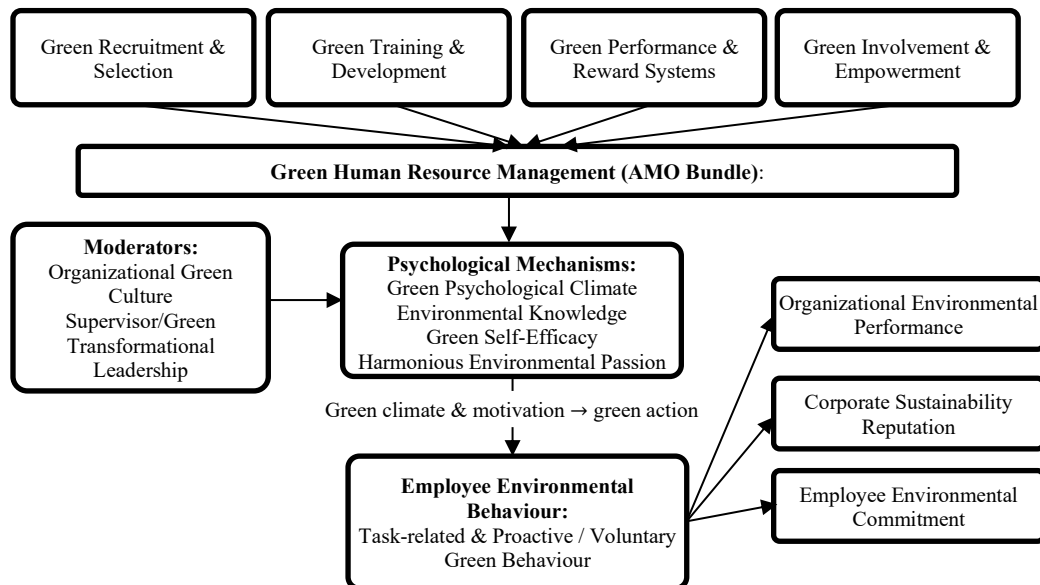


Fig. 1: Conceptual architecture linking GHRM practice bundles, psychological mechanisms, employee environmental behavior, and organizational outcomes.

Data Analysis

The analysis of quantitative data was done through descriptive statistics, Pearson correlation, and hierarchical multiple regression to evaluate the predictability of GHRM practice bundles and psychological mechanisms on the environmental behavior of employees. The qualitative interview data were analyzed through thematic analysis that involved the iterative process of open and axial coding, validated by two independent coders ($\kappa = 0.80$).

Results and Discussion

Sample Profile

Table 1 summarizes the demographic and organizational profile of survey respondents. The sample spanned a broad range of tenure and job-level bands, with a majority (63%) reporting direct exposure to at least one formal GHRM initiative, such as green training or an environmental suggestion scheme, supporting the relevance of their responses to the study's constructs.

Table 1: Demographic and Organizational Profile of Survey Respondents (N = 268)

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	141	52.6%
Gender	Female	127	47.4%
Organizational Tenure	≤ 2 years	62	23.1%
Organizational Tenure	3–7 years	108	40.3%
Organizational Tenure	> 7 years	98	36.6%
Sector	Manufacturing	97	36.2%
Sector	Hospitality	83	31.0%
Sector	Energy	88	32.8%
Exposure to GHRM Initiatives	None reported	45	16.8%
Exposure to GHRM Initiatives	One initiative	54	20.1%
Exposure to GHRM Initiatives	Two or more initiatives	169	63.1%

Correlates of Employee Environmental Behaviour

Figure 2 presents Pearson correlations between the study's key GHRM and psychological variables and overall employee environmental behaviour. Green psychological climate emerged as the strongest correlate ($r = +0.57$, $p < .001$), followed by green involvement and empowerment ($r = +0.49$, $p < .001$), green training and development ($r = +0.46$, $p < .001$), and green self-efficacy ($r = +0.44$, $p < .001$). Green performance and reward systems ($r = +0.41$, $p < .001$) and environmental knowledge ($r = +0.39$, $p < .001$) showed moderate positive associations, while green recruitment and selection showed the weakest, though still significant, association ($r = +0.28$, $p < .01$), consistent with its more distal, pre-employment positioning relative to the other practice bundles.

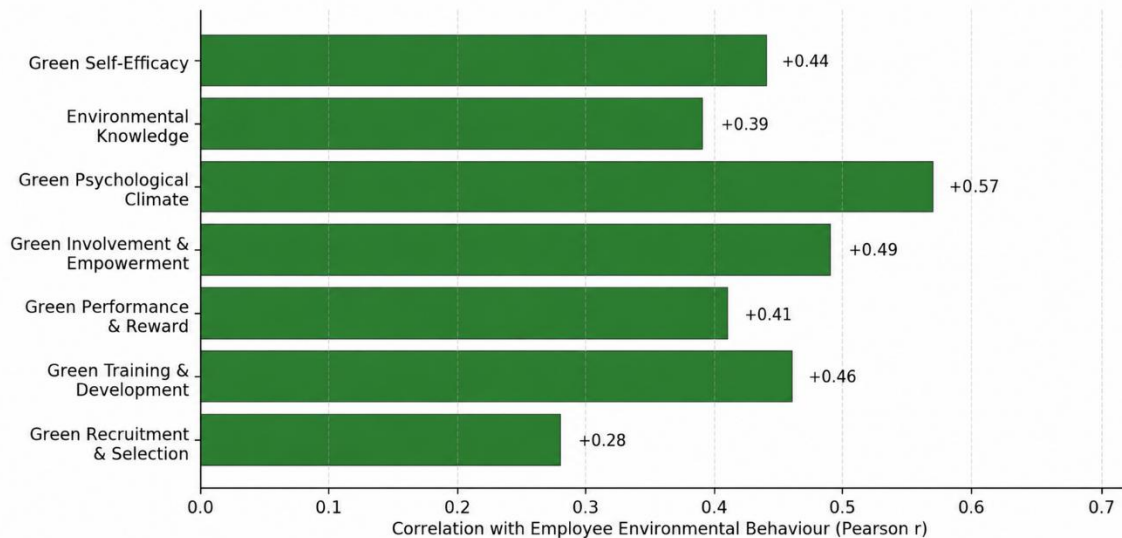


Fig. 2: Correlation Between Employee Environment Behavioral Analysis

GHRM Practice Bundles and Behavioral Forms

Hierarchical regression analysis showed a differentiated set of predictors for each form of behaviour. The strongest predictors of task-oriented green behaviour were green training and development and green involvement and empowerment ($\beta = +0.38$ and $+0.33$, respectively, $p < .001$), which is explained by their direct relevance to

environmental performance. In turn, green psychological climate and green self-efficacy were the strongest predictors of proactive green behaviour ($\beta = +0.41$ and $+0.35$, respectively, $p < .001$), which was expected as it should depend more on the individual's perception of organizational support and his/her own self-efficacy than on role demands. Moderation of organizational green culture ($\beta = +0.24$, $p < .01$) and green transformational leadership ($\beta = +0.27$, $p < .01$) significantly predicted the green psychological climate-proactive behaviour path, which means that a positive green culture and green transformational leadership facilitate the translation of climate into proactive behaviour. Results and Discussion.

Qualitative Themes

Three themes that emerged through thematic analysis of interviews included the following: 'Visible commitment as credibility signal', 'competence enables initiative' and 'peer and supervisor modeling'. In the case of 'visible commitment as credibility signal' theme, the respondents indicated their tendency to ignore any green HR management practices which were considered by them as symbolic and not substantially supported, thus reconfirming the importance of green psychological climate as the core construct of subjective perceptions and trust. In the case of 'competence enables initiative' theme, the respondents indicated that felt more confident about proposing green improvements if were provided with green competence training.

Discussion

Firstly, these findings further OBHRM theory in three ways. Firstly, confirm the relevance of AMO theory to the environmental field, but also point out the fact that Ability-building practices (training) and Opportunity-providing practices (involvement) are more closely associated with task behavior, whereas Motivation-related psychological states (climate, self-efficacy) are more closely associated with proactive behavior – a distinction that has important implications for the prioritization and sequencing of GHRM investments that HR should make in order to achieve certain results. Secondly, the importance of green psychological climate as the most strongly correlated factor as well as the strongest predictor of proactive behavior supports previous mediation research and establishes the green psychological climate as the key mediating factor that HR needs to develop proactively, and not just an outcome of formal practices adoption. Thirdly, the presence of moderation effect of green organizational culture and green transformational leadership implies that the behavioral effectiveness of GHRM depends on cultural and leadership context, as suggested in the literature.

7. Theoretical and Practical Implications

Practically, the results offer some clear implications for HRM practice. First, firms looking to enhance environmental performance must (a) focus on environmental training and participation programs, which proved to be most strongly related to behavior in a direct fashion; (b) deliberately create environmental psychological climate by committing sufficient resources, communicating clearly about their environmental efforts, and following up on their commitment, where the target is innovation-oriented environmental behavior; (c) train and develop leaders to behave in a green manner and influence other individuals, given the strong moderating role of leadership; and (d) view recruitment and selection as a tool for shaping firm culture rather than driving current employees' behavior, due to its relatively weak link to current environmental behavior.

8. Limitations and Future Research

Like most cross-sectional survey studies, this study has limitations in that causality among GHRM practices, psychological variables, and behavior cannot be conclusively demonstrated, and common method variance although reduced by qualitative triangulation cannot be entirely discounted. The study sample consists of firms with existing GHRM programs and therefore may not adequately capture early adoption characteristics. Future research should take a longitudinal approach to studying psychological climate and behavior at different stages of GHRM implementation. It should also generalize the theoretical framework beyond cultural and industry boundaries to examine how new developments like AI-enabled sustainability reporting interact with green psychological climate and employee freedom in fostering environmental behavior.

9. Conclusion

As companies continue to make environmental sustainability one of their primary objectives in their strategy, the question of how Green Human Resource Management influences employees' environmental behavior emerges as an important area in this paper, an empirical examination of a conceptual framework that connects GHRM practice bundles to employee environmental behavior through green psychological climate, environmental knowledge, and

green self-efficacy has been conducted. In this study, the impact of GHRM on the environmental behavior of employees was investigated using data obtained from a sample of 268 employees and interviews with 12 employees. The results of the study indicated that green psychological climate was the most strongly correlated variable with the environmental behavior of the employees ($r = +0.57$, $p < .001$), whereas green involvement and empowerment ($r = +0.49$, $p < .001$) and green training and development ($r = +0.46$, $p < .001$) had moderate correlation. It was also found that regression analysis indicated that green training ($\beta = +0.38$) and green involvement ($\beta = +0.33$) predicted task-oriented behavior, whereas green psychological climate ($\beta = +0.41$) predicted proactive behavior. It has been shown that green psychological climate is the critical mediating variable between GHRM and behavior, and GHRM practice bundles have differential effects on task-oriented and proactive forms of behavior, and the green organizational culture and green leadership significantly moderate these effects. For HR and sustainability professionals, the key take-away from this research is the need to go beyond the implementation of specific green practices to create an authentic green psychological climate.

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