

## **Green Human Resource Management Research Landscape: Trends, Gaps, and Future Directions from a Systematic Literature Review**

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### **ABSTRACT**

Green Human Resource Management (GHRM) has emerged as a vital organizational approach that aligns human capital practices with environmental sustainability. This study investigates publication trends, thematic orientations, and methodological patterns within GHRM research while identifying key theoretical and practical gaps. Using bibliometric evidence from Scopus between 2013–2025, the analysis highlights a sharp increase in scholarly attention after 2018, dominated by studies in Asia, particularly China, India, and Malaysia. The findings suggest that most works adopt the Ability–Motivation–Opportunity (AMO) and Social Exchange Theory as dominant frameworks, with limited exploration of broader institutional or stakeholder-based approaches. In addition, research gaps remain concerning cross-cultural validation, longitudinal analysis, and practical implementation challenges in organizations. The study contributes by proposing future research directions that connect GHRM to sustainable organizational performance, innovation, and resilience. Ultimately, this research underscores the significance of integrating environmental and human resource strategies to achieve long-term sustainability.

**Keywords** – Green Human Resource Management (GHRM), Systematic Literature Review (SLR), Bibliometric Analysis

### **INTRODUCTION**

Sustainability has become one of the defining challenges of the twenty-first century, urging organizations to rethink not only their business models but also the way they manage people. Employees are increasingly seen as key agents of environmental responsibility, and the human resource function plays a decisive role in embedding sustainability into daily practices. Against this backdrop, the concept of Green Human Resource Management (GHRM) has gained momentum. GHRM refers to policies and practices that align recruitment, training, performance management, and reward systems with environmental objectives. While the corporate world recognizes the urgency of climate action, scholarly research has only recently begun to systematize the role of HRM in advancing environmental and social goals.

Over the last decade, the academic conversation around GHRM has grown rapidly, yet it remains fragmented and geographically concentrated. For example, bibliometric evidence shows that the majority of contributions originate from Asia, while studies in Western contexts remain scarce. Furthermore, although theoretical frameworks such as the AMO model and Social Exchange Theory dominate the literature, critical perspectives and interdisciplinary lenses are still underdeveloped. This raises important questions about how GHRM can be better conceptualized,

tested, and implemented across diverse contexts. By exploring trends, patterns, and research gaps, this study seeks to provide a roadmap for future scholarly inquiry and managerial practice.

## **LITERATURE REVIEW**

### **Green Human Resource Management (GHRM) Overview**

Green Human Resource Management (GHRM) has emerged as a significant area of research, focusing on aligning human resource practices with environmental sustainability goals. GHRM practices include green recruitment, training, development, and performance management, aimed at fostering eco-friendly workplace behaviors and enhancing corporate social responsibility. Despite its growing importance, the literature on GHRM remains fragmented, with various studies highlighting the need for a more integrated and systematic approach to understanding its impact on organizational and employee outcomes.

### **Current Trends and Research Gaps**

Recent studies have identified several key trends and gaps in GHRM research. There is a strong emphasis on developing employee abilities through training and awareness programs, but less focus on providing incentives and opportunities to motivate green behaviors. Additionally, the literature reveals significant international and industry differences in GHRM practices, influenced by cultural and institutional factors. The hospitality and tourism industry, for instance, has seen a notable application of GHRM practices to enhance sustainable business performance. However, there is a lack of comprehensive studies on GHRM in undeveloped countries and Asia, as well as a need for cross-cultural models.

### **Future Directions and Implications**

To advance GHRM research, scholars have proposed several future directions. These include exploring the antecedents and outcomes of GHRM practices, understanding the mediating role of green commitment and employee engagement, and addressing the dark side of GHRM, such as greenwashing and employee burnout. Additionally, integrating digital transformation and big data analytics into GHRM practices can enhance their effectiveness and sustainability impact. By addressing these gaps and leveraging emerging trends, organizations can better implement GHRM practices to achieve their sustainability goals and foster a green organizational culture.

## **METHODOLOGY**

A systematic literature review employing a bibliometric approach quantitatively assesses literature to discern trends, patterns, and key research entities within a discipline. Using frameworks such as PRISMA, this approach ensures a comprehensive and replicable literature examination, providing a clear and transparent picture of the topic being studied (Chotisarn & Phutthong, 2023; Hadi et al., 2020). The inclusion criteria established were: (1) articles published up until September 05, 2025, (2) publications in English, and (3) focusing on the topic of **Islamic**

**Leadership.** Bibliometric analysis was performed using VOSviewer, visualizing bibliographic data to analyze citation networks, author collaborations, and co-occurring keywords, revealing the intellectual structure and dynamics of the research field. The combination of bibliometric analysis and systematic review helps researchers synthesize empirical findings and map the landscape of research activity, including identifying key contributors and emerging trends (Ni & Abdullah, 2025). The integration of both approaches provides a comprehensive understanding of the development, historical flow, and future direction of the research field, making it highly beneficial in interdisciplinary studies for gaining deeper insights (Marzi et al., 2025; Wang & Yi, 2025). Bibliometric analysis is also used for strategic purposes in scholarly publication, introduced by Bertrand et al. (1970) to evaluate scientific journals based on their economic weight. The preliminary phase in this scholarly examination involves the selection of keywords, which can be accomplished through a macro methodology (top-down), progressing from expansive search trajectories to more narrow and refined studies and topics. Consequently, after evaluating the limitations inherent in past research and the scarcity of studies addressing Islamic Leadership, this investigation incorporates the keyword “Islamic leadership” as a focal point within the article’s title, abstract, and keyword sections. Furthermore, the Scopus database is employed by researchers for a myriad of investigational purposes, including the execution of literature reviews, identifying subject-matter experts, and monitoring research trends.

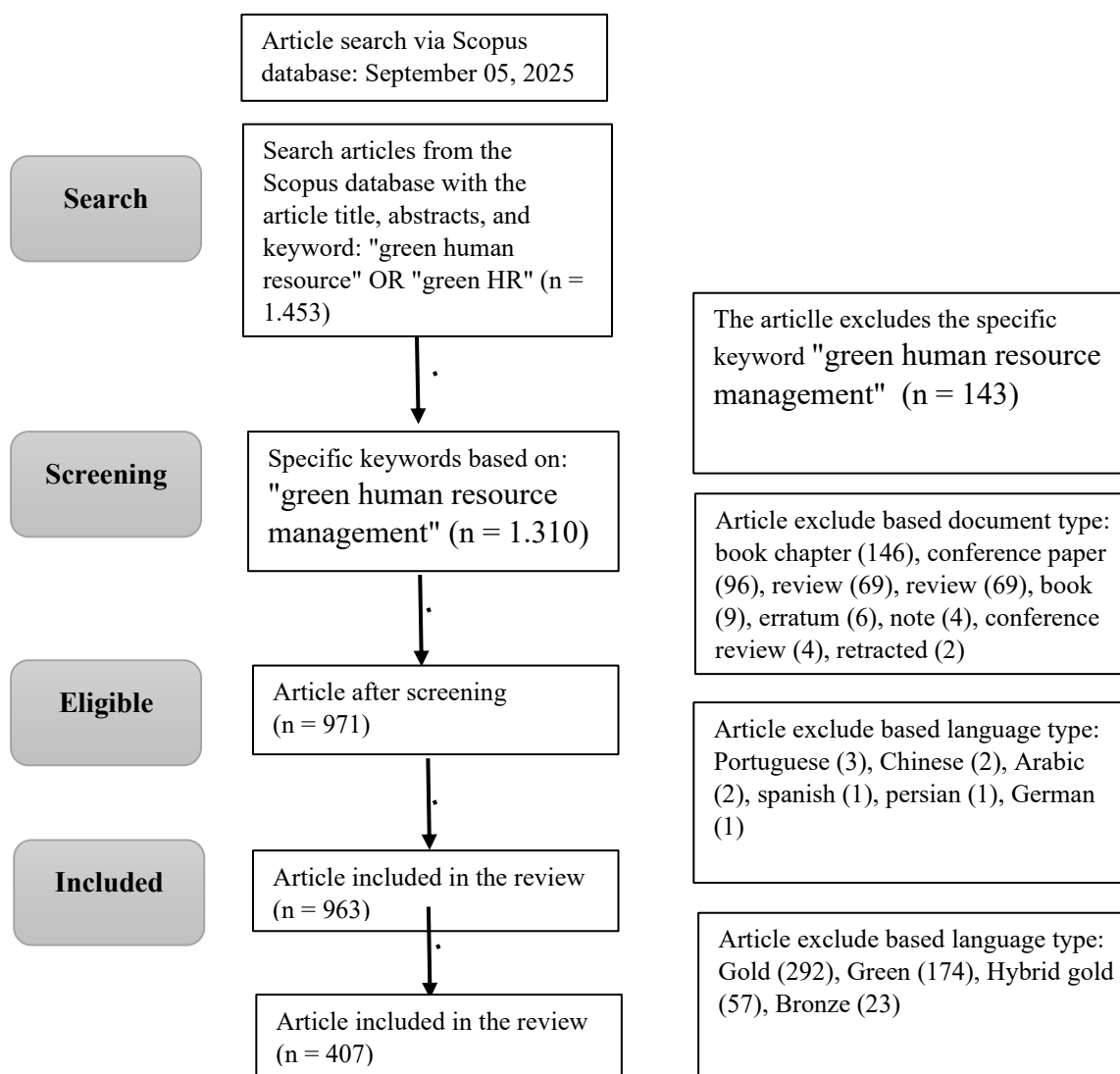


Fig. 1. Systematic Literature Review Information flow using PRISMA

According to the search outcomes retrieved on September 5, 2025, from the Scopus database utilizing the article title, abstract, and keywords: "green human resource" OR "green HR" across diverse academic disciplines, spanning from the earliest publication in 2008 to the most recent in 2025, the total number of articles about Green Human Resource Management is 1,453 documents (refer to Figure 1). Following these findings, a screening process filters documents according to their classification. Articles are eliminated based on the document type: book chapter (146), conference paper (96), review (69), book (9), erratum (6), note (4), conference review (4), and retracted (2), culminating in a total of 971 documents. The screening results, categorized by language, further excluded non-English publications (Portuguese, Chinese, Arabic, Spanish, Persian, and German), leaving 963 documents. Finally, after applying additional indexing and relevance filters, a total of 407 documents were included in this review. This refined collection of articles is then further analyzed in this study to answer the following research questions: RQ1: What are the publication trends, patterns, and geographical distribution of Green Human Resource Management research? RQ2: What are the dominant themes, theoretical frameworks, and methodological approaches in the current body of GHRM literature? RQ3: What are the key research gaps, and what theoretical and practical implications can be derived to guide future investigations in linking GHRM with sustainable organizational performance?

## RESULTS

### **A. RQ1: What are the publication trends, patterns, and geographical distribution of Green Human Resource Management research?**

The bibliometric analysis retrieved 407 documents on GHRM, showing a significant upward trajectory, particularly after 2018, with the peak number of publications in 2024 (98 articles), followed by 2025 (75 articles). This growth pattern suggests increasing scholarly interest in the role of GHRM in addressing sustainability challenges.

Geographically, research contributions are dominated by China, India, Malaysia, and Saudi Arabia, reflecting regions with strong government sustainability initiatives and growing industrial applications of GHRM. In terms of institutional affiliation, King Saud University and Universiti Utara Malaysia emerge as leading contributors, highlighting the strong Middle Eastern and Southeast Asian research presence.

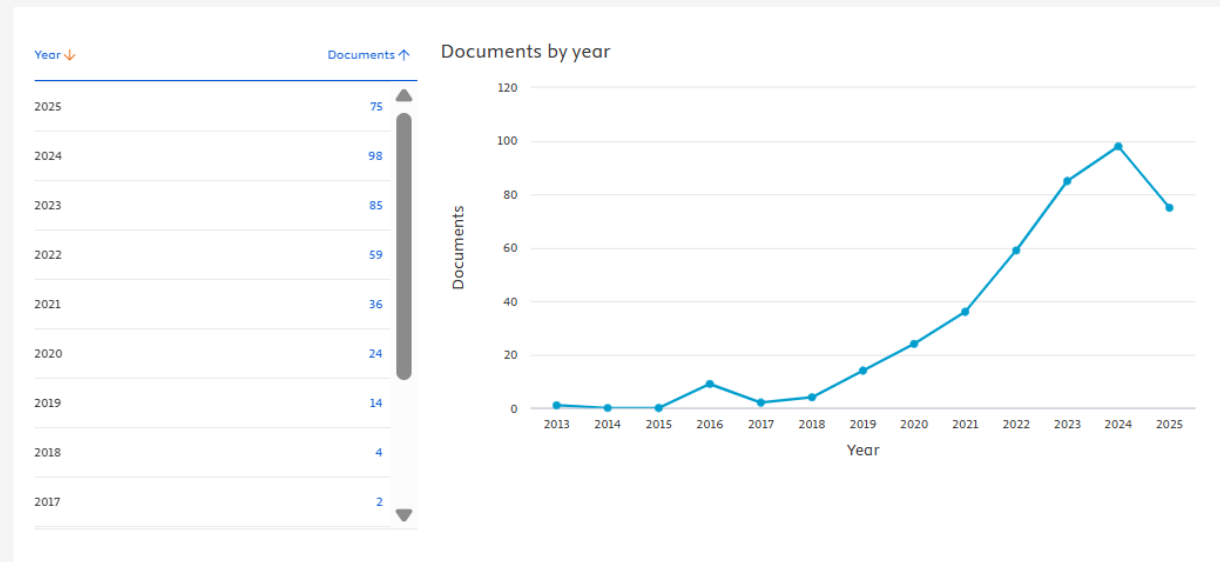
This distribution indicates that while GHRM research is gaining momentum globally, it is particularly concentrated in Asia, where environmental sustainability and human capital

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407 document results

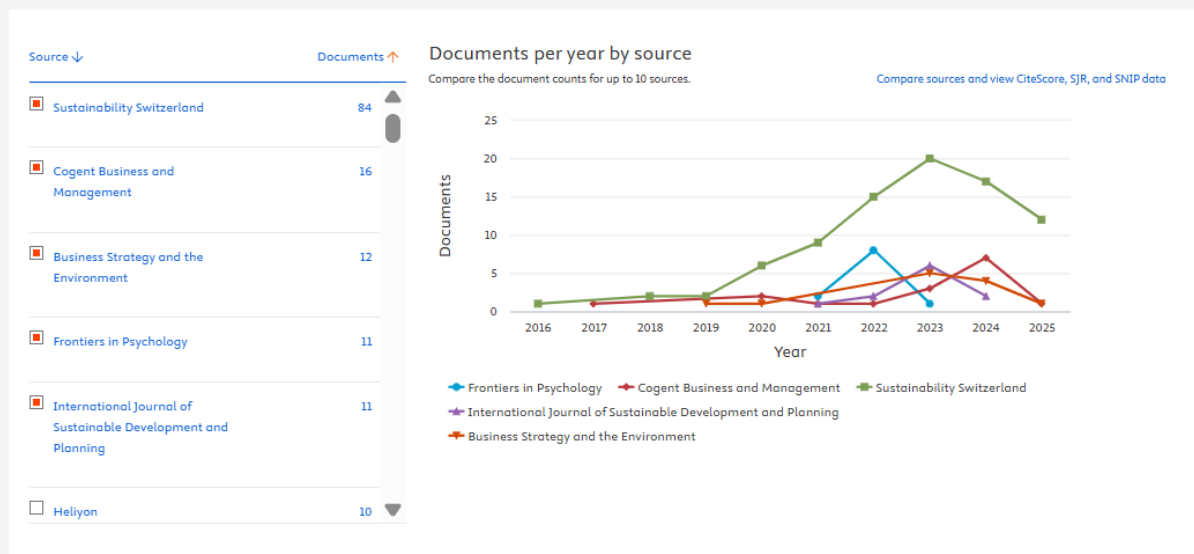
Select year range to analyze: 2013 to 2025 Analyze



development are strategic policy priorities.

407 document results

Select year range to analyze: 2013 to 2025 Analyze



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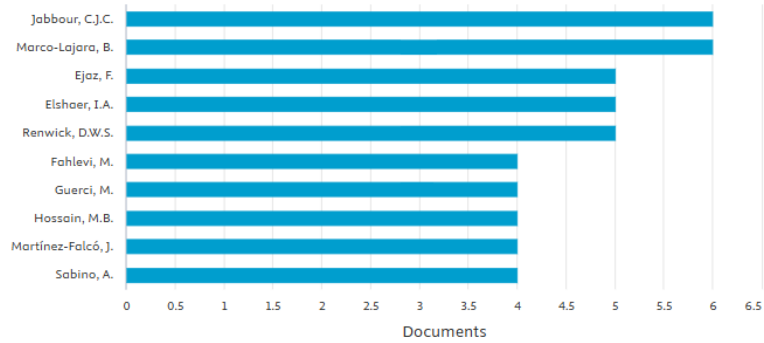
Author ↑

Documents ↓

Jabbour, C.J.C.	6
Marco-Lajara, B.	6
Ejaz, F.	5
Elshaer, I.A.	5
Renwick, D.W.S.	5
Fahlevi, M.	4
Guerce, M.	4

## Documents by author

Compare the document counts for up to 15 authors.



407 document results

Select year range to analyze: 2013 to 2025 Analyze

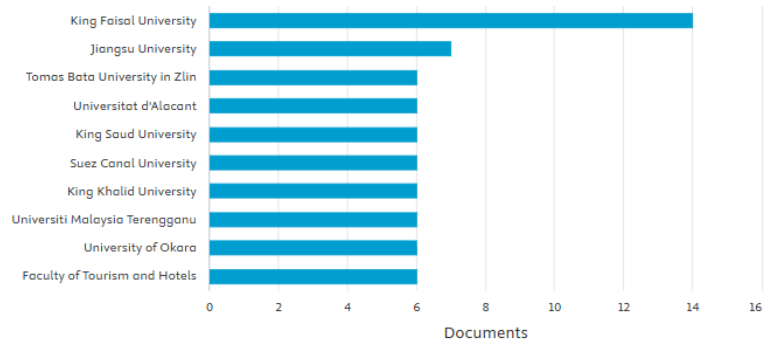
Affiliation ↑

Documents ↓

King Faisal University	14
Jiangsu University	7
Tomas Bata University in Zlin	6
Universitat d'Alacant	6
King Saud University	6
Suez Canal University	6
King Khalid University	6

## Documents by affiliation

Compare the document counts for up to 15 affiliations.



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Select year range to analyze: 2013 to 2025 Analyze

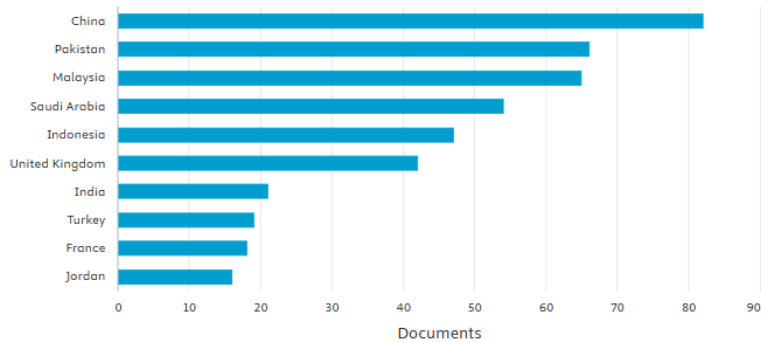
Country/Territory ↑

Documents ↓

China	82
Pakistan	66
Malaysia	65
Saudi Arabia	54
Indonesia	47
United Kingdom	42
India	21

## Documents by country or territory

Compare the document counts for up to 15 countries/territories.



407 document results

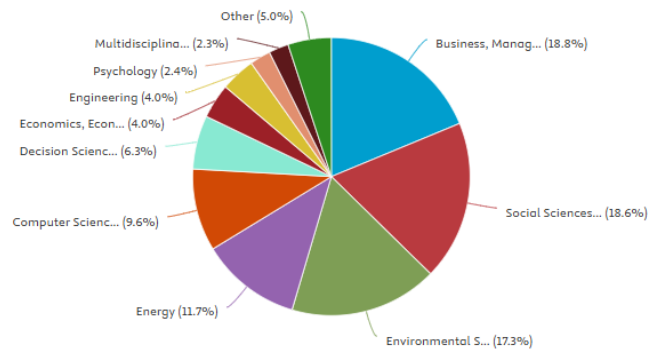
Select year range to analyze: 2013 to 2025 Analyze

Subject area ↓

Documents ↓

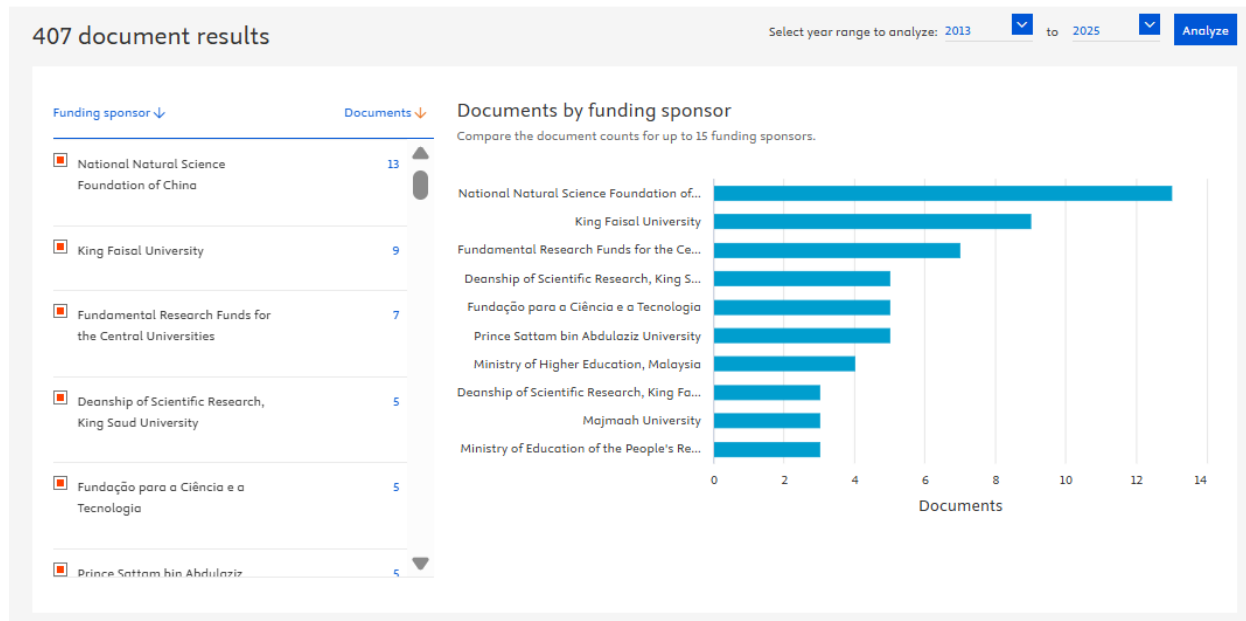
Business, Management and Accounting	186
Social Sciences	184
Environmental Science	171
Energy	116
Computer Science	95
Decision Sciences	62
Economics, Econometrics and Finance	40
Engineering	40
Psychology	24

## Documents by subject area



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## B. RQ2: What are the dominant themes, theoretical frameworks, and methodological approaches in the current body of GHRM literature?

The subject area distribution reveals that GHRM research spans Business, Management & Accounting, Environmental Sciences, Social Sciences, and Engineering, reflecting its interdisciplinary nature. Funding analysis indicates that major sponsors, such as the National Natural Science Foundation of China and King Faisal University, emphasize integrating HRM with environmental sustainability, signaling the prioritization of eco-innovation and responsible management. Thematically, the literature has revolved around: Green recruitment and selection, Green training and development, Green performance management and rewards, and Employee engagement in sustainability initiatives.

Methodologically, most studies adopt quantitative survey-based approaches, while qualitative case studies and mixed-method approaches remain underexplored. Theoretical frameworks frequently referenced include the Resource-Based View (RBV), Ability-Motivation-Opportunity (AMO) theory, and Stakeholder theory, providing lenses to connect HR practices with environmental performance outcomes.

## C. RQ3: What are the key research gaps, and what theoretical and practical implications can be derived to guide future investigations in linking GHRM with sustainable organizational performance?

Although the field of Green Human Resource Management (GHRM) has advanced considerably, several research gaps remain evident. Existing studies have primarily relied on cross-sectional, survey-based quantitative methods, which limit the ability to establish causal inferences and to capture the dynamic nature of GHRM practices over time (Bangwal, 2025; Mustafa, 2023). Moreover, the majority of research has been conducted in Asian and emerging economies, with



limited representation from Western or cross-cultural contexts, restricting the generalizability of findings (Chowdhury, 2025). Theoretically, while the Ability–Motivation–Opportunity (AMO) framework and Social Exchange Theory dominate current discourse, there is room to integrate broader perspectives such as institutional theory, stakeholder theory, or dynamic capabilities to enrich understanding of how GHRM contributes to sustainable performance (San Román-Niaves et al., 2025; Ndiango et al., 2025). Practically, organizations still face challenges in embedding GHRM into core business strategies, as most studies highlight implementation gaps between policy and practice. Future research should therefore adopt longitudinal and multi-method approaches, explore under-researched geographical regions, and link GHRM more explicitly to measurable outcomes such as environmental performance, innovation, and competitive advantage. Such directions will not only advance theory but also provide actionable insights for managers aiming to align HR practices with sustainability agendas.

## **DISCUSSION**

The findings of this study highlight that Green Human Resource Management (GHRM) has moved from being a marginal concept to becoming a central driver of sustainable organizational performance. The publication trends indicate a steady rise in scholarly interest over the last decade, suggesting that organizations and researchers increasingly view human resources as a key lever in addressing environmental challenges. This growth is not only quantitative but also qualitative, as research themes have expanded from operational practices—such as green recruitment, training, and appraisal—towards strategic integration with sustainability goals and corporate responsibility.

Geographically, contributions are dominated by scholars from Asia and Europe, reflecting both the environmental policy priorities of these regions and the growing interest of emerging economies in sustainability. However, the underrepresentation of studies from Africa and Latin America shows that GHRM scholarship has not yet achieved full global coverage, leaving space for future research to capture diverse contexts and cultural perspectives.

The theoretical lens most commonly applied is the Ability–Motivation–Opportunity (AMO) framework, complemented by resource-based theory and institutional theory. These perspectives provide robust explanations for how organizations design HR practices that foster pro-environmental behaviors. However, reliance on a limited set of theories risks creating intellectual lock-in, highlighting the need for new interdisciplinary frameworks, such as behavioral economics, psychology of sustainability, or circular economy theory, to enrich the field.

Methodologically, most studies remain dominated by cross-sectional surveys and case studies, often relying on self-reported data. While useful for establishing correlations, these approaches limit the capacity to capture causal mechanisms and long-term impacts. Future research should explore longitudinal studies, experimental designs, and mixed-method approaches to provide more comprehensive insights.

The discussion also reveals gaps in linking GHRM with broader organizational outcomes, such as innovation capability, financial resilience, and social sustainability. By addressing these gaps, scholars can move beyond proving the relevance of GHRM towards demonstrating its role as a strategic enabler of sustainable competitiveness.

## **CONCLUSION**

This systematic literature review has demonstrated that Green Human Resource Management

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is more than a passing trend—it is an evolving field with profound implications for both research and practice. The evidence suggests that organizations cannot achieve sustainable performance without embedding environmental values into their human capital strategies. Employees are no longer viewed merely as implementers of environmental policies but as active change agents who shape the organizational culture of sustainability.

The review confirms that the field has matured in scope but still faces limitations in terms of theoretical diversity, methodological rigor, and geographical inclusiveness. To address these challenges, future studies should embrace broader conceptual frameworks, adopt more innovative research designs, and extend investigations to underexplored regions.

For practitioners, the implication is clear: green HR practices should not be treated as isolated initiatives but as integral to long-term strategy. Organizations that succeed in aligning their human resources with environmental responsibility will not only comply with regulatory pressures but also gain reputational advantage, foster employee engagement, and secure long-term competitiveness.

Ultimately, the future of GHRM lies in bridging the gap between academic knowledge and organizational practice. By cultivating a more sustainable workforce, businesses can contribute meaningfully to the global sustainability agenda while ensuring their own survival and prosperity in an increasingly complex environment.

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