

## Uncovering Key Themes in Sustainable HRM: A Data-Driven Analysis Using Topic Modelling

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Received Date: 6 November 2024

Accepted Date: 17 December 2024

Revised Date: 5 January 2025

Published Date: 31 January 2025

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### ABSTRACT

*This study explores the landscape of Sustainable Human Resource Management (HRM) by employing topic modelling to analyze 902 articles from the Scopus database. Sustainable HRM, which integrates sustainability principles into HR practices, has emerged as a critical strategy for achieving long-term economic, social, and environmental goals. Using Natural Language Processing (NLP) techniques, the analysis identified five core themes within Sustainable HRM research: economic and environmental sustainability, performance factors, supply chain and innovation, social responsibility, and green HRM practices. These themes highlight Sustainable HRM's potential to enhance organizational resilience, employee engagement, and corporate social responsibility. By categorizing Sustainable HRM literature, this study provides insights into the thematic diversity of sustainable HRM and its relevance in contemporary organizational contexts. The findings offer implications for both scholars and practitioners, underscoring the role of HRM in supporting sustainability objectives and guiding future research towards a comprehensive understanding of Sustainable HRM practices and their impact on organizational outcomes.*

**Keywords:** *corporate social responsibility, green HRM, human resource management, organizational sustainability, sustainable topic modelling*

### INTRODUCTION

Sustainable Human Resource Management (HRM) has gained importance as organizations strive to align their operations with the goals of economic growth, environmental responsibility, and social equity. Sustainable HRM is defined as the strategic management of human resources in a manner that supports the achievement of organizational goals while ensuring the long-term sustainability of the workforce and the environment (Ahn & Avila, 2022; Anlesinya & Susomrith, 2020). It reflects a holistic approach that integrates economic, social, and ecological considerations into HRM practices, thereby fostering a sustainable organizational culture (Dvořáková, 2020; Lulewicz-Sas, Kinowska, & Fryczyńska, 2022; Mazur & Walczyna, 2020).

HRM is uniquely positioned to drive organizational sustainability by embedding eco-friendly practices and promoting social responsibility among employees. A critical component of this approach, Green HRM, focuses on incorporating environmental management into various HR functions, including recruitment, training, and performance management. Studies indicate that implementing Green HRM practices significantly enhances employees' commitment to environmental goals and encourages pro-environmental behaviors, thereby supporting overall organizational sustainability (Anlesinya & Susomrith, 2020; Rijal, 2023; Hameed et al., 2020). Additionally, integrating environmental knowledge into HRM has been shown to mediate the link between Green HRM practices and employees' sustainable behaviors (Bhattarai, 2023; Ercantan & Eyupoglu, 2022).

CSR within HRM also plays a vital role in sustainable HRM, emphasizing an organization's responsibility towards society and the environment. Aligning HR strategies with CSR initiatives enhances an organization's reputation and fosters a sustainability-focused culture among employees (Herrera & Heras-Rosas, 2020; Roscoe et al., 2019). Research suggests that employees are more likely to adopt sustainable practices when they perceive their organization as genuinely committed to CSR, contributing to the organization's long-term sustainability goals (Ansari et al., 2020). Moreover, organizations that actively involve employees in sustainability, through green teams or sustainability training, foster motivation and commitment to environmental objectives, cultivating a culture that prioritizes sustainability (Ercantan & Eyupoglu, 2022; Malarvizhi, 2024; Roscoe et al., 2019). Despite growing interest, the field of sustainable HRM is vast and multifaceted, with research spanning different industries, regions, and conceptual frameworks. To map the thematic landscape and identify core areas of focus within sustainable HRM, this study leverages topic modelling techniques on a dataset of 902 articles from Scopus. This analysis aims to uncover the primary themes in sustainable HRM literature and provide insights into how these themes contribute to both theoretical understanding and practical applications.

This study contributes to the sustainable HRM literature by systematically categorizing research themes, illustrating the overlaps and distinctions among them, and examining how HRM can serve as a strategic partner in advancing sustainability. The findings offer valuable implications for researchers and practitioners alike, illuminating paths for integrating sustainable HRM practices that align with both organizational performance and global sustainability objectives.

## LITERATURE REVIEW

### Foundations of Sustainable Human Resource Management (HRM)

Sustainable HRM is increasingly recognized as essential for organizations striving for long-term viability while balancing economic, social, and environmental objectives. Integrating traditional HRM with sustainability principles, Sustainable HRM emphasizes the role of human resources in fostering sustainable organizational practices. Central to Sustainable HRM is the three-dimensional categorization of sustainable HRM into green HRM, socially responsible HRM, and triple bottom line (TBL) HRM, with an additional focus on "Common Good HRM" aimed at addressing societal challenges (Anlesinya & Susomrith, 2020). This categorization underscores Sustainable HRM's multifaceted nature, where practices are adopted not only to enhance economic performance but also to positively impact society and the environment. Similarly, Ehnert's work introduces paradox theory to highlight the conflicts that may arise between short-term financial goals and long-term sustainability objectives, positioning Sustainable HRM as both an ethical imperative and a strategic necessity in a competitive landscape (Murillo-Ramos et al., 2022; Kramar, 2022).

Sustainable HRM practices enhance career growth and foster a committed workforce that link commitment-oriented HRM systems with improved employee well-being and minimized negative impacts (Cheng et al., 2023; Kim & Shin, 2019). Sustainable work systems, which balance economic

rationality with social responsibility, highlight that sustainable HRM can improve organizational performance while addressing employee and stakeholder expectations (Stankevičiūtė & Savanevičienė, 2014). Effective training and development are fundamental to Sustainable HRM, equipping employees to meet the demands of a sustainable business environment (Piwowar-Sulej, 2021). Overall, Sustainable HRM foundations are built on integrating green, socially responsible, and TBL HRM approaches to create frameworks that promote economic success, social equity, and environmental stewardship, reflecting the evolving role of human resources in achieving sustainable organizational outcomes.

### **Theoretical Perspectives Underpinning Sustainable HRM**

Sustainable HRM is increasingly recognized as a critical component of organizational strategy, aimed at aligning HR practices with long-term economic, social, and environmental goals. Various theoretical perspectives underpin sustainable HRM, emphasizing how human resource practices contribute to sustainability. One widely applied framework is the Triple Bottom Line (TBL) model, which encourages organizations to pursue economic profitability, social equity, and environmental stewardship in tandem. This model advocates for an integrated approach, suggesting that sustainable HRM practices can enhance employee engagement and bolster organizational reputation, ultimately supporting a sustainable competitive advantage (Gravili, 2023; Kramar, 2022; Mobarez, 2020). By balancing these dimensions, TBL in HRM fosters a comprehensive approach to organizational success.

Institutional theory offers another perspective on sustainable HRM, focusing on how organizational practices are shaped by social norms, values, and regulations. This theory posits that organizations adopt sustainable HRM practices in response to societal pressures from stakeholders such as customers, employees, and regulatory bodies, aiming to gain legitimacy by aligning with evolving expectations around corporate responsibility (Anlesinya et al., 2022; Jia et al., 2023). In this light, sustainable HRM is seen as a response to external pressures that compel organizations to incorporate sustainability into HR practices. Stakeholder engagement, thus, becomes essential, as organizations must consider and respond to the interests of various stakeholder groups to maintain credibility and foster a reputation aligned with sustainability (Ren et al., 2023).

Additionally, stakeholder theory and the concept of sustainable careers contribute important insights to the sustainable HRM discourse. Stakeholder theory posits that organizations have obligations not only to shareholders but also to employees, customers, suppliers, and the wider community, emphasizing a broader responsibility beyond economic returns (Stahl et al., 2020; Paulet et al., 2021). Sustainable HRM practices that prioritize these diverse interests can improve employee morale, retention, and overall organizational performance (Clipa et al., 2019). The concept of sustainable careers complements this by advocating for HR practices that support employees' long-term career development and well-being, acknowledging that sustainable employment relationships benefit both the organization and its workforce (Vos & Heijden, 2017). Collectively, these perspectives highlight how integrating sustainability into HR practices enables organizations to achieve positive economic, social, and environmental outcomes, fostering a culture of responsibility and engagement aligned with sustainability goals.

### **Methodological Approaches in Sustainable HRM Research**

Sustainable Human Resource Management (SHRM) has emerged as a crucial research area, employing diverse methodologies to examine its implications and applications within organizations. Qualitative methods, including case studies and interviews, have been essential for providing detailed insights into the implementation of Sustainable HRM in specific contexts. For instance, Anlesinya and Susomrith (2020) highlight the challenges organizations face in embedding sustainability into HRM, pointing out the need for formalized systems and commitment to sustainability training. Similarly, Mejias et al. illustrate the role of HRM in achieving sustainable outcomes, emphasizing that qualitative methods can uncover the complexities involved in Sustainable HRM practices (Mejias et al., 2015).

Quantitative approaches, particularly surveys, further contribute to understanding Sustainable HRM's impact on performance outcomes. Studies demonstrate a positive correlation between Sustainable HRM and employee engagement and can improve employee performance and organizational commitment (Díaz-Carrión et. al., 2020; Weerasinghe & Silva, 2021).

In addition to qualitative and quantitative methods, bibliometric analyses have tracked publication trends, revealing shifts in research priorities within sustainable HRM. The expanding literature on Sustainable HRM underscores its growing importance in modern organizations (Ehnert & Harry, 2012). However, traditional methods like case studies, surveys, and bibliometrics have limitations in capturing the comprehensive and evolving nature of Sustainable HRM. To address these gaps, researchers have begun using advanced techniques, such as Natural Language Processing (NLP) and topic modeling, including Latent Dirichlet Allocation (LDA), to analyze large datasets of academic articles. This data-driven approach enables systematic identification of underlying themes in the Sustainable HRM literature, offering a holistic view of the field and allowing researchers to explore Sustainable HRM's multifaceted dimensions more effectively (Stankevičiūtė & Savanevičienė, 2018). These advanced analytical techniques represent a significant methodological advancement, enhancing our understanding of Sustainable HRM practices and their organizational implications.

## **METHODOLOGY**

This study uses a systematic and data-driven approach to analyze trends and themes in sustainable HRM research. Given the interdisciplinary nature of sustainable HRM, the research design incorporates bibliometric data analysis combined with Natural Language Processing (NLP) and topic modelling. This mixed-methods approach is well-suited for uncovering latent themes within a large dataset, allowing for a structured examination of key trends and thematic areas. The objective is to identify core research areas, highlight emerging topics, and map the landscape of Sustainable HRM literature comprehensively.

### **Data Collection**

The data for this study was collected from the Scopus database, a well-regarded source of peer-reviewed research literature. To build a comprehensive dataset on sustainable HRM, a series of targeted search queries was conducted using keywords such as “sustainable human resource management,” “green HRM,” “corporate social responsibility and HR,” and “sustainable workforce practices.” These keywords were chosen to capture a broad yet focused scope of the field, ensuring that the dataset would include various aspects of sustainable HRM. This search yielded a total of 902 articles spanning multiple disciplines and publication years, reflecting the wide-ranging interest and research on sustainable HRM practices. The dataset includes essential metadata for each article, such as titles, abstracts, keywords, publication years, and authorship details, offering a robust foundation for the topic modelling analysis. By using Scopus, this study leverages a high-quality, reputable source of academic work, ensuring the relevance and credibility of the dataset for analyzing sustainable HRM trends.

### **NLP Techniques and Topic Modelling**

Given the diversity and volume of the collected data, Natural Language Processing (NLP) techniques and topic modelling were applied to systematically uncover the primary themes within the literature on sustainable HRM. Topic modelling, a machine learning approach, is particularly useful for identifying latent themes across large collections of text, making it well-suited to the exploration of broad research areas like sustainable HRM. This approach allows for the extraction of meaningful clusters of information without needing predefined labels or categories, an advantage for summarizing complex topics in evolving fields. For this study, topic modelling was used to analyze the abstracts of each article, as they provide concise summaries of research aims, methods, and findings, capturing the

essence of each study. Through this technique, underlying themes in sustainable HRM were identified, offering a structured view of the main areas within the dataset.

## **Data Preprocessing**

Prior to applying topic modelling, the text data required extensive preprocessing to ensure quality and coherence in the results. Preprocessing involved multiple steps to standardize and clean the text. First, each abstract was tokenized, breaking down the text into individual words or "tokens," which facilitates further text analysis. Then, all tokens were converted to lowercase to maintain uniformity and eliminate redundant variations, such as "Sustainable" and "sustainable." Stop words, or common words that do not add meaningful content (e.g., "the," "and," "in"), were removed to focus the analysis on more informative terms. Additionally, words that appeared in fewer than two abstracts were filtered out, minimizing noise from extremely rare terms that could detract from coherent topic formation. Finally, a Count Vectorizer was applied, converting the preprocessed text into a matrix of token counts. This matrix served as the input for the topic modelling algorithm, representing each abstract in a standardized format.

## **Latent Dirichlet Allocation (LDA)**

The primary topic modelling approach used in this study was Latent Dirichlet Allocation (LDA), a widely applied probabilistic model in text mining. LDA assumes that each document, in this case, each abstract, is composed of multiple topics, with each topic characterized by a unique set of words. This method is particularly useful for studies seeking interpretable clusters, as it reveals the prominent topics that underpin the literature. For this study, five topics were specified after preliminary trials suggested this number would balance granularity and interpretability. The LDA model was run with a fixed random state to ensure reproducibility of the results. By assigning each document a probabilistic distribution over the five topics, the model allowed each abstract to exhibit multiple themes to varying extents, revealing the nuanced focus areas in sustainable HRM research.

## **Analysis Tools and Software**

All analyses were conducted using the Python programming language, leveraging multiple libraries to facilitate each stage of the process. Scikit-Learn, a widely used machine learning library, was used for both vectorization and the LDA topic modelling. Scikit-Learn's Count Vectorizer efficiently processed the pre-processed abstracts, and its LDA implementation allowed for easy interpretation and manipulation of topic distributions. Pandas was used for data handling and organization, as it provided a flexible framework for managing the dataset, transforming metadata, and analyzing results. Additionally, Numpy was utilized for handling data arrays, ensuring efficient processing during the data manipulation stages. These tools provided a reliable infrastructure for implementing the NLP techniques, enabling the study to efficiently extract and analyze the key research themes within sustainable HRM. Figure 1 provides a clear view of the relative emphasis placed on each theme, with "Performance & Sustainability Factors" and "Green HRM & Environmental Practices" slightly more represented.

## **FINDINGS**

The topic modelling analysis of 902 abstracts from the Scopus database yielded five core themes within sustainable HRM research, each reflecting unique areas of focus. Through a comparative lens, the analysis reveals interconnectedness among certain themes, highlighting how these aspects of sustainable HRM integrate to form a comprehensive field. Below, each theme is discussed individually, with insights into their overlaps and distinctions.

## Economic and Environmental Sustainability in HRM

The first theme primarily revolves around the intersection of economic and environmental sustainability within HRM. Keywords such as “economic,” “resources,” “development,” “sustainable,” and “environmental” are prevalent, underscoring the focus on balancing financial viability with ecological responsibility. Articles in this category often address resource efficiency and cost-effective sustainable practices that align with broader environmental goals. This theme naturally overlaps with Green HRM and Environmental Practices, where reducing environmental impact is also central. However, while Green HRM prioritizes ecological outcomes, studies in this theme place added emphasis on cost-benefit analyses, underscoring a nuanced approach to balancing sustainability and profitability.

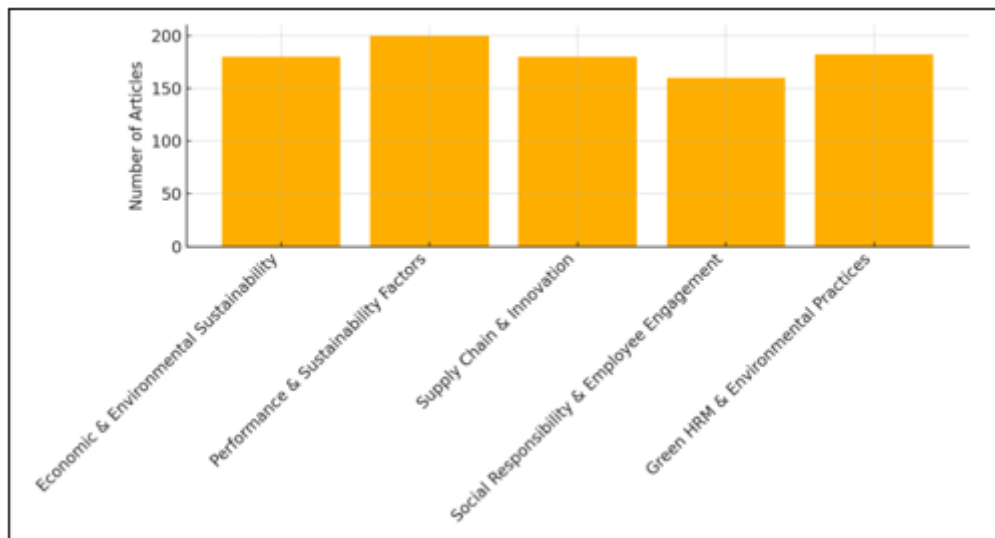


Figure 1: Distribution of Articles Across Sustainable HRM Topic Areas

## Performance and Sustainability Factors

The second theme emphasizes the link between sustainability initiatives and performance outcomes, focusing on factors that drive effective sustainable HRM practices. With keywords like “sustainability,” “performance,” “factors,” “work,” and “development,” this theme captures studies examining how sustainable HRM practices impact employee performance, job satisfaction, and organizational productivity. This theme intersects significantly with Social Responsibility and Employee Engagement, as both explore how sustainability practices influence employees. While social responsibility research often emphasizes the ethical and cultural dimensions, performance-focused studies offer empirical insights into productivity improvements, highlighting that HRM strategies promoting well-being can also drive efficiency.

## Supply Chain and Innovation in Sustainable HRM

The third theme centers around the role of HRM in sustainable supply chain management and innovation. Keywords such as “sustainability,” “supply chain,” “manufacturing,” “development,” and “innovation” are common, reflecting a focus on integrating sustainable HRM practices across supply chains, particularly in manufacturing sectors. This theme complements the Economic and Environmental Sustainability theme by extending sustainable practices beyond organizational boundaries to supply chain partners. Research here examines how HRM can support green supply chains, suggesting that HR can be pivotal in fostering sustainability in external partnerships. Compared

to other themes, this area uniquely highlights HR's influence on broader industry ecosystems, demonstrating a strategic contribution to sustainability throughout the supply chain.

### **Social Responsibility and Employee Engagement in Sustainable HRM**

The fourth theme highlights HRM's role in fostering social responsibility and employee engagement. Key terms include "employee," "social," "work," "HRM," and "responsibility," reflecting a focus on embedding socially responsible practices in HRM. Research in this theme frequently examines corporate social responsibility (CSR) initiatives within HRM, assessing their impact on employee morale, organizational culture, and community involvement. This theme overlaps with Green HRM, as organizations often leverage green initiatives to enhance their image and foster a sense of purpose among employees. However, social responsibility research goes further by emphasizing corporate citizenship and community-oriented efforts, broadening the scope beyond environmental impact to a broader societal contribution.

### **Green HRM and Environmental Practices**

The final theme centres on green HRM, specifically focusing on environmental sustainability. Keywords such as "environmental," "practices," "performance," "management," and "green" reflect a focus on practices that directly support ecological objectives. Research within this area covers HRM strategies aimed at minimizing an organization's environmental footprint, such as green recruiting, training for sustainability, and linking performance metrics to environmental goals. This theme overlaps with both the Economic and Environmental Sustainability and Social Responsibility themes, yet its distinct focus is on the role of HRM in fostering green initiatives directly. Unlike the broader economic theme, Green HRM places HRM at the forefront of promoting a sustainable culture and aligning with global environmental targets.

### **Comparative Insights**

The comparative analysis highlights how these sustainable HRM themes integrate, with each theme contributing uniquely to the field. For instance, Economic and Environmental Sustainability and Green HRM both focus on ecological impact, yet they differ in their approach to financial outcomes and operational practices. Similarly, Social Responsibility and Performance themes converge around employee well-being, diverging in focus; one emphasizes ethical engagement, while the other centers on productivity metrics. These comparisons underscore sustainable HRM's versatility, illustrating how HR strategies address sustainability on multiple levels while supporting both organizational objectives and societal goals. Figure 2 displays the relative overlap between each pair of themes, where higher values indicate stronger connections. Figure 2 helps illustrate how certain themes, like "Economic & Environmental Sustainability" and "Green HRM & Environmental Practices," share a significant focus, while others, like "Supply Chain & Innovation," have more distinct areas of emphasis.

## **DISCUSSION**

The findings from the topic modelling analysis reveal sustainable HRM as a multifaceted field, characterized by distinct but interconnected themes. This discussion explores the implications of each theme in terms of theoretical contributions, practical applications, and areas for future research, while examining the unique and overlapping aspects of these themes. This comparative approach highlights both synergies and potential conflicts in sustainable HRM practices, contributing to a more nuanced understanding of the field.

### **Theoretical Implications**

The analysis confirms that sustainable HRM spans economic, environmental, and social dimensions, reinforcing its interdisciplinary nature and links to corporate sustainability and HR theories. Each theme adds unique value to theoretical frameworks in HRM and sustainability, such as the Economic and Environmental Sustainability theme contributing to resource-based views and competitive advantage theories. Performance and Sustainability Factors advances social exchange theory by linking sustainable HRM with productivity outcomes, suggesting that sustainable practices reinforce mutual benefit between employee and employer. Supply Chain and Innovation in Sustainable HRM aligns with supply chain and innovation theories, suggesting that sustainable HRM extends beyond internal practices to influence external partnerships and supply networks. Meanwhile, Social Responsibility and Employee Engagement enhances our understanding of CSR in HRM, focusing on how HR shapes organizational culture and employee commitment to social values. Finally, Green HRM aligns closely with green organizational theory, positioning HRM as a central driver of ecological initiatives through green practices in recruitment, training, and management.

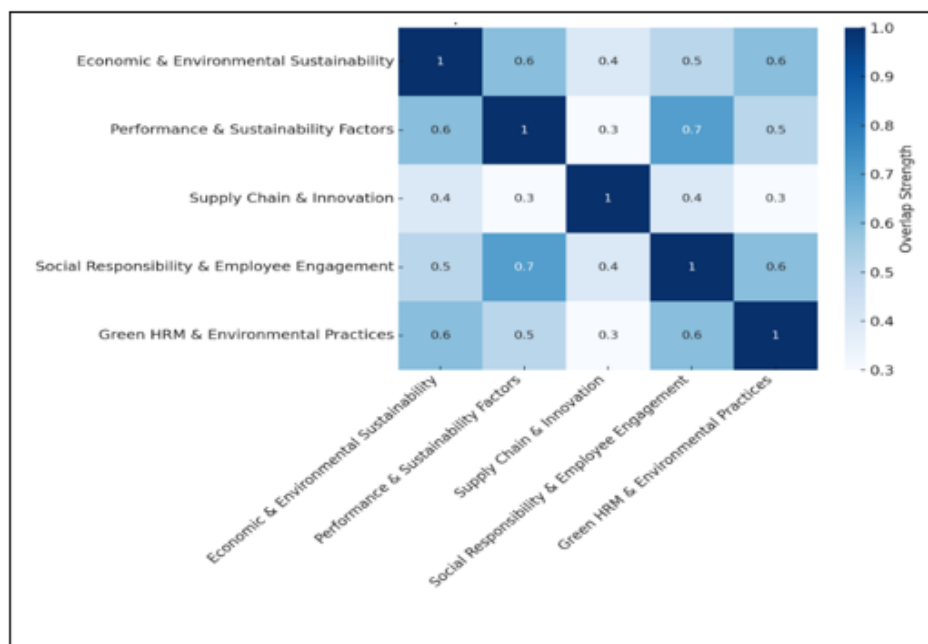


Figure 2: Overlap Between Sustainable HRM Themes

### Practical Implications

The practical implications of sustainable HRM themes are significant, offering actionable insights for organizations. Findings related to Economic and Environmental Sustainability suggest that HR managers can play a key role in aligning cost-effective HRM practices with environmental objectives, such as optimizing resource use and promoting energy-efficient behaviors. However, a potential conflict arises when economic goals conflict with environmental goals, especially in the short term, as sustainable practices may require initial investments that some organizations find difficult to justify financially. Balancing these economic-environmental interests presents both a challenge and an opportunity for HR leaders to design policies that meet dual goals over the long term.

The Performance and Sustainability Factors theme underscores the importance of fostering a positive work environment to enhance employee productivity through sustainable practices, an approach that benefits both employees and organizations. Yet, this theme can sometimes overlap with Social Responsibility and Employee Engagement efforts, as initiatives meant to boost engagement (such as CSR-driven programs) also tend to improve performance outcomes. HR leaders can leverage this overlap by creating programs that fulfill both social and performance goals, such as sustainability-linked performance incentives or green employee engagement programs.



The Supply Chain and Innovation theme illustrates HR's potential to foster sustainable supply chains by embedding green values in recruitment and training. This theme, however, may conflict with economic objectives in cases where sustainable practices in supply chains lead to increased operational costs. Nonetheless, organizations that strategically align HRM with supply chain sustainability often find that the long-term benefits—such as brand reputation and customer loyalty—can offset initial costs. The Green HRM theme shows how HR can actively promote environmental awareness through specialized training and metrics tied to sustainability. This overlaps with Economic and Environmental Sustainability, as green HRM initiatives can indirectly support cost savings by reducing resource consumption. HR leaders can use these insights to implement and measure green initiatives, promoting HR as a bridge between sustainability goals and operational efficiencies. In practice, however, HR managers may face challenges in measuring and quantifying the impact of green HR initiatives, especially in cases where results are indirect or intangible, necessitating innovative metrics and long-term tracking.

These implications suggest that sustainable HRM acts as a bridge between organizational sustainability goals and employee engagement, with HR serving as a key driver of sustainable outcomes. Organizations may need to adopt innovative approaches and a long-term perspective to balance and integrate the dual goals of financial success and sustainability.

### **Future Research Directions**

The comparative analysis of sustainable HRM themes identifies several promising areas for future research. For instance, research into the Integration Across Themes could explore how organizations can better align economic, environmental, and social sustainability within HRM practices. Future studies might investigate questions such as, “How do financial incentives in sustainable HRM affect employee engagement in CSR programs?” or “What are the effects of integrated sustainability-focused HRM practices on employee morale and company performance?” Additionally, Longitudinal Studies are needed to understand the long-term impact of sustainable HRM practices on retention and resilience, providing insights into how sustainable practices shape organizational culture over time. Comparative Cross-Cultural Analysis is another promising avenue, examining how sustainable HRM practices vary across cultures and regulatory contexts. This is especially relevant for multinational organizations, where aligning HRM practices with diverse environmental and social standards can be challenging. Finally, Green HRM and Innovation research could further explore HR's role in driving environmental innovation, especially how green training and recruitment foster organizational adaptability in response to sustainability challenges.

### **Limitations of the Study**

While this study provides valuable insights into sustainable HRM themes, certain limitations should be acknowledged. One primary limitation is the reliance on article abstracts, which may not capture the full range and complexity of each study. As abstracts are summaries, they might omit key details regarding methods, findings, and in-depth discussions that could influence theme identification. Future research could address this limitation by incorporating full-text content analysis or using a mixed-method approach that combines topic modelling with qualitative coding of full articles. This would provide a richer understanding of sustainable HRM's nuances and enable a more granular view of subthemes within each topic.

Another limitation is the potential over-representation of certain regions or disciplines within the Scopus database, as publication trends vary internationally. This bias could influence the thematic prevalence and may not fully capture sustainable HRM practices in underrepresented regions or emerging markets. Future research could mitigate this limitation by expanding the dataset to include additional databases or by conducting comparative analyses of publication patterns across different regions.

Finally, the use of topic modelling, while effective for theme extraction, does not account for subtle thematic overlaps or tensions. For example, themes like Green HRM and Economic Sustainability may share an ecological focus yet diverge in specific practices and short-term versus long-term objectives. To address these subtleties, future studies could benefit from incorporating network analysis of keywords or applying advanced NLP techniques, such as BERT, for more detailed contextual understanding. This would allow a more comprehensive exploration of nuanced relationships within sustainable HRM literature.

## **CONCLUSION**

In conclusion, this study reveals sustainable HRM as a multidimensional field with five core themes: economic and environmental sustainability, performance factors, supply chain and innovation, social responsibility, and green HRM practices. Together, these themes underscore HRM's expanding role in integrating sustainability across economic, environmental, and social domains within organizations. By positioning HRM as a strategic partner in sustainability, organizations can enhance employee engagement, support eco-friendly practices, and promote corporate social responsibility, aligning organizational goals with societal expectations. While this study provides valuable insights into sustainable HRM trends, it is limited by its reliance on abstracts and potential dataset biases. Future research that incorporates comprehensive content analysis and region-specific perspectives will deepen understanding of HRM's role in sustainability. Ultimately, as companies increasingly prioritize sustainable practices, HRM's contribution will be pivotal in fostering resilience, innovation, and a lasting positive impact on society.

## **ACKNOWLEDGEMENTS**

We would like to acknowledge UiTM Cawangan Kedah for the invaluable support throughout this research.

## **FUNDING**

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## **AUTHORS' CONTRIBUTION**

Kamaruddin, K. and Ali, N.M. jointly conceived and planned the study. Kamaruddin, K. conducted the data collection and preparation, while Ali, N.M. carried out the analysis and contributed to the interpretation of the results. Kamaruddin, K. took the lead in writing the manuscript, with both authors providing critical feedback and helping shape the research, analysis, and manuscript.

## **CONFLICT OF INTEREST DECLARATION**

We certify that the article is the Authors' and Co-Authors' original work. The article has not received prior publication and is not under consideration for publication elsewhere. This research/manuscript has not been submitted for publication, nor has it been published in whole or in part elsewhere. We testify to the fact that all Authors have contributed significantly to the work, validity and legitimacy of the data and its interpretation for submission to Jurnal Intelek.

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