

Human Resource Management and ESG Integration: A Systematic Review of Sustainable Value Creation in Malaysia

Nor Amira Syairah Zulkarnaini¹, Abdul Hakim Md Yusop^{2a,b}, Roziana Shaari³, Azlineer Sarip⁴,
Noraini Rusbadrol⁵, Irmawati Norazman⁶, Faizah Mohd Fakhrudin⁷

^{1,3,4,5,6,7}School of Human Resource Development and Psychology, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia

^{2a}Materials Research & Consultancy Group (MRCG), Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Johor, Malaysia

^{2b}Department of Materials, Manufacturing and Industrial Engineering, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Johor, Malaysia

DOI: <https://doi.org/10.47772/IJRISS.2026.1014MG0009>

Received: 05 January 2026; Accepted: 11 January 2026; Published: 23 January 2026

ABSTRACT

Integrating Environmental, Social, and Governance (ESG) principles into business strategies has gained significant momentum as organizations respond to increasing demands for sustainability, ethical conduct, and social responsibility. Human Resource Management (HRM) is increasingly recognized as a critical enabler in embedding ESG values within organizational practices by fostering a supportive culture, engaging employees, and aligning workforce strategies with sustainability objectives. This systematic literature review (SLR) synthesizes findings from 216 peer-reviewed studies to explore HR's role in driving ESG implementation. The review highlights HR's significant contributions, including promoting diversity and inclusion, delivering sustainability-focused training, and embedding ethical governance practices. Additionally, it identifies emerging trends, such as integrating ESG indicators into HR functions like recruitment, performance management, and leadership development. However, the study also reveals gaps in the literature, including the absence of standardized ESG frameworks for HR, limited empirical data on implementation outcomes, and challenges such as resource constraints and organizational resistance. This paper concludes by proposing future research directions, including developing comprehensive ESG-HR frameworks, industry-specific studies, and applying digital tools to enhance ESG alignment. By consolidating current insights, this review underscores the critical role of HR in advancing ESG strategies and contributing to sustainable organizational success in Malaysia.

Keywords: Human Resources, ESG, Sustainability, Governance, Systematic Review

INTRODUCTION

In recent years, the importance of Environmental, Social, and Governance (ESG) considerations has surged as companies strive for sustainable growth and long-term resilience. This shift is evident globally, with increasing pressure on organizations to adopt responsible practices contributing to social well-being, environmental protection, and strong governance (Rau and Yu, 2024). In Malaysia, ESG practices are gaining momentum, influenced by national policies such as the Malaysian Code on Corporate Governance (MCCG) and growing expectations from regulators and consumers for businesses to demonstrate their commitment to sustainability (Zahid (2019). Malaysia's Vision 2030 further emphasizes the role of sustainability in shaping the future of industries, aligning with the United Nations Sustainable Development Goals (SDGs) (Sklavos et al, 2025). Human Resources (HR) is essential in embedding ESG principles within organizations, particularly in shaping culture, employee engagement, and leadership development (Vinnikova, 2024). In Malaysia, HR functions are crucial in guiding businesses through the complexities of integrating ESG into day-to-day operations. From promoting inclusive hiring practices and diversity to aligning workforce strategies with sustainability objectives, HR can drive transformative change. For instance, HR departments can incorporate ESG criteria

into recruitment and performance management, develop training programs on sustainability, and create a culture that supports ethical decision-making at all levels. However, the role of HR in supporting ESG initiatives in Malaysia is still an emerging field of study (Makhecha, 2023). While there is growing recognition of HR's potential, challenges such as limited resources, regulatory complexities, and resistance to change remain significant barriers to adopting ESG practices (Lee, 2023). Moreover, Malaysia's unique socio-economic context adds another layer of complexity to implementing effective HR-driven ESG strategies across diverse industries (Li et al., 2021). This paper aims to address these gaps by providing a systematic review of the existing literature on the role of HR in advancing ESG, with a specific focus on Malaysia. By analyzing current research, this study will explore HR's contributions to ESG goals, examine the obstacles HR departments face, and offer insights into how HR can play a key part in driving sustainable organizational change.

METHOD

A systematic literature review incorporates numerous high-calibre research findings to strengthen the paper's credibility and persuasiveness. A systematic and structured approach to gathering, screening, assessing, and analyzing existing research literature is the Systematic Literature Review (SLR) method. SLR aims to provide a thorough, impartial, and reliable assessment of a particular research subject and, in contrast to typical literature reviews, emphasizes the transparency, repeatability, and comprehensiveness of methodologies. A systematic literature review is a rigorous and methodical approach to identifying, evaluating, and synthesizing existing research on a specific topic (García-Peñalvo, 2022; Caldwell & Bennett, 2020). It aims to comprehensively summarise current literature, identify knowledge gaps, and inform research needs (García-Peñalvo, 2022; Van Dinter., 2021). The process involves several steps, including formulating a research question, implementing a search strategy, collecting data, assessing quality, and analyzing results (Van Dinter., 2021). To ensure reliability and reproducibility, systematic reviews should adhere to methodological and transparency principles, allowing for future updates as scientific knowledge advances (García-Peñalvo, 2022). SLR comprehensively collects, screens, and analyses existing research literature systematically to provide researchers with a panoramic perspective. A wide range of research results can be covered through SLR to avoid missing important research and ensure a comprehensive and in-depth understanding of the research topic (Paul et al., 2024). Therefore, the Systematic Literature Review (SLR) method was chosen for this study due to its structured approach, ensuring a comprehensive and unbiased synthesis of existing research. SLR research can explore topics that have not been thoroughly researched or understood. For in-depth SLR research, a thorough review of existing literature helps the researcher to identify questions about the research topic.

Search Strategy

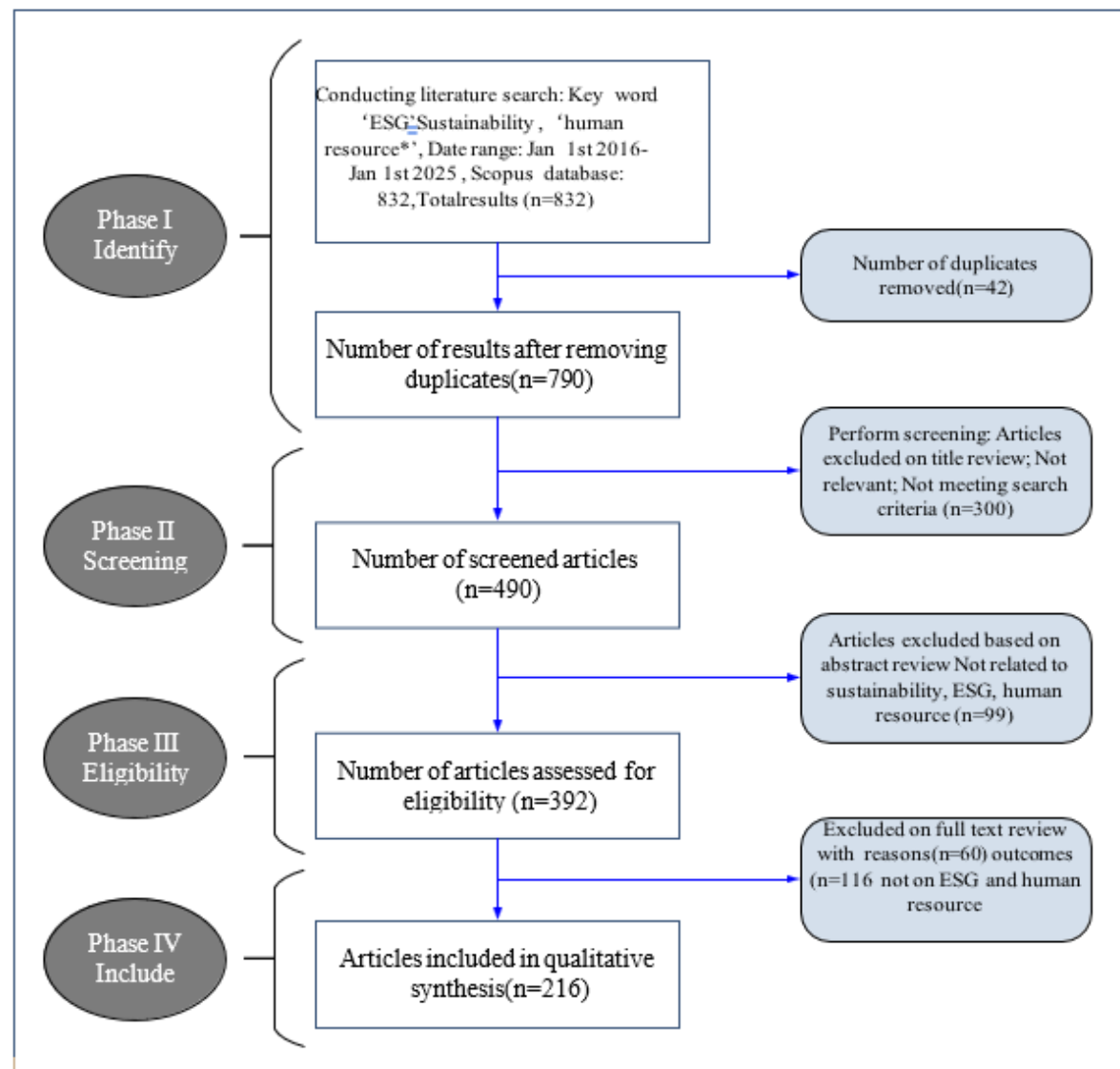
This thorough literature study includes peer-reviewed articles from scholarly journals demonstrating how HR procedures can enhance Environmental, Social, and Governance (ESG) performance. Chong (2024) made well-informed strategic decisions throughout the evaluation that aligned with research issues about HR's contribution to ESG goals. Analyzing articles on HR-driven ESG efforts methodically reduced bias by pointing out and defending the exclusion of sources. The data's qualitative synthesis and analysis results highlight HR's role in long-term business operations. This thorough literature study includes peer-reviewed articles from scholarly journals demonstrating how HR procedures can enhance Environmental, Social, and Governance (ESG) performance. Chong (2024) made well-informed strategic decisions throughout the evaluation that aligned with research issues about HR's contribution to ESG goals. Every concept, finding, and discovery is meticulously documented to preserve transparency and trustworthiness (Khan et al., 2022). On January 1, 2025, the study's last search was conducted using the Scopus database, renowned for its excellent papers from Elsevier and other international publishers. Boolean operators were employed for accurate results, and keywords such as "human resource management," "sustainability," and "ESG" were used to find publications.

Data collection

The Scopus database was used to collect data for this systematic study. First, a total of publications in human resource management and environmental, social, and governance (ESG) from 2016 to 2025 were obtained by entering these terms. According to this viewpoint, research on how HR practices affect ESG performance is

comparatively extensive. This study, however, focuses on how HR may support ESG objectives. As a result, by combining the phrases "human resource management," "ESG," and "sustainability," a search string is created that includes 832 publications that fall within the time frame of January 1, 2016, to January 1, 2025. No articles were found before 2007, 2009, 2011, and 2017, suggesting that HR's integration with ESG practices is still relatively recent but is increasing quickly. In the literature search, of the 832 papers, about 512 were screened based on non-ESG relevance, non-HR focus, and non-sustainability criteria, and the 216 most relevant peer-reviewed papers were finally selected for the final review. This identification was done by reading each article's title, abstract, and conclusion. The final selection included articles written in English and focused on integrating HR practices with ESG goals. After reviewing the relevant articles, a comprehensive content analysis was conducted. Figure 1.1 illustrates the data selection process, including the inclusion and exclusion criteria applied during the review.

Figure 1.1 PRISMA flow diagram for systematic review



LITERATURE REVIEW

Recent literature highlights the critical role of Human Resource Management (HRM) in driving environmental, social, and governance (ESG) initiatives globally. HR practices foster corporate social responsibility and environmental sustainability, particularly in resource-intensive sectors like oil and gas (Goswami et al., 2023; Papalexandris, N., 2022). Integrating ESG practices into organizational strategies is increasingly considered essential for long-term business success and resilience (Jorgji S. et al., 2024). Green Human Resource Management (GHRM) has emerged as a specialized field, focusing on aligning HR practices with environmental management goals (Jorgji S. et al., 2024). Key HR interventions supporting ESG include strategic recruitment, training, leadership development, and fostering an organizational culture aligned with

sustainability objectives (Lazareva, E. I et al., 2022). However, challenges persist in measuring and implementing effective ESG practices, necessitating further research to develop standardized metrics and explore the impact of ESG initiatives on various aspects of organizational performance (Belas, 2024).

Key Findings: HR Role in Advancing ESG

In recent years, integrating Environmental, Social, and Governance (ESG) principles into corporate strategy has gained significant attention. As businesses strive to enhance sustainability and ethical governance, the Human Resource (HR) function has emerged as a key driver in advancing ESG initiatives. HR professionals play a vital role in embedding sustainability into organizational culture, fostering ESG-aligned leadership, and ensuring ethical workforce practices. However, despite its strategic significance, HR faces numerous challenges in effectively implementing ESG principles. This essay explores HR's role in advancing ESG and examines the barriers that hinder its successful implementation. HR departments contribute to ESG initiatives through various mechanisms, including sustainability leadership, talent management, employee well-being, and governance. HR plays a crucial role in embedding sustainability within an organization's culture. HR fosters sustainability leadership by influencing ethical decision-making and ensuring alignment between ESG goals and corporate values. Research suggests that companies with strong HR-led ESG programs often experience improved employee engagement and corporate reputation (Boudreau & Ramstad, 2020). Through leadership development programs and sustainability training, HR enables managers and employees to integrate ESG considerations into daily operations.

One of the most significant contributions of HR to ESG is in talent management. By integrating ESG principles into recruitment, development, and retention strategies, HR ensures that organizations attract employees who align with sustainability values. HR also facilitates ESG training programs, equipping employees with green practices, diversity and inclusion, and ethical governance knowledge. Sustainable Human Resource Management (HRM) focuses on ensuring that employee well-being is central to an organization's ESG strategy. By implementing fair labor practices and employee engagement programs, HR strengthens the social pillar of ESG, fostering a more resilient and motivated workforce. HR is fundamental in strengthening corporate governance by ensuring compliance with labor laws, ethical conduct, and corporate transparency. Governance-focused HR policies help mitigate risks related to workplace discrimination, corruption, and unethical leadership (Guerci & Carollo, 2021). By establishing robust ethical guidelines and whistleblower protection mechanisms, HR enhances accountability and trust within organizations.

Challenges to HR Role in ESG Implementation

Despite its strategic role, HR faces numerous challenges in implementing ESG initiatives effectively. These barriers range from a lack of ESG expertise to organizational resistance and resource constraints. One of the primary challenges HR faces in ESG implementation is the lack of formal training and expertise in sustainability practices. Many HR professionals struggle to integrate ESG into HRM due to limited knowledge of sustainability frameworks and ESG reporting standards (Benn et al., 2018). Without adequate training, HR's ability to drive ESG initiatives remains restricted. Implementing ESG initiatives often requires significant cultural shifts within an organization. However, resistance from employees and leadership can slow down HR-led transformations. Research suggests that traditional corporate structures and deeply ingrained business practices create barriers to ESG adoption (Van der Merwe & Davey, 2024).

HR must, therefore, navigate resistance through effective change management strategies, ensuring that employees and leadership understand the long-term value of ESG. Organizations often prioritize short-term financial performance over long-term sustainability goals. HR professionals must balance business profitability with sustainable workforce practices, ensuring that ESG considerations are integrated without negatively impacting financial objectives. Another significant challenge in ESG implementation is measuring HR's contribution to ESG performance. Unlike financial metrics, ESG-related HR initiatives lack standardized frameworks for assessment. Without precise measurement tools, organizations struggle to quantify the impact of HR policies on sustainability outcomes, making it harder to justify investments in ESG-driven HRM practices. HR departments often operate with limited budgets and resources, which can hinder the implementation of ESG-focused initiatives. Studies indicate that without sufficient executive support, cross-departmental collaboration, and financial backing, HR-led ESG programs remain underdeveloped (Zhao et al.,

2022). To overcome this, HR must advocate for more substantial leadership commitment and seek external partnerships to enhance ESG capabilities. HR is pivotal in advancing ESG by fostering a sustainability culture, developing ESG competencies, ensuring employee well-being, and strengthening corporate governance. However, numerous challenges, including a lack of expertise, resistance to change, short-term business priorities, measurement difficulties, and resource constraints, hinder HR's ability to implement ESG initiatives fully. Organizations must invest in ESG-focused HR training to address these barriers, develop standardized ESG metrics, and foster leadership commitment to sustainability. Future research should explore best practices for integrating HRM with ESG frameworks, ensuring that HR remains a strategic driver of sustainability and ethical governance in modern organizations.

RESULTS

This section presents the results of this systematic literature review. The specific results are analyzed in detail below.

Yearly Distribution of the sample

The trend graph of the number of selected works in recent years is shown in Figure 2. As illustrated in this figure, interest in the role of Human Resources (HR) in Environmental, Social, and Governance (ESG) initiatives has grown significantly in recent years. Figure 2.1 presents the number of articles published in the Scopus database across different years. This study focuses on publications from January 1, 2016, to August 1, 2023. According to the sample data, relevant publications began appearing in 2018, indicating a lack of research between 2005 and 2014. The annual distribution analysis shows a steady publication increase over the study period. Furthermore, the correlation analysis of article content suggests that the number of systematic literature reviews on HR's role in ESG has also been rising each year, reflecting growing academic interest. Notably, 2024 recorded the highest number of articles, highlighting a peak in research activity in this field.

Documents by year

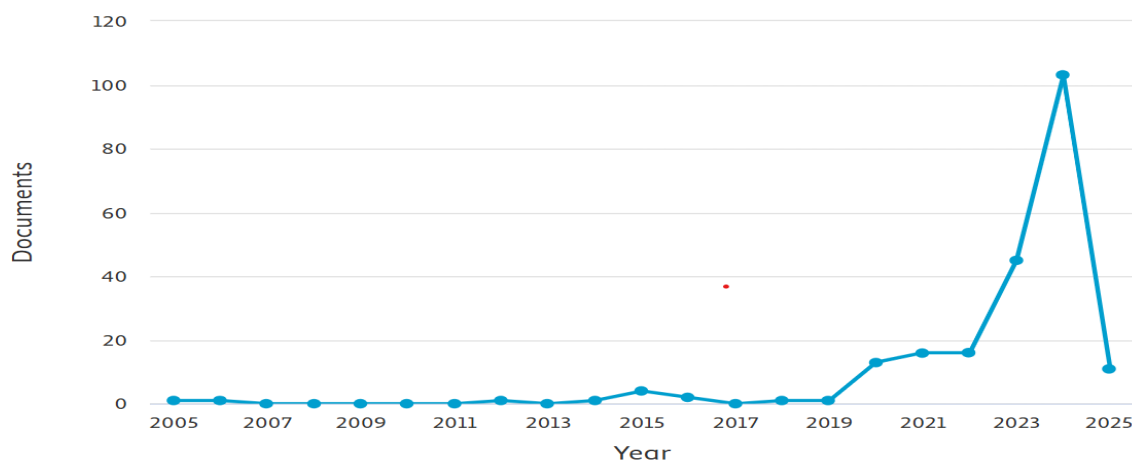


Figure 2.1: Number of Papers per year

The Geographical Distribution

Figure 2.2 illustrates the geographical distribution of research on HR's role in ESG, reflecting a global interest in this critical area. Studies originate from various regions, including Asia, Europe, and North America. Notably, China and the United States have made significant contributions to the literature, while research in Asia particularly in countries like China and India has been gaining prominence. As emerging economies, these nations emphasize ESG-driven business practices, which are influenced by their distinct economic and regulatory landscapes. The global representation of this research area underscores the increasing awareness of HR's pivotal role in driving ESG initiatives across different international contexts. This trend highlights a widespread recognition of the opportunities and challenges associated with integrating HR strategies into ESG frameworks tailored to diverse regional and industrial needs. The geographical distribution of research literature in each country is depicted in Figure 2.2. It should be noted that the data presented only include

countries with at least two published studies, while those with fewer than two were excluded. Among the 158 publications analyzed, the country of origin for the journal was identified in 148 articles. For the remaining 10 journals where the country could not be determined, further investigation revealed that these were non-peer-reviewed publications with relatively lower quality, leading to their exclusion from the analysis.

Documents by country or territory

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

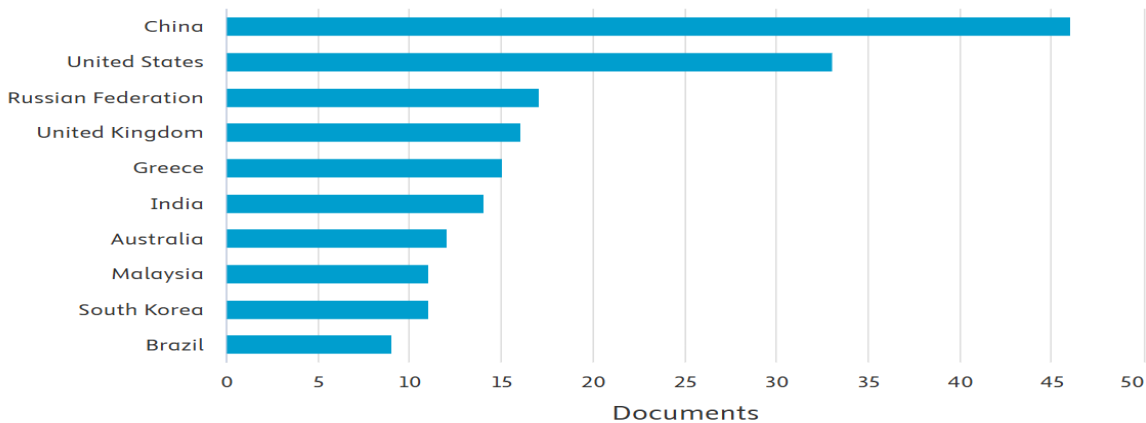


Figure 2.2 Statistical chart of the number of papers published by different countries

Journal Source of Reviewed Articles

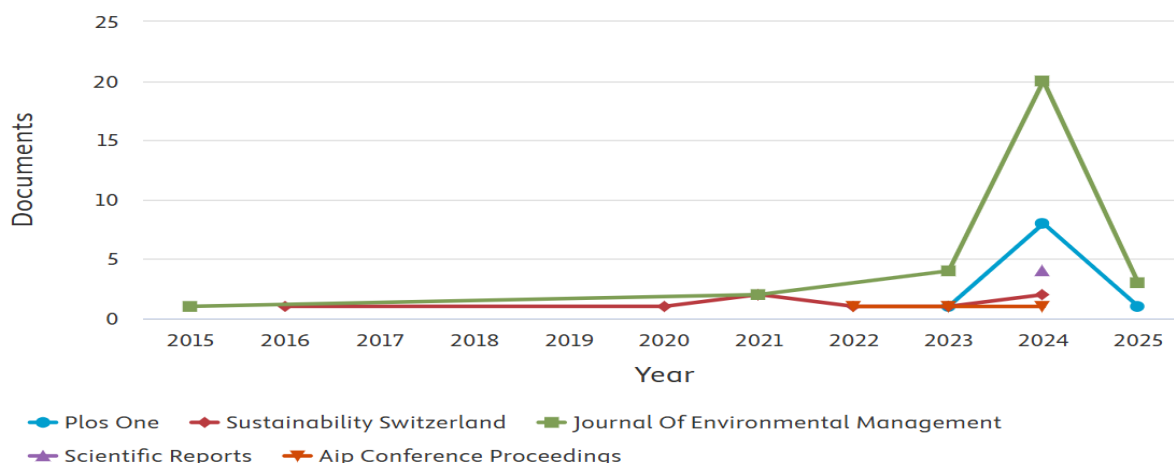
The literature on the role of HR in ESG is categorized based on the methodologies used in the reviewed studies, including conceptual proposals, implementation frameworks, simulation modelling, qualitative interviews, and survey-based statistical methods. Most studies focus on theoretical discussions surrounding HR's strategic role in ESG, often accompanied by conceptual frameworks that propose ideas or implementation strategies. Additionally, some key studies incorporate simulation modelling to explore HR-driven ESG initiatives. However, this area has fewer empirical studies, quantitative analyses, and survey-based statistical research. The research primarily emphasizes validated methodologies, quantitative techniques, and surveys, though most literature remains qualitative. Only a few studies adopt mixed-methods approaches, highlighting a research gap in empirical validation and real-world applications of HR's role in ESG integration. This underscores the need to explore HR-led ESG initiatives further, particularly in simulation-based and embedded strategic models. See Table 3.2 for more details on method-based classification.

Figure 2.3 Distribution of the number of publications published by source

Documents per year by source

Compare the document counts for up to 10 sources.

[Compare sources and view CiteScore, SJR, and SNIP data](#)



Methodologies, Tools, and Approaches of Reviewed Articles

The literature on the role of HR in ESG is categorized into several key themes, including conceptual frameworks, implementation strategies, simulation modelling, qualitative interviews, and survey-based statistical approaches. Many studies propose conceptual frameworks that outline HR's contribution to ESG goals, particularly in fostering sustainable workplace practices. Additionally, significant research integrates simulations to model HR-driven ESG initiatives. However, there is a limited number of empirical studies and quantitative analyses on the direct impact of HR on ESG performance. Most of the literature remains qualitative, emphasizing theoretical discussions and strategic recommendations for HR's role in driving ESG sustainability.

Challenges of Role of HR in ESG

The role of Human Resources (HR) in Environmental, Social, and Governance (ESG) initiatives has evolved significantly, positioning HR as a strategic partner in driving sustainability efforts (Rimanoczy & Pearson, 2010). HR departments are uniquely positioned to support organizational sustainability goals while maintaining a competitive advantage (Rimanoczy & Pearson, 2010). In the oil and gas sector, HR is critical in implementing environmental sustainability initiatives through strategic interventions in recruitment, training, and organizational culture (Ifesinachi et al., 2024). While there is growing awareness of ESG among employees, challenges persist in fully integrating ESG into corporate culture (Sahu et al., 2024). HR tools significantly impact achieving sustainability goals in the context of global digitalization (Arkauti et al., 2023). To effectively manage risks and create long-term value, HR departments must integrate ESG principles into their activities, which is crucial for successfully implementing sustainable development strategies (Arkauti et al., 2023). Integrating Environmental, Social, and Governance (ESG) principles into organizational strategies has become increasingly important in today's business environment. Human Resource (HR) departments are critical in driving ESG initiatives by fostering a culture of sustainability, ensuring diversity and inclusion, and maintaining ethical governance practices. However, the role of HR in ESG adoption is fraught with challenges that hinder the effective implementation of these principles. One significant challenge is the lack of expertise and training among HR professionals in ESG practices. ESG initiatives often require specialized knowledge in sustainability, regulatory frameworks, and social responsibility, which may not be traditionally covered in HR training. As a result, HR departments may struggle to develop and implement effective ESG strategies, leading to superficial or ineffective initiatives. To overcome this challenge, organizations must invest in training and development programs that equip HR professionals with the necessary skills and knowledge in ESG practices.

Another challenge is the resistance to change within organizations. Integrating ESG principles often requires significant organizational culture, policies, and practice changes. Employees and management may resist these changes due to a lack of awareness, perceived threats to job security, or the additional workload associated with ESG initiatives. HR departments must, therefore, focus on change management strategies that promote awareness, engagement, and buy-in from all levels of the organization. This includes effective communication, training programs, and incentives encouraging employees to embrace ESG practices. Additionally, measuring and tracking the impact of ESG initiatives presents a challenge for HR departments. Unlike traditional HR metrics, such as employee turnover and performance, ESG metrics can be complex and challenging to quantify. HR professionals must develop robust systems for measuring and reporting ESG performance, ensuring the organization's efforts are transparent and accountable. This requires collaboration with other departments, investment in technology, and developing clear key performance indicators (KPIs) for ESG goals. The role of Human Resource Management (HRM) in driving Environmental, Social, and Governance (ESG) initiatives is vital for fostering sustainable business practices. However, the path to integrating ESG goals within HR practices is filled with challenges that require strategic solutions and proactive efforts.

One of the primary challenges is aligning ESG goals with existing HR strategies. Many organizations have well-established HR practices focused on talent acquisition, employee engagement, and performance management. Integrating ESG objectives into these practices requires a significant shift in priorities and resources. HR departments must ensure that ESG considerations are embedded in every aspect of the employee lifecycle, from recruitment and onboarding to training, performance appraisal, and rewards (Wang, 2024). This alignment requires a clear understanding of ESG goals and a commitment from top management to integrate these goals into the organization's overall strategy. Another significant challenge is ensuring employee

engagement and participation in ESG initiatives. Employees play a critical role in the success of ESG programs, but achieving widespread participation can be difficult. HR departments must create a culture of sustainability where employees are motivated to contribute to ESG goals. This involves designing relevant and meaningful programs for employees, providing opportunities for participation, and recognizing and rewarding contributions to ESG initiatives. HR departments also face balancing short-term business objectives with long-term ESG goals. Organizations often prioritize financial performance and operational efficiency, which can conflict with the long-term investments required for ESG initiatives. HR professionals must advocate for the importance of ESG in achieving sustainable business success and work with leadership to balance short-term pressures with long-term sustainability goals.

Furthermore, regulatory compliance adds another layer of complexity to the HR-ESG landscape. ESG regulations constantly evolve, and organizations must comply with local and international standards. HR departments must ensure that policies and practices related to labor rights, diversity, environmental impact, and ethical governance align with regulatory requirements. This requires continuous monitoring, policy updates, and employee training (Jorgji, S., 2024). In conclusion, while integrating ESG goals into HR practices presents several challenges, it also allows HR to drive meaningful change and contribute to sustainable business practices. By aligning HR strategies with ESG objectives, engaging employees, balancing business priorities, and ensuring regulatory compliance, HR departments can navigate these challenges and lead the way towards a sustainable future.

CONCLUSION

The role of Human Resources (HR) in driving Environmental, Social, and Governance (ESG) initiatives has become increasingly critical in fostering sustainable business practices. HR departments can influence organizational sustainability by embedding ESG principles across various facets of the employee lifecycle, from recruitment and onboarding to training, performance management, and rewards. However, the journey to effectively integrate ESG into HR practices is fraught with challenges that require strategic solutions and proactive efforts. While HR is critical in advancing ESG initiatives, numerous challenges hinder their effective integration, including expertise gaps, resistance to change, and difficulties aligning ESG with existing HR strategies. Thus, it is recommended for future research to focus on developing comprehensive ESG-HR frameworks that provide clear guidelines for integrating sustainability, diversity, and ethical governance into HR practices. These frameworks could include practical tools for measuring ESG impact, addressing resistance, and aligning HR strategies with long-term sustainability goals. This effort would benefit organizations with more robust and actionable strategies for embedding ESG principles into HR practices. Furthermore, further studies should also focus on industry-specific studies to identify the unique challenges and opportunities for HR in driving ESG initiatives across various industries or sectors. For instance, with its social and environmental complexities, the oil and gas industry may require tailored HR interventions in recruitment, training, and employee engagement. Thus, future researchers could explore how HR practices can be adapted to address sector-specific sustainability challenges while aligning with global ESG standards. Examining the impact of regulatory frameworks on HR's role in ESG of different sectors or industries will offer insights into compliance strategies and continuous adaptation to evolving standards. In short, these industry-specific studies will help create more actionable, context-sensitive frameworks for embedding ESG principles in HR practices.

Finally, future researchers are suggested to investigate how technologies like artificial intelligence, data analytics, and digital learning platforms can support HR departments in tracking ESG metrics, promoting organizational buy-in, and improving decision-making. Studies could explore the use of digital tools in streamlining communication and training efforts, ensuring that all employees are equipped to engage with ESG objectives. Developing platforms that allow real-time tracking of ESG performance and providing analytics for informed decision-making could be transformative in overcoming measurement challenges. Moreover, future studies could examine the impact of these digital solutions on employee motivation, participation, and overall organizational sustainability. By incorporating digital tools into ESG efforts, HR departments could more effectively drive alignment, monitor progress, and accelerate the integration of ESG principles across the organization.

Addressing these gaps in future research can contribute to more robust strategies for embedding ESG principles into HR practices and help organizations navigate their sustainability journeys more effectively.

ACKNOWLEDGEMENT

This research was supported by Universiti Teknologi Malaysia under the Potential Academic Staff Vote No : Q.J130000.2753.03K98.

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