SUSTAINABLE HR RESEARCH EVOLUTION IN 20 YEARS FROM 2005 UNTIL 2025

Oleh

Ade Suhara¹, Amallia², Decut Della³, Suyana Hadi⁴, Nanny Mayasari⁵

1,2,3,4 Prodi Teknik Industri, Fakultas Teknik, Universitas Buana Perjuangan Karawang

⁵Universitas Nusa Cendana

Email: ¹ade.suhara@ubpkarawang.ac.id, ²amallia@ubpkarawang.ac.id

Abstrak

This study conducts a comprehensive bibliometric analysis to examine the evolution of sustainable human resource management (HRM) research over a 20-year period from 2005 to 2025. Utilizing data extracted from the Scopus database and analyzed through VOSviewer, the research maps the intellectual structure, thematic concentrations, and global collaboration networks within the field. The findings reveal a steadily growing body of literature, with core themes centered on corporate social responsibility, green HRM, strategic alignment, and employee well-being. Co-authorship and country collaboration analyses indicate a dense network of influential scholars and cross-regional partnerships, led by the United Kingdom, United States, India, and China. Keyword co-occurrence and temporal mapping highlight an evolving research agenda, with emerging topics such as artificial intelligence, sustainable development goals, and mental health gaining traction in recent years. This study contributes to the field by offering a synthesized overview of key research trends, identifying conceptual gaps, and suggesting future directions for scholarly inquiry into sustainable HRM within the broader sustainability discourse.

Keywords: Sustainable human resource management; Bibliometric analysis; Green HRM; Corporate social responsibility

PENDAHULUAN

Over the past two decades, the concept of sustainability has evolved from being a peripheral concern to a central strategic priority for organizations across the globe. Initially focused on environmental and corporate social responsibility sustainability issues, increasingly permeated other dimensions of organizational management, including Human Resource Management (HRM). The emergence of Sustainable Human Resource Management (Sustainable HRM) marks a critical paradigm shift in how organizations conceptualize and implement HR practices to balance economic performance with environmental stewardship and social equity [1], [2]. As the global economy grapples with complex sustainability challenges such as climate change, inequality, and demographic shifts HR scholars and practitioners alike have responded

embedding sustainability principles into workforce planning, employee engagement, and corporate governance.

The 2005-2025 period has been particularly transformative in reshaping the intellectual contours of sustainable HR research. Early research in this area was largely normative, exploring how HR could align with sustainability rhetoric. However, subsequent studies have increasingly focused on empirical frameworks and integrated models, highlighting the strategic role HR plays in achieving sustainability objectives Sustainable HRM has thus grown beyond green HRM or corporate philanthropy to encompass themes such as ethical leadership, employee well-being, long-term workforce development, and diversity management [4].

Technological advancement globalization have also catalyzed changes in HR functions and their intersection with sustainability. The digital transformation of HR processes through artificial intelligence, people analytics, and automation has not only improved efficiency but also raised new questions about the sustainability of labor practices and human dignity at work [5]. Similarly, globalization has led to more diverse, cross-cultural workforces, demanding HR policies that support inclusion, psychological safety, and equitable growth across regions [6]. These developments have further intensified the need for sustainable HR frameworks that are both context-sensitive and globally relevant.

Moreover, global crises such as the COVID-19 pandemic have underscored the urgency of sustainable HR practices. The pandemic revealed deep vulnerabilities in traditional HR systems, especially regarding employee mental health, job security, remote working capabilities, and organizational resilience. As organizations navigated disruptions, sustainable strategies HR emphasizing adaptability, empathy, stakeholder engagement emerged as key enablers of continuity and trust [7]. This shift is not temporary; rather, it has accelerated longterm changes in the HRM landscape and underscored the need for resilient, peoplecentered approaches.

Concurrently, the academic community has responded with a proliferation of research in the sustainable HR field. Using frameworks such as the Triple Bottom Line [8], Stakeholder Theory [9], and Institutional Theory, scholars have sought to define, categorize, and measure the impact of sustainable HRM practices. Bibliometric analyses over the years show a steady rise in scholarly attention, publication volume, and interdisciplinary collaboration. Nevertheless, the conceptual diversity and methodological fragmentation in the literature call for a comprehensive review to understand

the evolution, thematic concentrations, and intellectual structure of sustainable HR research from 2005 to 2025.

Despite the growing academic and practical relevance of sustainable HRM, there remains a lack of consolidated understanding regarding how this research field has evolved over the past two decades. Existing studies often focus on narrow subtopics such as green HRM or employee well-being without integrating these themes into a holistic timeline of scholarly development. Furthermore, there is limited bibliometric insight into the dominant contributors, institutions, geographical trends, and influential publications that have shaped the field's trajectory. This gap makes it difficult for researchers and practitioners to identify knowledge clusters. track theoretical advancements, or recognize future research avenues. Without a structured overview of the past 20 years, the field risks theoretical stagnation, duplication of efforts, and missed opportunities for impactful innovation. This study aims to conduct a comprehensive bibliometric analysis to trace the evolution of sustainable HR research from 2005 to 2025

METODE PENELITIAN

This study adopts a bibliometric analysis approach to examine the evolution of sustainable human resource (HR) research over a two-decade period from 2005 to 2025. Bibliometric methods are widely recognized for their utility in quantitatively assessing the intellectual structure, development trends, and thematic concentrations of a given research field. The methodology is particularly the dynamic appropriate for capturing progression of scholarly literature sustainable HRM, given the growing volume and diversity of research in this area.

Data Source and Collection

.....

The data for this bibliometric study were retrieved exclusively from the Scopus

database, one of the largest and most reputable repositories of peer-reviewed literature across disciplines. Scopus was chosen for its broad coverage, standardized metadata, compatibility with bibliometric software tools. The search was conducted using a combination of keywords and Boolean operators designed to capture a comprehensive set of publications relevant to the domain of sustainable HR. The query string included terms such as "sustainable human resource management", "sustainable HRM", "green HRM", "employee well-being", "HR sustainability", and related variants. The search was limited to articles published between January 1, 2005, and December 31, 2025. For publications indexed beyond 2024, early-access or online-first articles already archived by Scopus were included. Only journal articles, reviews, and conference papers written in English were considered to ensure quality and consistency. Duplicates, irrelevant results, and documents lacking complete bibliometric data were excluded through manual screening. The final dataset comprised a curated list of articles including information titles, abstracts, keywords, authors, publication sources, and citation counts.

Data Analysis Techniques

The bibliometric analysis was carried out using VOSviewer, a specialized tool for constructing and visualizing bibliometric networks. VOSviewer enables the mapping of relationships scientific various among publications, such as co-authorship, co-citation, keyword co-occurrence, and institutional collaboration. The software uses a clustering algorithm to detect thematic groupings within the dataset, thereby highlighting dominant research streams and emerging trends. The analysis was conducted in several stages. First, a descriptive statistical analysis was performed to identify annual publication trends, top contributing authors, most cited documents, and leading journals in the field of sustainable

HR. This provided a foundational overview of the growth trajectory and academic influence of the domain. Next, keyword co-occurrence analysis was applied to determine the most frequent and interconnected terms, allowing the identification of core topics and conceptual evolution across different time periods. Third, co-authorship analysis was used to map collaboration patterns among researchers, institutions, and countries, offering insights into the geographic and institutional spread of sustainable HR research. To further interpret the findings, temporal overlay visualization was employed, which enabled the tracking of how certain topics gained or declined in popularity over time. By analyzing the colorcoded timeline maps in VOSviewer, the study could identify emerging areas of interest and shifts in research focus. In addition, citation analysis helped highlight the most influential publications and foundational theories in the field.

HASIL DAN PEMBAHASAN

Co-Authorship Network

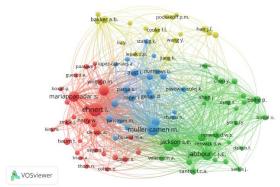


Figure 1. Network Visualization Source: Data Analysis

The visualization illustrates a coauthorship network among key researchers in the field of sustainable human resource management from 2005 to 2025. The map is divided into four main clusters, each represented by a distinct color, signifying collaborative communities within the literature.

The red cluster, centered around influential scholars such as *Ehnert I.* and *Mariappanadar* S., reflects foundational contributors in sustainable HRM and ethical labor practices. The blue cluster, including Muller-Camen M., Aust I., and Matthews B., represents a core group of researchers focused on strategic HRM integration with sustainability principles. The green cluster, with leading figures like Jabbour C.J.C., Jackson S.E., and Paille P., emphasizes environmental sustainability, green HRM, and operational practices. Meanwhile, the yellow cluster appears more peripheral, containing Podsakoff P.M. and Hair J.F., suggesting interdisciplinary linkages to organizational behavior and methodological foundations. The size of the nodes indicates publication volume or co-authorship strength, while the density of (edges) shows the intensity lines collaboration.

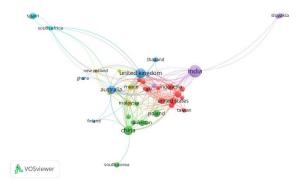


Figure 2. Country Visualization Source: Data Analysis

The map displays a co-authorship network by country in the field of sustainable human resource research from 2005 to 2025. collaboration highlighting international patterns. The United Kingdom emerges as the central hub of scholarly collaboration, maintaining strong co-authorship ties with countries across multiple continents, including the United States, Australia, India, China, and Malaysia. The United States and India also appear prominently, forming dense linkages with each other and with Southeast Asian and European countries such as Indonesia, France, and Italy. The green cluster, centered around

China, indicates growing regional collaboration in Asia, particularly with Pakistan, South Korea, and Malaysia. The purple cluster containing India and Slovakia suggests a more isolated collaboration subgroup. Meanwhile, Spain, South Africa, and New Zealand form part of a loosely connected blue cluster, indicating relatively limited but regionally significant contributions.

Keyword Co-Occurrence Network

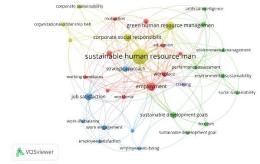


Figure 3. Network Visualization Source: Data Analysis

The keyword co-occurrence map above reveals the thematic landscape of sustainable human resource management (HRM) research from 2005 to 2025, segmented into several interconnected clusters. At the center of the visualization is the dominant term "sustainable human resource management", indicating its central role and high frequency of use across publications. Closely connected to this core concept are terms such as "employment", "corporate social responsibility", and "green human resource management", which reflect the broader discursive framework linking HR practices with organizational sustainability agendas. The thickness of the lines (link strength) suggests strong thematic overlaps among these areas, showing that sustainable HRM is often discussed in tandem with corporate ethics, environmental responsibility, and workforce planning.

The red cluster reflects topics that converge on strategic and institutional dimensions of sustainable HRM. Keywords like "corporate social responsibility",

"education", "motivation", and "strategic approach" point to a focus on how HR policies support broader corporate missions, ethical behavior, and long-term employee engagement. These terms indicate a concern with aligning HR strategies not only with internal performance goals but also with external societal and environmental expectations. This suggests that much of the literature emphasizes the integrative role HR plays in promoting responsible corporate behavior. In contrast, the blue cluster at the bottom left focuses on employee-centric outcomes. Keywords such as "job satisfaction", "work engagement", "employee well-being", "work-life balance", and "employee satisfaction" represent research emphasizing the psychological and experiential outcomes of sustainable HR practices. This cluster points to a growing awareness that sustainability is not only about external impact but also about internal human outcomes. Studies in this domain likely evaluate how HR policies can foster a healthier, more engaged, and more resilient workforce a critical dimension in building organizational sustainability from within.

The green cluster to the right is oriented and developmental around environmental themes, connecting such terms sustainability", "social "environmental sustainability", "environmental management", and "sustainable development goals (SDGs)". This group highlights research at intersection of HRM and global sustainability frameworks, including the United Nations SDGs. The appearance of keywords like "tourism" and "artificial intelligence" also signals interdisciplinary integration, suggesting applications of sustainable HRM across sectors technologies. The integration environmental terms with HR indicates that green practices, such as eco-friendly behavior and environmental training, are integral themes in the evolution of sustainable HR scholarship. The yellow and purple nodes represent peripheral but emerging terms that may reflect future directions. Terms such as "organizational citizenship behavior", "performance assessment", and "training" suggest operational and behavioral mechanisms that enable the execution of sustainable HRM strategies. The presence of "artificial intelligence" as a connected term signals a shift toward incorporating technological innovations into sustainable HRM discussions. organizations digitize and automate more functions, scholars are beginning to explore how technology can either hinder or enhance sustainability in human-centered processes.

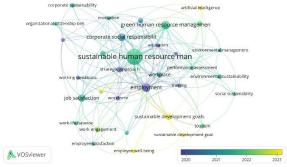


Figure 4. Overlay Visualization

Source: Data Analysis

This overlay visualization presents the temporal evolution of keywords in sustainable human resource management (HRM) research from 2020 to 2023. The colors of the nodes correspond to the average publication year in which a keyword appeared, as indicated by the color gradient from purple (earlier years) to yellow (more recent years). The central theme, "sustainable human resource management", remains consistently present over time, indicating its foundational role. Terms such as "corporate social responsibility", "green management", human resource "employment" are clustered in the green to blue spectrum, suggesting their stable presence in the literature across multiple years.

More recent trends highlighted in yellow and light green point to an emerging research focus. Keywords like "artificial intelligence", "employee well-being",

"sustainable development goals", and "workforce" are located on the outer edges and appear in yellow, signaling increased scholarly attention from 2022 to 2023. This suggests a growing interest in integrating technological innovation and global development agendas into sustainable HR practices. The inclusion of "tourism" also points to the application of sustainability principles in specific industry contexts, reflecting the field's expanding interdisciplinary relevance.

In contrast, keywords colored in purple and dark blue, such as "working conditions", satisfaction", and "organizational citizenship behavior", represent earlier focal points that were more prominent in publications around 2020 and before. These terms suggest that earlier research emphasized traditional HR outcomes and behavioral constructs. The temporal overlay thus reflects a shifting thematic focus, where early studies emphasized internal workforce metrics, while recent works are increasingly addressing broader systemic challenges such as technological transformation, well-being, and alignment with the UN Sustainable Development Goals.

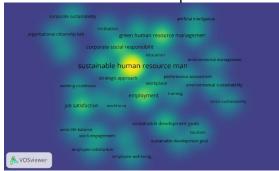


Figure 4. Density Visualziation

Source: Data Analysis

This heatmap illustrates the density of keyword occurrences in the field of sustainable human resource management (HRM). The most intensely highlighted term is "sustainable human resource management", located at the center in bright yellow, indicating it is the most frequently used and co-occurring keyword in the dataset. Surrounding this core concept are related terms such as "corporate social

"green human responsibility", management", "employment", and "strategic approach", all shown in shades of green and light yellow, which signifies their strong relevance and frequent appearance in the literature. These terms form the thematic backbone of sustainable HRM research, reflecting its integration with business ethics, organizational strategy, and workforce development. In contrast, keywords on the periphery such as "artificial intelligence", "social sustainability", "tourism", "employee well-being" are shown in cooler shades like blue and light green, indicating emerging or less frequently studied topics. Although less prominent, these terms suggest expanding frontiers in the field, particularly sustainable HR intersects technology, industry-specific applications, and human-centric outcomes.

Citation Analysis

Table 1. Top Cited Literature

Citations	Author	Title
566	[10]	Beyond strategic human resource management: Is sustainable human resource management the next approach?
450	[11]	Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green human resource management
405	[12]	A systematic review on green human resource management Implications for social sustainability
353	[3]	On the importance of sustainable human resource management for the adoption of sustainable development goals
328	[13]	Systematic literature review on sustainable human resource management
299	[14]	Work flexibility, job satisfaction, and job performance among romanian employees-Implications for sustainable human resource management
280	[15]	Envisioning the invisible: Understanding the synergy between green human resource management and green supply chain management in manufacturing firms in Iran in light of the moderating effect of employees' resistance to change
198	[16]	Innovation, sustainable HRM and customer satisfaction
185	[1]	Sustainable human resource management: A conceptual and exploratory analysis from a paradox perspective
174	[17]	The role of sustainable human resource practices in influencing employee behavior for corporate sustainability

Source: Scopus, 2025

Discussion

Intellectual Structure and Core Authors

The co-authorship map reveals a strongly interconnected scholarly network, structured into at least four primary clusters. Prominent authors such as *I. Ehnert*, *S. Mariappanadar*, *M. Muller-Camen*, *C.J.C. Jabbour*, and *P. Paille* occupy central roles, suggesting their foundational influence in shaping the conceptual underpinnings of

.....

sustainable HRM. Ehnert and Mariappanadar, for instance, have contributed substantially to the ethical and paradoxical dimensions of sustainable HRM, often emphasizing long-term well-being over emplovee efficiency. Meanwhile, Jabbour and Paille have advanced research in green HRM, exploring the operational integration of environmental concerns into HR practices. The density and strength of the co-authorship connections indicate that the field benefits from collaborative knowledge production, particularly across Europe, Asia, and the Americas.

Interestingly, while these core scholars are frequently cited and well-connected, there is also evidence of emerging contributors entering the field from different disciplinary backgrounds, including environmental studies, technology, and organizational behavior. This diversification reflects a shift in sustainable HRM from a niche area to a broader interdisciplinary research domain that draws interest from adjacent fields. The relatively dense and interconnected nature of the scholarly network also signals a certain degree of theoretical convergence researchers are not only building on one another's work but are also co-authoring across institutional and geographic boundaries.

Global Distribution and Collaboration Patterns The country collaboration highlights the global character of sustainable HRM research. The United Kingdom, United States, India, Australia, and China emerge as the most active contributors, forming the central hubs of international research collaboration. The United Kingdom. particular, acts as a bridge between research communities across Asia, Europe, and North America, reflecting its historical leadership in management studies and sustainability research. Meanwhile, the strong presence of India and Indonesia suggests a growing interest in sustainable HRM in emerging economies likely driven by the twin pressures of globalization and environmental degradation. Notably, the research network includes contributions from developing countries such as Pakistan, Ghana, and South Africa, indicating increasing inclusivity and relevance of the topic in diverse contexts. These regional dynamics underscore that sustainable HRM is not a one-size-fits-all construct; rather, it requires sensitivity to cultural, regulatory, and economic variations across nations. The implications for future research include a need for more context-specific studies that examine how sustainable HRM principles are interpreted and implemented in different institutional environments.

Thematic Clusters and Research Focus

The keyword co-occurrence reveals several distinct thematic clusters. At the core of the network lies the central theme of sustainable human resource management, with closely linked corporate social responsibility (CSR), green HRM, employment, and strategic HR approaches. These findings suggest that the foundational logic of sustainable HRM is grounded in aligning workforce practices with broader organizational and societal goals. The strong co-occurrence between CSR and sustainable HRM illustrates that these two domains are conceptually and practically intertwined, with HR often acting as the mechanism through CSR values are operationalized which internally. The blue cluster focuses on employee-centric outcomes, including job satisfaction, employee well-being, work-life balance, and employee engagement. This reflects a consistent stream of research emphasizing the psychological and behavioral effects of sustainable HR policies. The prevalence of these terms suggests that sustainable HRM is increasingly being evaluated through the lens of human outcomes, rather than solely through organizational performance metrics. Such a perspective is aligned with the long-term orientation of sustainability, which values employee

flourishing as both an end and a means to organizational resilience. In parallel, the green cluster points to environmental and policy-level concerns, with keywords such as environmental sustainability, sustainable development goals, social sustainability, and environmental management. These terms reflect the expansion of sustainable HRM into global policy frameworks, particularly the integration of HR functions with the United Nations' Sustainable Development Goals (SDGs). The inclusion of artificial intelligence and tourism in this cluster also signals the emergence of sector-specific and technology-driven research, illustrating the field's evolving scope.

Temporal Evolution and Emerging Trends

The temporal overlay map reveals clear trends in the evolution of keyword usage. Earlier research (circa 2020 and before) focused on terms such as job satisfaction, working conditions, and organizational citizenship behavior, indicating an early preoccupation with internal organizational dynamics and employee psychology. In contrast, more recent (2022-2023),terms such as artificial intelligence, employee well-being, sustainable development goals, point to an outward-looking and technologically integrative trajectory. This shift reflects the responsiveness of sustainable HRM research to external changes, including the digital transformation of workplaces and the growing influence of global sustainability policies. The emergence of artificial intelligence suggests an important frontier for future research. Scholars are beginning to explore how AI and automation affect sustainable employment practices—raising both opportunities (e.g., bias reduction) and ethical efficiency, dilemmas (e.g., job displacement, surveillance). Similarly, the rise of employee well-being as a recent keyword highlights how the COVID-19 pandemic may have acted as a catalyst for deeper inquiry into mental health, remote work, and organizational support systems. These newer themes indicate that sustainable HRM is

evolving from a strategic concern into a moral and existential one: how to sustain not only organizations, but also the dignity and wellness of human capital in an increasingly volatile world.

Research Gaps and Future Directions

While the field has matured significantly, several gaps remain. First, although sustainable HRM research expanding globally, there is still a dominance of literature from high-income and Englishspeaking countries. More empirical studies from underrepresented regions—such as Sub-Saharan Africa, Central Asia, and Latin America—would enrich the discourse and offer new perspectives on sustainability challenges. Second, the conceptual boundaries sustainable HRM are still somewhat fluid. As the field integrates themes like AI, SDGs, and psychological well-being, there is a pressing need for robust theoretical models that can synthesize these elements into cohesive frameworks. Moreover, while co-authorship networks indicate healthy collaboration, there remains a fragmentation in methodological approaches. Most studies are either conceptual or rely on case studies and surveys. Future research could benefit from longitudinal designs, mixed methods, and experimental approaches to more rigorously evaluate the long-term impacts of sustainable HR practices. Finally, the role of HR in crisis management, climate adaptation, and inclusive digital transformation remains underexplored—topics that are likely to gain prominence in the post-2025 research landscape.

PENUTUP Kesimpulan

This bibliometric study reveals that sustainable human resource management (HRM) has evolved into a dynamic and interdisciplinary field over the past two decades, marked by strong intellectual foundations, increasing global collaboration, and expanding thematic diversity. The analysis highlights central

themes such as corporate social responsibility, green HRM, and employee well-being, while also identifying emerging trends involving artificial intelligence, sustainable development goals, and sector-specific applications. The growing involvement of scholars institutions from diverse regions underscores the global relevance of sustainable HRM, although more inclusion from underrepresented regions remains necessary. As the field continues to mature, future research should prioritize integrated theoretical models, rigorous methodological designs, and contextspecific studies to address the complex challenges of aligning workforce strategies with long-term sustainability goals in an era of technological transformation and environmental uncertainty.

DAFTAR PUSTAKA

- [1] I. Ehnert and I. Ehnert, "Sustainable human resource management," *Physica–Verlag.–2009*, 2009.
- [2] K. Piwowar-Sulej, "Core functions of Sustainable Human Resource Management. A hybrid literature review with the use of H-Classics methodology," *Sustain. Dev.*, vol. 29, no. 4, pp. 671–693, 2021.
- [3] N. Chams and J. García-Blandón, "On the importance of sustainable human resource management for the adoption of sustainable development goals," *Resour. Conserv. Recycl.*, vol. 141, pp. 109–122, 2019.
- [4] A. Anlesinya and P. Susomrith, "Sustainable human resource management: a systematic review of a developing field," *J. Glob. Responsib.*, vol. 11, no. 3, pp. 295–324, 2020.
- [5] I. Ehnert and W. Harry, "Recent developments and future prospects on sustainable human resource management: Introduction to the special issue," *Manag. Rev.*, pp. 221–238, 2012.

- [6] S. Mariappanadar, "Sustainable human resource strategy: The sustainable and unsustainable dilemmas of retrenchment," *Int. J. Soc. Econ.*, vol. 30, no. 8, pp. 906–923, 2003.
- [7] H. H. Opatha, Sustainable human resource management. Lap Lambert Academic Publishing Beau Bassin, Mauritius, 2019.
- [8] J. Elkington, "The triple bottom line," *Environ. Manag. Readings cases*, vol. 2, pp. 49–66, 1997.
- [9] A. Bandura, Self-efficacy: The exercise of control, vol. 604. Freeman, 1997.
- [10] R. Kramar, "Beyond strategic human resource management: is sustainable human resource management the next approach?," *Int. J. Hum. Resour. Manag.*, vol. 25, no. 8, pp. 1069–1089, 2014.
- [11] J. Y. Yong, M. Yusliza, T. Ramayah, C. J. Chiappetta Jabbour, S. Sehnem, and V. Mani, "Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green human resource management," *Bus. Strateg. Environ.*, vol. 29, no. 1, pp. 212–228, 2020.
- [12] V. N. Amrutha and S. N. Geetha, "A systematic review on green human resource management: Implications for social sustainability," *J. Clean. Prod.*, vol. 247, p. 119131, 2020.
- [13] J. Macke and D. Genari, "Systematic literature review on sustainable human resource management," *J. Clean. Prod.*, vol. 208, pp. 806–815, 2019.
- [14] A. A. Davidescu, S.-A. Apostu, A. Paul, and I. Casuneanu, "Work flexibility, job satisfaction, and job performance among Romanian employees—Implications for sustainable human resource management," *Sustainability*, vol. 12, no. 15, p. 6086, 2020.
- [15] M. Nejati, S. Rabiei, and C. J. C. Jabbour, "Envisioning the invisible: Understanding the synergy between

- green human resource management and green supply chain management in manufacturing firms in Iran in light of the moderating effect of employees' resistance to change," *J. Clean. Prod.*, vol. 168, pp. 163–172, 2017.
- [16] W. Wikhamn, "Innovation, sustainable HRM and customer satisfaction," *Int. J. Hosp. Manag.*, vol. 76, pp. 102–110, 2019.
- [17] C. Pellegrini, F. Rizzi, and M. Frey, "The role of sustainable human resource practices in influencing employee behavior for corporate sustainability," *Bus. Strateg. Environ.*, vol. 27, no. 8, pp. 1221–1232, 2018.