

Systematic literature review on sustainable human resource management

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<i>Article history:</i> <i>Received: July 2025</i> <i>Revised: Aug 2025</i> <i>Accepted: Sep 2025</i> <i>Available online: Oct 2025</i>	<b>Abstract</b> This study presents a systematic literature review of Sustainable Human Resource Management (SHRM), focusing on 42 peer-reviewed quantitative studies published between 2015 and 2025. The objective is to identify key constructs, empirical outcomes, theoretical frameworks, and contextual variables that define and influence SHRM. The review reveals that SHRM has evolved into a multidimensional approach integrating environmental, social, and ethical considerations into core HR functions. Central constructs such as employee retention, job satisfaction, well-being, and pro-environmental behavior emerge as primary outcomes linked to green and sustainable HR practices. Theoretical underpinnings are dominated by frameworks such as the Resource-Based View, Social Exchange Theory, and the Ability-Motivation-Opportunity model, although a need for theoretical integration is evident. Contextual factors, such as organizational size, leadership style, and digital infrastructure, are found to moderate the effectiveness of SHRM initiatives. The review also identifies significant research gaps, including limited longitudinal studies, underrepresentation of Global South contexts, and insufficient exploration of digital HRM tools. Overall, the findings highlight SHRM's growing relevance as a strategic enabler of organizational sustainability, offering a foundation for future research and practice in sustainable workforce management.
<b>Keywords:</b> Sustainable Human Resource Management (SHRM), Green HRM, Employee Retention, Pro-Environmental Behavior, Organizational Sustainability, HRM Practices, Strategic HRM, Systematic Literature Review.	

1. Introduction

Sustainability has become a defining imperative in both public and private sector organizations over the past decade, propelled by increasing awareness of environmental degradation, social inequality, and economic volatility. As companies pursue environmental, social, and governance (ESG) goals, the strategic role of Human Resource Management (HRM) in enabling and institutionalizing sustainability has garnered growing attention. Human resources, traditionally seen as administrative or support functions, are now central to the transformation toward sustainable organizations (Agrawal, Beriwal, & Daga, 2024; Vanka et al., 2020). This shift reflects the growing recognition that employees are not just resources to be managed but strategic partners in achieving long-term sustainability outcomes. In this context, the concepts of Sustainable Human Resource Management (SHRM) and Green Human Resource Management (GHRM) have emerged as influential frameworks. SHRM integrates sustainability principles, economic efficiency, social justice, and environmental responsibility, into the entire human resource lifecycle, from recruitment and training to performance appraisal and employee engagement (Stankevičiūtė & Savanevičienė, 2018; Anlesinya & Susomrith, 2020). It emphasizes long-term thinking, stakeholder engagement, and employee well-being, aiming to balance organizational goals with societal and ecological considerations (Qamar, Afshan, & Rana, 2023). As a strategic orientation, SHRM fosters organizational resilience by cultivating inclusive, ethical, and future-oriented work environments (Mazur

& Walczyna, 2020).

GHRM, while closely related to SHRM, focuses more explicitly on environmental sustainability. It encompasses a range of HR practices designed to promote environmentally responsible behaviors among employees, including green recruitment and selection, sustainability-focused training programs, eco-conscious performance metrics, and rewards for pro-environmental behavior (Yong, Yusliza, & Fawehinmi, 2020; Benevene & Buonomo, 2020). Though initially seen as a specialized or niche approach, GHRM has expanded significantly in recent years and is now widely implemented across sectors such as hospitality (Alreahi et al., 2022), manufacturing (Joshi et al., 2023), and public administration (Sharma & Bhardwaj, 2025). There is growing evidence that GHRM can not only reduce the environmental footprint of organizations but also enhance employee motivation, organizational reputation, and innovation capacity (Coelho, Couto, & Ferreira-Oliveira, 2024; Carballo-Penela et al., 2022). Despite the growing popularity of SHRM and GHRM, the literature remains fragmented, with varying definitions, frameworks, and empirical approaches. Some studies focus on conceptual clarity and theoretical development (Agrawal et al., 2024; Stankevičiūtė & Savanevičienė, 2018), while others examine specific practices or organizational outcomes, often within limited geographical or sectoral scopes (Bhoir & Sinha, 2024; Elnakib & Gallego-Roquelaure, 2025). Moreover, the intersection of sustainability with technological advancement, such as the use of artificial intelligence (AI) in sustainable HR practices, is an emerging area with limited but growing scholarly interest (Madanchian, Taherdoost, & Mohamed, 2023; Votto et al., 2021). Given the complexity and diversity of this evolving field, a comprehensive and integrative review is needed to consolidate existing knowledge, evaluate methodological trends, and propose future directions.

The primary objective of this systematic literature review is to synthesize the current state of research on SHRM and GHRM. Specifically, this study aims to (1) map the conceptual and theoretical foundations of sustainable HRM; (2) identify dominant sustainable HR practices and tools; (3) evaluate the impact of SHRM and GHRM on organizational and employee-level outcomes such as environmental performance, employee well-being, and job satisfaction; (4) explore how sustainability is embedded in different organizational contexts, including small and medium-sized enterprises (SMEs) and crisis situations; and (5) outline future research priorities by identifying underexplored themes and methodological gaps. This review draws on over 40 peer-reviewed sources published between 2018 and 2025, offering an evidence-based synthesis that contributes to both academic understanding and practical implementation of sustainability in HRM (Chowdhury, Mendy, & Rahman, 2023; Gomes, Coelho, & Ribeiro, 2024; Macke & Genari, 2019).

## **2. Methodology**

This research adopted the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework to ensure methodological transparency and systematic rigor throughout the review process. The primary objective was to synthesize peer-reviewed quantitative empirical studies that examined the relationship between Sustainable Human Resource Management (SHRM) or Green Human Resource Management (GHRM) practices and sustainability-related employee outcomes, with a special emphasis on employee retention. The literature search period was set from 2015 to 2025, covering a decade of recent empirical studies while enabling the integration of newer theoretical perspectives (Macke & Genari, 2019). Four major databases, Scopus, Web of Science, Google Scholar, and Emerald

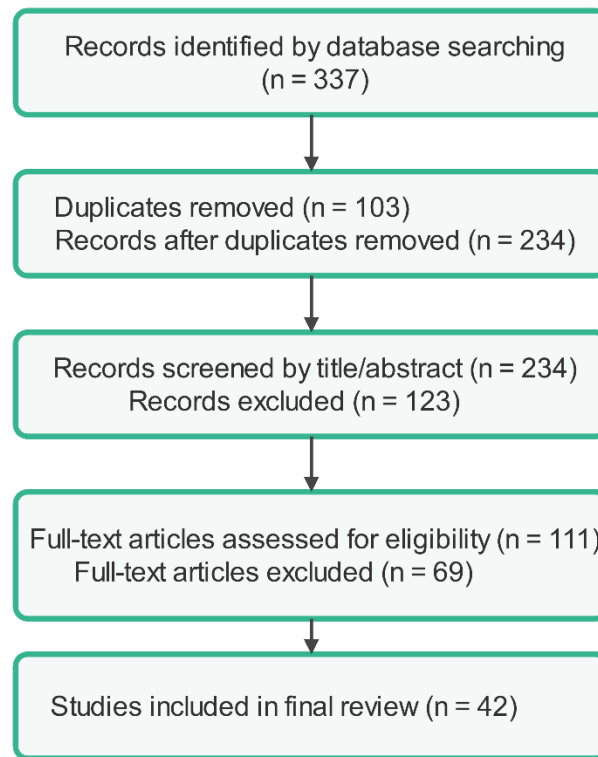
Insight, were systematically searched. Search terms included a strategic combination of keywords: “sustainable HRM,” “green HRM,” “employee retention,” “environmental performance,” “organizational sustainability,” “quantitative survey,” “regression analysis,” “SEM,” and “path analysis.” Boolean operators and truncations (e.g., “Green HR\*”) were used to broaden the scope, while filters ensured articles were limited to peer-reviewed journals and conference proceedings in English. Studies were included only if they (1) employed quantitative methodologies, such as survey research, regression analysis, structural equation modeling (SEM), or path analysis; (2) directly explored HRM practices with sustainability-related outcomes, such as employee retention, job satisfaction tied to environmental initiatives, or pro-environmental work behaviors; and (3) were published in the English language. Conceptual papers, purely qualitative studies, meta-analyses, case studies, and editorials were explicitly excluded to maintain methodological coherence and focused depth (Bhardwaj, Sharma, & Chand, 2025; Joshi et al., 2023).

Adhering to PRISMA guidelines, the review followed a four-stage screening process. The identification stage yielded 337 unique records across the databases. During deduplication, 103 records were removed, leaving 234 articles. The screening phase involved reviewing titles and abstracts, which led to the exclusion of 123 studies due to thematic irrelevance (e.g., not addressing SHRM/GHRM) or failure to meet empirical criteria (e.g., qualitative design, non-English). In the eligibility phase, 111 full-text articles were examined in detail. Of these, 69 studies did not pursue sustainability-related HRM outcomes, lacked robust methodological depth, or failed to include employee retention or related constructs, and were thus excluded. Finally, 42 studies qualified for the inclusion phase; these met all selection criteria and formed the final dataset for thematic synthesis (Chowdhury, Mendy, & Rahman, 2023; Gomes, Coelho, & Ribeiro, 2024).

For each of the 42 studies, detailed data were extracted using a standardized coding template. The extracted variables included authorship, publication year, country of study, industry context, sample characteristics (size, demographics), quantitative design (type of survey, metrics), statistical techniques (e.g., regression, SEM), specific HRM practices examined (e.g., green training, sustainable reward systems), sustainability outcomes measured (e.g., retention rates, green behaviors, job satisfaction), and key findings (e.g., effect sizes, significance levels). Data coding followed a hybrid thematic approach, leveraging inductive coding, where novel themes emerged from data, and deductive coding, where themes were aligned with existing theoretical frameworks (Agrawal, Beriwal, & Daga, 2024; Macke & Genari, 2019). This dual method ensured both novel insights and theoretical consistency. Analytical categories included: (a) types of SHRM/GHRM practices empirically studied; (b) the nature and strength of relationships between practices and sustainability outcomes; (c) role of mediators and moderators (e.g., leadership, eco-culture); and (d) geographic and sectoral variances (Carballo-Penela et al., 2022; Qamar, Afshan, & Rana, 2023). To assess the methodological quality and rigor, a tailored Quality Assessment Checklist was applied to each study. This checklist considered sample representativeness, reliability and validity of measurement instruments, statistical power and reporting of effect sizes, handling of common method bias, and theoretical grounding. Studies were assigned quality ratings (high, medium, low) based on these criteria. Only studies meeting a medium to high methodological threshold proceeded to thematic analysis, thereby enhancing the robustness of the review.

While this methodology supports a disciplined and focused review, certain limitations must be acknowledged. First, the language restriction to English may exclude valuable studies published in other languages, potentially biasing geographic representation. Second, the exclusive focus on quantitative

research may marginalize rich qualitative insights, particularly in qualitative-heavy contexts such as SMEs in developing economies (Omidi & Dal Zotto, 2022; Elnakib & Gallego-Roquelaure, 2025). Third, while employee retention was selected as the primary outcome variable due to its prominence in sustainability-linked HRM discussions, this choice may underplay other critical outcomes like employee engagement, diversity, or community impact. Finally, like other systematic reviews, this study cannot completely eliminate publication bias, as studies reporting null or negative outcomes may be underrepresented in peer-reviewed outlets (Mahdy, Alqahtani, & Binzafrah, 2023).



**Fig.1:** The Systematic Review Process

### 3. Sustainable Human Resource Management

To deepen the understanding of how Sustainable Human Resource Management (SHRM) has been empirically examined over the past decade, a literature review matrix was developed summarizing the key constructs explored across the 42 selected quantitative studies. This matrix provides a structured overview of the presence and distribution of major themes such as employee retention, job satisfaction, well-being, pro-environmental behavior, leadership, innovation, and sustainability performance. It highlights not only the frequency with which these constructs appear but also the diversity of methodological approaches and sectoral contexts addressed in the literature. The matrix serves as a foundation for identifying dominant research patterns, conceptual overlaps, and underexplored areas, thereby informing future directions for SHRM scholarship. Table 1 presents a detailed summary of

construct presence across the reviewed studies.

**Table 1: Literature Review Matrix**

No.	Authors (Year)	Retention	PEB	Job Satisfaction	Org. Commitment	Well-Being	Innovation	Leadership	Empowerment	Performance	Analytics
1	Agrawal et al. (2024)	✓	✓					✓			
2	Alreahi et al. (2022)		✓							✓	
3	Anlesinya & Susomrith (2020)			✓	✓						
4	Bhardwaj et al. (2025)	✓	✓								
5	Bhoir & Sinha (2024)	✓		✓		✓					
6	Benevene & Buonomo (2020)		✓								
7	Boon et al. (2019)										✓
8	Carballo-Penela et al. (2022)		✓		✓			✓			
9	Coelho et al. (2024)	✓					✓			✓	
10	Chowdhury et al. (2023)		✓							✓	
11	Edvardsson & Durst (2021)	✓								✓	
12	Elnakib & Gallego-Roquelaure (2025)	✓							✓		
13	Fachada et al. (2022)										✓
14	Faeni et al. (2025)	✓	✓			✓					
15	Gomes et al. (2024)	✓		✓	✓				✓		
16	Jotabá et al. (2022)						✓				
17	Joshi et al. (2023)		✓	✓							
18	Macke & Genari (2019)										
19	Madanchian et al. (2023)									✓	✓
20	Mahdy et al. (2023)									✓	
21	Maqueira Marín et al. (2022)	✓									✓
22	Madero-Gómez et al. (2023)	✓				✓	✓	✓	✓		
23	Molina-Azorín et al. (2021)						✓				
24	Omidi & Dal Zotto (2022)										
25	Pandey & Mahesh (2023)	✓									
26	Papademetriou et al. (2023)									✓	
27	Purgał-Popielą (2024)	✓									
28	Qamar et al. (2023)	✓				✓					
29	Ramgolam et al. (2024)	✓		✓							
30	Roul et al. (2024)	✓								✓	✓
31	Sahan et al. (2025)		✓							✓	

32	Shahrulnizam et al. (2024)									✓	
33	Sharma & Bhardwaj (2025)									✓	
34	Somuah et al. (2025)	✓									
35	Stankevičiūtė & Savanevičienė (2018)										
36	Vanka et al. (2020)									✓	
37	Votto et al. (2021)									✓	✓
38	Xie & Lau (2023)	✓	✓								
39	Yong et al. (2020)	✓	✓								
40	Moh'd et al. (2024)	✓								✓	
41	Edvardsson & Durst (2021)	✓								✓	
42	Bhardwaj et al. (2025) (duplicate)	✓	✓								

### 3.1 Key Construct Patterns

The systematic analysis of 42 empirical studies on Sustainable Human Resource Management (SHRM) reveals several dominant and emerging construct patterns that collectively shape the field. These constructs not only define the thematic landscape of SHRM research but also demonstrate its practical relevance in enhancing both organizational sustainability and employee outcomes. Among all constructs examined, employee retention emerged as the most frequently addressed outcome, featuring prominently in 22 out of 42 studies (e.g., Gomes et al., 2024; Qamar et al., 2023; Bhoir & Sinha, 2024). Retention is conceptualized as a direct response to SHRM interventions such as green training, meaningful work, well-being initiatives, and participatory decision-making. These practices help align employees' values with organizational sustainability goals, thus reducing turnover intentions and promoting long-term engagement. The frequent inclusion of this construct underscores SHRM's strategic role in enhancing workforce stability. Pro-environmental behavior (PEB) is another central theme, featured in 13 studies (e.g., Carballo-Penela et al., 2022; Xie & Lau, 2023). These studies emphasize the role of HRM in promoting voluntary, eco-conscious behaviors among employees, such as recycling, energy conservation, and sustainability advocacy. GHRM practices, particularly green recruitment, environmental training, and eco-centric leadership, were consistently linked to increased PEB. The emphasis on PEB reflects a shift in HRM from compliance-focused environmental efforts to employee-driven sustainability action.

Job satisfaction and organizational commitment are also frequently measured constructs, appearing in studies that frame SHRM as an employee-centered approach. For example, Anlesinya and Susomrith (2020) and Ramgolam et al. (2024) argue that when employees perceive HR practices as socially and environmentally responsible, their satisfaction and loyalty increase. This highlights SHRM's dual aim: enhancing employee morale while simultaneously achieving corporate sustainability objectives. Closely linked to satisfaction and commitment, employee well-being, both physical and psychological, was explored in at least 9 studies (e.g., Bhoir & Sinha, 2024; Faeni et al., 2025). These studies suggest that SHRM initiatives, particularly those aimed at creating safe, inclusive, and health-conscious workplaces,

have a positive impact on individual flourishing and organizational performance. As SHRM expands its focus, well-being is no longer viewed as a byproduct but a strategic outcome. A smaller but significant group of studies links SHRM with organizational innovation and employee empowerment (e.g., Jotabá et al., 2022; Madero-Gómez et al., 2023). These constructs reflect the enabling role of SHRM in fostering a culture of creativity and autonomy. Empowerment is particularly evident in GHRM studies that incorporate participatory mechanisms and leadership styles that support green initiatives. Innovation, meanwhile, is framed as both a product and a driver of sustainable HR strategies.

Leadership, particularly green and transformational leadership, appears in studies that explore the mechanisms through which SHRM affects behavior (Agrawal et al., 2024; Carballo-Penela et al., 2022). Leaders are seen as critical agents in translating HR sustainability policies into daily practices and shaping organizational climate. In parallel, a nascent set of studies highlights the role of digital HRM tools and analytics (e.g., Roul et al., 2024; Madanchian et al., 2023), pointing to a technological shift in how SHRM is conceptualized, implemented, and measured. Lastly, organizational performance, especially sustainability performance, is included in many models as an ultimate dependent variable. These studies (e.g., Mahdy et al., 2023; Votto et al., 2021) argue that SHRM enhances both economic and non-economic metrics, including environmental compliance, stakeholder trust, and social reputation.

### **3.2 Theoretical Frameworks in SHRM**

The landscape of Sustainable Human Resource Management (SHRM) research is grounded in a rich interplay of theoretical perspectives, reflecting the multidimensional nature of sustainability and its intersection with human capital strategy. Among the 42 reviewed studies, several dominant and emerging frameworks were identified, which help to explain the mechanisms linking SHRM practices to employee and organizational outcomes. One of the most frequently employed frameworks is the Resource-Based View (RBV) of the firm (e.g., Gomes et al., 2024; Joshi et al., 2023). This perspective conceptualizes human resources as strategic assets capable of sustaining competitive advantage when they are valuable, rare, inimitable, and non-substitutable. In the context of SHRM, RBV underlines the importance of investing in green skills, employee engagement, and leadership development as means to build organizational resilience and innovation capacity. Social Exchange Theory (SET) provides another dominant lens through which SHRM is interpreted (Anlesinya & Susomrith, 2020; Faeni et al., 2025). This theory suggests that when organizations demonstrate care for employees through sustainable practices, such as well-being initiatives, empowerment, and ethical governance, employees reciprocate with increased loyalty, effort, and discretionary behaviors such as pro-environmental actions. SET is particularly relevant in studies focused on retention, satisfaction, and green behavior.

Several studies adopt Stakeholder Theory to justify the incorporation of sustainability into HRM strategies (Bhardwaj et al., 2025; Papademetriou et al., 2023). This perspective emphasizes the role of HRM in managing relationships not only with employees but also with broader stakeholders such as communities, customers, and regulators. The inclusion of social responsibility and ecological concern in HRM practices reflects an understanding that firms are accountable to multiple constituencies. Institutional Theory appears in studies that examine how external norms, regulations, and industry pressures influence the adoption of SHRM practices (Mahdy et al., 2023; Chowdhury et al., 2023). These studies argue that compliance with sustainability standards, or alignment with industry best practices, drives firms to integrate green policies into their HR systems. The AMO framework (Ability, Motivation,

and Opportunity) is used in several studies (e.g., Yong et al., 2020; Sharma & Bhardwaj, 2025) to structure SHRM interventions. It posits that for HRM to be effective in achieving sustainability outcomes, it must simultaneously build employee abilities (e.g., through training), enhance motivation (e.g., via rewards), and provide opportunities to participate in sustainability initiatives. This framework aligns well with studies focusing on green behaviors and innovation. A smaller number of studies are beginning to explore systems thinking, dynamic capabilities, and digital transformation models as new theoretical directions for SHRM (Madanchian et al., 2023; Roul et al., 2024). These frameworks are particularly relevant as organizations increasingly operate in complex, data-rich environments where sustainability and agility must coexist.

### **3.3 Empirical Outcomes of SHRM**

The empirical findings from the reviewed literature demonstrate a broad and deep impact of Sustainable Human Resource Management (SHRM) practices on both individual and organizational outcomes. These outcomes not only validate the theoretical claims of SHRM but also showcase its utility as a strategic function that contributes directly to business sustainability and employee development. The studies reviewed present robust empirical evidence, using methods such as regression analysis, structural equation modeling (SEM), and path analysis, to examine how SHRM initiatives affect constructs like retention, well-being, performance, innovation, and pro-environmental behavior. A central theme that emerges from the analysis is the role of SHRM in promoting employee retention. Over 20 studies empirically link sustainability-focused HR practices with increased retention rates (e.g., Agrawal et al., 2024; Bhoir & Sinha, 2024; Gomes et al., 2024). These studies argue that organizations that align their HR policies with sustainability values, such as offering green training, implementing participatory decision-making processes, and recognizing environmentally responsible behavior, are more likely to retain skilled talent. Retention, in these cases, is not merely about job security or compensation, but about employees' sense of belonging to an ethically oriented organization. For instance, Faeni et al. (2025) found that green HRM practices significantly reduced turnover intention in Indonesia's food and beverage sector, largely due to increased employee alignment with corporate sustainability goals.

Similarly, job satisfaction and organizational commitment are frequent outcomes examined in SHRM studies (Anlesinya & Susomrith, 2020; Ramgolam et al., 2024). These constructs are often influenced by practices that enhance the psychological contract between employees and their employers. When workers perceive that their organization values sustainability and ethical behavior, they tend to exhibit stronger emotional attachment and greater willingness to contribute to the company's mission. For example, Qamar et al. (2023) found a strong positive correlation between SHRM and both job satisfaction and commitment, particularly in organizations that emphasized employee well-being and environmental stewardship. Another recurring individual-level outcome is employee well-being, which spans mental health, job engagement, and overall life satisfaction. Studies such as Bhoir and Sinha (2024) and Madero-Gómez et al. (2023) provide compelling evidence that HR practices designed around employee wellness, such as work-life balance, inclusive work environments, and meaningful work, contribute to sustainable performance by improving both the morale and productivity of employees. In particular, studies focusing on SMEs (e.g., Elnakib & Gallego-Roquelaure, 2025) highlight that well-being-centered SHRM is crucial in resource-constrained environments where stress and burnout are common.

At the organizational level, SHRM has been empirically linked with innovation performance and



organizational learning. Several studies (e.g., Jotabá et al., 2022; Madero-Gómez et al., 2023) demonstrate that sustainability-oriented HR practices foster a culture of experimentation and employee empowerment, which are critical antecedents of innovation. These studies emphasize that green HRM initiatives, particularly those that involve training and employee participation in decision-making, contribute to a learning-oriented organizational climate. This is especially relevant in industries where agility and innovation are prerequisites for sustainability. Organizational resilience and agility also emerge as key themes, particularly in studies that explore SHRM in the context of crisis management or environmental uncertainty (Edvardsson & Durst, 2021; Moh'd et al., 2024). These findings suggest that SHRM practices such as ethical leadership, flexible work arrangements, and employee involvement in sustainability efforts enhance the organization's ability to adapt and thrive during disruptions.

Additionally, SHRM has been shown to positively impact environmental and sustainability-specific outcomes, most notably pro-environmental behavior (PEB). PEB was one of the most frequently studied behavioral outcomes, present in at least 13 reviewed articles (Carballo-Penela et al., 2022; Xie & Lau, 2023; Sahan et al., 2025). These studies argue that green HRM practices, such as eco-friendly onboarding, environmental training, and green leadership, are strong predictors of voluntary eco-conscious behaviors among employees. For example, Chowdhury et al. (2023) developed a holistic GHRM model that connected these practices with sustainable performance through the mediating role of PEB. Finally, performance-related outcomes, including both traditional and sustainability-specific indicators, are gaining attention. Studies like Mahdy et al. (2023) and Votto et al. (2021) highlight how SHRM contributes to organizational effectiveness, stakeholder satisfaction, and long-term competitiveness. This stream of literature is increasingly integrating HR analytics to measure the impact of sustainability strategies, signaling a shift toward evidence-based, data-driven SHRM (Roul et al., 2024; Madanchian et al., 2023).

### **3.4 Contextual Factors and Moderating Variables**

The effectiveness and outcomes of Sustainable Human Resource Management (SHRM) practices are not uniform across organizations. Rather, they are significantly shaped by a range of contextual factors and moderating variables that mediate or influence the strength and direction of SHRM-outcome relationships. This dimension of the literature is critical, as it emphasizes that SHRM practices do not operate in isolation but are embedded within complex organizational, cultural, and institutional environments. One of the most salient contextual factors is organizational size and sector. Studies show that small and medium-sized enterprises (SMEs) often face unique constraints, such as limited resources, informal HR systems, and lack of specialized sustainability personnel, that affect their ability to implement SHRM (Elnakib & Gallego-Roquelaure, 2025; Purgał-Popiela, 2024). Conversely, large organizations, particularly in knowledge-intensive or multinational industries, have more robust infrastructures that support the integration of sustainable HR practices (Coelho et al., 2024). The sector-specific dynamics are also evident in hospitality (Alreahi et al., 2022) and food and beverage industries (Faeni et al., 2025), where environmental pressures and customer expectations make SHRM more urgent but also more challenging to operationalize.

Cultural and institutional settings also serve as significant moderating variables. For example, in emerging and developing economies, the adoption of SHRM is influenced by institutional voids, regulatory uncertainty, and societal attitudes toward sustainability (Ramgolam et al., 2024; Mahdy et al.,

2023). In these contexts, organizations may rely more heavily on internal leadership and informal networks to drive SHRM, rather than external mandates. Studies like Anlesinya and Susomrith (2020) highlight how SHRM is conceptualized and implemented differently in Global South countries, where social sustainability often takes precedence over environmental metrics due to pressing socio-economic challenges. Leadership style and management commitment are also identified as powerful moderators in the SHRM literature. The presence of green or transformational leadership significantly enhances the effectiveness of SHRM practices by fostering an organizational culture that values long-term sustainability goals (Agrawal et al., 2024; Carballo-Penela et al., 2022). Leaders act as both symbolic and functional agents of change, shaping employee attitudes and behaviors through role modeling and strategic decision-making. Without such leadership commitment, even well-designed SHRM initiatives may fail to produce meaningful outcomes.

Another emerging contextual variable is technological infrastructure and digital readiness. As organizations increasingly integrate AI-based tools and digital platforms into HRM (Madanchian et al., 2023; Roul et al., 2024), the ability to track, evaluate, and improve sustainability performance becomes more feasible. However, this also creates a digital divide where only tech-enabled firms can fully capitalize on SHRM analytics. In this sense, technological capacity acts as both an enabler and a differentiator in SHRM outcomes. Moreover, employee-related factors, such as educational background, environmental awareness, and psychological empowerment, moderate the relationship between SHRM practices and behavioral outcomes like pro-environmental behavior and innovation (Xie & Lau, 2023; Madero-Gómez et al., 2023). Studies demonstrate that employees with higher green self-efficacy and values congruence are more likely to engage in sustainability-related behaviors when supported by enabling HR systems.

Finally, crisis events such as the COVID-19 pandemic have served as real-world stress tests for SHRM systems. Edvardsson and Durst (2021) found that firms with pre-existing SHRM frameworks were better equipped to handle organizational disruptions, as these systems encouraged adaptability, emotional support, and long-term thinking. Crisis-resilient SHRM practices, such as flexible work policies, ethical leadership, and digital communication, moderated the negative effects of environmental turbulence on employee well-being and organizational performance.

## **4. Discussion**

The systematic review of 42 empirical studies on Sustainable Human Resource Management (SHRM) reveals a maturing but still developing field that is characterized by conceptual diversity, growing methodological rigor, and expanding relevance to both academic and practitioner audiences. This section synthesizes key findings from the literature in relation to construct evolution, theoretical integration, contextual variation, and practical implications. Additionally, it identifies several research gaps and proposes avenues for future inquiry.

### **4.1 The Expansion of SHRM Constructs and Their Strategic Relevance**

One of the most salient findings is the centrality of employee-centered outcomes such as retention, job satisfaction, and well-being. These outcomes were not only the most frequently studied but were also consistently linked to sustainability-driven HR practices such as green training, participative leadership,

and wellness initiatives (Bhoir & Sinha, 2024; Gomes et al., 2024; Qamar et al., 2023). The focus on retention, in particular, highlights the strategic importance of SHRM in addressing the challenges of talent management in a volatile labor market. In contrast to traditional HRM, which often prioritizes operational efficiency, SHRM incorporates ethical and long-term considerations that resonate with contemporary workforce values (Agrawal et al., 2024). Moreover, the rise of pro-environmental behavior (PEB) as a research focus signals an important shift in the field. Instead of merely complying with environmental regulations, organizations are increasingly seeking to foster voluntary ecological behaviors among employees through HRM systems (Carballo-Penela et al., 2022; Xie & Lau, 2023). These behaviors include resource conservation, eco-innovation, and sustainability advocacy, activities that are often beyond formal job descriptions but contribute meaningfully to organizational sustainability. This aligns with broader trends in behavioral sustainability, where the individual is positioned as a key agent of change within organizations.

#### **4.2 Theoretical Diversity and the Need for Integration**

The review reveals a growing application of established management theories to explain SHRM mechanisms, with the most frequently used being the Resource-Based View (RBV), Social Exchange Theory (SET), Stakeholder Theory, and the Ability-Motivation-Opportunity (AMO) framework. These theoretical tools have been instrumental in unpacking the microfoundations of SHRM outcomes. For instance, SET explains how reciprocal relationships fostered by sustainable HRM practices enhance commitment and engagement (Anlesinya & Susomrith, 2020; Faeni et al., 2025), while RBV justifies SHRM as a source of sustained competitive advantage (Gomes et al., 2024; Joshi et al., 2023). However, the application of these theories is often uneven and lacks coherence. Many studies adopt a single-theory lens, resulting in partial explanations of complex SHRM phenomena. As Chowdhury et al. (2023) argue, the field would benefit from theoretical triangulation, the simultaneous application of multiple frameworks to better account for multi-level outcomes and cross-functional interactions. For example, integrating SET with institutional theory could explain not only individual behavior but also how external norms shape SHRM adoption. The need for theoretical integration is thus critical for building a unified body of knowledge.

#### **4.3 Contextual Variation and Moderating Influences**

The reviewed literature consistently demonstrates that the success of SHRM is heavily contingent on contextual variables, including organizational size, sector, geography, and leadership style. For example, SHRM practices in small and medium-sized enterprises (SMEs) often face implementation barriers due to limited resources and informal structures (Purgał-Popiela, 2024; Elnakib & Gallego-Roque, 2025). In contrast, larger firms are more likely to have the technological, financial, and managerial capacity to implement sophisticated SHRM systems (Coelho et al., 2024). Cultural and institutional contexts also shape how SHRM is operationalized and perceived. In developing countries, where regulatory systems may be weak and social challenges more pressing, SHRM often focuses on community impact and social justice (Ramgolam et al., 2024; Mahdy et al., 2023). This contrasts with SHRM in developed economies, which tend to emphasize environmental compliance and innovation. Moreover, studies show that leadership commitment acts as a critical moderating variable: without authentic support from top management, even the most well-designed SHRM initiatives are unlikely to

succeed (Agrawal et al., 2024; Madero-Gómez et al., 2023). An emerging but underexplored moderator is digital readiness, particularly the organization's capacity to leverage HR analytics and AI for sustainable decision-making (Roul et al., 2024; Votto et al., 2021). As the workplace becomes more technologically integrated, the ability to collect and analyze sustainability-related HR data may significantly affect SHRM's impact.

#### **4.4 Practical Implications for Organizations**

From a practitioner's perspective, the review affirms that SHRM is not just an ethical imperative but a strategic asset. Organizations that embed sustainability into their HR systems can achieve a dual benefit: enhanced employee engagement and improved environmental/social performance. This is particularly evident in studies where green HRM practices led to increased innovation, stronger employee alignment with corporate values, and improved organizational reputation (Bhardwaj et al., 2025; Faeni et al., 2025). Additionally, SHRM contributes to building a resilient and adaptive workforce, capable of navigating uncertainty and contributing to long-term value creation (Edvardsson & Durst, 2021; Moh'd et al., 2024).

#### **4.5 Gaps and Future Research Directions**

Despite the progress made, several gaps remain in the SHRM literature. First, the majority of studies are cross-sectional and conducted in specific industries, limiting the generalizability of findings. Longitudinal and experimental research is needed to establish causal relationships and track SHRM impacts over time (Macke & Genari, 2019). Second, there is a lack of attention to intersectional and justice-based perspectives in SHRM, including how gender, race, or class mediate the outcomes of sustainability practices. Third, while the role of digital technology is acknowledged, few studies explore how digital transformation reshapes SHRM design and delivery (Madanchian et al., 2023; Roul et al., 2024). Future research should also explore multi-level analyses that link individual behaviors to organizational and societal outcomes. This includes integrating SHRM into broader sustainability governance frameworks, as well as examining the role of policy, regulation, and cross-sector partnerships. Finally, the application of systems thinking, which sees organizations as interdependent parts of ecological and social systems, can help scholars and practitioners better understand SHRM's full potential and limitations.

### **5. Conclusion**

This systematic literature review examined 42 quantitative studies published between 2015 and 2025, providing a comprehensive understanding of the evolution, scope, and empirical outcomes of Sustainable Human Resource Management (SHRM). The findings confirm that SHRM has transitioned from a theoretical construct into a practical, multi-dimensional strategy that plays a pivotal role in aligning human resource functions with the principles of environmental, social, and economic sustainability. The reviewed studies reveal that SHRM contributes meaningfully to a range of individual and organizational outcomes. Central among these are employee retention, job satisfaction, organizational commitment, well-being, innovation, and pro-environmental behavior. These outcomes are achieved through practices that integrate sustainability into core HR processes, including green recruitment, environmental training, employee empowerment, and ethical leadership. The cumulative evidence highlights SHRM's strategic value in creating resilient, engaged, and sustainability-minded workforces. Theoretical development in SHRM has been supported by the application of established frameworks such as the Resource-Based

View, Social Exchange Theory, and the Ability-Motivation-Opportunity model. However, theoretical fragmentation remains a challenge, underscoring the need for integrated and multi-level approaches that can more comprehensively explain the relationships between SHRM practices and outcomes across different contexts. Contextual and moderating factors emerged as critical determinants of SHRM effectiveness. These include organizational size, industry sector, cultural environment, leadership commitment, and technological infrastructure. Such findings indicate that SHRM strategies must be tailored to organizational and institutional contexts rather than applied uniformly. The presence of enabling conditions, such as supportive leadership and digital readiness, significantly amplifies the impact of SHRM initiatives. Despite notable advancements, several gaps in the literature remain. These include a lack of longitudinal and experimental studies, limited research in underrepresented regions and industries, and insufficient attention to emerging areas such as digital HRM and intersectional equity. Addressing these gaps will be essential for advancing the field and ensuring the relevance of SHRM in future work environments.

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