THE SUSTAINABLE HRM LANDSCAPE: MAPPING ITS EVOLUTION, THEORETICAL FOUNDATIONS, AND FUTURE PATHWAYS

Dr. Muhammad Umar Shahzad

Faculty of Management Sciences, Virtual University of Pakistan, Rawalpindi. Pakistan

Corresponding Email: muhammad.umar@vu.edu.pk

ABSTRACT

Purpose: This systematic literature review aims to bridge the gap in the existing literature on Sustainable Human Resource Management (SHRM) by providing a comprehensive analysis of selected empirical studies published between 2005 and 2024.

Design/methodology/approach: A total of 80 empirical studies were systematically shortlisted and analyzed using a step-by-step approach based on the Preferred Review of Items for Systematic Review and Meta-Analysis (PRISMA) Framework and though the quality assurance checklist of Critical Appraisal Skills Programme (CASP). This helped in the development of Context, Intervention, Mechanism and Outcomes (CIMO) Framework to further guide this study.

Findings: This study highlighted how organizations may utilize SHRM as a strategic function to gain competitive advantage. Based on a thorough analysis of shortlisted research studies; this systematic review offers a trend analysis of empirical research in the domain of SHRM through a new theoretical research framework, a new CIMO framework, propositions, and an insightful discussion having watershed moments of major historical periods for the evolution of SHRM. Notably, the Ability-Motivation-Opportunity theory emerged as the most frequently cited underpinning theoretical lens for empirical quantitative studies on SHRM. A significant trend of using deductive reasoning through a higher reliance on cross-sectional, self-reported, and quantitative studies was observed in the literature.

Originality: No previous review-based study had provided a thematic trend analysis for empirical research on SHRM and this study filled that literature gap. Moreover, this study offers a new theoretical research framework, propositions based on recent literature and a CIMO framework. It also throws light on the prevailing use of research approach, choice of theories, commonly used measurement scales, industries/sectors being studied, response rates, units of analysis, and analytical techniques employed in the past empirical research in this domain of SHRM.

INTRODUCTION

In recent years, businesses have become aware of the need to implement environmentally friendly practices and policies as a base for competitive advantage (Ahmad, 2015; El Baroudi et al., 2023; Hooi et al., 2022). It is because of environmental degradation and climate change which are among the most pressing global concerns of the 21st century, leading to significant economic losses (Shafaei et al., 2020). Both researchers and practitioners have agreed upon the fact that the reasons for such environmental decline are deeply rooted in the human behavior (Anwar et al., 2020). Consequently, environmental sustainability is becoming an integral part of organizations around the world. A global survey showed that more than 43 percent of companies are considering sustainability as one of the key aspects of their business goals, mission, and values to better align those with the expectations of stakeholders (Muisyo et al., 2022; Tuan, 2021; Yusoff et al., 2020).

Human resources management (HRM) plays a key role in enabling organizations to effectively implement environmental management policies (Ren et al., 2018). Recent studies suggest that the implementation of sustainable human resource management (SHRM) can enhance individual, team, and group-level performance along with the organization's environmental and financial performance. It can also help in better compliance with environmental standards for the organizations by aligning various HRM practices with environmental-friendly corporate goals. SHRM refers to the *"inclusion of environment consciousness within the whole HRM process of hiring, training, rewarding, and, developing a green workforce that understands environment-friendly values, practices, and initiatives"* (Anwar et al., 2020, p. 3). Unlike the traditional HRM function; SHRM emphasizes environmental sustainability for achieving the greater goal of environmental protection either through regulatory compliance or voluntarily in line with the sustainable development goal of the United Nations Organization (UNO) at the broader level and more specifically for the organizations to get themselves aligned with the triple bottom line approach (Shahzad, 2025).

This study aims to advance the literature through a systematic review of SHRM research published during the last two decades (2005 to 2024). Systematic literature reviews on SHRM have been conducted in the past but for a limited timeframe (e.g., Yong et al., 2019). The origin of SHRM can be traced back in the literature of last two decades, and it is often argued that the inclusion of a fresh time period may provide a holistic view for the evolution of SHRM (Li et al., 2023). Hence, this systematic literature review is one of few research studies which cover 20 years of literature starting from 2005 and 2024. Current study was guided by a research question and it is that "how have empirical research trends in Sustainable Human Resource Management (SHRM) evolved over the past two decades, specifically regarding the

adoption of theoretical lenses and common research methodologies, and how can a new CIMO (Context, Intervention, Mechanism, Outcome) framework and newly derived propositions be utilized to synthesize insights for this study and guide future scholarly inquiry?"

Moreover, unlike the previous review-based studies on SHRM (Li et al., 2023; Muisyo et al., 2022; Ren et al., 2018; Tariq et al., 2016), this study not only examined the research published over the last 20 years but it also covers different aspects of the previous studies that are the key for theoretical and methodological pattern analysis for future studies on SHRM which is one of the objectives of this research study based on a systematic literature review. Previous research studies primarily focused on the general understanding for the domain of SHRM while ignoring the research trends in empirical research. This study tried to gauge the extent to which different underpinning theories, measurement scales, industries/sectors, research approaches, response rates, etc., have been reported in the past research along with the watershed moments of last two decades for the evolution of SHRM. This factor has distinguished this study from the previous systematic literature reviews. It will also help future scholars to make informed decisions for further theoretical and methodological progress. The findings of this study provide not only the future research directions but it also the several takeaways for practitioners interested in the implementation of SHRM.

LITERATURE REVIEW

Sustainable Human Resource Management (SHRM) is a new normal for businesses in this 21st century. As a function of sustainable business, it gets the organizational activities aligned with the sustainable development goals of UNO and with the triple bottom line approach (Ahmad, 2015). A sustainable business follows the approach of a triple bottom line for an equal emphasis on the needs of people, profit, and the planet. Businesses usually have a greater focus on the motive of profit and they tend to ignore the other two until regulatory compliance becomes mandatory (Shah & Soomro, 2023). However, with the passage of time, environmental issues such as water crisis, global warming, unpredictable rains etc., have intellectually stimulated stakeholders to put pressure on the top management of organization for having a greater focus on green organizational functions (Chen et al., 2021). Hence, the following proposition has been extracted after the relevant review of the literature for further deductive reasoning in future studies:

Proposition 1: Organizations that openly adopt sustainable development goals and the triple bottom line approach into their core business strategy through SHRM practices will exhibit higher levels of environmental performance and a positive societal impact.

Adoption of SHRM Practices

There are different green organizational functions such as green marketing, green supply chain management, green finance, green production, etc. Similarly, there is the organizational function of green human resource management (GHRM) that almost runs parallel to sustainable human resource management (Ahmad, 2015; Dumont et al., 2017; Tang et al., 2018). However, there is a difference between the two concepts.

Sustainable human resource management focuses on the implementation of all three components of the triple bottom line approach through the HRM practices., i.e., equal focus on people, profit, and the planet. However, green HRM depicts the extent of sole focus by an organization on green activities through the practices of HRM (Shahzad, 2020). Organizations may have different ways to gauge their involvement in SHRM or GHRM. However, there is no uniform mechanism in the literature for applying these concepts and these concepts are still evolving in the literature and practice (El Baroudi et al., 2023; Hooi et al., 2022; Shahzad, 2020). Mechanism for adoption of SHRM depends on the legal and regulatory compliance needed by an organization working in a specific sector or industry of a country (Shahzad, 2020). Available literature shows that the most commonly adopted practices of SHRM include green recruitment and selection, environmental training and development, green performance appraisal, eco-based reward and recognition systems, employee empowerment for green initiatives, sustainability-oriented work design, green health and safety policies (Ahmad & Umrani, 2019; Freitas et al., 2020; Islam et al., 2020). The following proposition supports the relevant review of the literature for further deductive reasoning:

Proposition 2: A comprehensive adoption of a range of SHRM practices (e.g., green hiring, environmental training, green performance appraisal, eco-based rewards, and green health & safety policies) is positively associated with an organization's overall sustainability performance.

Environmental Regulations

Bulk of literature on SHRM adoption explained that it somehow requires the presence of legal guidelines and environmental regulations in a country. One of the reasons for an increased adoption of SHRM practices in the western countries is the governmental regulations, policy frameworks for an industry, and the legal requirements. Moreover, there is an increased level of awareness for the needs of planet earth and there is a surge in the stakeholders' pressure on board members of corporations to pay back to the society through sustainability related measures. In Asia, the increased adoption of SHRM is mainly due to the governmental and legal pressures mainly as a result of heavy industrialization in the last two decades (Shahzad, 2025). Such pressure from government, non-governmental organizations, and other stakeholders forces the top management to adopt SHRM practices at least to be at par with the competitors of that respective industry (Berrone & Gomez-Mejia, 2009).

Organizations use SHRM to improve environmental performance, satisfy stakeholders, and adhere to the environmental requirements set by regulatory authorities from time to time (Hameed et al., 2020). SHRM, if properly adopted, plays a crucial role in the organizational efforts to combat pollution and embrace green practices which have a favorable impact on the organizations' financial performance as well (Ahmad, 2015; Dumont et al., 2017; Tang et al., 2018). SHRM practices help employees deal with the environmental issues along with their routine organizational

affairs (Ababneh, 2021; Chen et al., 2021; Darvishmotevali & Altinay, 2022; Hooi et al., 2022; Rubel et al., 2021). The association between SHRM and volunteer green behaviors of employees enhances employee involvement, personal qualities, and the sharing of green information among relevant stakeholders. SHRM practices and green behavior of employees are often related (El Baroudi et al., 2023; Hooi et al., 2022). SHRM practices have a positive impact on environmental behavior and have the potential to promote environmental sustainability within the organizations (Shah & Soomro, 2023). The following proposition supports the relevant review of the literature for further deductive reasoning:

Proposition 3: Higher requirements of legal regulations for environmental compliance and greater stakeholder pressure on organizations are positively related to the adoption rate of SHRM practices.

Antecedents of SHRM
Evidence from the available literature depicts that there are different antecedents that lead to the adoption of SHRM by an organization. Environmental regulations and institutional pressures (e.g., ISO 14001 certification) are among those such antecedents. Moreover, top management commitment, stakeholder expectations (customers, regulators, society), organizational orientation towards corporate social responsibility (CSR), organizational culture and green values, style of leadership (e.g., transformational, ethical, or servant leadership), industry-type and sector (e.g., manufacturing vs. service), employee green attitudes and environmental awareness, training and empowerment initiatives, etc., are some of the major antecedents for the effective implementation of SHRM (Hooi et al., 2022; Ren et al., 2018; Tian et al., 2018). The following proposition supports the relevant review of the literature for further deductive reasoning:

Proposition 4: Top management commitment and strong adoption of green organizational culture significantly moderate the relationship between external institutional pressures and effective implementation of SHRM practices.

Commonly used Theoretical Lens and Research Trends
With reference to the theoretical foundations for the empirical research on SHRM; the available body of knowledge shows that the Ability-Motivation-Opportunity (AMO) theory has been the most cited underpinning theory. Other theories that have been commonly used in the empirical research on SHRM include Resource-Based View (RBV), Social Exchange Theory, Institutional Theory, Stakeholder Theory, Contingency & Fit theories, self-determination and cognitive-affective system theory (for behavioral outcomes) (e.g., Brekke & Nyborg, 2008; Carmona-Moreno et al., 2012; Cherian & Jacob, 2012). The adoption of research trends in the past literature depicts that the dominant approach is quantitative, cross-sectional, and had deductive reasoning (Anwar et al., 2020; Kim et al., 2019; Yong & Mohd-Yusoff, 2016). Such empirical studies have often focused on the manufacturing industry with a growing

interest in service sectors as well (e.g., hospitality, healthcare), and of late there has been an increasing trend for the adoption of SHRM in the developing countries of Asia as well (Hooi et al., 2022; Ren et al., 2018; Tian et al., 2018; Shahzad, 2025). The following proposition supports the relevant review of the literature for further deductive reasoning:

Proposition 5: Ability-Motivation-Opportunity (AMO) theory acts as a stronger predictor for the relationship between SHRM practices and employee-level green behaviors compared to studies using other theoretical lenses.

Outcomes of SHRM
There are different individual-level and organizational-level outcomes of SHRM. Some of the individual-level outcomes include green behavior, job satisfaction and engagement, psychological empowerment, increased environmental knowledge, and organizational citizenship behavior for the environment (OCBE). Organizational-level outcomes of SHRM include improved environmental performance, compliance with environmental standards, better reputation with the stakeholders, strategic competitive advantage, and an improved financial performance (Begley, 1996; Chan, 2009; Freitas et al., 2020; Shahzad, 2020; Shahzad, 2025 Teixeira et al., 2012). The following proposition supports the relevant review of literature for further deductive reasoning:

Proposition 6: Practical implementation of SHRM practices positively influences both individual-level outcomes (e.g., green behavior at work, OCBE) and organizational-level outcomes (e.g., improved environmental performance, and financial performance).

Based on the findings of literature, theoretical framework as shown in the figure 1 serves as a guiding research framework for this study:
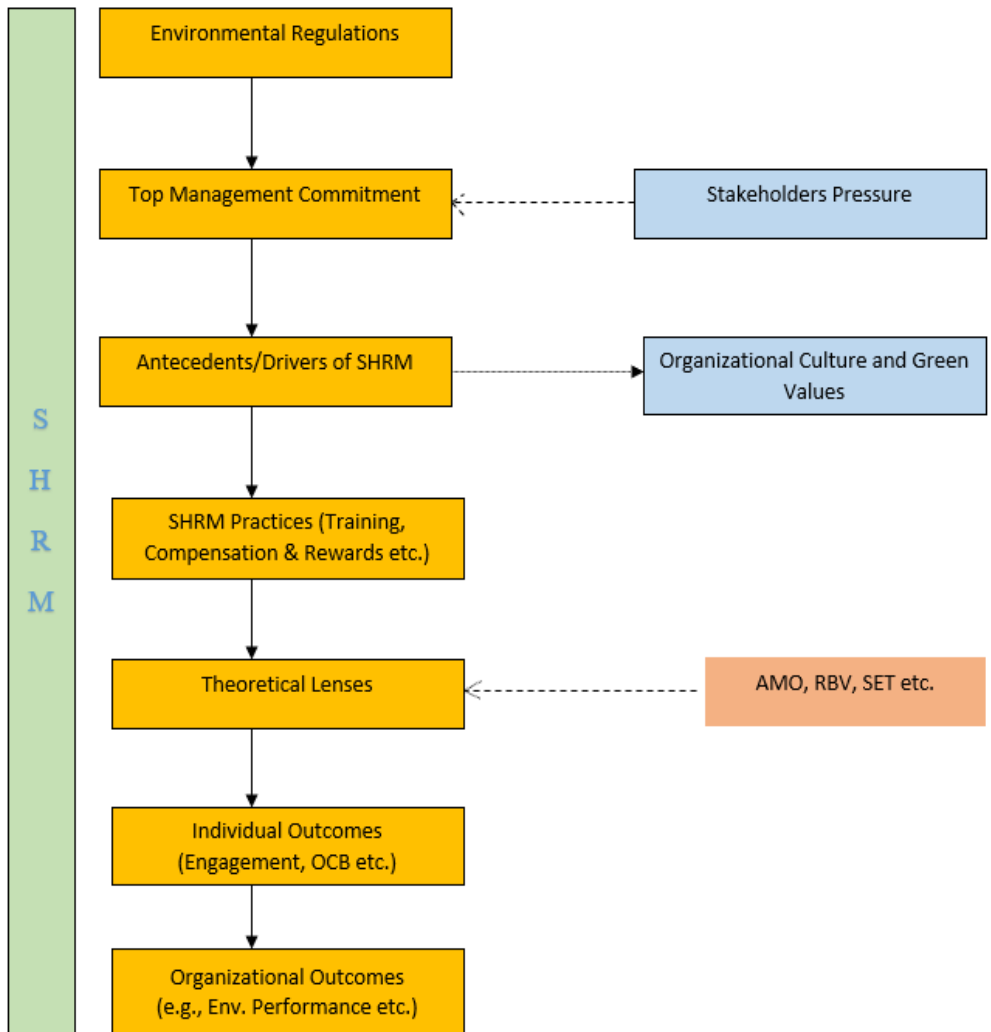
Environmental Regulations

Top Management Commitment

Stakeholders Pressure

Antecedents/Drivers of SHRM

Organizational Culture and Green Values

SHRM Practices (Training, Compensation & Rewards etc.)

Theoretical Lenses

AMO, RBV, SET etc.

Individual Outcomes (Engagement, OCB etc.)

Organizational Outcomes (e.g., Env. Performance etc.)

S H R M

Figure 1 Theoretical Framework for Mapping the Current Study

(Source: Author's own work)

METHODS

Time Period

This systematic literature review is based on selected empirical studies published from June 2005 to June 2024. A major reason for the selection of this period was that there had been early evidence of SHRM concerning sustainable business and SHRM as an opportunity for strategic advantage at the start of the 21st century. Moreover, there has been an emphasis on green training in the past literature which is a function specifically related to SHRM (El Baroudi et al., 2023).

Only peer-reviewed English-language empirical research papers were selected from reputable publishers' databases including Emerald, JSTOR, Springer, Taylor & Francis, and Willey-Blackwell. These databases are the most common sources for academic publishing in business and management disciplines. Such a strategy for the selection of databases has been used in past systematic reviews as well (Hooi et al., 2022; Ren et al., 2018; Tian et al., 2018).

Keywords

Keywords need to be selected in advance and should be relevant to the topic and scope of the research (Tranfield et al., 2003). Hence, several keywords were used to find the articles related to SHRM. This method is quite useful for conducting a systematic literature review as it emphasizes searching and organizing literature in a more precise manner (Pittaway et al., 2004). The keywords used for this study were, "sustainable human resource management, human resource management and environmental sustainability, human resource management and corporate social responsibility, strategic green human resource management, dimensions of sustainable human resource management, sustainable work practices, and organizational green functions and sustainable HRM".
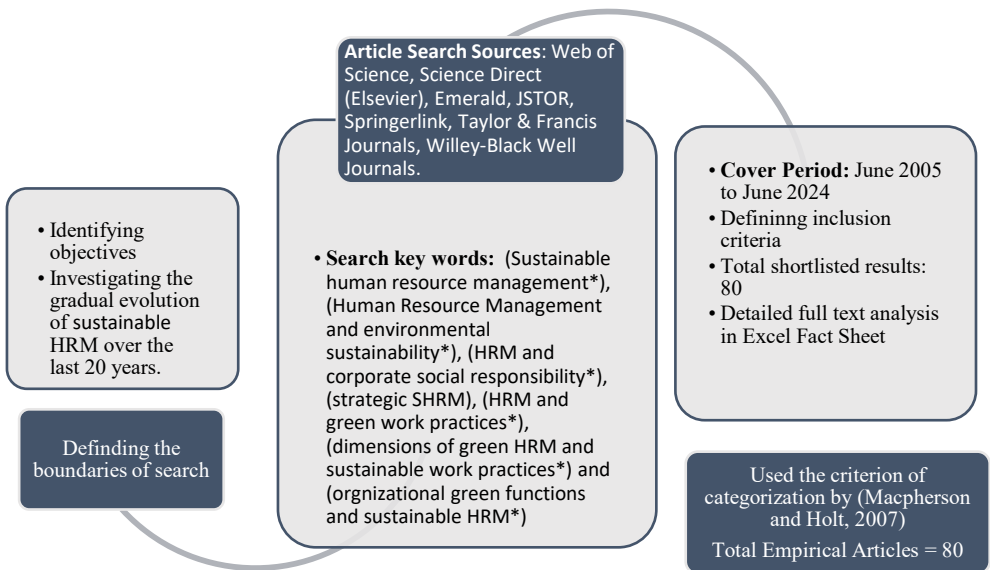
Article Search Sources: Web of Science, Science Direct (Elsevier), Emerald, JSTOR, Springerlink, Taylor & Francis Journals, Willey-Black Well Journals.

- Identifying objectives
- Investigating the gradual evolution of sustainable HRM over the last 20 years.

Definding the boundaries of search

- **Search key words:** (Sustainable human resource management*), (Human Resource Management and environmental sustainability*), (HRM and corporate social responsibility*), (strategic SHRM), (HRM and green work practices*), (dimensions of green HRM and sustainable work practices*) and (orgnizational green functions and sustainable HRM*)

- **Cover Period:** June 2005 to June 2024
- Defininng inclusion criteria
- Total shortlisted results: 80
- Detailed full text analysis in Excel Fact Sheet

Used the criterion of categorization by (Macpherson and Holt, 2007)

Total Empirical Articles = 80

Figure 2 Steps for Systematic Literature Review (Source: Author's own work)

Criteria for Inclusion

Research papers were shortlisted on four merit-based criteria points including 1) relevance, 2) empirical research, 3) there must be an abstract, and 4) it must be written in the English language (Hobson, 2005; Macpherson & Holt, 2007; Nurse, 2013). Based on the PRISMA framework, a search was narrowed gradually based on quality and relevance as per CASP checklist (*see Figure 2*). Out of different categories of research papers; empirical articles were selected and those were published in different management journals.

Extraction, Synthesis, and Reporting

A systematic literature review is a methodological approach that was conducted here as per the guidelines of previous literature (Tranfield et al., 2003). This requires the scrutiny of the research question, context, and content of the study adopting the principles of quality, credibility, relevance, replicability, and transparency. These also include the five principles of planning for systematic literature review, search in a structured manner, evaluation of material against agreed criterion, analysis, and thematic reporting. However, it gives a cushion to the researcher for logically joining disorganized data on a specific field of study (Pittaway et al., 2004).

Using PRISMA framework, an initial scan of the literature while using an open search approach produced 460 items from different databases. These were refined using the CIMO framework after a CASP checklist. Initially, keeping in view the context, themes of systematic review, and outcomes in the mind; different short strings were generated which further helped in exploring the topic. At this stage, research was limited to those sources which were published only in the English language. This pilot search found the relevance of 322 items (Tranfield et al., 2003). Moreover, advice from experts was sought, and more keywords were included. The search engine primarily produced open-source peer-reviewed articles from Google Scholar along with additional keywords on the already explored databases. This was to reduce the bias of using selected databases only (Nijmeijer et al., 2014). An Excel worksheet was maintained to compile the data of empirical articles directly relevant to SHRM that were finally extracted through the structured approach of the PRISMA framework (Hobson, 2005; Macpherson and Holt, 2007; Nurse, 2013).

After a structured search from the five databases, 279 articles had topic relevance. Here, the author was involved in the judgmental process of article selection for deciding which articles need to be finally included. Where there was confusion, the opinion of a domain expert was sought. After that, 62 articles were ignored leaving behind around 217 articles on the basis of relevance in topic or abstract. Further refinement for the exclusion of 38 articles based on quality concerns was done as per CASP checklist leaving behind 179 articles. Later on, 3 more articles were excluded for having only those articles that were directly or indirectly linked to SHRM leaving behind 176 articles (Hobson, 2005). A thorough textual analysis of 176 articles found that the final useful number of articles directly relevant to SHRM was 113. Of those

shortlisted studies, 23 articles were conceptual articles and due to that reason, they were also excluded. A total of 80 empirical studies were finally obtained for further analysis. Hence results, analysis, and discussion in the systematic review are based only on 80 empirical articles. Figure 2 shows the Preferred Reporting of Items for Systematic Reviews and a Meta-analysis (PRISMA) flow chart that summarizes the overall process. An Excel sheet was duly maintained for the analysis of those eighty empirical articles from different perspectives as required in the thematic analysis of results mentioned in this study (Nurse, 2013). A checklist of 10 questions from the Critical Appraisal Skills Programme (2018) was used to ensure the quality of finally shortlisted 80 empirical studies.
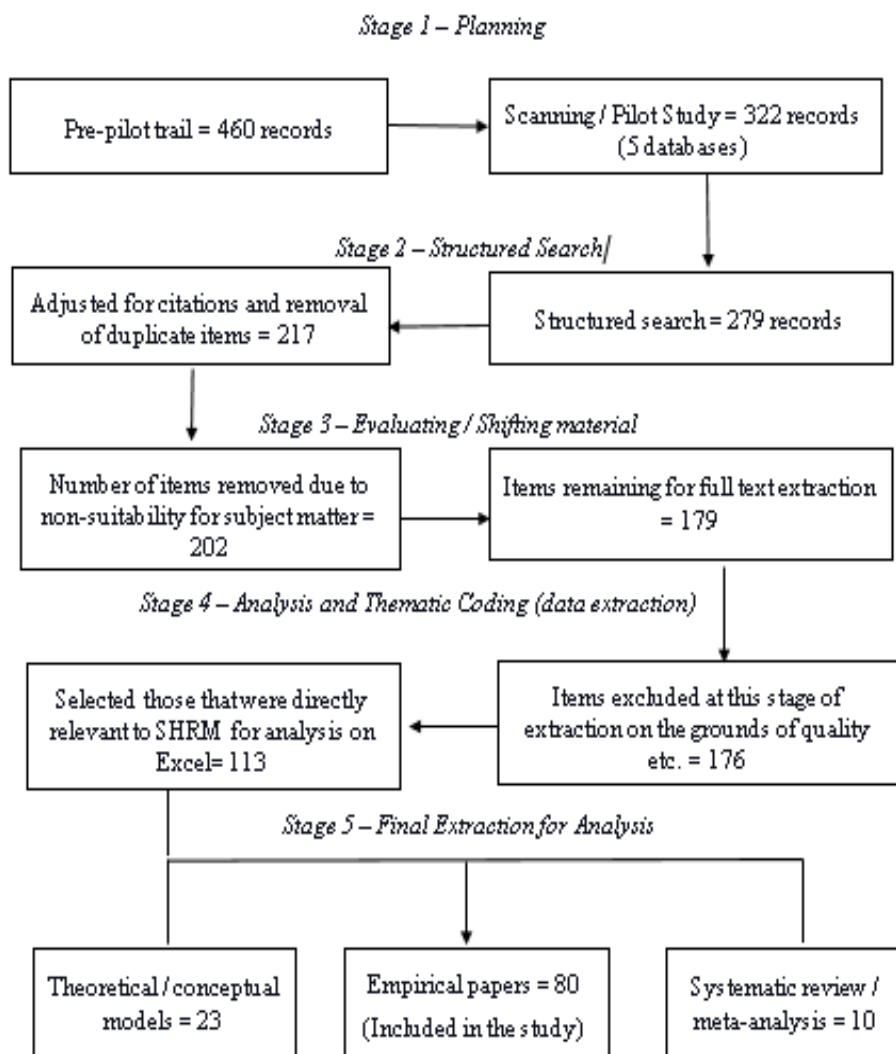
Stage 1 – Planning

Pre-pilot trail = 460 records	Scanning / Pilot Study = 322 records (5 databases)

Stage 2 – Structured Search/

Adjusted for citations and removal of duplicate items = 217	Structured search = 279 records

Stage 3 – Evaluating / Shifting material

Number of items removed due to non-suitability for subject matter = 202	Items remaining for full text extraction = 179

Stage 4 – Analysis and Thematic Coding (data extraction)

Selected those that were directly relevant to SHRM for analysis on Excel = 113	Items excluded at this stage of extraction on the grounds of quality etc. = 176

Stage 5 – Final Extraction for Analysis

Theoretical / conceptual models = 23	Empirical papers = 80 (Included in the study)	Systematic review / meta-analysis = 10

A CIMO framework was developed as per the directions of previous literature to refine the search. (Tranfield et al., 2003; Nurse, 2013). Finally shortlisted 80 studies were used to identify the context, interventions, mechanism, and outcomes for the implementation of SHRM. Based on the findings of existing body of knowledge, different factors were identified under these four main categories as given in the figure 4:
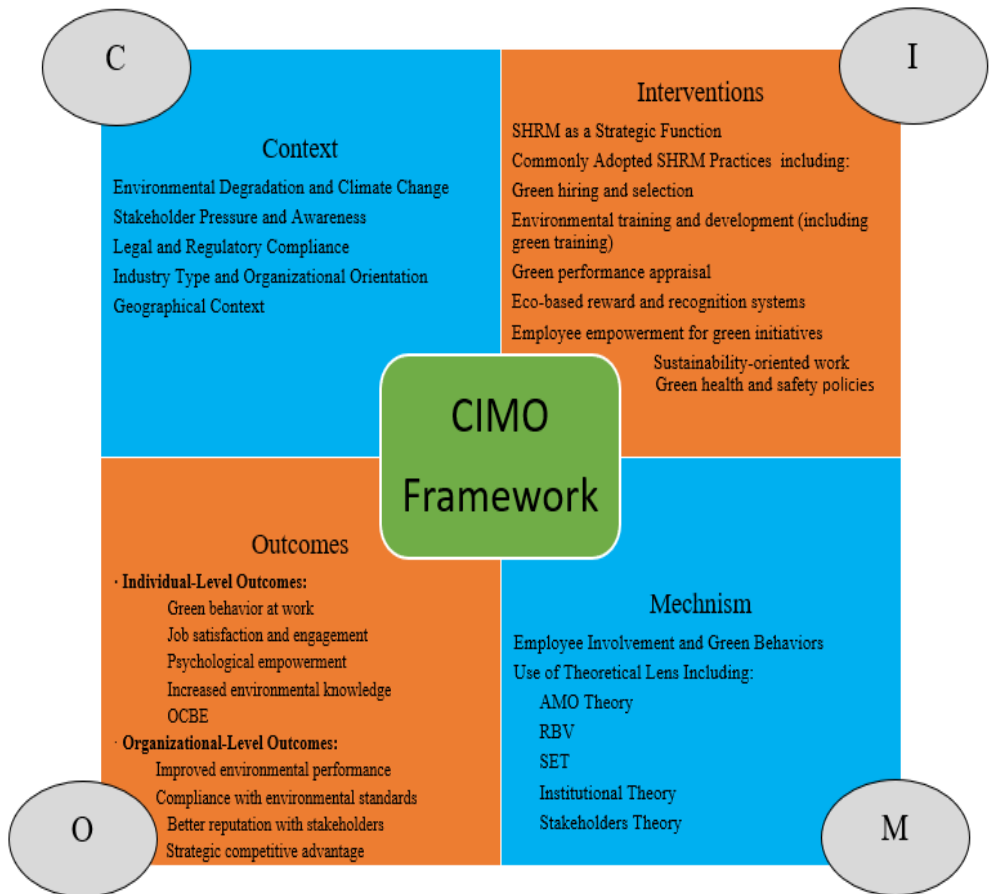

Figure 4 CIMO Framework Extracted from SLR (Source: Author's own work)

RESULTS OF THE STUDY

A thematic analysis was performed using a literature matrix in the MS Excel worksheet. The literature matrix helped to systematically enter and extract the

required data with a few simple steps of data organization. The results of theoretical findings for some of the major studies are following:

Table 1: Major SHRM Studies (2005–2024) with Watershed Contributions(Source: Author's own work)

Year	Authors	Key Contribution / Finding
2005	Hobson	Early consideration of NGOs' role in green practices and HR landscape.
2009	Berrone & Gomez-Mejia	Linked executive compensation with environmental performance andagency-institutional perspective.
2010	Jabbour et al.	Pioneered the role of HRM in different stages of environmental management.
2012	Carmona-Moreno et al.	Connected environmental HRM with sustained competitive advantage.
2013	Renwick et al.	Comprehensive review and future research agenda; and established a foundation for green HRM.
2014	Paillé et al.	Employee-level study on HRM's impact on environmental performance.
2016	Tariq et al.	Systematic literature review focusing on green employee empowerment.
2017	Dumont et al.	Developed and validated green HRM practices scale.
2018	Ren et al.	Notable review on green HRM that identified

Year	Authors	Key Contribution / Finding
		deductive trends, AMO theory dominance.
2019	Pham, Tučková, et al.	Mixed-methods study connecting GHRM to organizational citizenship behavior.
2020	Freitas et al.	Empirical link between GHRM and CSR, benchmarking cross-sector insights.
2021	Ababneh	Studied personality and employee engagement as mediators in green behavior.
2022	Hooi et al.	Linked green HRM with organizational citizenship behavior in Asian context.
2023	El Baroudi et al.	Incorporated green HRM in strategic frameworks, post-COVID direction.
2024	Li et al.	Recent exploration of spiritual leadership as a moderator in SHRM and green behavior link.

Measurement Scales on SHRM

As per this research, few studies developed new measurement scales related to SHRM (N = 17). Some studies used adopted scales (N = 31) while a few studies used adapted scales (N = 3). Few studies used descriptive patterns without adopting a specific measurement scale (N = 29). The analysis showed that 31 different scales have been used to measure the SHRM concept over the past 20 years. One measurement scale was found to be used in four different studies as per this analysis (i.e., Ren et al., 2018). A relatively recent instrument has gained much popularity in contemporary studies (i.e., Tang et al., 2018). Some scales were developed by other scholars (i.e., Dumont et al., 2017; Jabbour et al., 2010; Pham et al., 2019).

SHRM Research in the Context of Sector/Industry

The SHRM concept has been studied in both manufacturing and service industries. The manufacturing industry remained the preferred choice of the researchers (N = 33) followed by the services sector (N = 23). Several empirical studies investigated the SHRM phenomenon in both manufacturing and service sectors at the same time (N =21).

As per the analysis, some studies were conducted on both the manufacturing and service sectors simultaneously (N = 21). Although, it is fine as the concept is in an evolving phase. Future researchers need to develop scales relevant to an industry which may be either for the manufacturing industry or for the services sector in general. Some studies were purely conducted on the manufacturing industry (N = 33) and few studies were conducted purely on service sectors (N = 23). There were few studies that were conducted without considering the application of a specific sector or industry (N = 3).

Unit of Analysis

Majority of the studies used a single-source data primarily from the managers (N = 34) followed by the data collection from employees only (N = 25). Few studies reported dyadic data, i.e., manager–subordinate dyads (N = 6). In a few studies, empirical data was collected from three different sources such as from managers, employees, and customers (N = 4). Only a few studies reported chief executive officers as the respondents of their study (N = 3). Moreover, there were a few studies that used multilevel modeling with different units of analysis (N = 2) and some used external stakeholders such as a customer or regulator as the unit of analysis (N = 10).

Use of Underpinning Theories

Most of the research studies (N = 70) used one or at times two underpinning theories, explicitly. Only a few studies did not use or mention any theory. As per the findings, ability–motivation–opportunity theory has been the most cited theory (N = 11) followed by resource-based view (N = 10), social exchange theory (N = 5), stakeholders' theory (N = 5), institutional theory (N = 5 each) and supplies values fit theory (N = 4). In addition, social identity theory, contingency theory, self-determination theory, cognitive social theory, and attribution theory have also been cited as the underpinning theories (N = 2 each). Few theories have been used only once in an empirical study, including contingency theory, paradox theory, goal-setting theory, conservation of resource theory, social learning theory, organizational learning theory, theory of planned behavior, McLeland motivation theory, upper echelon's view, agency theory, meta theory, signaling theory, attitude theory, border theory, boundary theory, absorptive capacity theory and cognitive social theory (N = 1 each).

Research Approach

The quantitative research approach has been the preferred choice of scholars. As per the analysis, the number of quantitative studies was the highest compared to any other research approaches (N = 61). However, there is an encouraging trend concerning mixed methods approach (N = 13). Only a few studies explored the SHRM phenomenon using a qualitative approach (N = 4). Other approaches such as multi-method, experimental, and case study design have rarely been adopted (N = 1 each).

Sample Size in SHRM Research

The majority of the studies that used quantitative methods had a sample size of more than 200 (N = 37). Only a few studies (N = 5) used a large sample size (e.g., 500 and above). A considerable number of studies have reported their findings based on a sample size of less than 200 (N = 30). Moreover, the majority of studies that used a qualitative approach had a sample size of 12 or less (N = 3). Only one qualitative research had reported the findings based on 30 interviewees (N = 1). This showed that within the qualitative research on SHRM, the phenomenological lens has been used more often compared to the use of grounded theory as this concept is relatively established in the literature of human resource management.

Data Collection in SHRM Research

Personally administered questionnaire has been the most popular source of data collection methods (N = 52) followed by the use of online questionnaire surveys (N = 10). However, several studies used a hybrid approach, using both face-to-face and online data collection strategies (N = 18).

Response Rate in SHRM Research

As per the analysis, the studies that managed to achieve above 50% response rate (N = 28) were higher than the studies with a response rate of less than 50% (N = 24). Surprisingly, there was a large number of studies that did not mention their response rate (N = 28).

Time Horizon in SHRM Research

As per the review, most of the studies on SHRM were cross-sectional (N = 54). Few studies used time-lag design (N = 11) and just a few studies were longitudinal studies (N = 3). Some studies did not report the time horizon of the study (N = 12).

Use of Data Analysis Software

Based on the analysis, quantitative researchers have extensively used 2nd generation techniques for data analysis. The use of AMOS (N = 16) and Smart PLS (N =13) remained the popular choice among. Nevertheless, majority of the SHRM researchers used IBM SPSS (N = 27) including in some of the recently published articles. LISERAL and Mplus were used and considered by only a few studies (N = 3 each). Unexpectedly, some of the studies did not even report the software that they used for the data analysis (N = 11). Other programs such as Stata, QDA Miner Lite, Excel, SciMAT, and iNetPrivacy were only used once (N = 1 each). Moreover, NVIVO (N = 2) and Atlas Ti (N = 1) have also been used for the qualitative data analysis.

Use of Bundle versus Individual SHRM Practices

Bulk of the research on SHRM practices examined it as the bundling practice (N = 50) while some studies focused on the individual SHRM practices as well, especially for the separate use of variables (N = 23). Few studies did not take a clear stance on individual versus bundle practices (N = 7).

DISCUSSION

This systematic literature review explored the dynamic evolution within the domain of Sustainable Human Resource Management (SHRM) from 2005 to 2024. The initial phase (2005-2010) was of the promising emergence of SHRM. During this era, early attempts were made for the conceptualizations for distinguishing it from Green HRM; although, we can observe a low number of empirical studies. This foundational period gradually cemented the way for the critical theoretical grounding which can be observed between 2011-2013. During this era, frameworks such as the Ability-Motivation-Opportunity (AMO) theory got prominence by setting the theoretical underpinnings that were necessary for strong future research, although there was a temporary decline in the empirical research output around 2016.

A new and significant surge in the empirical research output can be observed from 2014 onwards which particularly got accelerated from 2020-2024. This period established a major watershed which was motivated by an increased divergence in

research focus and the development of new measurement scales along with an evident response to global events such as COVID-19. This factor incited the interest of SHRM scholars in areas like green health and safety. In this era, there was considerable growth in the publications, along with the rising average citations which resulted in the maturation of SHRM as a field by developing it from a domain of largely quantitative, cross-sectional studies towards a greater adoption of mixed methods research with a prolonged focus on the services sector and with a persistent demand for multilevel and longitudinal research to further advance the theoretical and practical understanding of the field.
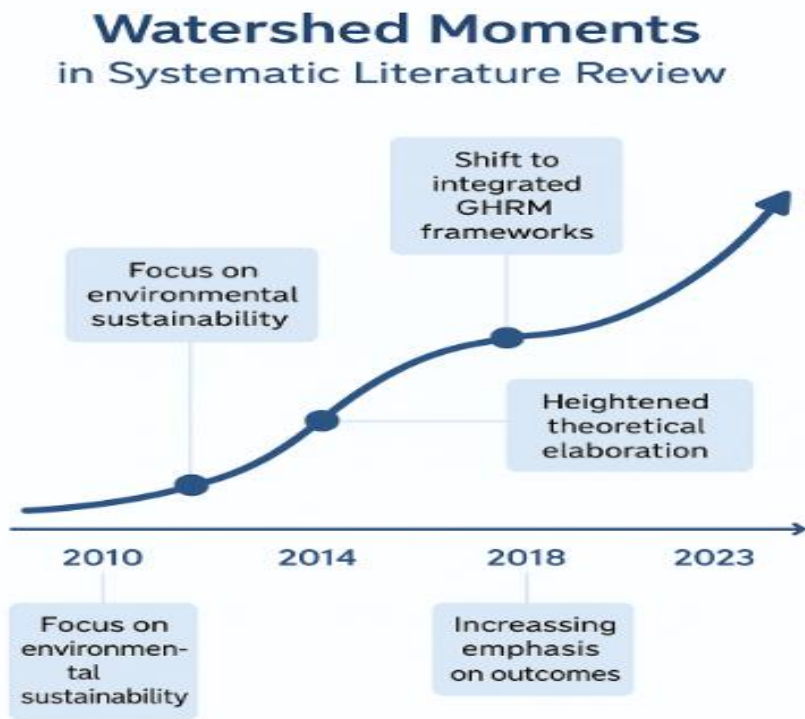
Figure 5. Major Watershed Moments during Evolution of SHRM (2005 – 2024)

(Source: Author's own work)

The majority of research on Sustainable Human Resource Management (SHRM) has been quantitative using the deductive method (Jia et al., 2018; Paillé et al., 2014). However, the SHRM literature needs to use a wider variety of research techniques. There aren't enough qualitative studies, exploratory studies, case studies, and experimental studies in the field of sustainable HRM, even though some researchers have studied the phenomenon through a mixed-method approache (Davis et al., 2020; Mishra et al., 2014; Mousa & Othman, 2020; Yu & Zellmer-Bruhn, 2018). An increasing

trend of systematic literature reviews on SHRM has been observed but there is a need to further organize the literature on SHRM from different perspectives (Cherian & Jacob, 2012; Pham et al., 2019; Pham et al., 2019; Renwick et al., 2013; Santana et al., 2020; Tariq et al., 2016). Given the significant empirical and theoretical work on SHRM, it is anticipated that more academics will contribute to systematic literature evaluations in the future (Chan, 2009; Haddock-Millar et al., 2016; Perron et al., 2006). To further establish and investigate theories like social learning, social exchange, and institutional theory in the context of sustainable Human Resource Management (SHRM), more deductive research is required. The use of other theories that are already in existence as well as creating new ones through inductive research; both are necessary. The ability-motivation-opportunity theory and resource-based theory are the two that have been most frequently used in SHRM-related empirical research showing an emphasis on employees' capacities, drives, and opportunities to engage in SHRM practices. Concerning the use of bundle versus individual practices of SHRM, most of the studies have used bundle practices in SHRM (Ahmad & Umrani, 2019; Freitas et al., 2020; Islam et al., 2020). The reason for using bundle practices is that scholars use all the SHRM practices as a part of the SHRM domain. However, a few practices may be more influential than other SHRM practices and that's why research on individual practices might be equally important. There are some studies on individual practices of SHRM as well (Berrone & Gomez-Mejia, 2009; Pham, Tučková et al., 2019; Song et al., 2020; Xie et al., 2020).

Previous research on Sustainable Human Resource Management (SHRM) has predominantly focused on using SHRM practices as independent variable, with only limited studies exploring indirect effects or using SHRM as an outcome variable. There is a need for research to examine the impact of various antecedents and contextual factors concerning SHRM. Additionally, studies are needed to determine which specific SHRM practice is most effective under different contextual factors. Some studies have also explored the mediating role of SHRM. Future studies should examine the effect of environmental, organizational, and individual-level antecedents on SHRM, providing an opportunity for scale development and exploration of SHRM as an outcome level construct. For the quantitative measurement of the concept of SHRM, there are a few studies in the literature that have developed new measurement scales on SHRM (Dumont et al., 2017; Jia et al., 2018; Ren et al., 2018). However, most of the studies on SHRM have adopted previous measurement scales. The reason for new scale development is that SHRM research has had a real impetus for progression of late. Most of the quantitative studies as cited in this research have shown that the practice of adopted scales is more prevalent. Hence, there is a need to develop new measurement scales and to further refine previous measurement scales on SHRM by adapting them and making them more context-relevant, especially for developing countries.

There have been relatively less research studies on the service sectors with the majority of prior research concentrating on the manufacturing industry (e.g., Berrone & Gomez-Mejia, 2009; Freitas et al., 2020; Xie et al., 2020). The current focus on the hospitality, tourism, and hotel industry has elevated the services sector for SHRM

research (Anwar et al., 2020; Paillé et al., 2020; Tan et al., 2019; Yusliza et al., 2017). There is a need to research how SHRM is perceived and used in various service sectors. This is because the majority of public sector organizations worldwide are service-based organizations (Antonioli et al., 2013). Particularly after COVID-19, the global services, including internet-based enterprises have grown in number requiring research related to SHRM, particularly by incorporating green health and safety as a practice of SHRM (Shahzad, 2023). This study has also found that in most of the SHRM research, employees were the respondents, and rightly so because they are at the direct receiving end of SHRM practices (Ahmad & Umrani, 2019; Xie et al., 2020). However, in relatively a few studies, managers and even the top managers were the respondents (Freitas et al., 2020; Mousa & Othman, 2020). It is also important that research studies on SHRM should explore the actual implementation of SHRM in comparison to the intended SHRM. For that matter, multi-source data needs to be collected such as company documents, policies, job descriptions of employees, reward structures, appraisal forms, policies on company websites, etc., which can prove to be useful resources in this regard. The individual employee was the primary unit of analysis in empirical studies of SHRM.

In most of the empirical studies referred to this study, the sample size was less than 300. A relatively larger sample size must be taken for greater generalization especially while developing new measurement scales where data needs repeated collection and analysis to establish validity. In the qualitative studies, the sample size was 12 or less than it. There was only one study with 30 respondents. This is mainly due to the reason that the concept is relatively established and phenomenological studies are more prevalent compared to grounded theory. In most of the quantitative survey-based studies on SHRM, the response rate has been less than 50 % for data collection (Anwar et al., 2020; Kim et al., 2019; Yong & Mohd-Yusoff, 2016). Researchers need to come up with innovative ways to align with the industry to reduce the academia-industry gap and increase the response rate in the studies on SHRM. Furthermore, one reason for the low response rate is that the concept of SHRM is still in the nascent phase and is still being implemented in many developing economies on an experimental basis (Daily et al., 2012; Davis et al., 2020; Diaz-Carrion et al., 2021).

Regarding the time dimensions of research, the majority of studies have used a cross-sectional design with little use of time lags for data collection (Ahmad & Umrani, 2019; Antonioli et al., 2013; Anwar et al., 2020; Freitas et al., 2020; Tuan, 2021; Xie et al., 2020; Zhao et al., 2020). The lack of longitudinal studies raises concerns about proving causality in cross-sectional studies (Berrone & Gomez-Mejia, 2009). The requirement for time lag and longitudinal research is further highlighted by the common method bias associated with cross-sectional studies and the dependence on self-reported data (Antonioli et al., 2013; Tuan, 2021; Zhao et al., 2020). The validity of causal claims is increased when time lag and longitudinal designs are included in data collection (Berrone & Gomez-Mejia, 2009). There is a need for SHRM studies to examine this discrepancy as there hasn't been much research on ISO 14001-certified companies. To advance the literature on SHRM and to meet sustainable development objectives, regulatory bodies must be educated and then they should do the capacity

building of others. The understanding and application of SHRM can be improved by new findings in this field (Begley, 1996; Chan, 2009; Freitas et al., 2020; Shahzad, 2025; Teixeira et al., 2012).

CONCLUSION AND IMPLICATIONS

This study examined the various effects of implementing SHRM in businesses and the contribution of past empirical research to this area of human resource management. Initiatives based on corporate social responsibility, staff training programs, environmental certification schemes, and more can contribute positively to refining a positive image for organizations in the eyes of environmental stakeholders, particularly customers, regulators, and government bodies. SHRM practices can influence employee cognition and behavior, leading to enhanced psychological satisfaction and the resolution of stakeholder issues. The HR manager plays a key role in the implementation of SHRM practices and in boosting employee motivation toward initiatives related to environmental sustainability.

Theoretical Implications

This study highlighted the necessity of achieving cross-cultural consensus on the definition of SHRM while highlighting its critical significance in having eco-friendly practices that enhance financial performance. Strengthening the theoretical underpinnings of SHRM may refine conceptual boundaries and advance theoretical evolution. This study reveals a widespread reliance on quantitative, deductive studies, requiring methodological diversity. By incorporating more qualitative, exploratory, and experimental inquiries into the SHRM domain can reveal complicated sides of practice. By acknowledging the pervasiveness of the Ability-Motivation-Opportunity (AMO) and resource-based theories, this study advocates for an inclusive examination of established theories, such as social learning theory, social exchange theory, and institutional frameworks within the paradigm of SHRM. Leveraging on the existing theories and imitating new ones through inductive research will strengthen the theoretical foundation for SHRM.

Practical Implications

Practical implications need the use of SHRM practices. This involves capitalizing in employee training with respect to relevant green skills and familiarizing SHRM approaches to meet different industry requirements. Emphasis on environmental responsibility culture that includes both employees and managers' nurtures comprehensive engagement and long-term commitment. Cooperating with regulatory bodies ensures that SHRM practices line up with environmental regulations. Communicating for SHRM initiatives with stakeholders enhances organizational reputation and integrating SHRM principles into education makes them ready to be good future professionals. Environmental certification initiatives at individual and organizational level is also required. Moreover, acceptance of SHRM practices in the post-pandemic COVID-19 era to address health and safety concerns is also essential. Below are some of the crisp action points for practitioners/managers

in the real-world organizations regarding Sustainable Human Resource Management (SHRM).

Actively get engage for strong commitment from the top leadership and simultaneously nurture an organizational culture that sincerely values environmental sustainability. This step is vital for the effective implementation and success of initiatives related to SHRM.

Incorporate a comprehensive set of SHRM practices instead of isolated initiatives is important. This includes green hiring, specialized environmental training, incorporation of eco-performance in appraisals, and establishing an eco-based reward and recognition system.

Recognizing the environmental regulations and legal recommendations not just as a compliance mechanism but as strategic choice is beneficial. Moreover, managers ought to utilize them to initiate the adoption of SHRM to enhance organizational standing and gain stakeholder trust along with the improvement of overall environmental performance.

Design and implement ongoing environmental training programs which should be customized to improve employees' knowledge, green attitudes, and empowerment to actively participate in the green initiatives at the workplace.

Development and tracking of precise metrics for both individual employee green behaviors is recommended (e.g., energy consumption, waste reduction) and organizational-level environmental performance (e.g., carbon footprint, resource efficiency, and associated financial benefits, etc.).

Adaption of SHRM practices is recommended for getting them aligned with the specific industry, cultural norms, and regulatory environment of your organization, particularly when operating in diverse cultural dimensions or in countries categorized as emerging economies.

Limitations and Future Research Directions

This systematic literature review contributes to the knowledge in the domain of SHRM while identifying several gaps for the future research studies. The manufacturing industry and especially the cement industry has been a major focus of SHRM research (Kim et al., 2019; Yong & Mohd-Yusoff, 2016). However, SHRM research is needed in different manufacturing sectors including manufacturers of fast-moving consumer goods, mining, and electronics industry etc. Future researchers should also study SHRM in the service sectors, which are essential to economic development (Pham et al., 2019). The services sector is crucial since it considerably boosts employment and GDP. The cost factor of SHRM implementation has been reported in the literature as the biggest hurdle and it needs more attention in the future literature, especially for small and medium-size enterprises (SMEs) in developing countries. While earlier research has demonstrated the beneficial effects of SHRM on financial performance (e.g., O'Donohue & Torugsa, 2016). More research is required to elaborate the hurdles associated with many expenses associated with the implementation of SHRM and its complications, more so in developing countries (Alfred & Adam, 2009; Chaudhary, 2019; Al Kerdawy, 2019).

There may be different limitations, biases, and contextual elements which may potentially influence generalizability results for this study. Although this study provides a comprehensive systematic review of two decades, there are a few limitations of this research as well. Firstly, due to a sole focus on empirical research, this review omitted useful insights from the conceptual papers, theoretical reviews, and practitioner-oriented articles which might have offered different useful views on the evolution of SHRM and its application. Methodologically, often a major bias that is observed in the review-based studies is the major reliance on the cross-sectional, self-reported, and quantitative research designs. Although, such research is efficient and is widely conducted, but it fundamentally limits the causality which leads to concerns about common method bias as it may oversimplify complex organizational phenomena due to failure in capturing critical ongoing developments that are often associated with the longitudinal studies. Moreover, the generalizability of the findings of current research is significantly influenced by contextual factors such as the existence of geographical bias as it can be observed that most of the research reported here was from the western countries while just the recent research was from an Asian context. It is also because of the recent surge in literature from Asian countries such as India, Malaysia, China, and Pakistan, etc. However, it may potentially overlook key drivers of change, for SHRM in other geographical regions such as Africa or Latin America. Similarly, the manufacturing sector has been a consistent focus but the interest in services sector has been growing of late. Hence, the overall application of findings to a broad range of industries or organizational sizes requires caution.

Moreover, the success of SHRM interventions is largely dependent on the organization-specific cultural norms, national regulatory frameworks, and the unique strategic orientation towards sustainability. This means that direct implementation of the findings without taking contextual adaptation into consideration may not provide the desired results. There have been a few conflicting findings in the literature as well. While there is a broad consensus about the positive association between various SHRM practices (e.g., green training, green rewards) and desired outcomes such as environmental performance or green employee behavior; few studies present inconsistent results, especially regarding the generalizability of these relationships. Such inconsistencies are often due to the different methodological approaches, specific bundle practices of SHRM that were examined, or due to the contextual variables (e.g., leadership styles, organizational culture) which were considered as moderators or mediators.

There are very few studies that examine SHRM as a moderating or mediating variable in the current SHRM literature. It is necessary to investigate the different other contextual antecedents and varying outcomes of SHRM, classify them into study frameworks, and summarize key findings from SHRM research for theoretical contribution. Only a few studies in the literature are qualitative, hence there is a need for more qualitative research. In addition to expanding the unit of analysis to encompass manager-subordinate dyads and organization-level analysis, specific

SHRM practices should be investigated. While the Ability-Motivation-Opportunity theory is frequently employed, it is important to look into other established theories as well for the possible explanation of dynamics associated with SHRM. Although quantitative research has been preferred; there is a need for blended approaches and qualitative studies should also be conducted. For deductive research, large sample sizes are advised to improve generalization, and researchers should use techniques to increase the response rate in survey-based research (Brekke & Nyborg, 2008; Carmona-Moreno et al., 2012; Cherian & Jacob, 2012). Except for conference papers, books, reports, dissertations, and articles from the popular press, published research papers in peer-reviewed journals were the main focus of this comprehensive study. However, there is a need to do content analysis of social media trends, blogs, and interviews in SHRM's to examine cultural and social contexts. A big contribution can be made to the current body of knowledge on SHRM if it is organized with the help of meta-analysis, and country-specific systematic reviews can offer viewpoints from many stakeholders. A recent systematic literature review can be a good starting point in this regard (i.e., Shahzad, 2025). Moreover, there is a need for case studies, experimental designs, and multi-method research for future research on SHRM.

REFERENCES

Ababneh, O. M. A. (2021). How do green HRM practices affect employees' green behaviors? The role of employee engagement and personality attributes. *Journal of Environmental Planning and Management, 64*(7), 1204–1226. doi: 10.1080/09640568.2020.1814708

Ahmad, I., & Umrani, W. A. (2019). The impact of ethical leadership style on job satisfaction. *Leadership & Organization Development Journal, 40*(5), 534–547. https://doi.org/10.1108/LODJ-12-2018-0461

Ahmad, S. (2015). Green human resource management: Policies and practices. *Cogent Business & Management, 2*(1). doi.org/10.1080/23311975.2015.1030817

Al Kerdawy, M.M.A. (2019), "The Role of Corporate Support for Employee Volunteering in Strengthening the Impact of Green Human Resource Management Practices on Corporate Social Responsibility in the Egyptian Firms", *European Management Review, 16*(4), 1079–1095, doi: 10.1111/emre.12310.

Alkhateeb, T. T. Y., Alkahtani, N. S., & Mahmood, H. (2018). Green human resource management, financial markets and pollution nexus in Saudi Arabia. *International Journal of Energy Economics and Policy*, 8(3), 33-36.

Alfred, A. M., & Adam, R. F. (2009). Green management matters regardless. *Academy of Management Perspectives, 23*(3), 17–26. doi.org/10.5465/amp.2009.43479261

Antonioli, D., Mancinelli, S., & Mazzanti, M. (2013). Is environmental innovation embedded within high-performance organizational changes? The

role of   human resource management and complementarity in green business   strategies. *Research Policy, 42*(4), 975–988. doi.org/10.1016/j.respol.2012.12.005

Anwar, N., Nik Mahmood, N. H., Yusliza, M. Y., Ramayah, T., Noor Faezah, J., & Khalid, W. (2020). Green human resource management for organisational citizenship behaviour towards the environment and environmental performance on a university campus. *Journal of Cleaner Production, 256*, 120401. doi: 10.1016/j.jclepro.2020.120401

Begley, R. (1996). Is ISO 14000 worth it? *Journal of Business Strategy, 17*(5), 50–55. https://doi.org/10.1108/EB039805/FULL/XML

Berrone, P., & Gomez-Mejia, L. R. (2009). Environmental performance and executive compensation: An integrated agency-institutional perspective. *Academy of Management Journal, 52*(1), 103–126. doi.org/10.5465/amj.2009.36461950

Brekke, K. A., & Nyborg, K. (2008). Attracting responsible employees: Green production as labor market screening. *Resource and Energy Economics, 30*(4), 509–526.   https://doi.org/10.1016/j.reseneeco.2008.05.001

Carmona-Moreno, E., Céspedes-Lorente, J., & Martinez-del-Rio, J. (2012). Environmental human resource management and competitive advantage. *Management Research: Journal of the Iberoamerican Academy of Management, 10*(2), 125–142.   https://doi.org/10.1108/1536-541211251607

Chan, W. W. (2009). Environmental measures for hotels' environmental management systems.   *International Journal of Contemporary Hospitality Management, 21*(5), 542–560. https://doi.org/10.1108/09596110910967791

Chaudhary, R. (2019). Green human resource management and job pursuit intention: Examining the underlying processes. *Corporate Social Responsibility and Environmental Management*. doi.org/10.1002/csr.1732

Chen, S., Jiang, W., Li, X., & Gao, H. (2021). Effect of employees' perceived green HRM on their workplace green behaviors in oil and mining industries: Based on cognitive-affective system theory. *International Journal of Environmental Research and Public Health, 18*(8), 4056.10.3390/ijerph18084056

Cherian, J. P., & Jacob, J. (2012). A study of green HR practices and its effective implementation in the organization: A review. *International Journal of Business and Management, 7*(21). https://doi.org/10.5539/ijbm.v7n21p25

Critical Appraisal Skills Programme (2018). *CASP (CASP Checklist: CASP Systematic Review Checklist)* Checklist. [online] Available at: https://casp-uk.net/casp-tools-checklists/systematic-review-checklist/. Accessed: Date Accessed. June 20, 2025

Daily, B. F., Bishop, J. W., & Massoud, J. A. (2012). The role of training and empowerment in environmental performance. *International Journal of Operations & Production Management, 32*(5), 631–647. https://doi.org/10.1108/01443571211226524

Darvishmotevali, M., & Altinay, L. (2022). Green HRM, environmental awareness and green behaviors: The moderating role of servant leadership. *Tourism Management, 88*, 104401. https://doi.org/10.1016/j.tourman.2021.104401

Davis, M. C., Unsworth, K. L., Russell, S. V., & Galvan, J. J. (2020). Can green behaviors really be increased for all employees? Trade-offs for 'deep greens' in a goal-oriented green human resource management intervention. *Business Strategy and the Environment, 29*(2), 335–346. https://doi.org/10.1002/bse.2367

Diaz-Carrion, R., López-Fernández, M., & Romero-Fernandez, P. M. (2021). Constructing an index for comparing human resources management sustainability in Europe. *Human Resource Management Journal, 31*(1), 120–142. https://doi.org/10.1111/1748-   8583.12286

Dumont, J., Shen, J., & Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human Resource Management*, *56*(4), 613–627. doi: 0.1002/hrm.21792

El Baroudi, S., Cai, W., Khapova, S. N., & Jiang, Y. (2023). Green human resource management   and team performance in hotels: The role of green team behaviors. *International Journal   of Hospitality Management*, *110*, 103436.

Freitas, W. R. de S., Caldeira-Oliveira, J. H., Teixeira, A. A., Stefanelli, N. O., & Teixeira, T. B.   (2020). Green human resource management and corporate social responsibility. *Benchmarking: An International Journal, 27*(4), 1551– 1569. https://doi.org/10.1108/BIJ-12-2019-0543

Haddock-Millar, J., Sanyal, C., & Müller-Camen, M. (2016). Green human resource management: A comparative qualitative case study of a United States multinational   corporation. *The International Journal of Human Resource Management, 27*(2), 192– 211. https://doi.org/10.1080/09585192.2015.1052087

Hameed, Z., Khan, I. U., Islam, T., Sheikh, Z., & Naeem, R. M. (2020). Do green HRM practices influence employees' environmental performance? *International Journal of Manpower, 41*(7), 1061–1079. https://doi.org/10.1108/IJM-08-2019-0407

Hobson, K. (2005). Considering "green" practices: NGOs and Singapore's emergent environmental political landscape. *Journal of Social Issues in Southeast Asia, 20*(2), 155–176.

Hooi, L. W., Liu, M.-S., & Lin, J. J. J. (2022). Green human resource management and green   organizational citizenship behavior: Do green culture and green values matter? *International Journal of Manpower, 43*(3), 763–785. https://doi.org/10.1108/IJM-05-   2020-0247

Islam, M. A., Hunt, A., Jantan, A. H., Hashim, H., & Chong, C. W. (2020). Exploring challenges and solutions in applying green human resource management practices for the sustainable workplace in the ready-made garment industry in Bangladesh. *Business Strategy & Development, 3*(3), 332–343. https://doi.org/10.1002/bsd2.99

Jabbour, C. J. C., Santos, F. C. A., & Nagano, M. S. (2010). Contributions of HRM throughout the stages of environmental management: Methodological

triangulation applied to companies in Brazil. *The International Journal of Human Resource Management*, *21*(7), 1049–1089. https://doi.org/10.1080/09585191003783512

Jia, J., Liu, H., Chin, T., & Hu, D. (2018). The continuous mediating effects of GHRM on employees' green passion via transformational leadership and green creativity. *Sustainability*, *10*(9), 3237. https://doi.org/10.3390/su10093237

Kim, Y. J., Kim, W. G., Choi, H.-M., & Phetvaroon, K. (2019). The effect of green human resource management on hotel employees' eco-friendly behavior and environmental performance. *International Journal of Hospitality Management, 76*, 83–93. https://doi.org/10.1016/j.ijhm.2018.04.007

Li, W., Abdalla, A. A., Mohammad, T., Khassawneh, O., & Parveen, M. (2023). Towards examining the link between green HRM practices and employee green in-role behavior: Spiritual leadership as a moderator. *Psychology Research and Behavior Management, 16*, 383–396. https://doi.org/10.2147/PRBM.S396114

Macpherson, A., & Holt, R. (2007). Knowledge, learning and small firm growth: A systematic review of the evidence. *Research Policy, 36*(2), 172–192. https://doi.org/10.1016/j.respol.2006.10.001

Mishra, R. K., Sarkar, S., & Kiranmai, J. (2014). Green HRM: Innovative approach in Indian public enterprises. *World Review of Science, Technology and Sustainable Development, 11*(1), 26. https://doi.org/10.1504/WRSTSD.2014.062374

Mousa, S. K., & Othman, M. (2020). The impact of green human resource management practices on sustainable performance in healthcare organisations: A conceptual framework. *Journal of Cleaner Production, 243*, 118595. doi: 10.1016/j.jclepro.2019.118595

Muisyo, P. K., Su, Q., Hashmi, H. B. A., Ho, T. H., & Julius, M. M. (2022). The role of green HRM in driving hotels' green creativity. *International Journal of Contemporary Hospitality Management, 34*(4), 1331–1352. https://doi.org/10.1108/IJCHM-07-2021-0833

Nijmeijer, K. J., Fabbricotti, I. N., & Huijsman, R. (2014). Making franchising work: A framework based on a systematic review. *International Journal of Management Reviews, 16*(1), 62–83. https://doi.org/10.1111/ijmr.12009

Nurse, A. (2013). Privatising the green police: The role of NGOs in wildlife law enforcement. *Crime, Law and Social Change, 59*(3), 305–318. https://doi.org/10.1007/s10611-013-9417-2

O'Donohue, W., & Torugsa, N. (Ann). (2016). The moderating effect of 'Green' HRM on the association between proactive environmental management and financial performance in small firms. *The International Journal of Human Resource Management, 27*(2), 239–261. doi.org/10.1080/09585192.2015.1063078

Paillé, P., Chen, Y., Boiral, O., & Jin, J. (2014). The impact of human resource management on environmental performance: An employee-level study. *Journal of Business Ethics, 121*(3), 451–466. doi.org/10.1007/s10551-013-1732-0

Paillé, P., Valéau, P., & Renwick, D. W. (2020). Leveraging green human resource
practices to achieve environmental sustainability. *Journal of Cleaner
Production, 260*, 121137. https://doi.org/10.1016/j.jclepro.2020.121137

Perron, G. M., Côté, R. P., & Duffy, J. F. (2006). Improving environmental awareness
training in business. *Journal of Cleaner Production, 14*(6–7), 551–562.
https://doi.org/10.1016/j.jclepro.2005.07.006

Pham, N. T., Hoang, H. T., & Phan, Q. P. T. (2019). Green human resource
management: A comprehensive review and future research agenda.
International Journal of Manpower, 41(7), 845–878. https://doi.org/10.1108/IJM-
07-2019-0350

Pham, N. T., Tučková, Z., & Chiappetta Jabbour, C. J. (2019). Greening the
hospitality industry: How do green human resource management
practices influence organizational citizenship behavior in hotels? A
mixed-methods study. *Tourism Management, 72*, 386–399.
https://doi.org/10.1016/j.tourman.2018.12.008

Pittaway, L., Robertson, M., Munir, K., Denyer, D., & Neely, A. (2004). Networking
and innovation: A systematic review of the evidence. *International Journal of
Management Reviews, 5–6*(3–4), 137–168. https://doi.org/10.1111/j.1460-
8545.2004.00101.x

Ren, S., Tang, G., & Jackson, S. E. (2018). Green human resource management
research in emergence: A review and future directions. *Asia Pacific
Journal of Management, 35*(3), 769–803. https://doi.org/10.1007/s10490-017-
9532-1

Renwick, D. W. S., Redman, T., & Maguire, S. (2013). Green human resource
management: A review and research agenda. *International Journal of
Management Reviews, 15*(1), 1–14. https://doi.org/10.1111/j.1468-
2370.2011.00328.x

Rubel, M. R. B., Kee, D. M. H., & Rimi, N. N. (2021). The influence of green HRM
practices on green service behaviors: The mediating effect of green
knowledge sharing. *Employee Relations: The International Journal, 43*(5),
996–1015. https://doi.org/10.1108/ER-04-2020-0163

Santana, M., Morales-Sánchez, R., & Pasamar, S. (2020). Mapping the link between
corporate social responsibility (CSR) and human resource
management (HRM): How is this relationship measured?
Sustainability, 12(4), 1678. https://doi.org/10.3390/su12041678

Shafaei, A., Nejati, M., & Mohd Yusoff, Y. (2020). Green human resource
management.   *International Journal of Manpower, 41*(7), 1041–1060.
https://doi.org/10.1108/IJM-08-   2019-0406

Shah, N., & Soomro, B. A. (2023). Effects of green human resource management
practices on green innovation and behavior. *Management Decision, 61*(1),
290–312. https://doi.org/10.1108/MD-07-2021-0869

Shahzad, M. U. (2020). Green human resource management and its strategic
importance in the modern era: A review and research framework.

International Journal of Entrepreneurship and Business Development, 3(4), 484–493. https://doi.org/10.29138/ijebd.v3i4.1222

Shahzad, M. U. (2023). Impact of flexible work arrangements on work engagement in post- COVID-19 scenario: A case of technology-focused entrepreneurial firms. *Journal of Entrepreneurship and Business Venturing, 3*(1). https://doi.org/10.56536/jebv.v3i1.30

Shahzad, M. U. (2025). Beyond Boundaries: A Global Perspective on Sustainable Human Resource Management in Asia and Other Continents. *International Journal of Management Research and Emerging Sciences*, *15*(1).

Song, M., Yang, M. X., Zeng, K. J., & Feng, W. (2020). Green knowledge sharing, stakeholder pressure, absorptive capacity, and green innovation: Evidence from Chinese manufacturing firms. *Business Strategy and the Environment, 29*(3), 1517–1531. https://doi.org/10.1002/bse.2450

Tan, K.-L., Lew, T.-Y. and Sim, A.K.S. (2019). An innovative solution to leverage meaningful work to attract, retain and manage Generation Y employees in Singapore's hotel industry, *Worldwide Hospitality and Tourism Themes*, *11*(2), 204–216, doi: 10.1108/WHATT-11-2018-0075.

Tang, G., Chen, Y., Jiang, Y., Paillé, P. and Jia, J. (2018). Green human resource management practices: scale development and validity, *Asia Pacific Journal of Human Resources*,.*56*(1), 31–55, doi: 10.1111/1744-7941.12147.

Tariq, S., Jan, F.A. and Ahmad, M.S. (2016), "Green employee empowerment: a systematic literature review on state-of-art in green human resource management", *Quality & Quantity*, *50*(1), 237–269, doi: 10.1007/s11135-014-0146-0.

Teixeira, A.A., Jabbour, C.J.C. and Jabbour, A.B.L. de S. (2012), "Relationship between green management and environmental training in companies located in Brazil: A theoretical framework and case studies", *International Journal of Production Economics*, *140*(1), 318–329, doi: 10.1016/j.ijpe.2012.01.009.]

Tian, M., Deng, P., Zhang, Y. and Salmador, M.P. (2018), "How does culture influence innovation? A systematic literature review", *Management Decision*, 56(5), 1088–1107, doi: 10.1108/MD-05-2017-0462.

Tranfield, D., Denyer, D. and Smart, P. (2003), "Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review", *British Journal of Management*, 14(3), 207–222, doi: 10.1111/1467-8551.00375.

Tuan, L.T. (2021), "Effects of environmentally-specific servant leadership on green performance via green climate and green crafting", *Asia Pacific Journal of Management*, *38*(3), 925–953, doi: 10.1007/s10490-019-09687-9.

Xie, X., Zhu, Q. and Qi, G. (2020), "How can green training promote employee career growth?", *Journal of Cleaner Production*, 259, 12-048, doi: 10.1016/j.jclepro.2020.120818.

Yong, J.Y. and Mohd-Yusoff, Y. (2016), "Studying the influence of strategic human resource competencies on the adoption of green human resource management practices", *Industrial and Commercial Training*, *48*(8), 416–422,

doi: 10.1108/ICT-03-2016-0017.

Yong, J.Y., Yusliza, M.-Y. and Fawehinmi, O.O. (2019), "Green human resource management", *Benchmarking: An International Journal*, 27(7), 2005–2027, doi: 10.1108/BIJ-12-2018-0438.

Yu, L. and Zellmer-Bruhn, M. (2018), "Introducing Team Mindfulness and Considering its Safeguard Role Against Conflict Transformation and Social Undermining", *Academy of Management Journal*, *61*(1), pp. 324–347, doi: 10.5465/amj.2016.0094.

Yusliza, M.-Y., Othman, N.Z. and Jabbour, C.J.C. (2017), "Deciphering the implementation of green human resource management in an emerging economy", *Journal of Management Development*, *36*(10), 1230–1246, doi: 10.1108/JMD-01-2017-0027.

Yusoff, Y.M., Nejati, M., Kee, D.M.H. and Amran, A. (2020), "Linking Green Human Resource Management Practices to Environmental Performance in Hotel Industry", *Global Business Review*, *21*(3), 663–680, doi: 10.1177/0972150918779294.

Zhao, J., Liu, H. and Sun, W. (2020), "How Proactive Environmental Strategy Facilitates Environmental Reputation: Roles of Green Human Resource Management and Discretionary Slack", *Sustainability*, *12*(3), 7-63, doi: 10.3390/su12030763.