

## Sustainable People Management in the 21st Century: An Integrated Review of HRM Trends

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Abstract:

The concept of Sustainable Human Resource Management (SHRM) has been receiving much publicity among the professors and industry players. The authors of this paper sift through the existing body and divide it into three major categories. About 27 per cent of the studies represent general SHRM, 11 per cent socially conscious HRM and almost 60 per cent green HRM the most popular one. They present SHRM as an intersection, which connects large themes such as supply-chain management, environmental-stewardship, corporate-social-responsibility, and the United Nations Sustainable Development Goals using a solid Scopus dataset. An obvious gap noted in the review is the fact that despite the excessive focus on green HRM, the lack of research on socially responsible and shared SHRM practices remains. Generally, the paper provides an excellent overview of the current trends in the field of SHRM and directs students and scholars to the new aspects to develop, promoting further interdisciplinary debates and research in those unexplored niche.

**Keywords:-** Sustainable HRM, Green HRM, Green Recruitment and Selection, CSR, VOSviewer, Environmental Sustainability

### 1. INTRODUCTION

Over the last few decades, sustainability has changed from being just an environmental term to becoming an important part of business decision-making. In the 1970s, concerns about rapid population growth highlighted serious issues such as increasing pollution, limited living space, rising unemployment, and the shortage of natural resources (Weizsäcker and Wijkman, 2018). To address these concerns, the Brundtland Commission in 1987 introduced the concept of sustainability in the context of global development. It explained sustainability as meeting today's needs while ensuring that future generations can also meet their own needs.

Elkington (1998) further shaped the understanding of sustainability by introducing the “triple bottom line” concept. This framework highlights three closely linked areas: people, which refers to social fairness; planet, which focuses on caring for the environment; and profit, which relates to long-term economic success. According to Kramer (2014), over the past ten years, many organizations have moved away from seeing sustainability as an extra or optional issue and have made it a core part of their strategies. Nowadays, businesses are expected to be accountable not only for their profits but also for the social and environmental impact of what they do. Human resource management is no longer limited to a supporting role within organizations. It now plays a key part in promoting sustainability. Routine HR activities such as recruitment, training and development, performance evaluation, and employee well-being initiatives can be designed in ways that support the social, environmental, and economic goals of the triple bottom line, as noted by Ehrhart et al. (2016). Using this approach, organizations can develop a workforce that genuinely supports social fairness and environmental responsibility, while also contributing to better financial results. Today, sustainability is no longer a side issue—it has become a crucial factor in achieving long-term business success. Sustainable human resource management helps weave this perspective into an organization's core values and encourages employees to take an active role as drivers of positive change. Explore various approaches to studying this emerging subject, as the methodology enhances our comprehension of sustainable HRM. Look differently for research on this growing topic and the methodology helps to increase our understanding of sustainable HRM. But because of this, gathering the pertinent literature is very difficult. By highlighting the recurring themes in the body of existing literature, it can be helpful to review the state of research in this field. This paper presents the main research interests of the discipline and identifies possible ways of future investigation. It enhances our knowledge on sustainable HRM by rendering different perspectives and approaches. Nevertheless, a complete literature is quite an impressive undertaking. The note, therefore, could be adopted as one of the helpful means of evaluating the existing research space by highlighting the common themes which can be observed throughout the available research.

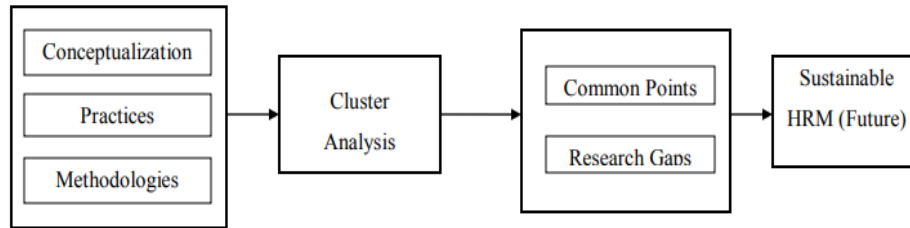
### 2. LITERATURE REVIEW

Both practitioners and researchers are increasingly turning their attention to HRM recognizing it as an emerging field of inquiry. In years a substantial body of work has sought to untangle the meaning of HRM. Kramer (2014) observes that the main divergence, among definitions and applications of the term rests on how they prioritize external objectives. Fundamentally, the idea seeks to identify the social elements that support an organization's long-term existence. By treating human and environmental outcomes independently of an organization's financial performance and strategic goals, this viewpoint can illuminate the variety of HRM methods that improve both. HRM is defined by Ehnert et al. (2016) as the modification of HRM techniques and tactics to help a company accomplish its long-term environmental and social goals while also addressing unfavorable feedback and unforeseen effects. Although opinions among academics may differ, it is widely acknowledged that HR results are essential to a business's survival and growth.

Some of the first to investigate the relationship between sustainability and HRM were the United States' Beer et al. (1984), Germany's Muller-Christ and Remer (1999), Switzerland's Zaugg et al. (2001), and Australia's Gollan (2000). Early research highlights the rising role of sustainability in HRM and offers a basic understanding of the relationship between human resource practices and sustainability. Ehnert et al. (2016) have described the same area of research as “Sustainable HRM,” and also recognized that Organizations are often faced with limitations in both human and environmental resources required for long-term success. Colbert and Kurucz (2007) and Kramer (2014) have highlighted the important role of human resource management in evolving sustainable management. It is explained by authors that HRM can support all three dimensions—economic performance, social responsibility, and environmental care—and can be applied across different organizational settings to promote sustainability. Kramer (2014) argues that the survival and longevity of an organization are key aspects of sustainability and that studies on sustainable human resource management for the sustainability of organizations have developed from multiple perspectives. Prior studies have consistently indicated that human resource management needs to enhance the performance of the economy, society, and environment sustainably over time for an organization to thrive and be effectively managed. Consequently, a link exists between the fundamental duties of human resource management and the three pillars of sustainable management—economic, social, and environmental (Kramer, 2014). Moreover, adjustments in the organization (change management), the organizational culture, leadership, career advancement and learning, development of top talent, education and training, ethics, work-life balance, performance assessment and compensation, as well as education and training can collectively represent typical areas emphasized in sustainable management and HRM.

However, the drawback of this earlier research is that, while a connection between human resource management and sustainable business management is proposed, there are no clear reasons for this relationship. In simpler terms, there has been a lack of focus on a particular application approach by human resource management that may support the long-term viability of businesses. Second, the terms sustainable HRM and HRM sustainability are used interchangeably, which completely upsets the clarity. The long-term strategy of a company can be connected to sustainable human resource management. Put another way, one of the main factors influencing a company's ability to survive over the long run should be its management of human resources. Sustainable human-resource management is one of the critical elements that help in the advancement of the strategy of the company, as much as ensuring that different systems of HRM remain sustainable over time. Hence, we do actually need additional research to distinguish between these two interrelated constructs (Zaugg et al., 2001; Spooner & Kane, 2010).

Researchers can gain a clear overview of the field and identify the key themes shaping current research by reviewing and assessing the literature on sustainable HRM published in recent years. Figure 1 presents the conceptual framework that guides the said review in evaluating sustainable HRM. Researchers can use cluster analysis to organize the literature into coherent perspectives, furthermore, this clarifies the various ways of sustainable HRM has been studied.



**Sustainable HRM Literature**

**Results**

**Figure 1. A Conceptual outline for Sustainable HRM assessment**

Source: Researcher’s Own

Cluster analysis was used to obtain a more coherent picture of the numerous voices in the sustainable HRM research. Diving into the groups which came up, we can identify the recurrent themes and have a clue on the gaps which can be filled in the future research. Our perception of the data is conditioned by the paradigm of sustainable HRM that was presented by Aust and colleagues in 2020. They have a framework that classifies the field into four primary streams namely, Socially conscious Human Resource Management, triple-bottom-line HRM, common-good HRM and Green HRM. These are the categories, which were initially outlined by Dyllick and Muff in 2016 and then refined, which are currently being utilized as the go-to map, when scholars wish to discuss sustainability in HR.

This is particularly in the case of the triple-bottom-line stream, which is helpful in that it takes in the three pillars of sustainability, profit, planet, people and makes them an integrated and holistic image. It demonstrates how the HR can assist in developing the skills, knowledge and attitudes that would enable a firm not only to become financially prosperous, but also become environmentally responsible and socially supportive. Since this stream cuts across the three dimensions of sustainability we will in this paper refer to it as being general sustainable HRM. This will maintain a clear and consistent discussion as we are reading through the literature. The second wave of HRM which we discovered is of another twist- it is known as green HRM. As opposed to merely gazing at people and processes, this work area narrows down to the planet and the bottom line. Consider the large-scale research that draws in ecological issues and inquire how HR can ever influence business in becoming greener. They examine how the HR can embrace the green values into the daily life, lead the way with sustainable practices at the workplace and encourage employees to join in achieving bigger environmental goals. In brief, they are demonstrating that a company can be profitable and at the same time, do good on the Earth. The third type is the human-resource management that is compatible with social responsibility. It is sustainable and it aims at the overall organizational objectives- both social and financial. Research in this category demonstrates the impact of business operations on individuals outside the organization and allows us to get an idea of the long-term impact of such operations. Research on sustainable human-resource management, which cannot be classified into one of the three broad categories described above, falls under the umbrella name of other sustainable HRM (Aust et al., 2020). The common good HRM, which refers to HRM competencies, abilities, expertise, and dispositions to contribute to the common good and aid in solving big issues, is one of the views on sustainable HRM included in this cluster (Aust et al., 2020). The human aspect of ethical HRM or organizational sustainability is another area of emphasis for this cluster. It should be highlighted, nevertheless, that various viewpoints are blended for simplicity's sake and only yield a small number of variables from the data.

**Table 1 : Summary of Key Literature on Sustainability and Sustainable HRM**

Authors	Year	Key Focus	Key Findings	Research Gap
Dyllick & Muff	1984-2001	Extended Aust et al.'s HRM types	Defined Triple Bottom Line HRM as "win-win-win" (people, planet, profit); introduced Common Good HRM and other categories	Many studies not clearly fitting one type; conceptual overlaps
Kramar	2007	Definitions and applications of Sustainable HRM	Emphasized that definitions vary based on internal/external goals; HRM impacts long-term organizational survival	Conceptual ambiguity; lack of consistent application approach
Ehnert et al.	2010	Strategic approach to Sustainable HRM	Defined Sustainable HRM as aligning HR strategies with financial, ecological, and societal objectives	Need for clearer links between HRM practices and sustainability outcomes
Beer et al. (USA), Gollan (Aus), Muller-Christ & Remer (Ger), Zaugg et al. (Swi)	2014	Early interest in linking HRM with sustainability	Introduced the term "Sustainable HRM" and emphasized the importance of limited natural and human resources for long-term success	Mainly theoretical; lacked practical frameworks
Colbert & Kurucz	2016	HRM's role in sustainable management's three pillars	Highlighted HRM's influence on economic, social, and environmental outcomes	No specific models for HR application
Spooner & Kane	2016	Clarification of Sustainable HRM vs. HRM Sustainability	Stressed the difference between Sustainable HRM (long-term contribution) and HRM sustainability (viability of HR systems)	Need to extricate these both concepts clearly
Aust et al.	2020	Categorization of Sustainable HRM research clusters	Identified key HRM clusters: Triple Bottom Line, Green HRM, Socially Responsible HRM, and Common Good HRM	Broader categories sometimes overlap; cluster boundaries not always clear

### 3. RESEARCH QUESTIONS AND GOALS

This study is a critical review of existing literature on the topic of sustainable human resource management, where the key clusters of research are identified and the common themes that are manifested in each of them are discussed. This approach helps identify potential research gaps and encourages the systematic organization of the current body of knowledge. The findings of this study have significant implications for professionals who want to develop and implement effective long-term HRM strategies. Furthermore, this study contributes to the field of sustainable HRM research by offering new insights on the development of themes and upcoming directions in the sector. Specific research questions have been established based on the reviewed literature and are listed below:

- 1) What significant advancements has the field of sustainable human resource management made?
- 2) What are the main sources of current study in this field, and which topics have been thoroughly studied?
- 3) What are the main areas of focus of any well-known research groups in sustainable HRM?
- 4) How do the various sustainable HRM research groups differ from one another and what both theoretical and practical impacts do they have?

### 4. METHODS

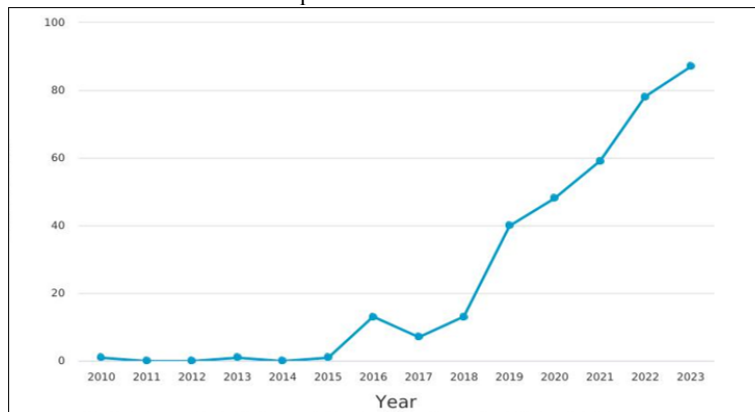
The literature used for the analysis of sustainable human resource management (sustainable HRM) came from Elsevier's abstract and citation database. Scopus was selected as the primary data source because of its broad coverage of international research in a variety of academic fields; additionally, the Boolean search method and Scopus's export function enable the efficient gathering, organizing, and methodical filtering of relevant data.

The following combination of search terms was employed to identify relevant publications for the present study:

TITLE-ABS-KEY ("sustainable human resource management" OR "common good human resource management" OR "green human resource management" OR "socially responsible human resource management" OR "sustainable HRM" OR "green HRM" OR "common good HRM" OR "triple bottom line human resource management" OR "socially responsible HRM" OR "triple bottom line HRM" OR "ethical human resource management" OR "ethical HRM") AND (LIMIT-TO (SUBJAREA, "BUSI")). This search string was applied to the title, abstract, and keyword fields in Scopus to ensure the inclusion of studies focusing on sustainable HRM and its related subdomains within the field of business and management. The Boolean operators "OR" and "AND" were utilized to expand or refine the search results systematically.

The query results' citation data, bibliographical Details, abstracts, and keywords were all included in the exported data. To find the most pertinent papers, the keyword query was further restricted to the business, management and accounting topic areas. 359 papers were returned in total from the original search query. Abstracts, authors, and document kinds were reviewed in order to confirm relevance. Duplicates, errors, and irrelevant results were removed from the data set. The final database used for this study included 359 papers that were categorized under the sustainable HRM cluster.

In order to comprehend the evolution of research in the area during the previous few years, the database for review, the yearly publishing trends, and an overview of publications by sustainable HRM cluster, and the leading journals of publications were analyzed. Subsequently, VOSviewer (van Eck & Waltman, 2010), a network mapping program, was used for term co-occurrence analysis and keyword co-occurrence analysis to identify the most often occurring terms for each study cluster as well as the pertinent keywords. It makes it possible for this study to examine the most important current developments in sustainable HRM and to observe how the separated detected clusters relate to one another. Subsequently, an analysis of the most frequently cited and noteworthy publications within each cluster is conducted in order to determine the shared areas of interest within each cluster and potential areas of unmet research need.



**Figure 2. Annual publications of research on sustainable HRM**

Source: Researcher's Own

**Table 2: Distribution of Publications on Sustainable HRM by Two-Year Period (2010–2023)**

Year Range	Number of Publication
2010-2011	3
2012-2013	3
2014-2015	3
2016-2017	23
2018-2019	53
2020-2021	107
2022-2023	167

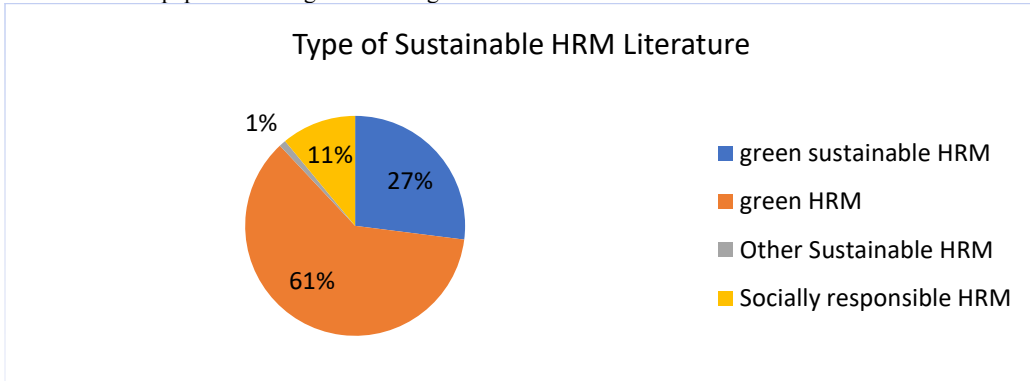
As shown in Table 2, the number of publications on sustainable HRM has increased substantially over time. The research output remained relatively low and stable between 2010 and 2015, with only three publications per two-year period. However, starting from 2016, a notable upward trend emerged, with publications rising to 23 during 2016–2017 and more than doubling in the following two-year periods. The most significant growth occurred between 2020 and 2023, when the number of publications more than tripled in comparison to prior years. As the global community started to focus more on the idea of sustainability, social responsibility and environmental stewardship, there has been a distinct trend whereby scholars as well as HR practitioners have shifted their interest towards management practices that focus on sustainability.

### 5. RESULTS

As a way of understanding the development of the field, it is handy to follow the trends on sustainable human resource management (HRM) research. It implies examining not only the number of studies published with time, but also the journals where they are published. Upon closer examination of the compilation of database, one can find definite tendencies of sustainable HRM scholarship. The publications on this

topic have been on the increase as illustrated in Figure 2; the growth with it is the growth of this field and the growing academic interest on sustainable HRM. With a clear view, the chart in Figure 2 depicts that there has been a growing interest of scholars towards sustainable human-resource management (HRM) over the past few years. The earliest significant publication was in 2010 and since that time the number of publications has been on an upward trend, with an increasing interest in the field. In particular, there was a notable increase in publications in 2016, and starting in 2017, the number of articles continued to rise. With 89 publications published in 2023, the field recorded its largest production to date, demonstrating the ongoing increase in scholarly attention to sustainable HRM.

The data categorizes articles based on the multiple domains of sustainable HRM in addition to the annual publishing patterns. The results show that 195 papers, or 61% of all research, focus on green HRM. Second place goes to general sustainable HRM, which makes up 27% (87 papers) of all publications, while socially conscious HRM makes up 11% (34 articles). Only two papers, or 1% of the total, examine other aspects of sustainable HRM. These papers are categorized in Figure 3.



**Figure.3 Category-specific literature on sustainable HRM from 2010 to 2023**

Source: Researcher's Own

**Table 3: Distribution of Sustainable HRM Publications by Category**

Types of Sustainable HRM	Numbers of Publication	Percentage of Total Publications
Green HRM	195	61%
General Sustainable HRM	87	27%
Socially Responsible HRM	34	11%
Other Sustainable HRM	2	1%

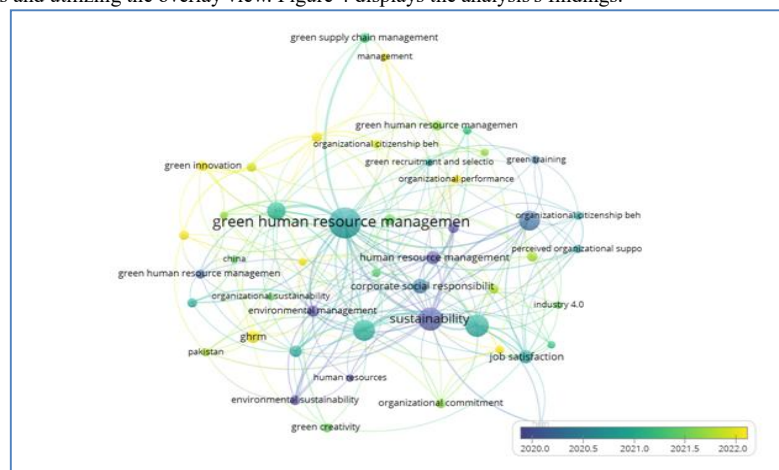
A count of papers published in each publication was done in order to identify the primary venues for sustainable HRM research. According to Table 1, the top five publication sources are Sustainability (Switzerland) (126 articles), Journal of Cleaner Production (12 articles), International Journal of Human Resource Management (9 articles), and Business Strategy and the Environment (8 articles). These findings are consistent with the classification results shown in Figure 3, which lists the many aspects of sustainable HRM research. Sustainability (Switzerland), a renowned interdisciplinary publication devoted to environmental and sustainability research, published a sizable number of papers. The International Journal of Sustainable Development and Planning, which highlights useful tools and case studies intended to enhance performance, accountability, and social and environmental responsibility in the field of sustainable development, also distinguished itself as one of the leading publication venues. Collectively, these results indicate that while sustainable HRM has attracted considerable scholarly attention, research on green HRM remains the predominant focus within the field.

**Table 1 lists the journals for sustainable HRM literature published between 2010 and 2023.**

Journal	No. of Publications
Sustainability Switzerland	126
Journal of Cleaner Production	12
International Journal of Sustainable Development and Planning	10
International Journal of Human Resource Management	9
Business Strategy AndThe Environment	8

Source: Researcher's Own

Dealing with the data on the above-mentioned sustainable HRM research clusters is also crucial. A keyword co-occurrence analysis was first carried out using VOSviewer in order to display the sustainable HRM issues that have drawn the greatest attention from scholars and to determine the subjects that are currently gaining traction in the field. The most pertinent author and index keyword tags, as well as the year they co-occur, were more easily identified by adjusting the threshold for keywords and utilizing the overlay view. Figure 4 displays the analysis's findings.



**Figure: 4. Temporal Analysis of Term Co-Occurrence in Sustainable HRM Literature.**

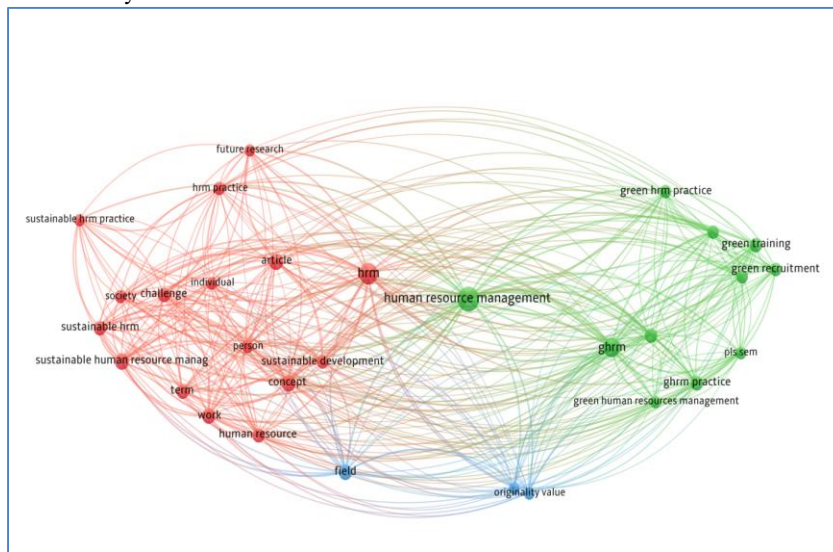
Source: Researcher's Own

**Table: 4 Term Co-Occurrence and Temporal Analysis in Sustainable HRM Research**

Keyword	Occurrences	Temporal Recency	Insights
Green Human Resource Management	79	Mid to recent (light green/yellow)	Central focus of research; highly connected to other themes
Sustainable HRM	43	Older to mid (blue/green)	Foundational concept; less recent but still influential
Sustainability	44	Mixed (blue to green)	Core theme, well-integrated into sustainable HRM literature
Sustainable Development	44	Recent (yellow)	Emerging area; increasingly connected to HRM practices
Green HRM	36	Recent (yellow)	Rapidly growing; linked with recruitment, selection, and performance
Environmental Management	12	Mid (green)	Related to HRM's ecological dimension
Environmental Sustainability	18	Mid to recent (green/yellow)	Growing relevance in HRM context
CSR (Corporate Social Responsibility)	19	Mid (green)	Frequently co-occurs with sustainability themes
Manufacturing	Not Specified	Most recent (yellow)	New emerging keyword in HRM-sustainability context
Green Recruitment & Selection	Not Specified	Most recent (yellow)	Highlights new interest in green hiring practices
Environmental Performance	Not Specified	Most recent (yellow)	Focus on linking HRM practices with environmental outcomes
HRM Practices	Not Specified	Most recent (yellow)	Reflects practical implementation of sustainability in HRM

The study reveals that the minimal number of examples for the keyword threshold setting is five.

The output is presented in an overlay temporal perspective and yields a total of 47 elements. Green Human Resource Management (79 occurrences), sustainable HRM (43 occurrences), sustainability (44 occurrences), sustainable development (44 occurrences), Green HRM (36 occurrences), environmental management (12 occurrences), environmental sustainability (18 occurrences), and CSR (19 occurrences) are the most frequently co-occurring keywords based on the size of the nodes. Research in the field of human-resources has been moving slowly towards the subject of sustainability. To see that in recent bibliometric researches: on those charts where the most-cited issues are marked with colour-codes, modern green-HRM discourse is encompassing all of manufacturing and hiring to the selection process, environmental performance, and the way that everyday HR functions. Meanwhile, much more focus is being directed on sustainable development and the general sustainability agenda and this has resulted in an emerging consensus: good HR management is critical to the success of any organization. This agreement itself not only emphasizes the strategic role of HR, but also provides new opportunities in research. Research can be conducted in the future to understand how certain HR practices can be adjusted to improve performance and sustainability performance. We have drafted the key concepts that continue to emerge in sustainability HRM studies. We examined the frequency of the most crucial words in the title and abstracts of the articles through the VOSviewer and it was possible to understand the latent relationships between themes. We had to make a rule to ensure that only concepts with a minimum frequency of ten times were displayed to make the visual map clear and useful. In addition, binary counting was used so that the analysis reflects whether a term appears or not, rather than how often it occurs. Overall, this methodological approach makes it easier to identify the major research themes in sustainable HRM and understand how they are interconnected.



**Figure.5 Analysis of term co-occurrence in sustainable HRM research clusters**

Source: Researcher's Own

**Table :5**

Cluster	Color in Figure	Keywords	Theme	Key References
Sustainable HRM Cluster	Red	Sustainability, sustainable development, human resource, sustainable HRM, HRM practice, challenge	Explains the concept of sustainable HRM, its consequences, and applications; links HRM with sustainability and CSR.	Ehnert (2009); Kramar (2014); Macke & Genari (2019); Diaz-Carrion et al. (2020); Mariappanadar & Kramar (2014); Mariappanadar & Aust (2017); Pellegrini et al. (2018); Stahl et al. (2020)
Green HRM Cluster	Green	Green human resource practices, green training, green recruitment, GHRM, green behavior	Focuses on environmentally friendly HRM practices and their influence on supply chain management; includes national-level studies.	Pham et al. (2020); Ren et al. (2018); Renwick et al. (2013); Teixeira et al. (2016); Yong et al. (2020); Jabbour & de Longoni et al. (2018); Sousa Jabbour (2016); Gholami et al. (2016)
Socially Responsible HRM Cluster	Blue	Corporate social responsibility (CSR), ethical HRM, practical implications, organizational citizenship behavior, organizational commitment	Explores the connection between HRM and CSR; includes studies on ethics, employee behavior, and organizational commitment.	Shen & Benson (2016); Newman et al. (2016); Kundu & Gahlawat (2016); Shen & Zhang (2019); Gahlawat & Kundu (2021); Zhao et al. (2021)

With this approach, the data network pertaining to sustainable HRM research clusters might be shown using the most pertinent phrases. The outcome of this study is a displayed map, as seen in Figure 5. Other keywords are associated with the particular sustainable HRM cluster, even if the majority of nodes within each cluster might be linked to ideas like sustainability and HRM. The red area of Figure 5 is occupied by the broad sustainable HRM cluster. Sustainability, sustainable development, human resource, sustainable HRM, HRM practice, and challenge are the concepts that are most pertinent. The idea of sustainable HRM is attempted to be explained by a closer examination of the most referenced publications in this cluster (Ehnert, 2009; Kramar, 2014; Macke & Genari, 2019). Research in the section also examines its consequences and application (Mariappanadar & Kramar, 2014; Mariappanadar & Aust, 2017; Pellegrini et al., 2018) and link it to CSR (Stahl et al., 2020; Diaz-Carrion et al., 2020).

In the accompanying chart, the green-shaded segment delineates the expanding cluster associated with green HRM. This general concept encompasses a lot of issues and matters, such as eco-friendly recruitment and green education to daily working behaviors such as sustainable employee behavior and green Hr. Both works are of importance in creating really sustainable working conditions. Researchers have charted the field through extensive reviews that identify general trends and gaps. Such influential works by Pham and colleagues (2020), Ren and colleagues (2018), Renwick et al. (2013), and Yong et al. (2020) allowed mapping the key directions and clarifying where more profound research is necessary. In addition to the academic debate, actual studies have indicated that green HRM has a direct impact on the supply-chain operations. In one example, Jabbour and deSousa Jabbour (2016) and Longoni et al. (2018) established positive gains in practice. International studies have not been an exception - Gholami and his colleagues in Malaysia (2016) and Teixeira et al. in Brazil (2016) have reported the same concepts in various cultural contexts, once again proving that green HRM is applicable in different environments and that it is very applicable to organizations across the globe.

The third group is that of socially responsible human-resource management highlighted in blue. It unites such issues as ethical HR practices, corporate social responsibility, and the practical consequences of making people-centric choices. Indeed, several recent researches (Shen & Benson, 2016; Shen and Zhang, 2019) have directly attributed this group to CSR initiatives. The research also touch on organizational citizenship behavior (OCB) (Newman et al., 2016; Gahlawat & Kundu, 2021; Zhao et al., 2021) and organizational commitment (Kundu & Gahlawat, 2016). Furthermore, research examining particular national contexts was also conducted in the Chinese (Zhao et al., 2021) and Indian (Gahlawat & Kundy, 2021). Due to a lack of research, Figure 5 does not display other sustainable HRM research clusters. As a result, only two studies were included. One is by Aust et al. (2020), who suggest Common Good HRM as a novel kind of Sustainable HRM.

## 6. DISCUSSION

The state of sustainable Human Resource Management study indicates that there has been and continues to be growth in this area. The annual publishing records show the topic's sustained interest throughout time. The clear upswing of the field was seen in 2016, and it only continued increasing after that date, with the number of research papers constantly rising. In order to map the new territory of sustainable management of human resources, we used VOSviewer to conduct a key words co-occurrence analysis, which indicated that there were specific research clusters in the field. The findings showed that Green HRM was the most commonly talked about aspect of sustainable HRM, which is why the former is deeply concerned about the environmental aspect of sustainability (Pham et al., 2020). This has been supported by previous research, which indicates that green HRM practices have the ability to influence key organizational functions including those in the supply-chain management and day-to-day operations (Longoni et al., 2018). According to Teixeira and colleagues (2016), the impact of green HRM may change radically in relation to the economic and cultural context. Although we are beginning to witness the inclusion of the green recruitment, selection and employee development, these are still untapped areas and can be improved. What is more, the limited studies that connect green HRM with the eco- friendly attitude of employees, corporate social responsibility activities, and the perceived environmental impact provide a blank terrain- a hole that researchers can use to explore this prospective area.

Human-resource management that is socially responsible is not only a buzzword, but also a fundamental component of corporate social responsibility (CSR) and how employees perceive their working environments in actual sense. This method introduces the sociocultural aspect of sustainability on the front line by exploiting the notions of organizational commitment (OC) and Organizational identification (OI) (Shen and Benson, 2016; Shen and Zhang, 2019). The eventual point is getting concrete and actual outcomes. This is why researchers are delving into a broad range of issues, including the basics of CSR as well as country-specific research in such environments as China and India, and unravelling the mechanisms of moderating and mediating factors in the context of responsible HR practices. Furthermore, the cluster has a connection to the micro-level behaviors of organizations, such as organizational commitment, organizational citizenship, and organizational identity (Zhao et al., 2021; Gahlawat & Kundu, 2021). The results too suggest that when analyzing the sustainable HRM-CSR relationship, country or cultural variations are important considerations. Therefore, by methodically examining the traits of sustainable HRM, more study can address the connection. Furthermore, as CSR and HRM practices are the main focus of the current research cluster, there may be a study vacuum regarding its impact on personnel management, specifically talent retention.

Moreover, the broad sustainable HRM cluster encompasses a range of subjects and has served as a catch-all for general research linking sustainability and Human Resource Management (Kramar, 2014; Macke & Genari, 2019). It may be possible to do more study to examine sustainable HRM practices and how they affect both the individual and the various phases of the HR flow. Additionally, it seems that additional interdisciplinary methods and research on its implementation in various local or national settings are needed.

Lastly, by examining the particular features that could set it apart from the presently recognized clusters, alternative sustainable HRM research clusters might offer prospects for future study. More specifically, the modifications brought about by the present scenario offer a potential framework for more research. Navigating through it or analyzing its effects and consequences utilizing the many viewpoints in sustainable Human Resource Management can provide fresh and major developments that drive the discipline forward, since this circumstance altered how human resources work at businesses.

## 7. CONCLUSION

In order to systematize the body of knowledge on the subject and identify potential research gaps, the study intends to analyze the literature on sustainable HRM by identifying the current research clusters pertaining to the area and examining the common themes within each cluster. A more structured summary of the increasing interest in the subject was given by the current survey of the literature on sustainable HRM. It was clear from the study's trends that sustainable HRM has become much more important and well-known in recent years. The different definitions, viewpoints, and methods used to research this topic, however, also demonstrate a great degree of complexity. Thus, this study can integrate a variety of studies and methodically landscape the present research in the area by distinguishing the three key flocks based on the sustainability component that the various academics focused on.

The data retrieved from the Scopus database was subjected to cluster analysis, which demonstrated the interconnectedness of supply chain management, environmental management, Corporate Social Responsibility (CSR), and sustainable development in sustainable HRM. In particular, the findings indicate that a great deal of study has focused on the green HRM cluster, with generally sustainable and socially responsible ones coming in second and third. The other part of the sustainable HRM cluster, which includes ethical and common good HRM

with regard to organizational sustainability, was also examined in this article. It also suggests connections between sustainable HRM and other fields and sectors. Lastly, it indicated potential directions for future interdisciplinary research. Furthermore, by examining the present research clusters, this study further indicates arising issues or gaps. Green HR strategies, such as employing socially conscious candidates and providing CSR training, are among the more recent areas of focus. To validate the favorable correlation with green employee attitudes, Corporate Social Responsibility (CSR), or perceived green outcomes, further empirical research on green HRM is needed. By examining the relationship's impact on talent management, particularly talent retention, more study can address the issue. According to a research, more interdisciplinary methods and diverse cultural settings should be investigated when using sustainable HRM. It is necessary to point out that the present pandemic's temporary and long-term implications on sustainable HRM may offer a study avenue for future investigations.

It is important to note that there are several drawbacks with this study, though. Initially, the database and keyword use are included in this study. Because of the collective export functionality, the Scopus database was the only tool used for data pooling. Although there is a fair amount of coverage for research contributions in this database, it is possible that not all pertinent publications about sustainable HRM are included. Moreover, it's possible that other pertinent papers about the present subject were excluded by the catchwords chosen for the study that focused on the groups. Finally, there are certain restrictions on the exact conclusions that can be drawn from the sustainable HRM articles due to the data analysis approach.

Despite this drawback, by offering a particular perspective on the pertinent research for each research cluster, the current study lays the groundwork for furthering research on sustainable HRM. It also offered a chance to see the research being conducted in each cluster and identify any potential research gaps in the corpus of existing literature. From a systematic perspective on the current subjects and methods to sustainable HRM research, scholars engaged in this field may discover these prospective Synergy opportunity and growth prospects between the ideas in different flocks.

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