



Implementation of sustainability in human resource management: A literature review



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Orientation: Truly, organisations face the challenge of implementing sustainability in their daily activities.

Research purpose: This article examines the ways in which sustainability has been implemented in human resource management (HRM).

Motivation for the study: Sustainability has become increasingly important in organisations, particularly regarding HRM.

Research approach/design and method: This study used qualitative methodology and collected data by means of an integrative literature review that retrieved appropriate and relevant journal articles from the Business Source Ultimate database, as one of the EBSCOhost databases.

Main findings: The findings suggest that green human resource management (GHRM) was the most frequently implemented concept and was combined with rare cases of corporate social responsibility (CSR) implementation. Sustainable human resource management (SHRM) was seldom implemented.

Practical/managerial implications: Interestingly, contemporary studies revealed the circular economy (CE) as an economic sustainability dimension in HRM, and likewise, the ascendance of sustainable development goals (SDGs) in HRM. Regarding the process of sustainability implementation in HRM, some links have been established between sustainability dimensions and HRM, but the incorporation of sustainability into HRM was not evident from the reviewed literature.

Contribution/value-add: This article ends with a discussion of some insights for future research. Moreover, the selection of sustainability and HRM in this article was significant given that sustainability can contribute towards a way of addressing and solving environmental, social and economic problems associated with organisations' activities that could be fixed by HR. This demonstrates the existing strong compatibility between sustainability and HRM because HRM could fit in each sustainability dimension.

Keywords: sustainability; human resource management; green human resource management; corporate social responsibility; circular economy; sustainable human resource management.

Introduction

Sustainability is a multi-layered phenomenon according to various authors (Bradford & Williams, 2014; Bulter et al., 2011; Nhamo et al., 2019; Stankeviciute & Savaneviciene, 2013), which entails the three Ps, symbolising the planet, persons and profit (Chaka, 2018; Elkington, 1997; Inwood & Dale, 2019), with the purpose of achieving economic prosperity, ecological safety and societal impartiality, and striking an effective balance among them (Muñoz-Torres et al., 2019). It is three-dimensional (Chofreh & Goni, 2017), which is commonly referred to as the 'triple bottom line' (TBL) (Chaka, 2018; Inwood & Dale, 2019; Muñoz-Torres et al., 2019).

Sustainability is a paradigm that recently emerged in human resource management (HRM) (Adam, 2018; De Lange et al., 2015; Freitas et al., 2011; Jabbour & Santos, 2008; Jackson et al., 2012; Kazlauskaitė & Buciušienė, 2008; Kennedy, 2017; Lorincová et al., 2018; Pellegrini et al., 2018; Prasetyo & Kistanti, 2020; Schroeder, 2012; Schroeder & Harold, 2012; Stahl et al., 2020; Zaugg et al., 2001). On the one hand, contemporary management perceived the importance of the new concept of green human resource management (GHRM) (Sardana, 2018). Green human resource

Note: Additional supporting information may be found in the online version of this article as Online Appendix 1.

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management aims to improve organisations' environmental management (EM) efficiency (Ren et al., 2018, p. 769), promote practices related to environmental maintenance, fortification and steadiness (Saeed et al., 2019), and enhance awareness and regulation of ecological sustainability (Ren et al., 2018). Currently, GHRM is viewed as a noteworthy organisational strategy (Sardana, 2018, p. 63). On the other hand, Krama (2014) acknowledged that the sustainable HRM approach has evolved over the past decade. The introduction of sustainable HRM is among the current embryonic topics (Esfahani et al., 2017). However, sustainable HRM (SHRM) remains a forthcoming theme (Mazur, 2015) and is still in its developing stages (Stankeviciute & Savaneviciene, 2019), which means that it has not been widely researched yet (Mazur, 2015). In light of this, it might be necessary to expand studies on sustainable HRM. Furthermore, social HRM and economic HRM are still infrequent themes in the literature on sustainability and HRM.

According to Truss et al. (2013) and Lai et al. (2017), the connection between HRM and performance is arbitrated by attitudinal variables such as a planned social exchange. For successful arbitrage, the social facet needs to be linked to HRM. Sanyal and Sett (2011) emphasised the causal relationship between ecological uncertainties and HR options, as well as strategic HRM. Similarly, Ren et al. (2018) recognised the increasing prevalence of studies establishing the relationship between several EM aspects and overall ecological performance. However, Krama (2014) acknowledged the semantic challenges in linking sustainability concepts to HRM. Because the possibilities of connecting HRM practices to organisations' ethical climates and sustainability have not been sufficiently explored yet (Guerci et al., 2015), it is necessary to provide organisations with various options for linking sustainability to HRM. More precisely, demonstrating the way in which environmental, social and economic dimensions of sustainability can be integrated into HRM might facilitate its implementation.

Misunderstandings regarding sustainability might affect its implementation in HRM and the connection between the two areas. In particular, the miscellaneous interpretations of sustainability hinder its incorporation into HRM (Mazur, 2015; Sanyal & Sett, 2011). Similarly, although numerous studies focussed on common GHRM practices (Odamkula et al., 2018; Ooi et al., 2017; Renwick et al., 2013; Saeed et al., 2019; Tang et al., 2018), only a few studies focussed on the role played by GHRM in integrating EM with HRM (Shah, 2019). Furthermore, the sustainability theme is extensively separated from several HRM subfields (Mazur, 2015). Therefore, there is a need to incorporate sustainability into the overall HRM field, as well as its thinking, fundamentals, processes and practices, and to establish a link between them. The aim of this article is to examine previous studies that have linked sustainability and its implementation to HRM. By doing so, it seeks to enhance our understanding of the role sustainability can play in HRM.

Problem statement

Incorporating sustainability into HRM has been the main problem in terms of its implementation. As already mentioned, the sustainability theme is extensively separated from several HRM subfields (Mazur, 2015). However, modern HR experts are frequently confronted with the need to incorporate ecological sustainability into human resource policies in an appropriate manner (Saeed et al., 2019). Also incorporating environmental, social and economic aspects into HRM policies, performance, thinking, fundamentals, processes and practices.

The establishment of a connection between sustainability and HRM does, however, present a challenge. For instance, sustainability has not been methodically linked to HRM (Mazur, 2015), because theorising about the relationship between sustainability and HRM is problematic (Krama, 2014). This has been demonstrated by Ren et al. (2018), who confirmed the lack of studies concerning the relationship between GHRM and HRM. Moreover, as previously indicated, misunderstandings regarding sustainability hinder the establishment of a link with HRM (Mazur, 2015; Sanyal & Sett, 2011). Therefore, there is a need to investigate how previous studies have linked sustainability and its implementation to HRM.

Research objectives

The aim of this article is to review the existing literature on HRM in sustainability and the implementation of sustainability in HRM. It further examines various studies that demonstrate the integration of sustainability dimensions into HRM and discusses existing research on this topic. Lastly, it reviews the literature on the incorporation of sustainability into HRM and the relationship between sustainability and HRM. Guided by these objectives, the research design, methods, data collection and analysis are discussed in the 'Literature review' section.

Literature review

Research on sustainability and HRM has gained the attention of many scholars. For this reason, several studies combining the two phenomena, sustainability and HRM, have been conducted (Ayđın & Turan, 2023; Ehnert, 2011; Ehnert et al., 2013; Hirsig et al., 2013; Mak et al., 2014; Spooner & Kaine, 2010; Stahl et al., 2020; Stankeviciute & Savaneviciene, 2013; Zaugg et al., 2001). To illustrate, Tony et al. (2016), Santana and Lopez-Cabrales (2019), Janakiram and Narayanamma (2019), Duvnjak and Kohont (2021) and Mukhuty et al. (2022) investigated sustainable development and HRM. While Pérez-López et al. (2015), Ehnert et al. (2016), Srpova (2018), and Lubis and Pratama (2022) focussed on sustainability reporting and HRM.

Furthermore, many studies covered sustainability and strategic HRM practices (Boudreau, 2003; DuBois & Dubois, 2012; Ehnert & Ehnert, 2009; Guerci et al., 2015; Gupta, 2014;

Hamadamin & Atan, 2019; Harry, 2013; Martin et al., 2016; Parkes & Borland, 2012; Ren et al., 2023). Whereas sustainability through HRM practices was the focus of Mariappanadar (2012), Buller and McEvoy (2016), Nisa et al. (2016), Rahman and Hosain (2021), and Suleman et al.'s (2023) studies. However, further attention needs to be paid to HRM in sustainability, sustainability dimensions implementation in HRM, sustainability integration into HRM and the establishment of sustainability and HRM relationships.

Definitions of key concepts

This section presents various definitions of key concepts of this article.

Definition of sustainability

Although there is no universally accepted definition of sustainability (Dimitrov, 2010; Ridsdale & Noble, 2016), the term 'sustain' has led to the understanding that sustainability involves the management of the continuous existence of something over a long period (Dignen, 2000; Burger & Middelberg, 2018). Thus, it has been stated that 'sustainability is the ability to meet current social, environmental and economic needs without negatively impacting the ability of future generations to meet their social, environmental and economic needs' (Brundtland Report for the World Commission on Environment and Development [WCED], 1987; Gachie, 2019; Joy & Peña, 2017; Niehaus et al., 2018; United Nations, 1987; World Summit on Sustainable Development, 2002). Moreover, Boso et al. (2017) acknowledged sustainability as the money quantity involved in ecological and social causes. Sustainability is the new standard of contemporary organisations in developed nations (Ahmad et al., 2021). Naturally, considering sustainability as a novel principle for modern organisations might motivate organisations to embrace such a notion.

Definition of human resource management

Several authors provided different definitions of HRM in various studies. According to French (1978), every individual engaged in the activities of an organisation regardless of their roles constitutes the human resources. For Bernadin and Russell (1993), HRM is involved in making decisions related to the organisational workforce. However, policies, practices and systems influencing the behaviour, attitudes and performance of employees are referred to as HRM (Noe et al., 2007). The overall strategic, integrated and coherent approach to people employment, management, well-being and development within organisations is attributed to HRM (Armstrong & Taylor, 2014). Acquisition, training, appraisal and compensation to employees as well as attending to employees' health, safety, fairness concerns and labour relations are the processes of HRM functioning (Dessler, 2017). In the same way, Opatha (2021) supported that HRM and organisational outcomes are indispensably achieved through a wide range of functions, including job design, job analysis, human resource planning, recruitment,

selection, hiring, induction, training and development, performance evaluation, career management, pay management, incentives management, welfare management, employee movements, health and safety, discipline management, grievance management and labour relations. He further suggested integrating strategic, stakeholder and sustainable perspectives into HRM functions.

Theoretical foundation

This section discusses contingency theory (CT) as the grounding theory of this article.

Contingency theory

According to Cui et al. (2014), CT was introduced in the influential works of Burns and Stalker (1961), Chandler (1962), and Lawrence and Lorsch (1967). In CT, factors clarifying or predicting anticipated phenomena are analysed (Gacenga et al., 2011; Umanath, 2003). Similarly, the development of various theories has been based on contingency analysis (Thai, 2014). Contingency theory allows for the reduction of assumptions regarding theoretical propositions (Gacenga et al., 2011). This study will refer to the concepts and theories falling under 'contingency theory' which have the potential of expanding existing theories or developing new theories. Contingency theory helps to expand the existing concepts of sustainability and operational performance (OP) in a small and medium-sized enterprise (SME) context or build a new theory from different aspects of these concepts were explored in this study (Liao & Tsai, 2017). The CT in this article is based on the contingencies of sustainability.

Contingency theory of sustainability

The alignment of an organisation's structures, strategies and environmental conditions has been a concern of CT (Chung & Davies, 2003). Contingency theory suggests that the necessary organisational design responses for improved performance are determined by ecological conditions (Donaldson, 2001; Lawrence & Lorsch, 1967). In CT, the environment, size and commitment to sustainability influence an organisation's behaviours (Fernández-Robin et al., 2019). Additionally, Maletič et al. (2018) suggest that CT offers a novel and valuable perspective on the implementation of sustainability practices.

This study intends to explore the will underlying contingencies of sustainability and the implementation of sustainability in HRM. Through CT, the most influential contingent factors in the espousal, implementation and consequences of ecological practices are identified (Fernández-Robin et al., 2019). Contingency theory was used in this study to identify contingent factors related to HRM and environmental, social, and economic HRM practices., as well as factors related to the integration, implementation, and relationship between of these sustainability aspects and HRM.

Organisational behaviours are determined by the environment in which the business operates and the size of the establishment. Large and medium-sized organisations are generally more committed to sustainable development. Regarding the relevance to the topic under investigation, appropriate contingency concepts and theories are used to support the design of sustainable performance. Therefore, theories on environmental sustainability, social sustainability and economic sustainability are considered.

Contingency theory of human resource management

The CT of HRM devolution by Stone and Smith (1996) assumes that employment contracts predict the variation of human resource management practices. The authors add that organisational economics and psychological contracts perspectives allow changes in HRM evolution and devolution. The CT by Youndt et al. (1996) and Arcand (2004) asserts that the direct relationship between the strategy adopted by the firm and the HRM practices is examined by the contingency perspective of SHRM. This was supported by Jerry and Souai (2014) who acknowledge the improvement of organisational performance through the implementation of strategy types that are adopted by HRM practices and accept business strategy as a contingent variable of HRM practices for the strategic direction of the company. To conclude, HRM system specifics aligned with the business strategy can positively influence performance within the firm (Youndt et al., 1996) through the administrative system and cost reduction strategy.

Research methodology

This section discusses the research methodology adopted for this article.

Research paradigm

Logically, this interpretive study intended to explore sustainability and HRM (Cohen & Manion, 1994; Mackenzie & Knipe, 2006) through the interaction of sustainability in HRM literature, to elicit information regarding their background and experiences, which could have an impact on the investigation (Creswell, 2003). An interpretive research outcome involves describing the existing literature on HRM in sustainability, the implementation of sustainability in HRM, the incorporation of sustainability dimensions in HRM and the relationship between sustainability, HRM and sustainable development goals (SDGs).

According to Healy and Perry (2000), the constructivism paradigm is appropriate for social science research. Of course, it emphasises the understanding of the surrounding world of individuals (Creswell, 2014). Bashir et al (2008) stated this:

[C]onstructivism in social perspective is defined as the view that all knowledge and therefore all meaningful reality, is contingent upon human practices, being constructed in and out of interaction between human beings and their world and developed and transmitted within an essentially social context. (p. 42)

Truly, grounded on the review of literature, this study focussed on the expressive reality of knowledge on sustainability and HRM generated from the interaction between scholars and HRM professionals, published between 2016 and 2024. Moreover, social constructivism is frequently combined with interpretivism (Creswell, 2007; Mertens, 1998).

In alignment with the aforementioned points, this article is situated within two research paradigms: interpretivism and constructivism. From an interpretive perspective, it analyses the existing literature on sustainability in HRM. Concurrently, under the constructivist paradigm, it develops a conceptual framework based on the findings derived from the reviewed literature.

Research design

This article explores the implementation of sustainability in HRM. Using an exploratory design, a variety of literature from different journals provides case studies that show how sustainability is implemented in HRM (Poulter, 2006), with the potential of providing recommendations for future research in this field (Babbie, 2007). The exploratory design is most appropriate for responding to the research questions and revealing the existing limitations of the literature regarding this topic. In addition, the present study is part of the interpretive paradigm, which means that it seeks to explore, understand and interpret the implementation of sustainability, as presented through the literature review, in a comprehensive manner (Cohen & Manion, 1994; Mackenzie & Knipe, 2006). In essence, this qualitative article reviews the literature on sustainability implementation in HRM.

Research method

Integrative reviews, semi-systematic reviews and systematic reviews are three different types of literature reviews, as described by Snyder (2019). The research method adopted for this qualitative article was an integrative literature review. This method was chosen in order to explore the diverse types of reviews that have been used in the investigation of sustainability implementation in HRM (Snyder, 2019). An integrative literature review was relevant in this instance because it helps to remain focussed on the topic and the context of the research. Further, facilitating a deeper understanding of the topic and its context involves breaking down a broad subject to collect adequate and relevant information. This type of review is therefore suitable, as it provides the researcher with structured content and the tools to manage a rapidly growing area of research (Torraco, 2016) that appears to lack sufficient coverage. An integrative review will assist in filling this gap.

Target population

This section discusses the targeted literature for this study. According to Kothari (2004), a population or universe encompasses all items in any field of investigation. In this study, literature represented the target population chosen

following the rule of some characteristic of the population under study (Kothari, 2004). The databases appropriate to this study were selected from the E-Resources databases. The EBSCOhost suite of databases was then selected, as it provides abstracts of articles in magazines, journals and newspapers as well as full-text articles that are relevant to business and management studies. Business Source Ultimate, which falls under the list of EBSCOhost databases, was chosen as the preferred database because of the valuable collection of peer-reviewed, full-text journals and other resources that it offers. Furthermore, this database provides sources that include past and present information relevant to debates about future trends in business transformation and growth.

Business Source Ultimate was the only database used to collect journal articles that were appropriate to this study. Furthermore, the process entailed searching for articles based on the names of the journals in which they were published. These included journals covering topics such as management, organisation management, business ethics, business strategy and the environment, human resource management, corporate social responsibility (CSR) and EM, business and management research and green management.

Sampling

This section discusses the literature collection approach adopted in this article. Although it is not easy to apply sampling techniques in studies like Integrative literature review (ILR), the data collection process for secondary data is similar to that for primary data (Kumar, 2018). This study followed the necessary process to determine the type of information needed to answer the research questions regarding the existing literature on HRM in sustainability, the implementation of sustainability in HRM, the incorporation of sustainability into HRM and the relationship between sustainability, HRM and the SDGs.

Data collection techniques

Firstly, the integrative literature review began with the collection of literature on sustainability and human resource management. The authors collected articles using an online library repository at a selected university, selecting databases listed alphabetically and by title.

Secondly, journal articles were selected according to the topic. The following terms were used to conduct the online searches, and the results for each term are indicated in brackets: implementation of sustainability in HRM (4 results), sustainability and HRM (783 results) and sustainability in HRM (105 results). In order to obtain a small but relevant sample, we searched for articles on sustainability and HRM from 2016 to 2024. Thirdly, we searched for articles using the keywords mentioned on the cover page of this article. The following are the terms used and their results: sustainability in HRM (5 results), green HRM (18 results), CSR (8 results) and sustainable HRM (8 results). However, some articles were not included in this study because their topics were not

related to sustainability and HRM or did not contain the keywords of this study, or the name of the journal did not sound appropriate to the field of business or management. Furthermore, nine results were excluded because they were not related to the topic and keywords, and the names of the journals were irrelevant to this study. The tables containing details of the results found during the selection of the journal articles can be seen in Online Appendix 1.

Data analysis techniques

Literature reviews entail the examination, assessment and interpretation of existing literature to conduct a thorough analysis (Bowen, 2009). Thus, after classifying all the reviewed literature, content analysis (CA) was used to analyse the content of the literature in terms of sustainability and its dimensions, as well as HRM and its related aspects (Saldana, 2013). Content analysis was deemed suitable as it allowed for the identification of concepts displayed in the reviewed literature that were relevant to the topic and keywords of the study. In line with this, the article used conventional qualitative CA, because the coding categories were initially generated directly from the literature itself (Hsieh & Shannon, 2005). The reviewed literature was then analysed and interpreted in terms of the key concepts of the study. These concepts are part of the coding categories generated from the literature (Krippendorff, 2004).

Furthermore, an amalgamation of literature helped clarify fundamental facets (Schryen et al., 2015). After collecting the literature, the publications were grouped according to their respective literature review categories: HRM in sustainability, sustainability implementation in HRM, sustainability integration in HRM and the establishment of the relationship between sustainability and HRM. To describe all content aspects, the written material regarding the review of all literature publication categories of this study was read several times (Burnard, 1991, 1996; Elo & Kynga's, 2008; Hsieh & Shannon, 2005).

Truthfulness

This section evaluates the truthfulness of this study. Bashir et al. (2008) made the following statement: 'Because a paradigm is a world view, spanning ontology, epistemology and methodology, the quality of scientific research carried out within a paradigm has to be judged by its own paradigm's terms'. To ensure the truthfulness of the findings, the processes of CA are explained in this article (Elo et al., 2014) with more details. In a similar fashion, the sampling frames and numbers of the collected literature were identified, and are available in Online Appendix 1 and described accurately and mentioned in the findings (Elo et al., 2014). While EBSCO and, in particular, Business Source Ultimate, were the appropriately selected databases, literature was chosen based on the research topic, objectives and context of the study. Furthermore, the information collected on both sustainability and HRM reinforced the trustworthiness of the research findings (Lincoln & Guba, 1985). To ensure the credibility of the findings, literature was also gathered from the most recent studies published in 2024.

Ethical considerations

An application for full ethical approval was made to the University of the Witwatersrand Human Research Ethics Committee and ethics consent was received on 22 October 2021. The ethics approval number is H21/10/03.

Results

This section presents the findings of the study conducted in this article. According to Guerin et al. (2018), a literature review involves examining documents published on a specific subject. This process allows the researcher to synthesise and summarise the reviewed materials. Table 1 to Table 3 displays the literature reviewed in this article. By analysing existing literature on human resource management and sustainability, a novel perspective has been adopted (Jasperson et al., 2002).

Presentation of the overall collected and reviewed literature on sustainability and human resource management

This section presents all the literature collected and reviewed for this study, with more details provided in Table 1.

Table 1 displays all collected literature for an integrative literature review. Table 1 was derived from *Online Appendix 1*. Objectives and indicators were identical and taken from the same perspective. In fact, Table 1 shows the total number of literature publications that covered sustainability and HRM. During the transcription of the collected data, they were classified into seven categories, namely, HRM in sustainability

literature, sustainability in HRM literature, environmental sustainability and HRM, social sustainability and HRM literature, economic sustainability and HRM literature, sustainable HRM literature, and HRM and sustainable development goals (SDGs) literature.

The first column lists the number of items, while the second describes the items. The third column shows the number of publications in 2016; the fourth column shows the number of publications in 2017; the fifth column shows the number of publications in 2018; the sixth column shows the number of publications in 2019; the seventh column shows the number of publications in 2020; the eighth column shows the number of publications in 2021; the ninth column shows the number of publications in 2022; the 10th column shows the number of publications in 2023, and the 11th column shows the number of publications in 2024. These publications cover topics such as HRM in sustainability literature, sustainability in HRM literature, environmental sustainability and HRM, social sustainability and HRM, economic sustainability and HRM, sustainable HRM literature, and HRM and SDGs pieces of literature.

Furthermore, a total of approximately 240 pieces of literature were collected for review. Of these, 24 focussed on HRM in sustainability, 50 on sustainability in HRM, 75 on environmental sustainability and HRM, 24 on social sustainability and HRM, 19 on economic sustainability and HRM, 39 on sustainable HRM and 9 on HRM and sustainable development goals (SDGs).

TABLE 1: Collected and reviewed literature on sustainability and human resource management.

No.	Descriptions	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
01	HRM in sustainability literature	6	0	0	4	2	2	4	4	2	24
02	Sustainability in HRM literature	6	5	7	8	3	5	8	6	2	50
03	Environmental sustainability and HRM	11	12	8	7	8	5	4	12	8	75
04	Social sustainability and HRM literature	1	3	4	5	3	1	3	2	2	24
05	Economic sustainability and HRM literature	0	0	0	1	3	4	5	4	2	19
06	Sustainable HRM literature	1	3	3	2	1	2	7	12	8	39
07	HRM and sustainable development goals (SDGs) literature	0	0	0	1	0	0	1	1	6	9
Total		25	23	22	28	20	19	32	41	30	240

HRM, human resource management.

TABLE 2: Number of collected literature per year.

Year of publication	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Number of the reviewed literature	25	23	22	28	20	19	32	41	30	240

TABLE 3: Excluded and selected literature.

No.	Descriptions	Number of the collected literature	Number of excluded literature	Number of included and selected literature for discussions
01	HRM in sustainability literature	24	10	14
02	Sustainability in HRM literature	50	36	14
03	Environmental sustainability and HRM	75	15	60
04	Social sustainability and HRM literature	24	11	13
05	Economic sustainability and HRM literature	19	8	11
06	Sustainable HRM literature	39	15	24
07	HRM and sustainable development goals (SDGs) literature	9	2	6
Total		240	97	143

HRM, human resource management.

Presentation of the number of literature per year

This section presents the number of the collected and reviewed literature for this article following the year of publication, with more details provided in Table 2.

Grounded in Online Appendix 1 and Table 1 of this article, the total number of publications from 2016 to 2024 is presented.

Presentation of the excluded and selected literature

This section presents literature that was extracted and included following the eligibility criteria.

Based on Online Appendix 1, Table 3 combines all the literature publications collected for this study. There were a total of about 240; however, some were excluded before the discussions of the contents, while others were selected for further consideration. Following this representation, out of the 240 collected literature publications, 97 were removed from the discussions, while 143 were selected for discussion.

Content analysis

This section presents the analysis of the literature collected and discussed in this article.

Content analysis of the overall collected and reviewed literature on sustainability and human resource management

This section presents the CA of themes generated from the categorisation of the reviewed literature.

Figure 1 presents the findings from the overall collected and reviewed literature, revealing that fewer than 250 publications were available in the EBSCOhost database, specifically in Business Source Ultimate, to address the research questions formulated for this study. These representations summarise the content of the reviewed literature. They indicate that seven categories are involved in the topic of HRM and

sustainability, which include literature on (1) HRM in sustainability, (2) sustainability in HRM, (3) environmental sustainability and HRM, (4) social sustainability and HRM, (5) economic sustainability and HRM, (6) sustainable HRM, and (7) HRM and SDGs.

Figure 1 displays the concepts generated from the published literature and their frequency in the reviewed works. Moreover, it outlines the number of publications related to those concepts per year, as specifically demarcated for this article. The charts in the figure exhibit the extent to which those concepts have been identified in the reviewed literature. The figure shows that the publications were predominantly focussed on environmental HRM, followed by sustainability in HRM and sustainable HRM literature. The fourth position was occupied by literature on HRM in sustainability and social HRM, while the literature on economic HRM ranked fifth. The sixth position was held by literature on SDGs.

Content analysis of the publication year of the overall collected and reviewed literature on sustainability and human resource management

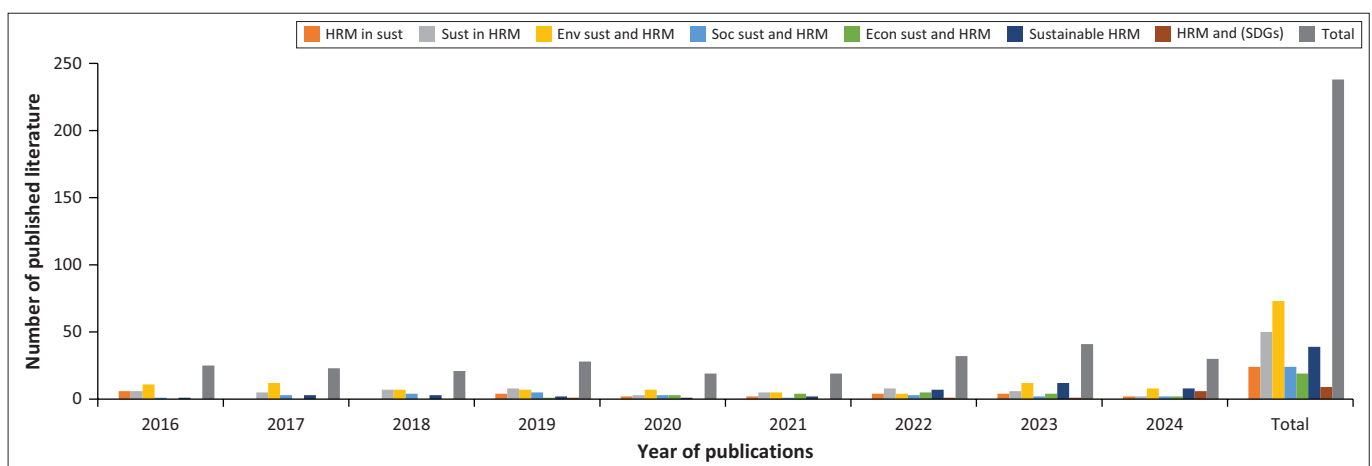
This section presents the CA of the collected literature per the year of publication.

Figure 2 shows that the majority of publications occurred in 2023, followed by those published in 2022 and then in 2024. This was followed by publications from 2019. Next came publications from 2016, followed by those from 2017 and again from 2022. Subsequently, there were publications from 2021, followed by those from 2019.

Content analysis of the eligible literature

This section analyses the eligibility criteria of the collected and reviewed literature as displayed in Figure 3.

Figure 3 exhibits the volume of collected literature, extracted literature from the discussions and those that were selected and included in the discussions and interpretations.



HRM, human resource management; Sust., sustainability; Env., Environmental; Soc., Social; Econ., Economic; SDG, Sustainable Development Goals.

FIGURE 1: Content analysis of themes generated from the reviewed literature.

Discussions

The discussions in this section focus on sustainability implementation in HRM in terms of sustainability dimensions, particularly green HRM, social HRM, economic HRM and sustainable HRM, as they appear in the titles of the reviewed literature. This is followed by a summary of the contents of this literature. The aim of this discussion is to discover the level of sustainability integration with HRM and the relationship between sustainability and HRM, as revealed by the reviewed literature. The discussion in this section is related to the objectives set for this study which include the exploration of HRM roles in sustainability implementation, sustainability incorporation into HRM, sustainability implementation in HRM, the implementation of sustainability dimensions in HRM, particularly green HRM, social HRM, economic HRM and sustainable HRM as they appear in the titles and contents of the reviewed literature. The aim of this discussion is to discover the level of sustainability integration with HRM and the approach of sustainability and HRM relationships in achieving SDGs as revealed by the reviewed literature.

Human resource management in sustainability implementation

The finding of this integrative review examined the existing literature on roles played by HRM in sustainability (Alcaraz et al., 2019; Blake & Foster, 2016; Buller & McEvoy, 2016;

Curado et al., 2022; Diaz-Carrion et al., 2021; Hameed et al., 2024; Luu, 2023b; Martin et al., 2016; Okreglicka, 2022; Onnis, 2019; Ozgul et al., 2020; Stahl et al., 2020).

In fact, the human resources' role possibly enabled incessant sustainability innovation (Blake & Foster, 2016). The pursuit of a sustainability strategy for organisational performance was driven by the combination of group competencies, individual aptitudes and supplementary features (Buller & McEvoy, 2016; Abolade, 2019). Further, strategic HRM can deal with key corporate sustainability challenges faced by organisations and individual management (Martin et al., 2016). In addition to this, there was a significant influence of HRM policy choices on remote workforce sustainability (Onnis, 2019). In the same way, human resource management plays an important role in corporate sustainability and social responsibility (Stahl et al., 2020), particularly in achieving human sustainability beyond the employment association and workplace (Hameed et al., 2024; Segalla & De Nisi, 2019; Taghavi, 2019).

The findings also revealed that HRM potentially contributed to sustainability (Curado et al., 2022) such as corporate sustainability (Stahl et al., 2020), social responsibility efforts (Alcaraz et al., 2019; Stahl et al., 2020) and environmental sustainability (Alcaraz et al., 2019). Similarly, sustainable careers of employees and sustainable employability enhancement (Curado et al., 2022; Ybema et al., 2020; Segalla & De Nisi, 2019; Taghavi, 2019) are HR practice inputs. Moreover, the advancement of sustainable organisations is strengthened by human resource practices (Curado et al., 2022; Seele & Lock, 2017). Similarly, green creativity among workers is fostered by HRM practices through green crafting and harmonious environmental passion (Luu, 2021).

Furthermore, sustainable production and consumption were piloted by HRM (Okreglicka, 2022). Besides, HRs were aligned with sustainability standards (Ozgul et al., 2020). Equally important, HR implementation was helpful in realising corporate sustainability vision and mission as well

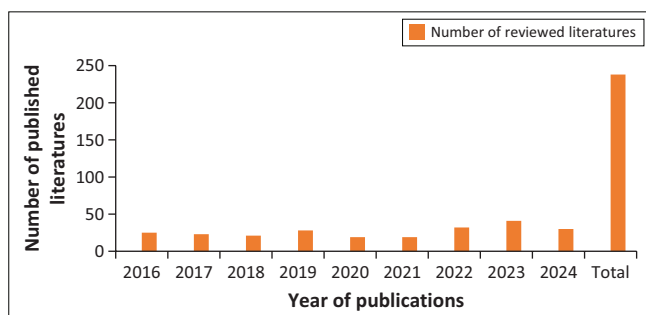
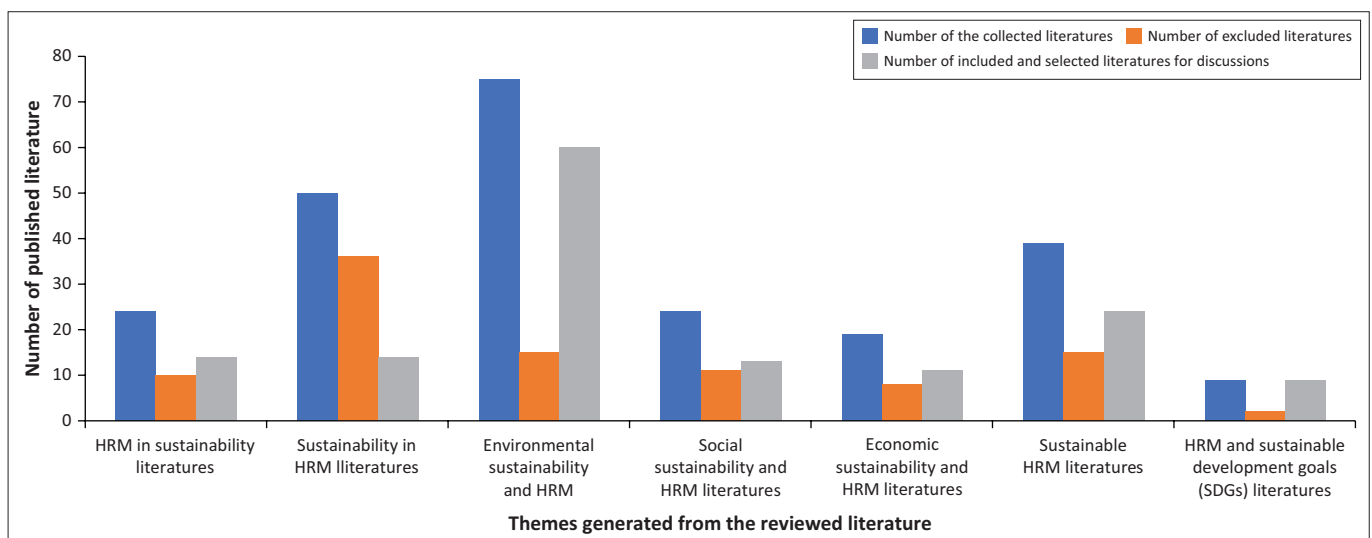


FIGURE 2: Evaluation of the publication year of the reviewed literature.



HRM, Human resource management.

FIGURE 3: Content analysis of the eligible literature.

as in attaining sustainability-oriented transformation (Ozgul et al., 2020). Finally, according to Diaz-Carrion et al. (2021), addressing the national institutional impact on firms' HRM sustainability should be required.

Sustainability implementation in human resource management

Sustainability has been implemented in HRM (Asis-Castro & Edralin, 2018; Belfort et al., 2021; Berzin et al., 2016; Buller & McEvoy, 2016; Ehnert et al., 2016; Fobbe & Hilletoft, 2021; Lepistö et al., 2023; Santana & Lopez-Cabrales, 2019; Saeed et al., 2019; Stan, 2018; Sult et al., 2024; Vasantha et al., 2017; Vatansever et al., 2018) through various activities such as implementing sustainable development (Lepistö et al., 2023; Santana & Lopez-Cabrales, 2019) and sustainability strategy in HRM practices (Buller & McEvoy, 2016). The combination of innovation and sustainability has led to new service agendas and improvements in existing services (Berzin et al., 2016), as well as the cultivation of sustainability behaviours among employees (Vatansever et al., 2018) and an increase in pro-environmental behaviour (Saeed et al., 2019). This approach fosters a sustainable work-life (Vatansever et al., 2018) and includes training for corporate sustainability implementation (Sult et al., 2024). Furthermore, the adoption of corporate sustainability contributes to HR development (Belfort et al., 2021), facilitates networking with stakeholders for coastal town sustainability (Fobbe et al., 2021) and promotes sustainability reporting (Ehnert et al., 2016). Sustainability programmes have also influenced behavioural changes and health improvements (Stan, 2018) and have led to greater adoption of humanistic sustainability HRM practices (Asis-Castro & Edralin, 2018).

The effects of sustainability on HRM are also revealed in the literature. In particular, some studies highlight the moderating effects of employee work experiences on the social harm of work (Mariappanadar & Aust, 2017), the impact of the economic crisis on CSR (Martínez-García et al., 2018), the influence of GHRM practices on ecological performance (Gilal et al., 2019), the effects of green practices on employees' pro-environmental behaviour (Saeed et al., 2019), and the relationship between GHRM practices and sustainability (Yong et al., 2020). In light of this, further research is needed on the impact of employee work experiences on both the environmental and economic harm of work, as well as the effects of social and environmental crises not only on CSR, but also on corporate environmental responsibility and corporate economic responsibility. Additionally, exploring the influence of social practices on social performance and the impact of economic practices on economic performance could significantly contribute to the HRM field. Similarly, examining how social practices affect employees' pro-social behaviour and how economic practices influence employees' pro-economic behaviour would be valuable areas of research. Lastly, the effects of social and economic practices on sustainability should be considered in future studies.

In fact, perceptions regarding sustainability in HRM have been discussed in the literature. This includes the perception of emerging ecological sustainability in HRM (Guerci & Carollo, 2016) and the perception of GHRM practices (Guerci et al., 2016). At the same time, the understanding of sustainability in HRM has been demonstrated in various studies. Examples include the understanding of GHRM's growth (Ren et al., 2018) and role (Chaudhary, 2020), as well as SHRM and top managers' responsibilities, and stakeholder identification and priority (Jarlström et al., 2018). Furthermore, the review of contemporary GHRM (Renwick et al., 2016) and SHRM themes, evolution and trends (Santana & Lopez-Cabrales, 2019), the readiness for GHRM implementation (Ooi et al., 2017) and the adoption of green practices (Longoni et al., 2018) were focal points of some studies. Other studies prioritised the analysis of similarities and differences between GHRM approaches (Haddock-Millar et al., 2016); the analysis of HRM and community organisations (Ang et al., 2017); and the analysis of antecedents and outcomes of GHRM (Obeidat et al., 2020). Moreover, some literature focussed on the importance of employees' green behaviour (Bohlmann et al., 2018), the measurement of green practices (Shah, 2019) and the establishment of socially responsible human resource practices (Barrena-Martínez et al., 2019). However, the sustainability dimensions that are missing from these studies need to be considered in future research.

Overall, the concepts of green HRM and CSR can be difficult to understand, particularly for professionals in the field. While frequently employing environmental HRM and social HRM concepts could help scholars and practitioners and professionals in the field to better understand these concepts, their implications and expected actions require further research. Similarly, the concepts of economic HRM and financial HRM also need to be explored by researchers and scholars in the field.

Implementation of sustainability dimensions in human resource management

This section discusses the implementation of sustainability dimensions in HRM.

Implementation of environmental sustainability in human resource management

Various environmental sustainability practices in HRM, revealed by the conducted integrative literature review, are discussed in this section. Furthermore, Figure 4 lists multiple aspects of the environmental sustainability dimension addressed in HRM.

Figure 4 exhibits various environmental sustainability activities such as sustainable environment (Kozar, 2017) and GHRM (Kozar, 2017). The reviewed literature revealed that GHRM was the term most commonly used to refer to environmental HRM (Bohlmann et al., 2018; Chaudhary, 2019; Davis et al., 2020; Gilal et al., 2019; Guerci & Carollo, 2016; Guerci et al., 2016; Haddock-Millar et al., 2016;

Longoni et al., 2018; Obeidat et al., 2020; Ooi et al., 2017; Ren et al., 2018; Renwick et al., 2016; Roscoe et al., 2019; Saeed et al., 2019; Shah, 2019; Shen et al., 2018; Yong et al., 2020). Green HRM refers to environmental HRM (Bohlmann et al., 2018; Chaudhary, 2019; Davis et al., 2020; Gilal et al., 2019; Guerci & Carollo, 2016; Guerci et al., 2016; Haddock-Millar et al., 2016; Longoni et al., 2018; Obeidat et al., 2020; Ooi et al., 2017; Ren et al., 2018; Renwick et al., 2016; Roscoe et al., 2019; Saeed et al., 2019; Shah, 2019; Shen et al., 2018; Yong et al., 2020). These environmental aspects need to be investigated from both social and economic perspectives. In other words, there should be a connection between social HRM practices, social organisational culture and organisations' social performance, as well as between economic HRM practices, economic organisational culture and organisations' economic performance.

The effects of sustainability on HRM were also revealed in the literature. In particular, some studies highlighted the moderating effects of employee work experiences on the social harm of work (Mariappanadar & Aust, 2017), the effects of the economic crisis on CSR (Martínez-García et al., 2018), the influence of GHRM practices on ecological performance (Gilal et al., 2019), the effects of green practices on employees' pro-environmental behaviour (Saeed et al., 2019) and the influence of GHRM practices on sustainability (Yong et al., 2020). Additionally, the roles of perceived GHRM practices on green creativity and perceived environmental leadership (Luu, 2023a) were discussed, as well as the role of GHRM in employee green advocacy (Liu et al., 2024).

Perceptions regarding sustainability in HRM were provided in the literature. This included the perception of emerging ecological sustainability in HRM (Guerci & Carollo, 2016) and the perception of GHRM practices (Guerci et al., 2016).

At the same time, the understanding of sustainability in HRM has been explored in several studies. Examples include the examination of GHRM's growth (Ren et al., 2018) and

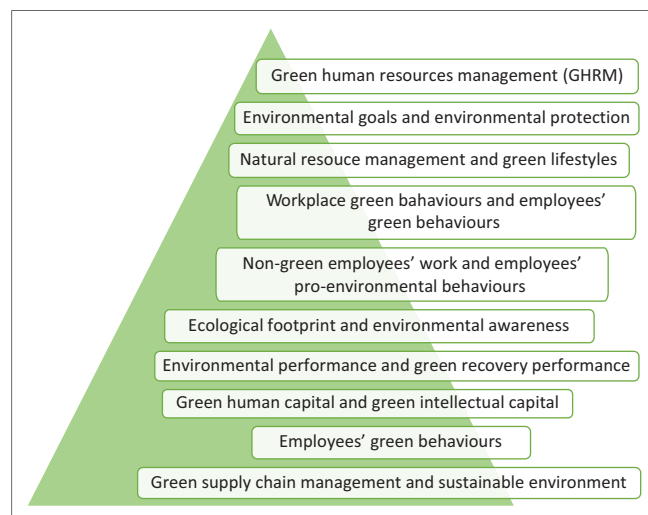


FIGURE 4: Environmental sustainability aspects in human resource management.

role (Chaudhary, 2020), as well as SHRM and the responsibilities of top managers, stakeholder identification and prioritisation (Järnlström et al., 2018). Furthermore, the review of contemporary GHRM (Renwick et al., 2016) and SHRM themes, evolution and trends (Santana & Lopez-Cabrales, 2019), as well as the readiness for GHRM implementation (Ooi et al., 2017) and the adoption of green practices (Longoni et al., 2018) have been focal points of some studies. Other research prioritised the analysis of similarities and differences among GHRM approaches (Haddock-Millar et al., 2016), the relationship between HRM and community organisations (Ang et al., 2017), and the analysis of antecedents and outcomes of GHRM (Obeidat et al., 2020). Moreover, some literature focussed on the importance of employees' green behaviour (Bohlmann et al., 2018), the measurement of green practices (Shah, 2019) and the establishment of socially responsible human resource practices (Barrena-Martínez et al., 2019). However, the sustainability dimensions that are absent from these studies need to be addressed in future research.

Implementation of social sustainability in human resource management

This section discusses the findings of social sustainability implementation in HRM as revealed by the reviewed literature as displayed in Figure 5.

Figure 5 exhibits various sustainability activities implemented and the sustainability questions addressed in HRM as shown in Online Appendix 1 of this study.

In fact, social responsibility was the common term used in reference to social sustainability within social HRM (Stahl et al., 2019). Corporate social responsibility was identified as the primary societal practice for implementing sustainability in HRM (Andrei et al., 2018; Bartolović et al., 2019; De Stefano et al., 2018; Getele et al., 2020; Kozar, 2017), which encompassed CSR directive (Humbert, 2019) and CSR strategies (Saru & Seeck, 2022). Besides, to make the concept's name shorter, Barrena-Martínez et al. (2019) employed the terms socially responsible HRM and sustainable and socially responsible HRM (Latan et al., 2022). Furthermore, social

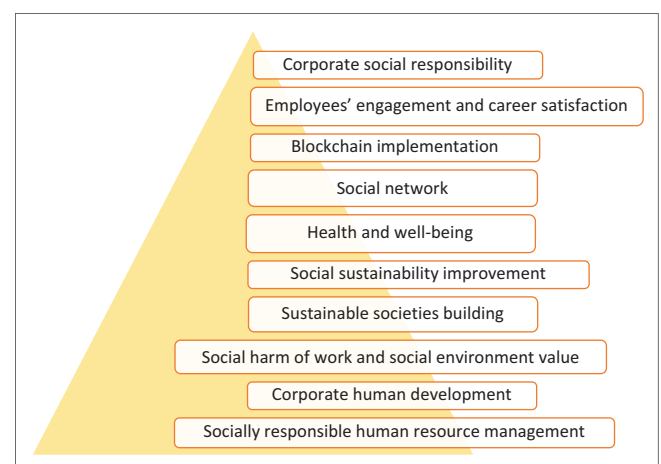


FIGURE 5: Social sustainability aspects in human resource management.

sustainability practices within HRM included social connectedness (Ang et al., 2017), building sustainable societies (Cooke et al., 2021) and addressing social harm related to work (Mariappanadar & Aust, 2017), health (Ang et al., 2017) and well-being (Ang et al., 2017).

Likewise, CSR is the common term used to refer to social sustainability in HRM or social HRM (Andrei et al., 2018; Getele et al., 2020; Iqbal et al., 2024; Macaulay et al., 2018). Furthermore, to simplify the terminology, Barrena-Martínez et al. (2019) used the term socially responsible human resource management. However, Ang et al. (2017) focussed more on HRM and social connectedness. Nevertheless, no concepts related to economic HRM were identified. In other words, the economic dimension of sustainability appears to be overlooked in the existing literature on sustainability implementation in HRM. This underscores the need to pay attention to the area of economic HRM. Overall, the concepts of green HRM and CSR seem to be challenging to understand, particularly for professionals in the field. While frequently employing the concepts of environmental HRM and social HRM could help scholars, practitioners and professionals in the field better comprehend these ideas, their implications and expected actions require further research. Similarly, the concepts of economic HRM and financial HRM need to be explored by researchers and scholars in the field.

In light of this, research should be conducted on the impact of employee work experiences on the environmental and economic harm associated with work, as well as the effects of social and environmental crises not only on CSR, but also on corporate environmental responsibility and corporate economic responsibility. Additionally, exploring the influence of social practices on social performance and the influence of economic practices on economic performance could significantly contribute to the HRM field. Similarly, investigating how social practices affect employees' pro-social behaviour and how economic practices influence employees' pro-economic behaviour would be valuable areas of research. Lastly, future studies should consider the effects of social and economic practices on sustainability.

The current discussions in this section demonstrated that it might be necessary to consider all social aspects when implementing social sustainability in HRM.

However, the findings of economic sustainability and HRM implementations are also discussed.

Implementation of economic sustainability in human resource management

This section discusses the findings on the implementation of economic sustainability in HRM as revealed by the reviewed literature.

Figure 6, also referred to as Online Appendix 1 of this study, presents the aspects generally covered by economic sustainability implementation in or by HRM. However, based on the reviewed studies from management, business,

performance, human resources management, organisation and sustainability or sustainable development-related journals, circular economy (CE) emerged as the most prevalent practice of economic sustainability implementation in HRM (Ahmad et al., 2020; Dibia et al., 2020; Lavagnini-Barboza et al., 2022; Obeidat et al., 2023; Subramanian & Suresh, 2022, 2023), including its components such as CE practices (Chowdhury et al., 2022) and CE performance (Chau et al., 2024; Khan et al., 2023), while the study by Merawati et al. (2023) focussed more on profit sustainability. This indicates a noticeable need for further investigations into economic sustainability and HRM-related studies.

Implementation of sustainable human resource management

This section discusses the findings on the implementation of sustainable HRM, as revealed by the reviewed literature.

Sustainable HRM was implemented by Mariappanadar and Aust (2017), Järlström et al. (2018), Pellegrini et al. (2018) and Guerci et al. (2019) (Figure 7). However, the literature reviewed on sustainable HRM emphasised sustainable development and human resource management more than

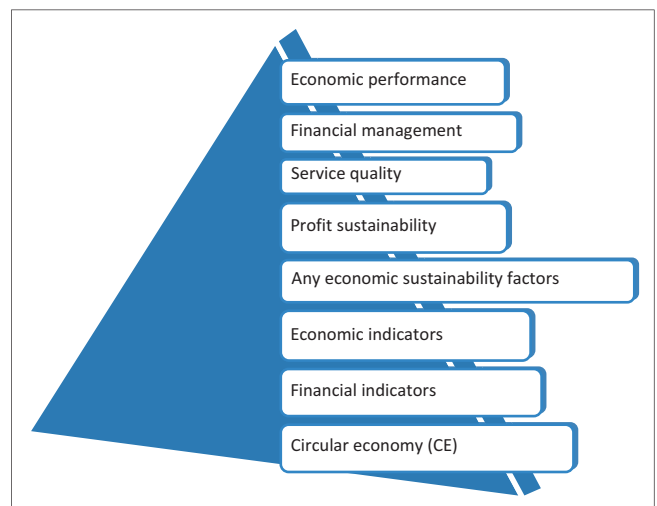
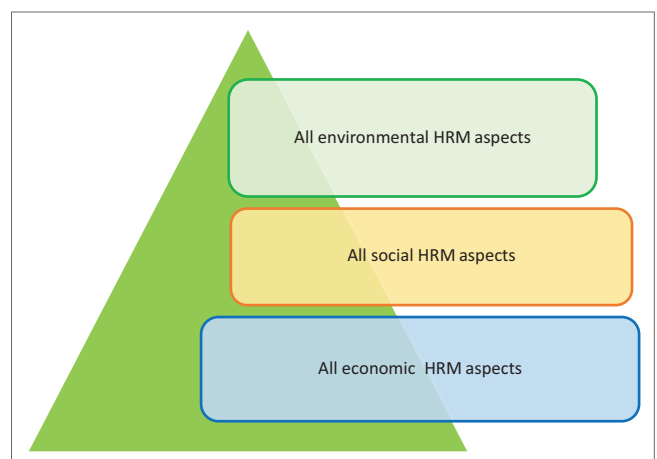


FIGURE 6: Economic sustainability aspects in human resource management.



HRM, human resource management.

FIGURE 7: Sustainable human resource management aspects.

sustainable HRM itself (Martínez-García et al., 2018; Santana & Lopez-Cabrales, 2019). Furthermore, although the concept of sustainable HRM appears in the literature, none of the reviewed studies utilised all three sustainability dimensions simultaneously. The term 'sustainable' is intended to address these three dimensions of sustainability. Therefore, sustainable HRM should incorporate the economic, environmental and social aspects of HRM. This gap needs to be addressed by scholars and experts in the field.

Sustainability implementation through its incorporation into human resource management

Sustainability can be implemented through its incorporation into HRM. However, not much has been found in the reviewed studies on sustainability implementation in HRM as conducted in this study. However, GHRM has been associated with sustainable performance improvements (Obeidat et al., 2023; Subramanian & Suresh, 2023); similarly, CE was incorporated to advance sustainable performance (Obeidat et al., 2023; Subramanian & Suresh, 2023). Nevertheless, there is no study revealing the incorporation of social sustainability into HRM. This highlights the need for further research to explore why sustainability has not been integrated into HRM practices.

Sustainability and human resource management relationships

There should be a relationship between HRM and sustainability. This has been proven by Guerci et al. (2019), Curado et al. (2022) and Wojtaszczyk et al. (2024).

In fact, the findings of this study revealed the existing link between HRM and economic performance (Guerci et al., 2019) which is a dimension of sustainability performance. At the same time, sustainable development was connected to sustainable lifestyles (Wojtaszczyk et al., 2024), which is a feature of sustainable HRM. While Ang et al. (2017) focussed more on HRM and social connectedness, Tanveer et al. (2023) mapped the relationships between CSR and sustainability performance through GHRM practices. Additionally, Curado et al. (2022) suggested that the relationship between HRM and sustainability calls for reflection on methods to be adopted to achieve sustainability goals through HRM practices. Furthermore, Brewster and Brookes (2024) discussed the relationship between HRM and the SDGs.

The literature review revealed the relationships between sustainability dimensions and HRM. This includes the link between GHRM practices, green organisational culture and a firm's environmental performance (Roscoe et al., 2019), the relationship between GHRM and job pursuit intention (Chaudhary, 2019), as well as the association between GHRM and non-green workplace outcomes (Shen et al., 2018). These environmental aspects need to be investigated from social and economic perspectives. In other words, there should be a connection between social HRM practices, social organisational culture and organisations' social performance, as well as between economic HRM practices, economic organisational culture and organisations' economic performance.

In a similar vein, this study investigated the relationships between HRM and CSR (Andrei et al., 2018), employee perceptions of HR practices and the adoption of sustainable behaviour (Pellegrini et al., 2018) and human resource management and corporate sustainability (Guerci et al., 2019). For sustainable HRM, CSR should be linked to GHRM and economic HRM. Additionally, to achieve sustainable behaviour, HR practices should connect to economic, environmental and social behaviours.

The discussions above confirmed the significant links between sustainability and HRM, as well as between the SDGs and HRM. This implies that HRM cannot operate without the implementation of sustainability and cannot function without referencing the SDGs.

Human resource management and sustainable development goals achievement

There are still very few studies that examine HRM and SDGs together (Aust et al., 2024; Bhattacharya & Sharma, 2023; Brandl et al., 2024; Brewster & Brookes, 2024; Campos-García et al., 2024; Cooke & Wood, 2024). Human resource management should focus on customer communication and education regarding sustainable practices (Bhattacharya & Sharma, 2023). Space and incentives are essential for promoting sustainability through HRM (Aust et al., 2024). Human resource management is responsible for the promotion or obstruction of the United Nations SDGs (Cooke & Wood, 2024). Human resources play a crucial role in achieving corporate sustainability (Campos-García et al., 2024). Human resources are also responsible for implementing sustainable principles into HRM practices (Campos-García et al., 2024). Additionally, Brewster and Brookes (2024) acknowledged the value of the SDGs for HRM experts. However, HRM has failed to improve its prospective goals (Brewster & Brookes, 2024). Certainly, HRM should make more effort to implement sustainability and achieve the SDGs.

This section provides an overview of the SDGs. Sustainability dimensions have the purpose of achieving economic prosperity, ecological safety and societal impartiality (Muñoz-Pascual et al., 2019; Muñoz-Torres et al., 2018). In fact, sustainability achievement in companies should aim for the realisation of business goals (Mazur, 2014), corporate sustainability (Beneke et al., 2016) and the attainment of SDGs (Pop et al., 2019). Figure 8 lists various goals of sustainable development.

Figure 8 displays the 17 SDGs. These goals have garnered the attention and efforts of governments and international assistance agencies, reflecting the agreement of the global community during the globalisation period (Auemsuvarn, 2019; Vandenberg, 2017). The objective is to achieve these relevant goals. According to Kuwornu (2017), sustainability, or the triple bottom line, has evolved into a broad multi-focal agenda. It is essential that the development goals are related to each pillar of sustainability.



Source: Carlsen, L., & Bruggemann, R. (2022). The 17 United Nations' sustainable development goals: A status by 2020. *International Journal of Sustainable Development & World Ecology*, 29(3), 219–229

FIGURE 8: Sustainable development goals.

The following items are the 17 SDGs:

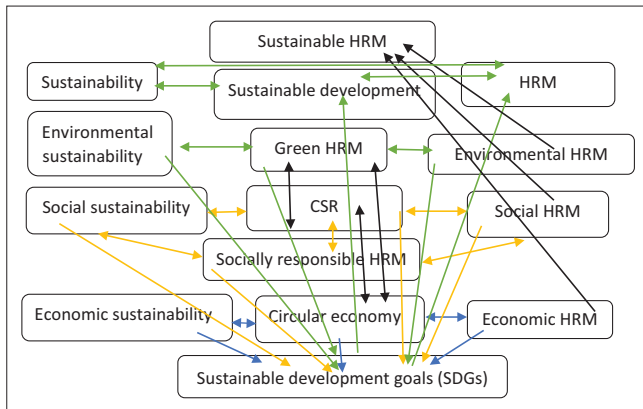
1. End poverty in all its forms everywhere.
2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.
3. Ensure healthy lives and promote well-being for all at all ages.
4. Ensure inclusive and equitable quality education and promote life-long learning opportunities for all.
5. Achieve gender equality and empower all women and girls.
6. Ensure availability and sustainable management of water and sanitation for all.
7. Ensure access to affordable, reliable, sustainable and modern energy for all.
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
9. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
10. Reduce inequality within and among countries.
11. Make cities and human settlements inclusive, safe, resilient and sustainable.
12. Ensure sustainable consumption and production patterns.
13. Take urgent action to combat climate change and its impacts.
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17. Strengthen the means of implementation and revitalise the global partnership for sustainable development.

Consequently, it may be necessary to identify approaches for implementing SDGs through HRM and sustainability–OP.

Conceptual framework

This section presents the conceptual framework generated from the findings of the ILR.

Figure 9 shows the concepts generated from the reviewed literature and the links between them. Environmental sustainability is related to GHRM and can also be considered as environmental HRM. Social sustainability refers to CSR and can be considered as social HRM, and when implemented by HRM, it can lead to socially responsible HRM. Economic sustainability is associated with the circular economy and can be considered as economic HRM. All these components are included in the SDGs, which can be integrated into HRM to achieve



HRM, human resource management; CSR, corporate social responsibility.

FIGURE 9: Conceptual framework of sustainable human resource management.

sustainable HRM. It should be noted that the SDGs are part of sustainable development, which refers to sustainability. For sustainable HRM, the link between GHRM, CSR and CE needs to be established.

Practical and managerial implications

For sustainable HRM, management should first integrate sustainability into HRM practices and then implement sustainability in daily HR activities by considering the economic, environmental and social aspects of the organisation while complying with the SDGs agenda. To achieve a sustainable organisation, top management should equip HRM with the necessary means to develop a sustainability culture in employees' mindsets and behaviours through communication and various educational programmes, such as workshops and training sessions. Moreover, management should encourage everyone in the company to participate, either directly or indirectly, in the process of sustainability implementation and the achievement of the SDGs. Furthermore, management needs to invest in these efforts.

Limitations and recommendations

By reviewing the existing literature on human resource management and sustainability, a novel perspective has been adopted (Jasperson, Carte, Saunders, Butler, Croes & Zheng, 2002). Further investigations are needed in HRM-sustainability-related topics. Similarly, studies on sustainability in HRM should be increased. Regarding sustainability dimensions, research on environmental aspects should be maintained, while much more focus should be placed on social sustainability dimensions. Additionally, future research on economic sustainability dimensions will greatly enrich HRM-sustainability studies.

Sustainability should be implemented with the goal of achieving the SDGs. Therefore, SDGs should be integrated into HRM strategies, plans and practices. To effectively implement sustainability and achieve the SDGs, further investigations are needed to equip HR managers with knowledge about sustainability dimensions, integration,

implementation and the role of HRM in achieving SDGs. Additionally, these findings could inform similar studies using various research approaches, such as quantitative, qualitative or mixed methods.

Conclusion

This article is based on an integrative literature review that explores HRM. It presents the topic areas covered by various studies. The reviewed literature reveals that GHRM has been the most commonly implemented practice, followed by rare SHRM implementation, with CSR coming next. More recent studies have highlighted the implementation of CE principles in HRM. Relationships have been established between sustainability dimensions and HRM during the process of sustainability implementation; however, the incorporation of sustainability into HRM remains largely unexplored. Additionally, a substantial amount of literature on HRM and sustainability is identified in this article. Following the discussion of the study's findings, several recommendations are made for future research, which could contribute to the growing body of literature in this area. Furthermore, the findings could serve as a basis for conducting similar studies using other research approaches, such as quantitative, qualitative or mixed-methods approaches.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

C.M.B. conceptualised the study and methodology and wrote and reviewed the original draft. J.G. supervised the study and methodology. J.G. wrote the revised draft and conducted the necessary editing.

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Data availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Disclaimer

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References

- Abolade, D.A. (2019). Effects of family demands on job performance and intention to quit of female employees in selected financial institutions in Akure, Nigeria. *Economic insights – Trends & challenges. Economic Insights–Trends and Challenges, VIII(LXXI)(2)*, 11–26.
- Ahmad, N., Mahmood, A., Han, H., Ariza-Montes, A., Vega-Muñoz, A., Din, M.U., Iqbal Khan, G., & Ullah, Z. (2021). Sustainability as a 'new normal' for modern businesses: Are SMEs of Pakistan ready to adopt it? *Sustainability, 13(4)*, 1944. <https://doi.org/10.3390/su13041944>
- Ahmad, N., Rabbany, M.G., & Ali, S.M. (2020). Organizational and human factors related challenges to ISO 20000: Implications for environmental sustainability and circular economy. *Academic Journal By: International Journal of Manpower Bradford, 41(7)*, 987–1004. <https://doi.org/10.1108/IJM-08-2019-0374>
- Alcaraz, J.M., Susaeta, L., Suarez, E., Colon, C., Gutiérrez-Martínez, I., Cunha, R., Leguizamón, F., Idrovo, S., Weisz, N., Correia, M.F., & Pin, J.R. (2019). The human resources management contribution to social responsibility and environmental sustainability: Explorations from Ibero-America. *The International Journal of Human Resource Management, 30(22)*, 3166–3189. <https://doi.org/10.1080/09585192.2017.1350732>
- Alonso, I.B., Sánchez-Rivero, M.V., & Pozas, B.M. (2022). Mapping sustainability and circular economy in cities: Methodological framework from Europe to the Spanish case. *Journal of Cleaner Production, 357*, 131870. <https://doi.org/10.1016/j.jclepro.2022.131870>
- Andrei, J.V., Panait, M., & Voica, C. (2018). Challenges and approaches for the corporate social responsibility and human resource management in the financial sector. *Economics, Management, and Financial Markets, 13(3)*, 415–431.
- Ang, S.H., Cavanagh, J., Southcombe, A., Bartram, T., Marjoribanks, T., & McNeil, N. (2017). Human resource management, social connectedness and health and well-being of older and retired men: The role of Men's Sheds. *The International Journal of Human Resource Management, 28(14)*, 1986–2016. <https://doi.org/10.1080/09585192.2015.1088886>
- Arcand, J.P. (2004). *Institutional and strategic implications of founder-CEO transitions in firms issuing initial public offerings*. Doctoral dissertation, Concordia University.
- Armstrong, M., & Taylor, S. (2014). *Armstrong's handbook of human resource management*. Kogan Page.
- Asis-Castro, A.L., & Edralin, D.M. (2018). Predictors of humanistic sustainability HRM practices. *DLSU Business and Economics Review, 27(2)*, 130–146.
- Aust, I., Cooke, F.L., Muller-Camen, M., & Wood, G. (2024). Achieving sustainable development goals through common-good HRM: Context, approach and practice. *German Journal of Human Resource Management, 38(2)*, 93–110. <https://doi.org/10.1177/23970022241240890>
- Aydin, E., & Turan, M. (2023). An AI-based shortlisting model for sustainability of human resource management. *Sustainability, 15(3)*, 2737.
- Babbie, E. (2007). *The practice of social research* (11th ed.). Thomson Wadsworth.
- Barboza, L.L., Bertassini, A.C., Gerolamo, M.C., & Ometto, A.R. (2022). Organizational values as enablers for the circular economy and sustainability. *Revista de Administração de Empresas, 62*, e2021-0331. <https://doi.org/10.1590/s0034-759020220509>
- Barrena-Martínez, J., López-Fernández, M., & Romero-Fernández, P.M. (2019). Towards a configuration of socially responsible human resource management policies and practices: Findings from an academic consensus. *The International Journal of Human Resource Management, 30(17)*, 2544–2580.
- Bashir, M., Afzal, M.T., & Azeem, M. (2008). Reliability and validity of qualitative and operational research paradigm. *Pakistan Journal of Statistics and Operation Research, 4*, 35–45. <https://doi.org/10.18187/pjsor.v4i1.59>
- Bernardin, H.J., & Russell, J.E.A. (1993). *Human resource management*. McGraw-Hill, Inc.
- Berzin, S., Pitt-Catsoupes, M., & Gaitan-Rossi, P. (2016). Innovation and sustainability: An exploratory study of intrapreneurship among human service organizations. *Human Service Organizations: Management, Leadership & Governance, 40(5)*, 540–552. <https://doi.org/10.1080/23303131.2016.1184207>
- Bhattacharya, R., & Sharma, G.A. (Eds.). (2023). *Capital and ecology: Developmentalism, subjectivity and the alternative life-worlds*. Taylor & Francis.
- Blake, P., & Foster, W.T. (2016). Sustainability innovation and the role of human resources practitioners. *Managerial Challenges of the Contemporary Society, 9(1)*, 68–74.
- Bohlmann, C., Van den Bosch, J., & Zacher, H. (2018). The relative importance of employee green behavior for overall job performance ratings: A policy-capturing study. *Corporate Social Responsibility and Environmental Management, 25*, 1002–1008. <https://doi.org/10.1002/csr.1516>
- Boso, N., Danso, A., Leonidou, C., Uddin, M., Adeola, O., & Hultman, M. (2017). Does financial resource slack drive sustainability expenditure in developing economy small and medium-sized enterprises? *Journal of Business Research, 80*, 247–256. <https://doi.org/10.1016/j.jbusres.2017.06.016>
- Boudreau, J.W. (2003). Sustainability and the talentship paradigm: Strategic human resource management beyond the bottom line. *Working Paper*, 03–21
- Bowen, G.A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal, 9(2)*, 27–40. <https://doi.org/10.3316/QRJ0902027>
- Bradford, M., & Williams, P. (2014). Sustainability reports: What do stakeholders really want? *Management Accounting Quarterly Fall, 16(1)*, 13–18.
- Brandl, J., Chore, L.I., & Junker, M. (2024). How you value shapes whom you value: The contribution of apprenticeships to sustainable development goals. *German Journal of Human Resource Management, 38(2)*, 231–256.
- Brewster, C., & Brookes, M. (2024). Sustainable development goals and new approaches to HRM: Why HRM specialists will not reach the sustainable development goals and why it matters. *German Journal of Human Resource Management, 38(2)*, 183–201. <https://doi.org/10.1177/23970022241229037>
- Brundtland, G.H. (1985). World commission on environment and development. *Environmental Policy and Law, 14(1)*, 26–30.
- Buller, P.F., & McEvoy, G.M. (2016). A model for implementing a sustainability strategy through HRM practices. *Business and Society Review, 121(4)*, 465–495. <https://doi.org/10.1111/basr.12099>
- Bulter, J.B., Henderson, S.C., & Raiborn, C. (2011). Sustainability and the balanced scorecard: Integrating green measures into business reporting. *Management Accounting Quarterly, 12(2)*, 1–10.
- Burger, A.B., & Middelberg, S.L. (2018). An evaluation of Global Management Accounting Principles in the sustainability of a South African mechanised piggery. *Journal of Economic and Financial Sciences, 11(1)*, 1–9. <https://doi.org/10.4102/jef.v11i1.154>
- Burns, T., & Stalker, G.M. (1961). Mechanistic and organic systems. *Classics of Organizational Theory, 10(2)*, 209–214.
- Campos-García, I., Alonso-Muñoz, S., González-Sánchez, R., & Medina-Salgado, M.S. (2024). Human resource management and sustainability: Bridging the 2030 agenda. *Corporate Social Responsibility and Environmental Management, 31(3)*, 2033–2053.
- Carlsen, L., & Bruggemann, R. (2022). The 17 United Nations' sustainable development goals: A status by 2020. *International Journal of Sustainable Development & World Ecology, 29(3)*, 219–229. <https://doi.org/10.1080/13504509.2021.1948456>
- Chaka, M. (2018). Sustainability reporting in South Africa: A descriptive and comparative analysis. *Journal of Gender, Information and Development in Africa (JGIDA), 7(2)*, 159–184. <https://doi.org/10.31920/2050-4284/2018/v7n2a8>
- Chandler, A.D. (1962). Strategy and structure: Chapters in the history of the industrial empire. *Cambridge Mass, 5(1)*, 12–48.
- Chau, K.Y., Huang, T., Moslehpour Khan, W., Nisar, Q.A., & Haris, M. (2024). Opening a new horizon in green HRM practices with big data analytics and its analogy to circular economy performance: Empirical evidence. *Environment, Development & Sustainability, 26(5)*, 12133–12162.
- Chaudhary, R. (2019). Green human resource management and job pursuit intention: Examining the underlying processes. *Corporate Social Responsibility and Environmental Management, 26*, 929–937. <https://doi.org/10.1002/csr.1732>
- Chaudhary, R. (2020). Green human resource management and employee green behavior: An empirical analysis. *Corporate Social Responsibility and Environmental Management, 27*, 630–641.
- Chofreh, A.G., & Goni, F.A. (2017). Review of frameworks for sustainability implementation. *Sustainable Development Sustainability Development, 25*, 180–188. <https://doi.org/10.1002/sd.1658>
- Chowdhury, S., Dey, P.K., Rodríguez-Espíndola, O., Parkes, G., Tuyet, N.T.A., Long, D.D., & Ha, T.P. (2022). Impact of organisational factors on the circular economy practices and sustainable performance of small and medium-sized enterprises in Vietnam. *Journal of Business Research, 147*, 362–378.
- Chung, S.Y., & Davies, B.J. (2003). Mortality from grossly encrusted bilateral pyelitis, ureteritis, and cystitis by *Corynebacterium* group D2. *Urology, 61(2)*, 463.
- Cohen, L., & Manion, L. (1994). *Research methods in education* (4th ed.). Routledge.
- Cooke, F.L., & Wood, G. (2024). Closer, stronger, and brighter: Bringing IB and IHRM together through the lens of Sustainable Development Goals. *The International Journal of Human Resource Management, 35(5)*, 779–805. <https://doi.org/10.1080/09585192.2023.2252316>
- Creswell, J. (2003). *Research design: Qualitative, quantitative and mixed methods approaches* (2nd ed.). Sage.
- Creswell, J.W. (2014). *Research design: Qualitative, quantitative and mixed methods* (4th ed.). Sage.
- Cui, A.P., Walsh, M.F., & Zou, S. (2014). The importance of strategic fit between host-home country similarity and exploration exploitation strategies on small and medium-sized enterprises' performance: A contingency perspective. *Journal of International Marketing, 22(4)*, 67–85.
- 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*, 335–346. <https://doi.org/10.1002/bse.2367>
- De Lange, A.H., Kooij, D.T., & Van der Heijden, B.I. (2015). Human resource management and sustainability at work across the lifespan: An integrative perspective. In L.M. Finkelstein, D. Truxillo, F. Fraccaroli, & R. Kanfer (Eds.), *Facing the challenges of a multi-age workforce* (p. 50–79). Routledge.

- Dessler, G. (2017). *Human resource management* (15th ed.). Pearson.
- 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>
- Dibia, C., Oruh, E.S., Anderson, M., & Dirpal, G. (2020). *Human resource management and circular economy: A critical perspective*. British Academy of Management.
- Dignan, J. (2000). *Understanding victims and restorative justice*. McGraw-Hill Education (UK).
- Dimitrov, R.S. (2010). Inside UN climate change negotiations: The Copenhagen conference. *Review of Policy Research*, 27(6), 795–821. <https://doi.org/10.1111/j.1541-1338.2010.00472.x>
- Donaldson, L. (2001). *The contingency theory of organizations*. Sage.
- DuBois, C.L., & Dubois, D.A. (2012). Strategic HRM as social design for environmental sustainability in organization. *Human Resource Management*, 51(6), 799–826.
- Duvnjak, B., & Kohont, A. (2021). The role of sustainable HRM in sustainable development. *Sustainability*, 13(19), 10668. <https://doi.org/10.3390/su131910668>
- Ehnert, I. (2011). Sustainability and HRM: A model and suggestions for future research. In A. Wilkinson, & K. Townsend (Eds.), *The future of employment relations: New paradigms, new approaches* (pp. 215–237). Palgrave Macmillan.
- Ehnert, I., & Ehnert, I. (2009). Theorising on strategic HRM from a sustainability approach. In I. Ehnert (Ed.), *Sustainable human resource management: A conceptual and exploratory analysis from a paradox perspective* (pp. 79–121). Physica-Verlag HD.
- Ehnert, I., Harry, W., & Zink, K.J. (2013). Sustainability and HRM: An introduction to the field. In I. Ehnert, W. Harry, & K.J. Zink (Eds.), *Sustainability and human resource management: Developing sustainable business organizations* (pp. 3–32). Springer.
- Ehnert, I., Parsa, S., Roper, I., Wagner, M., & Muller-Camen, M. (2016). Reporting on sustainability and HRM: A comparative study of sustainability reporting practices by the world's largest companies. *The International Journal of Human Resource Management*, 27(1), 88–108. <https://doi.org/10.1080/09585192.2015.1024157>
- Elkington, J. (1997). *Cannibals with forks. Triple bottom line of 21st century business*. Capstone Publishing Ltd.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE Open*, 4(1), 2158244014522633. <https://doi.org/10.1177/2158244014522633>
- Esfahani, S.A., Rezaii, H., Koochmeshki, N., & Parsa, S.S. (2017). Sustainable and flexible human resource management for innovative organisations. *AD-Minister*, 30, 95–215.
- Fernández-Robin, C., Celemín-Pedroche, M.S., Santander-Astorga, P., & Alonso-Almeida, M.D.M. (2019). Green practices in hospitality: A contingency approach. *Sustainability*, 11(13), 3737.
- Freitas, W.R.D.S., Jabbour, C.J.C., & Santos, F.C.A. (2011). Continuing the evolution: Towards sustainable HRM and sustainable organizations. *Business Strategy Series Journal*, 12(5), 226–234. <https://doi.org/10.1108/17515631111166861>
- French, W.L. (1978). *The personnel management process* (4th ed.). Houghton Mifflin Company.
- Gacenga, F., Cater-Steel, A., Tan, W.G., & Toleman, M. (2011). IT service management: Towards a contingency theory of performance measurement. In *Proceedings of International Conference on Information Systems (ICIS 2011)* (pp. 1–18). ICIS.
- Gachie, W. (2019). Project sustainability management: Risks, problems and perspective. *Problems and Perspectives in Management*, 17(1), 313–325. [https://doi.org/10.21511/ppm.17\(1\).2019.27](https://doi.org/10.21511/ppm.17(1).2019.27)
- Getele, G.K., Li, T., & Arrive, T.J. (2020). Corporate culture in small and medium enterprises: Application of corporate social responsibility theory. *Academy of Management Journal*, 27(2), 897–908. <https://doi.org/10.1002/csr.1853>
- Gilal, F.G., Ashraf, Z., Gilal, N.G., Gilal, R.G., & Channa, N.A. (2019). Promoting environmental performance through green human resource management practices in higher education institutions: A moderated mediation model. *Corporate Social Responsibility and Environmental Management*, 26, 1579–1590.
- Guerci, M., & Carollo, L. (2016). A paradox view on green human resource management: Insights from the Italian context. *The International Journal of Human Resource Management*, 27(2), 212–238. <https://doi.org/10.1080/09585192.2015.1033641>
- Guerci, M., Decramer, A., Van Waeyenberg, T., & Aust, I. (2019). Moving beyond the link between HRM and economic performance: A study on the individual reactions of HR managers and professionals to sustainable HRM. *Journal of Business Ethics*, 160, 783–800. <https://doi.org/10.1007/s10551-018-3879-1>
- Guerci, M., Longoni, A., & Luzzini, D. (2016). Translating stakeholder pressures into environmental performance – The mediating role of green HRM practices. *The International Journal of Human Resource Management*, 27(2), 262–289.
- Guerci, M., Radaelli, G., Siletti, E., Cirella, S., & Shani, A.B.R. (2015). The impact of human resource management practices and corporate sustainability on organizational ethical climates: An employee perspective. *Journal of Business Ethics*, 126, 325–342. <https://doi.org/10.1007/s10551-013-1946-1>
- Guerin, B., Janta, B., & Van Gorp, A. (2018). Desk-based research and literature review. *The RAND Corporation*, 12, 63–69.
- Gupta, S. (2014). Sustainability as a competitive advantage: An outcome of strategic HRM. *Review of HRM*, 3, 129–139.
- Haddock-Millar, J., Sanyal, C., & Mu'ller-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.
- Hamadamin, H.H., & Atan, T. (2019). The impact of strategic human resource management practices on competitive advantage sustainability: The mediation of human capital development and employee commitment. *Sustainability*, 11(20), 5782. <https://doi.org/10.3390/su11205782>
- Hameed, Z., Garavan, T.N., Naeem, R.M., Burhan, M., Moin, M.F., & McCabe, T. (2024). Subjective well-being, COVID-19 and financial strain following job loss: Stretching the role of human resource management to focus on human sustainability beyond the workplace. *Asia Pacific Journal of Human Resources*, 62(1), e12384.
- Harry, W. (2013). The relevance of the vision of sustainability to HRM practice. In *Sustainability and human resource management: Developing sustainable business organizations* (pp. 401–419). Springer.
- Healy, M., & Perry, C. (2000). Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research: An International Journal*, 3(3), 118–126. <https://doi.org/10.1108/13522750010333861>
- Hirsig, N., Rogovsky, N., & Elkin, M. (2013). Enterprise sustainability and HRM in Small and medium-sized enterprises: A decent work perspective. In *Sustainability and human resource management: Developing sustainable business organizations* (pp. 127–152). Springer.
- Hsieh, H.F. & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Inwood, S.E.E., & Dale, V.H. (2019). State of apps targeting management for sustainability of agricultural landscapes. A review. *Agronomy for Sustainable Development*, 39(8), 1–15. <https://doi.org/10.1007/s13593-018-0549-8>
- Iqbal, K., Shen, J., & Deng, X. (2024). When does CSR-facilitation human resource management motivate employee job engagement? The contextual effect of job insecurity. *Human Resources Management Journal*, 34(4), 1063–1079. <https://doi.org/10.1111/1748-8583.12544>
- Järnlström, M., Saru, F., & Vanhala, S. (2018). Sustainable human resource management with salience of stakeholders: A top management perspective. *Journal of Business Ethics*, 152, 703–724. <https://doi.org/10.1007/s10551-016-3310-8>
- Jabbour, C.J.C., & Santos, F.C.A. (2008). The central role of human resource management in the search for sustainable organizations. *The International Journal of Human Resource Management*, 19(12), 2133–2154.
- Jabbour, C.J.C., Sarkis, J., De Sousa Jabbour, A.B.L., Renwick, D.W.S., Singh, S.K., Grebinevych, O., Kruglianskas, I., & Godinho Filho, M. (2019). Who is in charge? A review and a research agenda on the 'human side' of the circular economy. *Journal of Cleaner Production*, 222, 793–801. <https://doi.org/10.1016/j.jclepro.2019.03.038>
- Jackson, S.E., Ones, D.S., & Dilchert, S. (2012). *Managing human resources for environmental sustainability* (Vol. 32). John Wiley & Sons.
- Janakiram, P., & Narayanamma, L. (2019). Strategic human resource management & digitisation of HR for sustainable development. *Journal of Mechanics of Continua and Mathematical Sciences*, 14(5), 716–723.
- Jaspersen, J., Carte, T.A., Saunders, C.S., Butler, B.S., Croes, H.J., & Zheng, W. (2002). Power and information technology research: A metatrigulation review. *MIS Quarterly*, 26(4), 397–459. <https://doi.org/10.2307/4132315>
- Jery, H., & Souaï, S. (2014). Strategic human resource management and performance: The contingency approach case of Tunisia. *International Journal of Humanities and Social Science*, 4(6), 282–291.
- Jo, H., Aryee, S., Hsiung, H.H., & Guest, D. (2020). Fostering mutual gains: Explaining the influence of high-performance work systems and leadership on psychological health and service performance. *Human Resource Management Journal*, 30, 198–225. <https://doi.org/10.1111/1748-8583.12256>
- Joy, A., & Peña, C. (2017). Sustainability and the fashion industry: Conceptualizing nature and traceability. In C.E. Henninger et al. (Eds.), *Sustainability in fashion: A cradle to upcycle approach* (pp. 31–54). Palgrave Macmillan.
- Kazlauskaitė, R., & Buciuniene, I. (2008). The role of human resources and their management in the establishment of sustainable competitive advantage. *Engineering Economics*, 5(60), 78–84.
- Kennedy, D. (2017). The move to institutions. In *International organizations* (pp. 3–150). Routledge.
- Kiesner, A.L., & Baumgartner, R.D. (2019). Sustainability management emergence and integration on different management levels in smaller large-sized companies in Austria. *Corporate Social Responsibility & Environmental Management*, 26, 1607–1626. <https://doi.org/10.1002/csr.1854>
- Krama, R. (2014). Beyond strategic human resource management: Is sustainable human resource management the next approach? *The International Journal of Human Resource Management*, 25(8), 1069–1089.
- Krippendorff, K. (2004). *Content analysis: An introduction to its methodology* (2nd ed.). Sage.
- Lai, Y. Saridakis, G., & Johnstone, S. (2017). Human resource practices, employee attitudes and small firm performance. *International Small Business Journal*, 35(4), 470–494. <https://doi.org/10.1177/02662426166637415>
- Latan, H., Chiappetta Jabbour, C.J., Lopes de Sousa Jabbour, A.B., Ali, M., & Pereira, V. (2022). Career satisfaction in the public sector: Implications for a more sustainable and socially responsible human resource management. *Human Resource Management Journal*, 32(4), 844–863.
- Lawrence, P.R., & Lorsch, J.W. (1967). *New management job: The integrator* (p. 142). Harvard Business Review.

- Lepistö, K., Saunila, M., & Ukko, J. (2023). The effects of soft total quality management on the sustainable development of SMEs. *Sustainable Development*, 31(4), 2797–2813. <https://doi.org/10.1002/sd.2548>
- Liao, T.T., & Yang, M.H. (2017). Revisiting epithelial-mesenchymal transition in cancer metastasis: The connection between epithelial plasticity and stemness. *Molecular Oncology*, 11(7), 792–804. <https://doi.org/10.1002/1878-0261.12096>
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Newberry Park.
- Liu, Z., Guo, Y., Zhang, M., & Ma, G. (2024). Can green human resource management promote employee green advocacy? The mediating role of green passion and the moderating role of supervisory support for the environment. *The International Journal of Human Resource Management*, 35(1), 121–153.
- Longoni, A., Luzzini, D., & Marco Guerci, M. (2018). Deploying environmental management across functions: The relationship between green human resource management and green supply chain management. *Journal of Business Ethics*, 151, 1081–1095.
- Lorincová, S., Hitka, M., Štarchoň, P., & Stachová, K. (2018). Strategic instrument for sustainability of human resource management in small and medium-sized enterprises using management data. *Sustainability*, 10(10), 3687. <https://doi.org/10.3390/su10103687>
- Lu, Y., Zhang, M.M., Yang, M.M., & Yue Wang, Y. (2023). Sustainable human resource management practices, employee resilience, and employee outcomes: Toward common good values. *Human Resource Management*, 62(3), 331–353.
- Lubis, H., & Pratama, K. (2022). HR related antecedes to sustainability reporting in Indonesian public listed firm: The mediating role of employee committeemen. *Cuadernos de Economía*, 45(128), 87–97.
- Luu, D.T. (2023a). Internationalisation, knowledge intensity, adaptive culture and absorptive capacity: A strategic entrepreneurship enabling logic for export firms. *Journal of Small Business and Enterprise Development*, 30(2), 390–418. <https://doi.org/10.1108/JSBED-06-2022-0288>
- Luu, T.T. (2023b). Can green creativity be fostered? Unfolding the roles of perceived green human resource management practices, dual mediation paths, and perceived environmentally-specific authentic leadership. *International Journal of Human Resource Management*, 34(6), 1246–1273. <https://doi.org/10.1080/09585192.2021.1986107>
- Macaulay, C.D., Peng, M.W., Richard, O.C., & Washburn, M. (2018). Balancing on the triple bottom line: An examination of firm CSR strategies. *SAM Advanced Management Journal*, 83(2), 27–36.
- Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research*, 16(2), 193–205.
- Mak, A., Cheung, L., Mak, A., & Leung, L. (2014). Confucian thinking and the implications for sustainability in HRM. *Asia-Pacific Journal of Business Administration*, 6(3), 173–189.
- Maletič, M., Maletič, D., & Gomišček, B. (2018). The role of contingency factors on the relationship between sustainability practices and organizational performance. *Journal of Cleaner Production*, 171, 423–433. <https://doi.org/10.1016/j.jclepro.2017.09.172>
- Mariappanadar, S. (2012). Harm of efficiency oriented HRM practices on stakeholders: An ethical issue for sustainability. *Society and Business Review*, 7(2), 168–184. <https://doi.org/10.1108/17465681211237628>
- Mariappanadar, S., & Aust, I. (2017). The dark side of overwork: Empirical evidence of social harm of work from a sustainable HRM perspective. *International Studies of Management & Organization*, 47, 372–387.
- Martin, G., Farndale, E., Paauwe, J., & Stiles, P.G. (2016). Corporate governance and strategic human resource management: Four archetypes and proposals for a new approach to corporate sustainability. *European Management Journal*, 34(1), 22–35.
- Martínez-García, E., Sorribes, J., & Celma, D. (2018). Sustainable development through CSR in human resource management practices: The effects of the economic crisis on job quality. *Corporate Social Responsibility and Environmental Management*, 25, 441–456. <https://doi.org/10.1002/csr.1471>
- Mazur, B. (2015). Sustainable human resource management: The attempt of holistic approach. *Economics and Management*, 7(2), 7–12.
- Mazur, J.E. (2015). *Learning and behavior: Instructor's review copy*. Psychology Press.
- Merawati, E.E., Djaddang, S., Kristanto, A., & Natasha, S. (2023). Human capital and institutional ownership roles on profit sustainability in banking. *Economics and Business Quarterly Reviews, Journal of Economics and Business*, 6(4), 95–108.
- Mertens, S. (1998). Phase transition in the number partitioning problem. *Physical Review Letters*, 81(20), 4281. <https://doi.org/10.1103/PhysRevLett.81.4281>
- Mukhty, S., Upadhyay, A., & Rothwell, H. (2022). Strategic sustainable development of Industry 4.0 through the lens of social responsibility: The role of human resource practices. *Business Strategy and the Environment*, 31(5), 2068–2081.
- Muñoz-Pascual, L., Curado, C., & Galende, J. (2019). The triple bottom line on sustainable product innovation performance in SMEs: A mixed methods approach. *Sustainability*, 11(6), 1689. <https://doi.org/10.3390/su11061689>
- Muñoz-Torres, M.J., Fernández-Izquierdo, M.A., Rivera-Lirio, J.M., & Escrig-Olmedo, E. (2019). Can environmental, social, and governance rating agencies favour business models that promote a more sustainable development? *Corporate Social Responsibility and Environmental Management*, 26, 439–452. <https://doi.org/10.3390/su10020535>
- Muñoz-Torres, M.J., Fernández-Izquierdo, M.A., Rivera-Lirio, J.M., Ferrero-Ferrero, I., Escrig-Olmedo, E., Gisbert-Navarro, J.V., & Marullo, M.C. (2018). An assessment tool to integrate sustainability principles into the global supply chain. *Sustainability*, 10(2), 535.
- Nhamo, L., Mabhaudhi, T., Mpendeli, S., Nhemachena, C., Senzanje, A., Naidoo, D., Liphadzi, S., & Modi, A.T. (2019). Sustainability indicators and indices for the water energy-food nexus for performance assessment: WEF nexus in practice – South Africa case study. *Environmental Science & Policy*, 109, 15–24.
- Niehaus, G., Goedhals-Gerber, L., & Feiboth, H. (2018). Investigating supply chain sustainability in South African organisations. *Journal of Transport and Supply Chain Management*, 12(1), 1–11. <https://doi.org/10.4102/jtscm.v12i01.335>
- Nisa, M.U., Mahmood, A., Sandhu, M.A., Kanwal, S., & Iqbal, M.J. (2016). The effect of green HRM practices on sustainability: Evidence from manufacturing companies in Pakistan. *Pakistan Journal of Social Sciences*, 36(1), 177–188.
- Noe, R.A., Hollenbeck, J.R., Gerhart, B., & Wright, P.M. (2007). *Human resource management*. Tata McGraw-Hill Publishing Company (Indian Print).
- Obeidat, S.M., Abdalla, S., & Al Bakri, A.A.K. (2023). Integrating green human resource management and circular economy to enhance sustainable performance: An empirical study from the Qatari service sector. *Employee Relations: The International Journal*, 45(2), 535–563.
- Obeidat, S.M., Al Bakri, A.A., & Elbanna, S. (2020). Leveraging green human resource practices to enable environmental and organizational performance: Evidence from the Qatari oil and gas industry. *Journal of Business Ethics*, 164, 371–388. <https://doi.org/10.1007/s10551-018-4075-z>
- Odankula, A.P., Krishnan, C., & Mariappan, J. (2018). A study on awareness of green HRM practices among the employees with special reference to Ibra College of Technology (ICT), Oman. *Amity Global HRM Review*, 8, 24–30.
- Okreglicka, M. (2022). Digitization of business activities and human resources orientation on sustainable consumption and production. *Strategic Management*, 159, 317–326.
- Okreglicka, M., Lemańska-Majdzik, A., & Havierníková, K. (2022). Knowledge-based resources in market share development. *Management/Vadyba*, 38(2), 81–86. <https://doi.org/10.38104/vadyba.2022.2.07>
- Onnis, L.A. (2019). Human resource management policy choices, management practices and health workforce sustainability: Remote Australian perspectives. *Asia Pacific Journal of Human Resources*, 57(1), 3–23.
- Ooi, S. K., Amran, A., Goh, S., & Nejati, M. (2017). Perceived importance and readiness of green HRM in Malaysian financial services industry. *Global Business and Management Research*, 9(4s), 457–474.
- Opatha, H.H.D.N.P. (2021). A simplified study of definitions of human resource management. *Sri Lankan Journal of Human Resource Management*, 11(1), 15–35. <https://doi.org/10.4038/sljhrm.v11i1.5672>
- Ozgul, B., Bozkurt, S., & Guro, Y. (2020). Investigation of human resources applications from sustainability perspective: An empirical study. *Istanbul Business Research*, 49, 117–145.
- Parkes, C., & Borland, H. (2012). Strategic HRM: Transforming its responsibilities toward ecological sustainability – The greatest global challenge facing organizations. *Thunderbird International Business Review*, 54(6), 811–824.
- Paruchuri, S., Perry-Smith, J.A., Chattopadhyay, P., & Shaw, S.D. (2018). New ways of seeing: Pitfalls and opportunities in multilevel research. *Academy of Management Journal*, 61(3), 797–801. <https://doi.org/10.5465/amj.2018.4003>
- Pellegrini, C., Rizzi, F., & Marco Frey, M. (2018). The role of sustainable human resource practices in influencing employee behavior for corporate sustainability. *Business Strategy and the Environment*, 27, 1221–1232.
- Pérez-López, D., Moreno-Romero, A., & Barkemeyer, R. (2015). Exploring the relationship between sustainability reporting and sustainability management practices. *Business Strategy and the Environment*, 24(8), 720–734. <https://doi.org/10.1002/bse.1841>
- Prasetyo, P.E., & Kistanti, N.R. (2020). Human capital, institutional economics, and entrepreneurship as a driver for quality & sustainable economic growth. *Entrepreneurship and Sustainability Issues*, 7(4), 2575. [https://doi.org/10.9770/jesi.2020.7.4\(1\)](https://doi.org/10.9770/jesi.2020.7.4(1))
- Rahman, M.S., & Hosain, M.S. (2021). E-HRM practices for organizational sustainability: Evidence from selected textile firms in Bangladesh. *Asian Journal of Economics, Business and Accounting*, 21(1), 1–16.
- Ren, S., Cooke, F.L., Stahl, G.K., Fan, D., & Timming, A.R. (2023). Advancing the sustainability agenda through strategic human resource management: Insights and suggestions for future research. *Human Resource Management*, 62(3), 251–265. <https://doi.org/10.1002/hrm.22169>
- 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, 769–803.
- Renwick, D.W., 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>
- Renwick, D.W.S., Jabbour, C.J.C., Muller-Camen, M., Redman, T., & Wilkinson, A. (2016). Contemporary developments in green (environmental) HRM scholarship. *The International Journal of Human Resource Management*, 27(2), 114–128.
- Ridsdale, D.R., & Noble, B.F. (2016). Assessing sustainable remediation frameworks using sustainability principles. *Journal of Environmental Management*, 184, 36–44. <https://doi.org/10.1016/j.jenvman.2016.09.015>
- Roscoe, S., Subramanian, N., Jabbour, C.J.C., & Chong, T. (2019). Green human resource management and the enablers of green organisational culture: Enhancing a firm's environmental performance for sustainable development. *Business Strategy and the Environment*, 28, 737–749.
- Saeed, B.B., Afsar, B., Hafeez, S., Khan, I., Tahir, M., & Afridi, M.A. (2019). Promoting employee's pro-environmental behavior through green human resource management practices. *Corporate Social Responsibility and Environmental Management*, 26, 424–438.

- Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Sage.
- Santana, M., & Lopez-Cabrales, A. (2019). Sustainable development and human resource management: A science mapping approach. *Corporate Social Responsibility and Environmental Management*, 26, 1171–1183.
- Sanyal, S., & Sett, P.K. (2011). Managing human resources in dynamic environments to create value: Role of HR options. *The International Journal of Human Resource Management*, 22(9), 1918–1941. <https://doi.org/10.1080/09585192.2011.573970>
- Sardana, A. (2018). Turning green into gold through practices of green HRM. *The Journal of Management Awareness*, 21(2), 63–73. <https://doi.org/10.5958/0974-0945.2018.00006.7>
- Schroeder, H. (2012). The importance of human resource management in strategic sustainability: An art and science perspective. *Journal of Environmental Sustainability*, 2(2), 4.
- Segalla, M., & De Nisi, A. (2019). International perspectives on employee engagement: Are American firms leading the way or walking alone? *International Studies of Management & Organization*, 49(1), 1–6. <https://doi.org/10.1080/00208825.2019.1565090>
- Shah, M. (2019). Green human resource management: Development of a valid measurement scale. *Business Strategy and the Environment*, 28, 771–785.
- Shen, J., Dumont, J., & Deng, X. (2018). Employees' perceptions of green HRM and non-green employee work outcomes: The social identity and stakeholder perspectives. *Group & Organization Management*, 43(4), 594–622. <https://doi.org/10.1177/1059601116664610>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339.
- Spooner, K., & Kaine, S. (2010). Defining sustainability and human resource management. *International Employment Relations Review*, 16(2), 70–81.
- Srpova, S.H.J. (2018). Corporate sustainability with focus on HR, reporting and financial performance. In S. Hronova (Ed.), *Innovation management, entrepreneurship and sustainability* (pp. 437–447). IMES.
- Stahl, G.K., Brewster, C.J., Collings, D.G., & Hajro, A. (2020). Enhancing the role of human resource management in corporate sustainability and social responsibility: A multi-stakeholder, multidimensional approach to HRM. *Human Resource Management Review*, 30(3), 100708. <https://doi.org/10.1016/j.hrmr.2019.100708>
- Stan, C. (2018). The role of SST variability in the simulation of the MJO. *Climate Dynamics*, 51(7), 2943–2964. <https://doi.org/10.1007/s00382-017-4058-2>
- Stankeviciute, Z., & Savaneviciene, A. (2013). Sustainability as a concept for human resource management. *Economics and Management*, 18(4), 837–846.
- Stankeviciute, Z., & Savaneviciene, A. (2019). Can sustainable HRM reduce work-related stress, work-family conflict, and burnout? *International Studies of Management & Organization*, 49, 79–98.
- Stone, T.H., & Smith, F.I. (1996). A contingency theory of human resource management devolution. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 13(1), 1–12. <https://doi.org/10.1111/j.1936-4490.1996.tb00097.x>
- Subramanian, N., & Suresh, M. (2022a). Social sustainability factors influencing the implementation of sustainable HRM in manufacturing SMEs: Analysis of social sustainability indicators of sustainable HRM: A TISM and MICMAC approach. *Humanistic Management Journal*, 7(3), 469–507. <https://doi.org/10.1007/s41463-022-00139-z>
- Subramanian, N., & Suresh, M. (2022b). The contribution of organizational learning and green human resource management practices to the circular economy: A relational analysis—evidence from manufacturing SMEs (part II). *The Learning Organization*, 29(5), 443–462. <https://doi.org/10.1108/TLO-06-2022-0068>
- Suleman, A.R., Amponsah-Tawiah, K., & Ametorwo, A.M. (2023). The role of employee environmental commitment in the green HRM practices, turnover intentions and environmental sustainability nexus. *Benchmarking: An International Journal, Benchmarking An International Journal*, 31(9), 3055–3078.
- Sult, A., Wobst, J., & Lueg, R. (2024). The role of training in implementing corporate sustainability: A systematic literature review. *Corporate Social Responsibility and Environmental Management*, 31(1), 1–30. <https://doi.org/10.1002/csr.2560>
- Summit, J. (2002). World summit on sustainable development. *Johannesburg, South Africa*, 9(3), 67–69.
- Taghavi, S. (2019). Mental construal and employee engagement: For more engagement look at the big picture. *International Studies of Management & Organization*, 49, 99–107. <https://doi.org/10.1080/00208825.2019.1565096>
- Tang, G., Chen, Y., Jiang, Y., Paille, P., & Jia, J. (2018). Green human resource management practices: Scale development and validity. *Asia Pacific Journal of Human Resources*, 56, 31–55. <https://doi.org/10.1111/1744-7941.12147>
- The United Nations World Water Development Report (2015). *Water for a sustainable world*. United Nations Educational, Scientific and Cultural Organization.
- Tony, E., Ralph, M., Romney, T., & Richard, W. (2016). Human resource management, strategic organizational capabilities and sustainable development. In R. Welford (Ed.), *Corporate environmental management 2* (pp. 152–168). Routledge.
- Torraco, R.J. (2016). Writing integrative literature reviews: Using the past and present to explore the future. *Human Resource Development Review*, 15(4), 404–428. <https://doi.org/10.1177/1534484316671606>
- Truss, C., Shantz, A., Soane, E., Alfes, K., & Delbridge, R. (2013). Employee engagement, organisational performance, and individual well-being: Exploring the evidence, developing the theory. *International Journal of Human Resource Management*, 24(14), 2657–2669. <https://doi.org/10.1080/09585192.2013.798921>
- Umanath, N.S. (2003). The concept of contingency beyond 'It depends': Illustrations from IS research stream. *Information & Management*, 40(6), 551–562. [https://doi.org/10.1016/S0378-7206\(02\)00080-0](https://doi.org/10.1016/S0378-7206(02)00080-0)
- Vasantha-Srinivasan, P., Senthil-Nathan, S., Ponsankar, A., Thanigaivel, A., Edwin, E.S., Selin-Rani, S., Chellappandian, M., Pradeepa, V., Lija-Escaline, J., Kalaivani, K., Hunter, W.B., Duraipandian, V., & Al-Dhabi, N.A. (2017). Comparative analysis of mosquito (Diptera: Culicidae: Aedes aegypti Liston) responses to the insecticide Temephos and plant derived essential oil derived from Piper betle L. *Ecotoxicology and Environmental Safety*, 139, 439–446. <https://doi.org/10.1016/j.ecoenv.2017.01.026>
- Vatanserver, D., Manktelow, A., Sahakian, B.J., Menon, D.K., & Stamatakis, E.A. (2018). Default mode network engagement beyond self-referential internal mentation. *Brain Connectivity*, 8(4), 245–253. <https://doi.org/10.1089/brain.2017.0489>
- WCED, S.W.S. (1987). World commission on environment and development. *Our Common Future*, 17(1), 1–91.
- Yong, J.Y., Yusliza, M.Y., Ramayah, T., Jabbour, C.J.C., Sehnem, S., & Mani, V. (2020). Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green human resource management. *Business Strategy and the Environment*, 29, 212–228. <https://doi.org/10.1002/bse.2359>
- Youndt, M.A., Snell, S.A., Dean, Jr. J.W., & Lepak, D.P. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal*, 39(4), 836–866. <https://doi.org/10.2307/256714>
- Zaugg, R.J., Blum, A., & Thom, N. (2001). *Sustainability in human resource management: Evaluation report: survey in European companies and institutions*. IOP-Press.