Bibliometric investigation on green human resource management research

Poonam Mehta

University School of Business, Shri Mata Vaishno Devi University, Katra, India

Abstract

Purpose – The paper aims to present the comprehensive picture on green human resource management (GHRM) based upon bibliometric investigation, including different criteria, such as key authors, documents, keywords, bibliographic coupling (BC), etc.

Design/methodology/approach – Bibliometric technique has been used with the application of VOSviewer. Further, the Scopus database has been utilised to extract the research articles.

Findings – The present study has exposed the due relevance of GHRM in the area of human resource management (HRM) for researchers as well as practitioners. The study has revealed that number of citations in the area is high from the researchers of China. Also, Jabbour, C.J.C., has been identified as the lead contributor and author from the area with 43 publications and 1,352 citations. The journal of cleaner production has been identified as the journal with the largest number of publications from the area. Also, prominent keywords used in the area are sustainability, GHRM, environmental management, sustainable environment and HRM.

Research limitations/implications – The study has offered the comprehensive publication analysis on the area which will assist the researchers in gaining review on topic and development of empirical models. Further, with the utilisation of keywords criterion they can easily explore the publications done in the area. Also, study will help the scholars and researchers to identify the region and countries along with the institutions and universities to pursue research on the GHRM topic.

Practical implications – The present study will help the mangers to focus on GHRM with more focus to acquire positive consequences for human resource management.

Originality/value – The present paper has presented various new and recent facets associated with the area of GHRM. Previously the similar analysis with bibliometric technique is rarely done with the present Scopus database.

Keywords Green human resource management, Bibliometric analysis, Citation analysis, Bibliographic coupling, Co-citation, Co-occurrence, VOSviewer

Paper type Research paper

Introduction

The last decade has prompted a crucial role of environment protection in making organisations more competitive, which further embrace them towards eco-friendly policies and practices (Wu *et al.*, 2021; Thondhlana and Hlatshwayo, 2018). Considering this, many organisations are now focusing on implementation of policies and initiatives through which they can develop the policies to protect the environment (Ren *et al.*, 2018). In this concern, organisations are taking various steps for every function including, finance, marketing and supply chain management (Ahmad, 2015). However, these initiatives in organisation may prove to be vague if they are not done with the cooperation of human resource of organisation and its functions (Ángel del Brío *et al.*, 2008). These initiatives are termed as green human

resource management (GHRM), where human resource management is amalgamated with environment management (Ansari *et al.*, 2020). GHRM is basically a usage of human resource management (HRM) policies to cultivate and boost optimum and sustainable use of organisational resources to promote sustainability in individual life, society and environment (Farrukh *et al.*, 2021; Renwick *et al.*, 2016; Arho *et al.*, 2019). With the effective utilisation of GHRM one can create a green skill set which can promote and inculcate green practices with the usage of different HRM functions, like, recruitment, training, compensation, development of human capital, etc.

The literature has strongly argued that organisation would get successful in implementation of green management practices only if their HR function is strengthened and ready to adopt green policies (Mehta, 2021a; Gholami *et al.*, 2016; Mishra *et al.*, 2014). Further, HR function of organisation can cultivate a desirable mindset by motivating and boosting the workforce to work for environment (Ginsberg *et al.*, 2004). Studies have mentioned that organisations can successfully implement green policies if their workforce is ready to imbibe this in their managerial skills and daily routine tasks (Daily and Huang, 2001). Therefore, for framing such kind of behaviour within individual there is a requirement of infusing progreen HR practices which will be possible with the proper emphasise on GHRM (Yong *et al.*, 2019). The area of GHRM was rarely discussed before the year of 2010, however, after 2010, its relevance has been emphasised due to the contribution from different disciplines, including, social psychology and economics (Jabbour and Santos, 2008). Gradually, different functions of organisations, including, HRM (have also presented a concern towards eco-friendly policies (Guerci and Carollo, 2016). Literature has exemplified the due importance of HR function in GHRM but there is a shortage of comprehensive studies in the area of GHRM, which are presenting the evolution and publication trend of studies from the area (Mehta, 2021b; Yong *et al.*, 2019). There are plenty of analytical techniques to review the literature from which bibliometric analysis is one of the techniques which comprehend the literature in detailed manner (Farrukh *et al.*, 2020; Cancino *et al.*, 2017).

The concept of GHRM has been inculcated to create a sustainable environment with the involvement of those policies which may create a green impact and create ecological impact. Basically, from 1960 to 1970, the concept of GHRM has started to come into existence when business activities start to create harmful impact on environment (Jabbour and Renwick, 2018). In 2000, business organisations have started to expose the ways through which these practices can be halted (Jabbour *et al.*, 2008). Further, some of the organisations are following it as a requirement from global rules and protocols. However, after a while organisations have started to rebuild the policies as moral responsibility. In the last decade, organisations have initiated various progreen plans, such as green marketing, green financing, green operations and green accounting (Ginsberg and Bloom, 2004). Gradually, organisations have realised that mindset is important to create green impact (Jackson *et al.*, 2014). Hence, concept of GHRM has been created where significant role of human aspect has been associated with environmental management (Jackson and Seo, 2010). Here, human resources of the organisation have created a set of activities that are crucial in planning, creation and execution of activities to create green impact in the society (Kim *et al.*, 2019).

Bibliometric analysis is the systematic way to analyse the studies with a statistical and quantitative procedure (Farrukh *et al.*, 2020; Nawaz *et al.*, 2020; Nejati *et al.*, 2017). This technique helps in determination of abundant data of field to present the trends, development, most prolific nations and authors in particular areas which provide an insight to new researchers to expose unexplored areas of the field (Pham *et al.*, 2020; Farrukh *et al.*, 2020). Hence, the present study used bibliometric techniques to examining the GHRM literature developed and evolved from the last one decade. The present study has utilised the Scopus database from the year 2015–2021 which has included 177 research papers shortlisted on the basis of various criteria.

Research methodology

As from the literature it has been identified that researchers have increased the work on GHRM which has broadened the area. Further, it has been identified that organisations are working in this direction to improve the practices of GHRM. Considering the trends in the area, following research questions have been framed:

RQ1. How many papers from the area of business management are published in GHRM?

RQ2. Which are the journals which are creating a high citation impact from the area of GHRM?

RQ3. How many countries have published prominently in the area of GHRM?

RQ4. What are the related keywords with which GHRM has been associated?

RQ5. Which are the dominating journals in GHRM scholarship?

RQ6. Who are the most relevant authors in the area of GHRM?

Research process

In the present study, bibliometric analysis has been used to review the data. Bibliometric technique is worthful in determining the trend and growth in any area in context to authors, publications, journals and countries (Wu *et al.*, 2021). It is a quantitative evaluation technique to determine the bibliographic data on academic literature. Through bibliometric analysis one can analyse publications, citations, co-authorship and bibliometric coupling. The technique is helpful in creating libraries which will assist the researchers to gain in depth review on any subject and area (Engler, 2014). In the present study, citation and co-citation analysis, bibliographical coupling and keyword co-occurrence analysis has been undertaken. Co-citation analysis is one of the most popular methods to analyse the relationship of bibliographic data. It assumes that two documents share a similar literature stream if they are cited together in a third document. bibliographic coupling (BC) happens when two different documents cite the third document in their reference list commonly. BC uses the number of shared sources by two published documents to measure the extent of the similarity. The higher the shared references, the more the similarity. Co-occurrence is a concept that refers to the common presence, frequency of occurrence and proximity of similar keywords present across (Gong *et al.*, 2018).

Searching criteria

Scopus database has been utilised to extract the papers as it is the one of the widest repositories of bibliometric data in the field of social sciences. Data has been selected on the basis of different criteria applied on the Scopus database mentioned in Table 1. For the present study, the Scopus database has been used as comparing to the Web of Science database, as former is appropriate in terms of offering widest dataset. Table 1 Has illustrated the procedure in the context to the extraction of papers where total 176 research papers have been extracted after applying various filters. Further, after considering the recent review analysis and empirical examinations in the area of GHRM, selected key words have been applied. The present study has used shortlisted the data on the basis of certain criteria. The first criteria used in this concern is key words, such as "Green HRM" or "Green Human Resource Management" or "Green behaviour" or "Green HR skills" or "green workforce" or "GHRM".

The searching criteria includes ((TITLE-ABS-KEY("Green Human Resource Management") OR TITLE-ABS-KEY ("Green HRM") OR TITLE-ABS-KEY("green behaviour") OR TITLE-ABS-KEY("GHRM") OR TITLE-ABS-KEY("green workforce") OR Green HR skills)). The search results displayed 176 research papers from the year

Inclusion criteria	Total no. of accepted papers
Search engine: Scopus	
Search date: 28 December, 2021	
Search term: "Green HRM" or "Green Human Resource Management" or "Green behaviour" or "green skills" or "green workforce" or "GHRM"	923
Year: 2015–2021	802
Subject areas: business, marketing accountancy, social sciences, economics, econometrics and finance, psychology, environmental sciences, medicine, energy	448
Document type: Research papers/notes/conference proceedings, book review in Scopus journals	244
Research papers only	176
Source(s): Author's calculations	

Table 1.
Search criteria to extract research papers in GHRM

2015–2021. Further, on the basis of subject areas, business, marketing accountancy, social sciences, economics, econometrics and finance, psychology, environmental sciences, medicine and energy has been chosen to shortlist the research papers. Also, only research papers written in the English language from 2015 to 2021 have been included. Further, book chapters, notes, conference papers and proceedings are not included. Finally, research results have displayed 176 research papers which are used for analysis.

Software
For the present analysis, visualisation of similarities technique has been used. Accordingly, literature maps have been used to visualise different indicators (publications by year, nations, authors, journals keywords, bibliometric coupling) with the application of software "VOSviewer". VOSviewer software has been used to analyse the dataset as it is appropriate to form and visualise networks effectively (Van Eck *et al.*, 2010). It is best for creating and visualisation of networks in relation to the different association among different factors, such as citation, co-citation, BC and co-authorship (Van Eck and Waltman, 2010).

Results analysis
Publications and citations trend by year in GHRM
If we consider the search publications the temporal analysis illustrated in Figure 1, has presented the immense increase in publication from the year of 2017–2020 (refer Figure 1). Also, year 2020 is the most productive year in the area of publication with 56 publications in the area (refer Table 2). The reason for outburst in the study is due to the rapid shift of the organisations towards environment and sustainability, where relevance of human resource has been appreciated to bring this change in depth. Further, data before 2015 has not been included as before that there are hardly 2 to 3 publications on yearly basis in the area. Also, from 2017 to 2020, the environment is on deterioration due to business units which have explored the need to promote pro-environmental behaviour from individual as a professional (Thondhlana and Hlatshwayo, 2018). Hence, researchers and scientists have determined the need of the subject and contribute in academia.

Publications by nations/countries in GHRM
In present study, only those studies have been included which have used the English language as very few studies have utilised the Chinese, French and German language. Further, it has been analysed that most of the publications have been originated from Asian
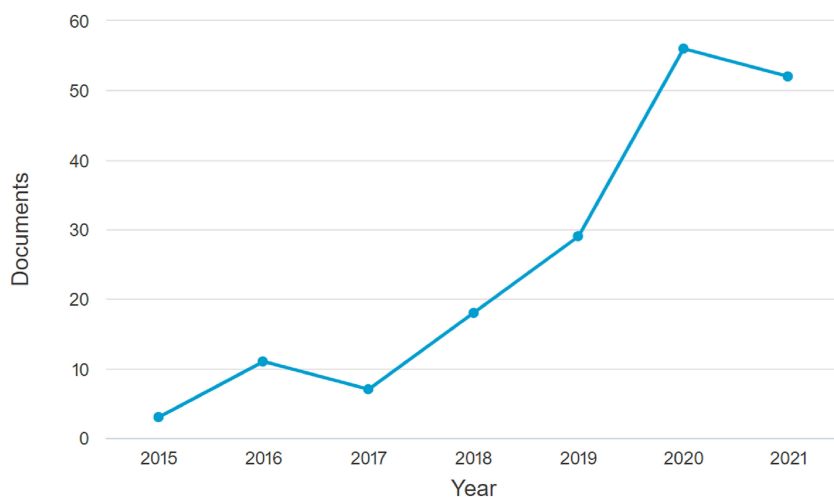
Figure 1.
Publication's trend by
year in GHRM

Year	Number of papers	Number of citations
2021	52	570
2020	56	443
2019	29	321
2018	18	245
2017	07	121
2016	11	571
2015	03	022
Total	176	2293
Source(s): Author's calculations		

Table 2.
Publications and
citations trend by year
in GHRM

countries where, China leads in numbers of publications with 58 documents. In this concern, it has been noticed that Asian countries have faced a drastic damage in environment which is speedier in comparison to other zones of world. This provokes the organisations as well researchers to put focus on green environment with the inclusion of policies. Table 3. Has presented the top nations which are into publications in the area of GHRM.

Bibliometric coupling in GHRM
Further, bibliometric coupling analysis has been done to present a comprehensive analysis on networking among countries which are producing publications in the area of GHRM. As mentioned, BC presents the scenario where two papers cite the any other third paper sharing subject theme with each other (Aksnes *et al.*, 2019). Further, in context to countries bibliometric coupling occurs when any publication from two countries cites the third publication sharing the similar literature (Donthu *et al.*, 2020; Gao *et al.*, 2021). Also, Figure 2, is presenting the BC, where size of the circle depicts the contribution from the country.

Further, on the basis of Figure 2, clusters have been identified. Red cluster shared by China, United States, Spain, Pakistan, Malaysia and Australia. Further, countries in green colour are creating another cluster including India, the United Kingdom, France and Brazil. Green clusters representing those countries that are sharing the similar literature.

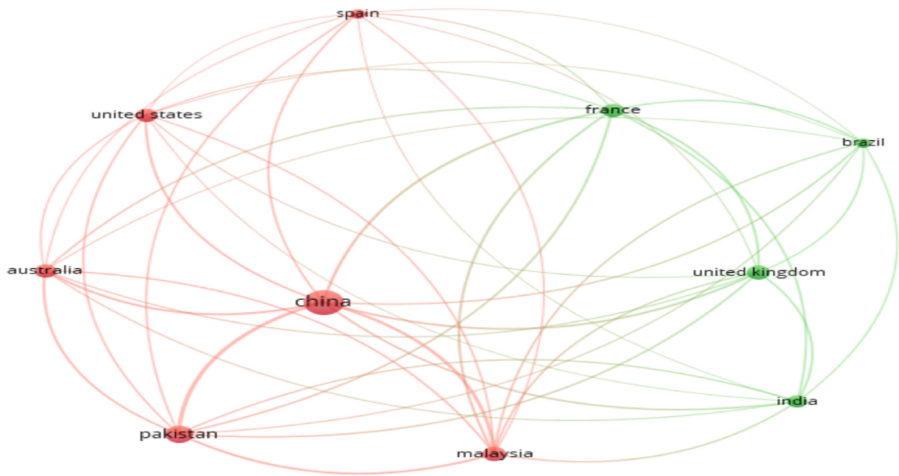| Country	Number of papers	Number of citations
China	58	1297
Pakistan	29	541
Malaysia	21	605
France	18	971
United Kingdom	21	774
Australia	18	871
India	15	373
Brazil	10	937
united states	17	928
Spain	9	312
Source(s): Author's calculations		

Table 3.
Publications by
nations/countries
in GHRM

Figure 2.
Bibliometric coupling
in GHRM

Source(s): Author

Keywords/topics usage in GHRM
The researchers have used certain keywords across the globe where most of the research related to GHRM revolves around the words, such as, sustainability, green human resource management, environmental management, sustainable environment, human resource, etc (refer Figure 3). However, difference in the usage of keywords have been identified, where red cluster is representing the keywords only from the area of HRM, such as, human resource, employment, green behaviour and resource management which provides an insight to the management researchers to explore the area with the application of these key words. There are some keywords, such as, pro-environmental behaviour, conservation of natural resources, employee green behaviour, etc., which are having a small node size and representing that these keywords are rarely used in the research but has a connection to the area.

Journals productivity in GHRM
The articles in the area of GHRM are published in more than 50 journals; however, majority of the journal is restricted to main ten journals. Further, from these ten journals, majority has been contributed by one leading journal, namely, *Journal of Cleaner Production*
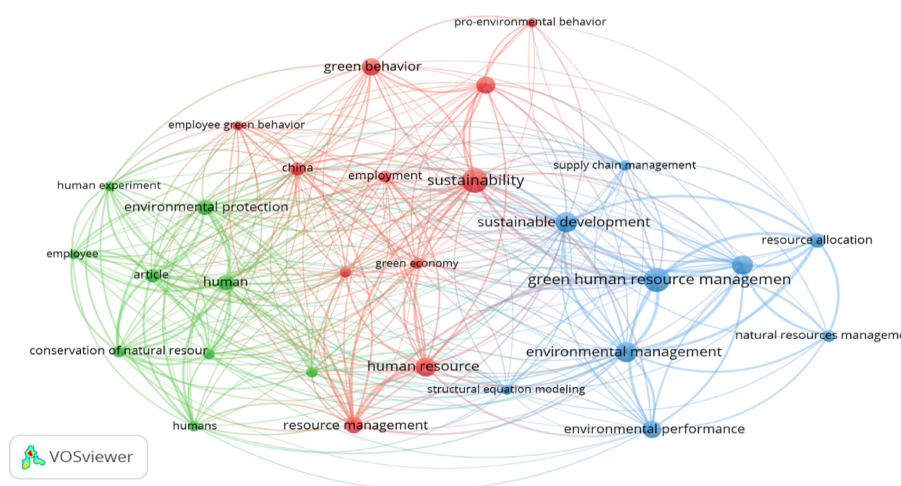
Source(s): Author

Figure 3.
Keywords/topics usage
in GHRM

(refer Table 4). Also, the journal is successful in producing majority of citations. Similarly, other journals, like, sustainability, business strategy and the environment, corporate social responsibility and environmental management, are also into the list which have contributed in the area. Also, in the area of HRM and organisational behaviour, only one journal, namely, international journal of manpower has presented the work in the area of GHRM. This journal is helpful in producing various insights in the area of HRM.

Author's productivity in GHRM

The most prominent author from the field has been analysed from Table 5, who have published the maximum number of articles from area. Accordingly, list has presented the top ten authors from the field. Accordingly, Jabbour, C.J.C., from France has been identified as the prominent author from the field who have contributed 43 documents with 1,352 citations (refer Figure 4 here). Similarly, Dumont J. is the second author from the field who has published 29 articles with 1,213 citations.

S. No.	Source	Documents	Citations
1	Journal of cleaner production	42	2058
2	Sustainability (Switzerland)	39	407
3	Business strategy and the environment	10	296
4	International journal of manpower	7	111
5	Corporate social responsibility and environmental management	10	348
6	International journal of environmental research and public health	10	55
7	International journal of hospitality management	5	305
8	Benchmarking	4	67
9	Journal of business ethics	6	276
10	International journal of contemporary hospitality management	4	140
11	Journal of environmental management	4	108
12	Environmental science and pollution research	5	76
Source(s): Author's calculations			

Table 4.
Leading journals/
journals productivity
in GHRM

Ranking	Names of prominent authors	Nationality	Documents produced	Scopus citations
1	Jabbour, CJ.C.	France	43	1352
2	Dumont J.	France	29	1213
3	Kim Y. J.	United Kingdom	3	361
4	Strauss, K.	France	3	262
5	Guerci, M.	Italy	6	145
6	TeixeiraA.A.	Brazil	4	87
7	SinghS.K.	United Arab Emirates	3	50
8	Nejati, M.	Australia	3	43
9	YuslizaM.Y.	Malaysia	5	35
10	YongJ.Y.	Czech Republic	5	33

Table 5.
Prominent authors in GHRM
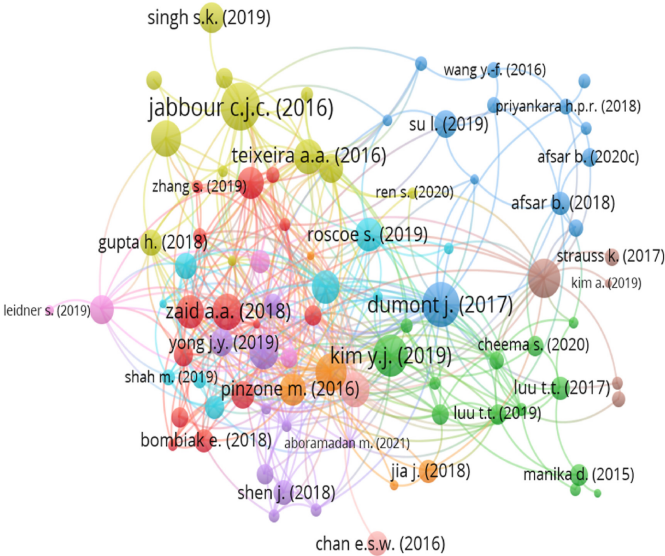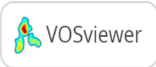
Source(s): Author's calculations

Figure 4.
Author's productivity in GHRM

Source(s): Author

Implications of the study

The present study has portrayed the comprehensive image on GHRM. Accordingly, studies have some implications for academician as well as practicians. Accordingly, the study has identified certain gaps prevailing in previous literature. In this concern, the study has determined that despite of belongingness of GHRM with HRM, most of its research has been found in journals covering science and technology. Hence, the present study suggests the prospective and future authors working in the field of social sciences or management or HRM to work in the area of GHRM. In this concern, researchers can associate their respective HR studies with environment and sustainability. Secondly, the study has offered the comprehensive publication analysis on the area which will assist the researchers in gaining review on topic and development of empirical models. Further, with the utilisation of keywords criterion they can easily explore the publications done in the area. Also, study will

help the scholars and researchers to identify the region and countries along with the institutions and universities to pursue research on the GHRM topic. As far as practical implications are considered, the present study will help the mangers to focus on GHRM with more focus to acquire positive consequences for HRM. Here, researchers from the area of HRM can accentuate the topic with environment related topics.

Conclusion
The present study has exposed the due relevance of GHRM in the area of HRM for researchers as well as practitioners. The studies have highlighted the various reasons for its rapid awareness where primarily it has been found that organisations are integrating their core functions with environment management for promoting sustainable environment. The study has included the studies from the year 2015–2021 extracted from the Scopus database. The analysis has revealed that the majority of the publication has been done in the area from the year 2020. Further, the present study has provided a clear view on various bibliometric facets associated with GHRM, such as, bibliometric coupling, co-authorship, citation and keyword analysis. Further, it has been found that number of citations in the area is high from the researchers of China. Also, Jabbour, C.J.C., has been identified as a lead contributor/author from the area with 43 publications and 1,352 citations. The journal of cleaner production has been identified as the journal with the largest number of publications from the area. Also, prominent keywords used in the area are sustainability, GHRM, environmental management, sustainable environment and HRM.

Further, for future researchers it has been suggested to perform bibliometric analysis on other databases, such as, Web of Science, which will contribute more in the field. Also, non-English publication, book chapters, conference proceedings and papers, notes are not included in the present analysis. Future researcher can utilise all these non-utilised databases in future to get more insights of the area.

References

Ahmad, S. (2015), "Green human resource management: policies and practices", *Cogent Business and Management*, Vol. 2 No. 1, 1030817.

Aksnes, D.W., Langfeldt, L. and Wouters, P. (2019), "Citations, citation indicators, and research quality: an overview of basic concepts and theories", *SAGE Open*, Vol. 9 No. 1, pp. 1-17.

Ángel del Brío, J., Junquera, B. and Ordiz, M. (2008), "Human resources in advanced environmental approaches–a case analysis", *International Journal of Production Research*, Vol. 46 No. 21, pp. 6029-6053.

Ansari, N., Farrukh, M. and Raza, A. (2020), "Green human resource management and employees proenvironmental behaviours: examining the underlying mechanism", *Corporate Social Responsibility and Environmental Management*, Vol. 28 No. 1, pp. 229-238.

Arho, S., Marko, S. and Ozgur, D. (2019), "A bibliometric review on innovation systems and ecosystems: a research agenda", *European Journal of Innovation Management*, Vol. 22 No. 2, pp. 335-360.

Cancino, C.A., Merig_o, J.M. and Coronado, F.C. (2017), "A bibliometric analysis of leading universities in innovation research", *Journal of Innovation and Knowledge*, Vol. 2 No. 3, pp. 106-124.

Daily, B.F. and Huang, S. (2001), "Achieving sustainability through attention to human resource factors in environmental management", *International Journal of Operations and Production Management*, Vol. 21 No. 12, pp. 1539-1552.

Donthu, N., Kumar, S. and Pattnaik, D. (2020), "Forty-five years of journal of business research: a bibliometric analysis", *Journal of Business Research*, Vol. 109, pp. 1-14.

Engler, S. (2014), "Bibliometrics and the study of religion/s1", Religion, Vol. 44 No. 2, pp. 193-219.

Farrukh, M., Shahzad, I.A., Meng, F., Wu, Y. and Raza, A. (2020), "Three decades of research in the technology analysis and strategic management: a bibliometrics analysis", Technology Analysis and Strategic Management, Vol. 33 No. 9, pp. 1-17.

Farrukh, M., Raza, A., Javed, S. and Lee, J.W.C. (2021), "Twenty years of green innovation research: trends and way forward, world journal of entrepreneurship", World Journal of Entrepreneurship, Management and Sustainable Development, Vol. 17 No. 3, pp. 89-92, doi: 10.1108/WJEMSD-06-2020-0068.

Gao, P., Meng, F., Mata, M.N., Martins, J.M., Iqbal, S., Correia, A.B., Dantas, R.M., Waheed, W., Rita, J.X. and Farrukh, M. (2021), "Trends and future research in electronic marketing: a bibliometric analysis of twenty years", Journal of Theoretical and Applied Electronic Commerce Research, Vol. 16 No. 5, pp. 1667-1679.

Gholami, H., Rezaei, G., Saman, M.Z.M., Sharif, S. and Zakuan, N. (2016), "State-of-the-art green HRM system: sustainability in the sports center in Malaysia using a multi-methods approach and opportunities for future research", Journal of Cleaner Production, Vol. 124, pp. 142-163.

Ginsberg, J.M. and Bloom, P.N. (2004), "Choosing the right green marketing strategy", MIT Sloan Management Review, Vol. 46 No. 1, pp. 79-84.

Gong, Y., Lyu, B. and Gao, X. (2018), "Research on teaching Chinese as a second or foreign language in and outside mainland China: a bibliometric analysis", The Asia-Pacific Education Researcher, Vol. 27 No. 4, pp. 277-289.

Guerci, M. and Carollo, L. (2016), "A paradox view on green human resource management: insights from the Italian context", The International Journal of Human Resource Management, Vol. 27 No. 2, pp. 212-238.

Jabbour, C.J.C., Santos, F.C.A. and Nagano, M.S. (2008), "Environmental management system and human resource practices: is there a link between them in four Brazilian companies?", Journal of Cleaner Production, Vol. 16 No. 17, pp. 1922-1925.

Jabbour, C.J.C. and Renwick, D.W.S. (2018), "The soft side of environmentally-sustainable organizations", RAUSP Management Journal, Vol. 53 No. 4, pp. 622-627.

Jackson, S.E. and Seo, J. (2010), "The greening of strategic HRM scholarship", Organization Management Journal, Vol. 7 No. 4, pp. 278-290.

Jackson, S.E., Schuler, R.S. and Jiang, K. (2014), "An aspirational framework for strategic human resource management", Academy of Management Annals, Vol. 8 No. 1, pp. 1-56.

Kim, Y.J., Kim, W.G., Choi, H.-M. and Phetvaroon, K. (2019), "The effect of green human resource management on hotel employees' eco-friendly behavior and environmental performance", International Journal of Hospitality Management, Vol. 76, pp. 83-93.

Mehta, P. (2021a), "Fake it or make it: employee well-being in emotional work settings", Benchmarking: An International Journal, Vol. 28 No. 6, pp. 1909-1933.

Mehta, P. (2021b), "Authenticity and employee wellbeing with reference to emotional work: a review", Mental Health and Social Inclusion, Vol. 25 No. 2, pp. 146-158.

Mishra, R.K., Sarkar, S. and Kiranmai, J. (2014), "Green HRM: innovative approach in Indian publicenterprises", World Review of Science, Technology and Sustainable Development, Vol. 11 No. 1, pp. 26-42.

Nawaz, K., Aslam, T. and Saeed, H.A. (2020), "A bibliometric analysis of international journal of sports marketing and sponsorship", International Journal of Business and Psychology, Vol. 2 No. 1, pp. 45-60.

Nejati, M., Rabiei, S. and Jabbour, C.J.C. (2017), "Envisioning the invisible: understanding the synergy between green human resource management and green supply chain management in manufacturing firms in Iran in light of the moderating effect of employees' resistance to change", Journal of Cleaner Production, Vol. 168, pp. 163-172.

Pham, N.T., Vo Thanh, T., Tu_ckov_a, Z. and Thuy, V.T.N. (2020), "The role of green human resource management in driving hotel's environmental performance: interaction and mediation analysis", *International Journal of Hospitality Management*, Vol. 88, pp. 1-10.

Ren, S., Tang, G. and Jackson, S.E. (2018), "Green human resource management research in emergence: a review and future directions", *Asia Pacific Journal ofManagement*, Vol. 35 No. 3, pp. 769-803.

Renwick, D.W.S., Jabbour, C.J.C., Muller-Camen, M., Redman, T. and Wilkinson, A. (2016), "Contemporary developments in green (environmental) HRM scholarship", *The International Journal of Human Resource Management*, Vol. 27 No. 2, pp. 114-128.

Thondhlana, G. and Hlatshwayo, T.N. (2018), "Pro-environmental behaviour in student residences at rhodes university, South Africa", *Sustainability*, Vol. 10 No. 8, pp. 2-19.

Van Eck, N. and Waltman, L. (2010), "Software survey: VOSviewer, a computer program for bibliometric mapping", *Scientometrics, Akadémiai Kiad_o, Co-published with Springer Scienceþ Business Media BV*, Vol. 84 No. 2, pp. 523-538.

Wu, Y., Farrukh, M., Raza, A., Meng, F. and Alam, I. (2021), "Framing the evolution of the corporate social responsibility and environmental management journal", *Corporate Social Responsibility and Environmental Management*, Vol. 28 No. 4, pp. 178-203.

Yong, J.Y., Yusliza, M.Y., Ramayah, T. and Fawehinmi, O. (2019), "Nexus between green intellectual capital and green human resource management", *Journal of Cleaner Production*, Vol. 215, pp. 364-374.

Further reading

Jabbour, C.J.C. and de Sousa Jabbour, A.B.L. (2016), "Green human resource management and green supply chain management: linking two emerging agendas", *Journal of Cleaner Production*, Vol. 112, pp. 1824-1833.

Jabbour, C.J.C., Santos, F.C.A. and Nagano, M.S. (2010), "Contributions of HRMthroughout the stages of environmental management: methodological triangulation applied to companies in Brazil", *The International Journal of Human Resource Management*, Vol. 21 No. 7, pp. 1049-1089.

Yang, J., Zhang, F., Jiang, X. and Sun, W. (2015), "Strategic flexibility, green management, and firm competitiveness in an emerging economy", *Technological Forecasting and Social Change*, Vol. 101, pp. 347-356.

About the author

Dr Poonam Mehta, has worked as Assistant Professor in private and government universities of India. She has completed her Ph.D. in the area of employee well-being. She has corporate as well as academic experience in private as well as government organizations in the area of human resource management. She has in her credit dozens of research papers with reputed publishers/institutions like Science Direct, Springer, Emerald, Inderscience, etc. Poonam Mehta can be contacted at: poonam.meh26@gmail.com