

EVOLVING TRENDS IN HUMAN RESOURCE MANAGEMENT RESEARCH WITHIN TOURISM: INSIGHTS FROM A BIBLIOMETRIC ANALYSIS

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Abstract

Human Resource Management (HRM) is a strategic approach to managing people effectively in tourism companies, providing a competitive edge. This study aims to reveal research trends from 2020 to 2022 through a bibliometric and content analysis of HRM-related articles in the tourism industry. A total of 1,086 Scopus-indexed articles were analyzed using R Studio with the bibliometric package. Key metrics such as countries, authors, and institutions contributing to HRM research were examined. The findings show that the United States and China were the most productive countries in article output, with Wang and Zhang identified as the most prolific authors and Netreported as the leading institution. Emerging themes and keywords were also identified, indicating significant areas of focus in HRM research. The results highlight that HRM remains a trending topic in the tourism sector, driven by its role in enhancing organizational performance. This study is one of the few to provide a comprehensive bibliometric analysis of HRM in tourism, offering insights into global research productivity and trends over three years. The findings have practical implications for both academia and industry, suggesting that future research should focus on specific HRM practices that can further improve competitiveness in the tourism sector. These insights can guide tourism companies in refining HRM strategies to enhance performance and adaptability.

Keywords: Bibliometric Approach, Content Analysis, Human Resource Management, Research Trend, R Studio.



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INTRODUCTION

Human resource management (HRM) involves human resource planning, recruitment, training, career development, and organizational development initiatives within an organization or company (Cooke, 2018; Pak et al., 2019). Competent human resources are crucial for successful organizational activities, and effective HR management is necessary to achieve desired targets (Boon et al., 2018; Dessi, & Shah, 2023; Fitriani, Triandafillidis, & Thao, 2023). HR management involves managing

human resources within a company to achieve its set goals and targets, making it the primary focus of employees' work (Brewster, 2022; Harvey & Turnbull, 2020; Shen et al., 2018). Good human resource management can have a positive impact on individual performance, retention, career satisfaction, commitment, originality, and employee behavior (Delery & Roumpi, 2017; Troth & Guest, 2020). In short, HRM processes can influence results-oriented macro and micro levels by reaching out to the strategic and operational levels of the company (Atkinson et al., 2022; Hidayati et al., 2024). Many researchers have studied HRM because of its important role in the continuity of company operations (Sydow et al., 2020; Mathew et al., 2022; Chumburidze et al., 2023; Rahmayani et al., 2023). According to the Scopus database, there are an average of 1,000 scientific publications per year in the field of Human Resource Management (Markoulli et al., 2017; Macke & Genari, 2019; Setiyani, Baharin, & Jesse, 2023). It is interesting for the writer to observe and analyze the development of topics related to Human Resource Management, and one method that can be used for this is bibliometric analysis (García-Lillo et al., 2017). Despite its extensive research, there is a lack of in-depth exploration into how HRM practices are specifically applied in the tourism industry, which has unique characteristics such as seasonal fluctuations and cultural diversity among tourists. For instance, limited studies explore recruitment strategies during peak tourism seasons, training programs tailored to address cultural diversity among tourists, or adaptive HR policies to manage workforce fluctuations.

In addition, human resource management also has a close relationship with the tourism industry. In the tourism industry, the quality of human resources is very important to provide the best service to tourists (Simanjuntak & Yapari, 2020). Effective human resource management can improve traveler satisfaction, customer loyalty, and the image of tourism destinations (Kasdi et al., 2018). Therefore, the implementation of good human resource management practices in the tourism sector not only has an impact on company performance, but also on the competitiveness of the tourist destination itself (Sitopu et al., 2021; Atzeni et al., 2022; Yolviansyah et al., 2023). While many studies have highlighted the importance of human resource management in various industry sectors, there are still significant theoretical and empirical gaps in the context of human resource management in the tourism industry (Hayati & Novitasari, 2017; Rini et al., 2023; Yusnidar et al., 2023). Theoretically, existing research often does not discuss in depth how human resource management practices are specifically applied in the tourism industry which has unique characteristics, such as seasonal fluctuations and cultural diversity of tourists. Additionally, empirical data on the effectiveness of various HRM strategies in enhancing tourist destination performance and traveler satisfaction is limited, indicating significant theoretical and empirical gaps in this area. Addressing these gaps is critical as effective HRM practices in tourism not only enhance company performance but also boost the competitiveness of tourism destinations. This urgency is amplified in the current context of increasing globalization, the need for post-pandemic recovery strategies in tourism, and the growing emphasis on sustainable tourism practices to meet global challenges. Therefore, further research combining theoretical and empirical approaches is needed to identify best HRM practices that can be adapted by the tourism industry to achieve sustainability and competitive advantage (Zhang et al., 2019).

Human Resource Management (HRM) plays a crucial role in the tourism industry, where the quality of human resources directly impacts service delivery and tourist satisfaction (Simanjuntak & Yapari, 2020). Effective HRM practices can enhance traveler satisfaction, boost customer loyalty, and elevate the image of tourism destinations (Kasdi et al., 2018). Moreover, good HRM not only improves company performance but also strengthens the competitiveness of the destination itself (Atzeni et al., 2022; Sitopu et al., 2021). However, significant gaps exist in both theoretical and empirical understanding of HRM in tourism. Many studies emphasize HRM's importance across various sectors, but few delve into its application in tourism, an industry with unique challenges like seasonal demand fluctuations and cultural diversity among tourists (Hayati & Novitasari, 2017). Empirically, there is a lack of robust data evaluating how specific HRM practices influence destination performance and traveler satisfaction, leaving much of this critical relationship unexplored. Addressing these gaps is vital to crafting effective HRM strategies that can support sustainable tourism development and maintain competitive advantages in a globalized market. This study aims to fill these gaps by using bibliometric analysis to uncover global HRM research trends in tourism from 2020 to 2022. Bibliometric analysis enables the mapping of large datasets to identify key research patterns, collaborations, and emerging topics. Through this approach, the study provides insights into how HRM practices can be optimized for tourism, serving as a foundation for future empirical research. Specifically, the study aims to identify best practices for managing HR in tourism, propose actionable recommendations for policymakers, and

provide a framework for improving workforce adaptability in the face of industry-specific challenges. By addressing both theoretical and practical gaps, this study aims to guide HRM practice and research in the tourism industry toward more effective, competitive, and sustainable outcomes.

Bibliometrics refers to the use of data analysis methods to investigate scientific publication outputs (Phoong et al., 2022). It is used to identify trends in journal articles, collaborative efforts, selectivity of studies, and investigate the working principles of existing domains in the literature. Bibliometric analysis deals with massive documentation (thousands), objective data (total citations and publications), and complex data (number of citations and publications, occurrence of keywords and topics) (Pan et al., 2023; BoangManalu, Iqbal, & Garcia, 2024; Khoviriza et al., 2024). In summary, bibliometric analysis can help to understand and map scientific knowledge in a particular field by analyzing large amounts of unstructured data (Cabanillas-lazo et al., 2022). Thus, bibliometric analysis is valuable for constructing a new and meaningful scientific foundation in a research field. Moreover, the popularity of bibliometric analysis in synthesis research is not a passing trend, but a method for managing vast amounts of scientific information into broad-reaching research (Seetharam et al., 2018; Kalia et al., 2022; Herawati, Khairinal, & Idrus, 2023). Despite its benefits, bibliometric analysis is only a preliminary study that maps large and unstructured research and presents it in an easy-to-understand format (Yang et al., 2022). Furthermore, the results of bibliometric analysis are heavily influenced by the data sources used, making generalization of the findings challenging (Andersen, 2021; B. Zhang et al., 2021; Sultanuddin et al., 2023).

Bibliometric analysis has been utilized in various research fields, including management, economics, and business. However, its application in the field of human resource management is still limited, presenting an opportunity for researchers to contribute to the introduction of this methodology, particularly in management. This study is expected to serve as a guide for other researchers interested in bibliometric research and to facilitate its implementation in future studies in a comprehensive and simplified manner (Jeris et al., 2022; Zyoud et al., 2015). The indicators investigated in the bibliometric analysis include relevant keywords, author analysis, journal investigation, and citation analysis. These indicators are used to analyze and identify the characteristics of metadata (Mukherjee et al., 2022). Citation analysis is a method to evaluate the level of research and development in a particular field of study (L. Zhang et al., 2022). Keyword analysis is useful in identifying recent developments and providing suggestions for future research (Nobanee et al., 2021). Overall, this paper provides a clear and refined understanding of the bibliometric methodology for preliminary research. It also serves as a guide for researchers in the management field who wish to use bibliometric analysis correctly. This research can be used as a resource, consideration, and reference for future studies. Therefore, this study aims to fill these gaps by using bibliometric analysis to uncover global HRM research trends in tourism from 2020 to 2022. This includes identifying dominant themes in HRM research, assessing the extent of research collaborations across countries and institutions, and pinpointing key gaps that require further exploration to support the development of effective HRM strategies. The research question is as follows: What is the distribution of publications by year, country, affiliation, source, most prolific author, and most cited articles?; What are the trending and relevant topics for future research?

RESEARCH METHOD

This study can be categorized as a review paper. It employs a Bibliometric method. The bibliometric method enables researchers to review a collection of bibliographic records, including academic journals and related citations, to highlight current research directions and show the topical structure and intellectual underpinnings of the field. This method uses bibliometric correlation analysis to cross-check article keywords and co-citations to map out how the topics are organized and related to each other (AM et al., 2023; Donthu et al., 2021). For instance, it may show that keywords such as “human resource management” and “tourism” often appear together, and highlight how citations from influential studies contribute to theoretical advancements in these areas.

The bibliometric method involves several key steps: first, identifying research questions to focus the analysis and define the variables. Second, selecting appropriate analytical methods, such as co-citation analysis or keyword analysis, to be used in the study. Third, compiling and sorting relevant data from academic databases like Scopus or Web of Science, and categorizing this data based on specific criteria. Fourth, displaying the data using bibliometric analysis software R Studio with bibliometric packages, to create visualizations like co-citation maps or keyword distribution graphs.

Finally, interpreting the results to identify research trends, collaboration patterns, and the evolution of topics within the field (Aria & Cuccurullo, 2017).

Data were collected from Scopus Database publications during 2020-2022. The data were selected using keywords. The keywords were conducted using the query “Human Resource Management” AND “Tourism” and was performed in November 2022. To ensure consistency and avoid errors caused by database updates, all data collection was completed in a single day, and no search limits were imposed. The choice of the period from 2020 to 2022 was deliberate to capture recent trends and developments in HRM research, which can provide insights into the current state of the field and emerging patterns. This timeframe allows for a comprehensive review of contemporary studies while reflecting recent shifts in research focus and methodology.

The collected metadata was filtered based on several criteria: publication year, document type, subject field, and source type. This filtering process ensures that the data is relevant and aligned with the research objectives. However, there are potential limitations to this approach. For example, the exclusion of older publications may omit foundational studies that could provide important context. Additionally, the reliance on a single database and a single-day data collection might introduce biases related to database coverage and temporal fluctuations in publication activity. The processed results, including the distribution of publications across different categories, will be detailed below. This approach provides a clear picture of recent research trends in HRM, although it is important to consider these limitations when interpreting the findings.

TITLE-ABS-KEY (“Human Resource Management”, AND “Tourism”) AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2020)) OR (LIMIT-TO (DOCTYPE , “ar”)) OR (LIMIT-TO (SUBJAREA, “BUSI”) OR LIMIT-TO(SUBJAREA, “SOCI”) ATAU LIMIT-TO (SUBJAREA , “ECON”)) AND (LIMIT-TO(EXACTKEYWORD , “Human Resource Management” AND “Tourism”)) AND (LIMIT-TO (SRCTYPE , “j”)). After filtering the database, the result is as shown in the following image.

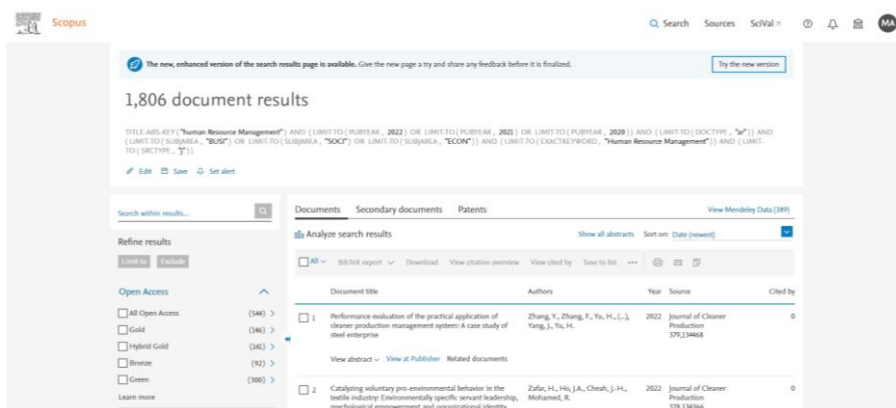


Figure 1. The process of retrieving metadata in the Scopus database

After the keywords to find data from Scopus are applied, the entire metadata is downloaded in comma summative value (.csv) format. After obtaining metadata from the Scopus database, the next step is to perform metadata analysis using R Studio software with the Bibliometrix package. To install the bibliometrix package, the code “install.packages(bibliometrix)” must be used for the first time. After the package is installed, it can be called using the code “library(bibliometrix)”, followed by the code “biblioshiny()” to open the bibliometric analysis program in a browser window. Scopus metadata can be imported in the "Loading Data" section (AM et al., 2023). The results of the analysis will display visualizations of published articles, most cited articles, most prolific authors, most used keywords, and the evolution of research themes. The data analysis procedures were carried out by two researchers with doctoral qualifications. The end result is a descriptive analysis used to examine and interpret the findings.

RESULTS AND DISCUSSION

Distribution of Publications by Year, Country, Affiliation, Source, Most Prolific Author, and Which Articles are Most Cited

After the metadata has been exported to the bibliometric software, the main information of all exported articles and their readiness for analysis are presented in Figure 2.



Figure 2. Main information.

Figure 2 displays that 1806 documents underwent bibliometric analysis, which were published from 2020 to 2022 and sourced from 492 Scopus-indexed journals. The average publication growth per year was 10.86%. There were 5,102 authors, of whom 170 were sole document authors. The percentage of international co-authorship was 29.79%, with an average of 3.26 co-authors per document. Additionally, there were 5,512 keywords and 120,126 references related to human resource management. On average, these documents had 5,823 citations per document.

Distribution of Articles by Years

This study presents the distribution of publications each year in Scopus. The results of the distribution of the number of article publications each year are presented in Figure 3.

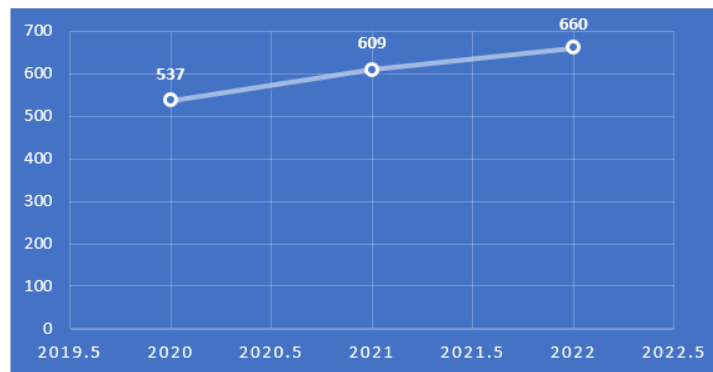


Figure 3. Annual scientific production (2020 – 2022).

Figure 3 depicts the number of papers published was 537 articles in 2020, 609 articles in 2021, and will continue to increase in 2022 to reach 660 articles. Even though the review of trends has only lasted 3 years, it still shows that the topic of human resource management has experienced continuous growth from year to year.

Distribution of Articles by Country

Many countries conduct research in the field of artificial intelligence every year, but if you look at the productivity of these countries, the top 10 countries are the countries of origin. When research published by Scopus is displayed or presented according to the country conducting the research, the results are obtained in the diagram in Figure 4.

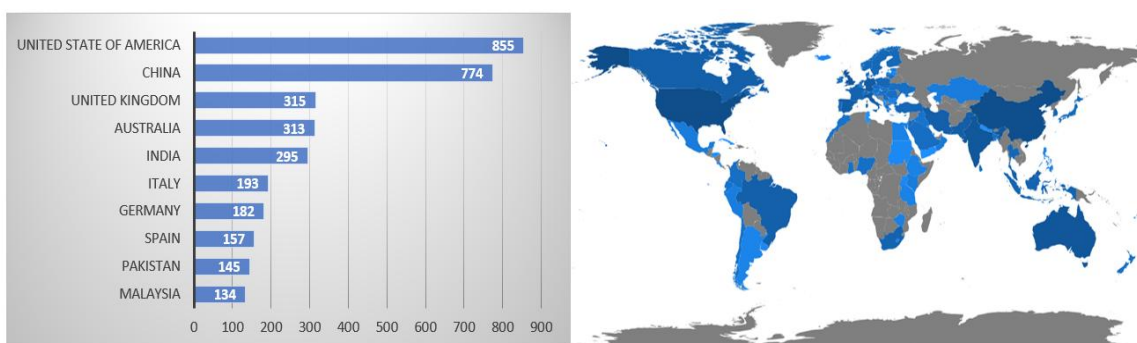


Figure 4. Distribution of articles by country.

According to data analysis, the United States and China are the top two countries in terms of the number of articles about Human Resource Management. In the last three years, 855 publications on Human Resource Management have been published in the United States, and 774 in China. Aside from the United States and China, the United Kingdom, Australia, and India are among the top five countries in terms of the number of Human Resource Management publications. If you look at the number of article publications from each country, it indicates that the topic of Human Resource Management is a very important object of study and always gets attention, especially for researchers in the field of human resource management.

Most Productive Affiliate

The following presents data related to the most productive affiliations for the human resource management theme. The results of the bibliometric analysis can be seen in Figure 5.

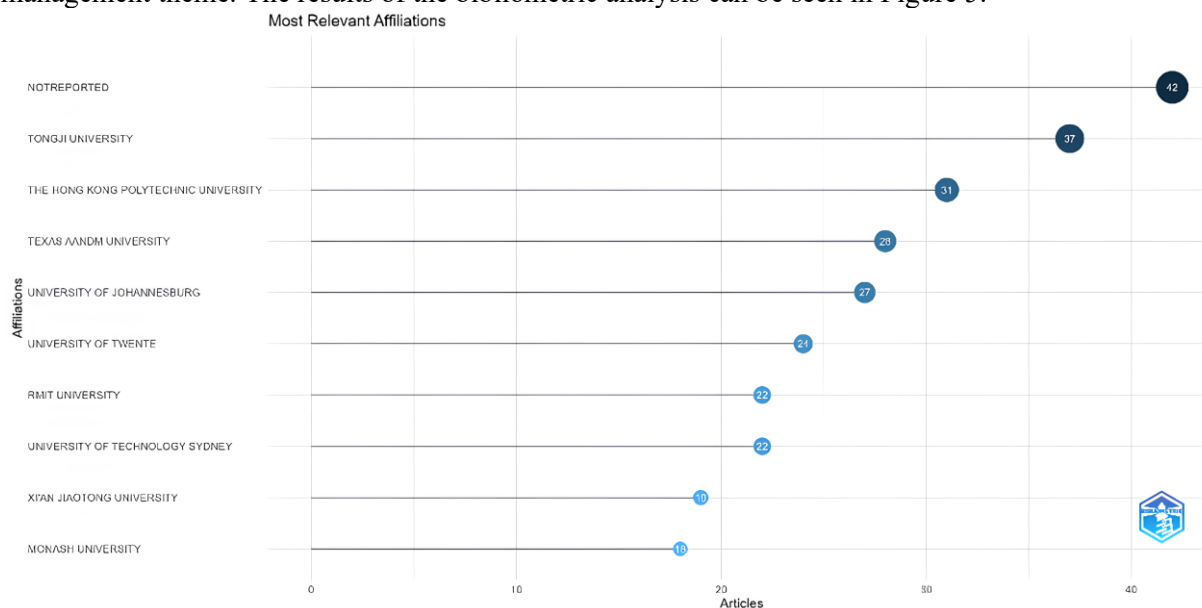


Figure 5. The most productive affiliates.

Figure 5 informs that Netreported is the affiliate that has published the most 42 articles in the field of human resource management. Tongji University and The Hong Kong Polytechnic University are the second affiliate and currently the most published articles in the field of human resource management. They published 37 and 31 articles respectively. In addition to the two mentioned above, the top five also includes Texas AANDM University and the University of Johannesburg. If we take a closer look at the affiliates who are in the top 10, most of them come from the USA and China.

Most Productive Sources (Articles and Citations)

Citation analysis begins with the top 10 sources and publications by subject Scopus indexed human resource management. The data is presented in Table 1.

Table 1. The most productive sources.

Source	Articles	Citations	H-Index
Safety Science	75	321	13
Journal of Cleaner Production	64	397	19
Engineering, Construction and Architectural Management	62	50	8
Journal of Construction Engineering and Management	49	271	13
TQM Journal	44	17	8
IEEE Transactions on Engineering Management	42	79	8
Kybernetes	38	72	6
Technological Forecasting and Social Change	37	159	19
Vine Journal of Information and Knowledge Management Systems	35	46	6
Strategic Management Journal	29	868	8

According to Table 1, “Safety Science” is the publication with the most articles on human resource management, with 75 articles and 321 citations. Next is the "Journal of Cleaner Production", with 64 articles and 397 citations. This journal also has the highest H-index among the top 10 journals. Interestingly, the "Strategic Management Journal" has a rather low number of articles (29) compared to other top 10 journals, but it has the highest number of citations, at 868. This indicates that the articles from this journal have high quality and impact. Table 1 shows that journals with the most published articles are not necessarily the most cited by researchers. Writing quality is also an important factor in the citation of scientific articles.

Most Productive Sources (Articles and Citations)

The following section provides an overview of the most prolific authors in the field of human resource management (HRM) based on the bibliometric analysis. Understanding the contributions of these authors can offer insights into the key players and major contributors to the HRM research landscape. Table 2 lists the top authors who have significantly contributed to HRM research. These authors are identified based on their publication counts and fractionalized article contributions, which reflect their individual impact in the field.

Table 2. The most productive authors.

No	Authors	Affiliation	Country	Articles	Articles Fractionalized
1	Wang X	School of Mechanical and Electrical Engineering, Xi'an University of Architecture and Technology	China	15	4.13
2	Zhang J	School of Management, Xi'an Jiaotong University	China	14	3.68
3	Li H	Department of Building and Real Estate, Faculty of Construction and Environment, Hong Kong Polytechnic University	Hong Kong	9	1.62
4	Kumar A	EMLYON Business School	France	8	2.53
5	Li J	Business School, Sun Yat-sen University	China	8	3.03
6	Wang Y	School of Management, RMIT University	Australia	8	2.32
7	Wang D	School of Public Policy and	China	7	1.88

No	Authors	Affiliation	Country	Articles	Articles Fractionalized
8	Zhao Y	Administration, Chongqing University College of Environmental Science and Engineering, Nankai University	China	7	1.80
9	Li X	Department of Building and Real Estate, The Hong Kong Polytechnic University	Hongkong	6	1.31
10	Zhang S	School of Civil Engineering, Harbin Institute of Technology	China	6	1.58

Based on Table 2, Wang X from the School of Mechanical and Electrical Engineering at Xi'an University of Architecture and Technology is the most prolific author with 15 articles on HRM, demonstrating a significant contribution to the field. Zhang J from the School of Management at Xi'an Jiaotong University follows with 14 articles. Additionally, Li H from the Hong Kong Polytechnic University, Faculty of Construction and Environment, published 9 articles. The analysis reveals that a substantial number of the top authors are affiliated with institutions in China, highlighting the country's prominent role in HRM research. This observation aligns with previous research indicating China's leading position in terms of publication volume and institutional affiliations in HRM. This dominance underscores China's substantial focus on advancing human resource management knowledge and practices.

Articles with the Most Citations

The following presents the 10 most cited articles obtained by various sources and authors. Table 3 shows information on the authors and the highest number of citations published by Scopus. Table 3 shows the results of the bibliometric analysis.

Table 3. Top 10 most articles citations.

Authors	DOI	Year	Journal	Number of Citations
Singh SK, et. Al.	10.1016/j.techfore.2019.119762	2020	Technological Forecasting and Social Change	400
Karnavale & Hatak	10.1016/j.jbusres.2020.05.037	2020	Journal of Business Research	325
Tas S, et. Al.	10.1016/j.resconrec.2019.104559	2020	Resources, Conservation and Recycling	175
Abbas J.	10.1016/j.jclepro.2019.118458	2020	Journal of Cleaner Production	134
Mousa & Usman	10.1016/j.jclepro.2019.118595	2020	Journal of Cleaner Production	127
Anwar N, et. Al.	10.1016/j.jclepro.2020.120401	2020	Journal of Cleaner Production	113
Rehman S, et.Al.	10.1016/j.techfore.2020.120481	2021	Technological Forecasting and Social Change	108
Yu W, et.Al.	10.1016/j.ijpe.2019.06.013	2020	International Journal of Production Economics	94
Pejic-Bach M, et.Al	10.1016/j.ijinfomgt.2019.07.014	2020	International Journal of Information Management	85
Al-Kurdi, et.Al.	10.1016/j.ijinfomgt.2019.05.018	2020	International Journal of Information Management	73

Based on the data in Table 3, it can be seen that the most cited article is “Singh SK, et al. (2022)”, which has been cited 400 times, making it the most cited article in the field of human resource

management. This article discusses the role of green transformational leadership and green human resource management in promoting green innovation and environmental performance. For researchers in the field of human resource management, this paper makes a significant contribution to advancing the practice of human resource management, particularly in the areas of leadership and green innovation within an organization. The second most cited article is "Karnevale & Hatak (2020)" with 325 citations. This article highlights the importance of employee adjustment and welfare during the COVID-19 pandemic. The third most cited article is "Avis, J (2020)" with 175 citations, which discusses the role of big data in improving sustainable supply chain performance. These three articles share a common thread in emphasizing the importance of maintaining the existing work rhythm in an organization, which can be achieved through effective implementation of human resource management practices.

The Trending and Relevant Topics for Future Research

Trending Topics

In the following, data is presented regarding trending topics for the human resource management theme. Figure 6 depicts the findings of the bibliometric analysis.

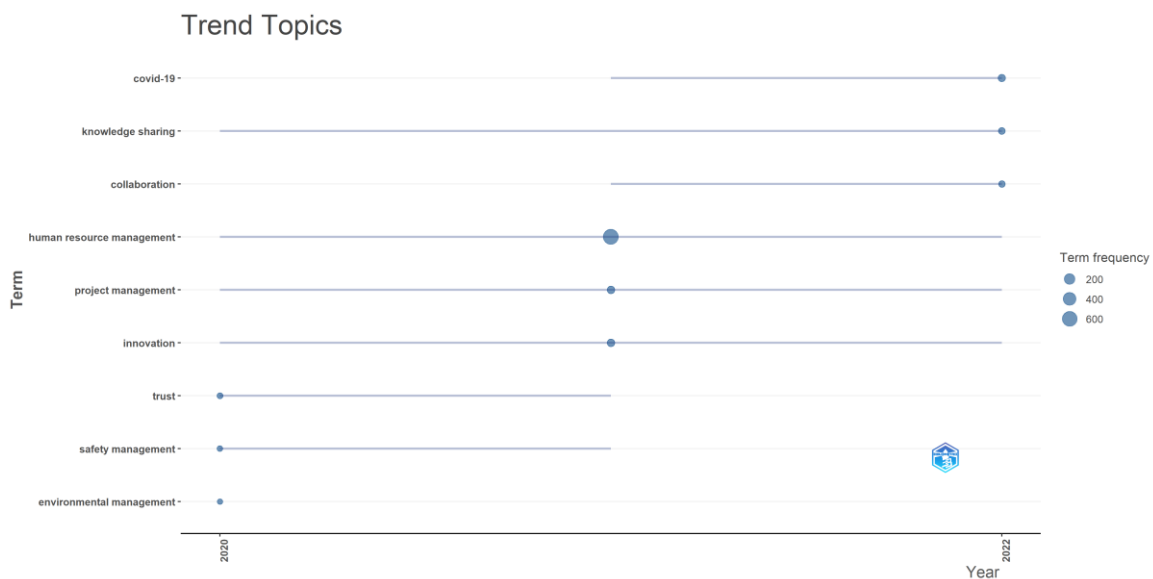


Figure 6. Trend topics.

Based on Figure 6, it is known that the trending keywords in 2020 were "trust," "safety management," and "environmental management." In 2021, the trending terms were "human resource management," "project management," and "innovation." In 2022, the trending keywords were "covid-19," "knowledge sharing," and "collaboration." Based on the most frequently appearing keywords or terms from 2020 to 2022, human resource management appeared 600 times, followed by project management with 200 mentions. Based on the information above, it can be concluded that human resource management studies in 2020 and 2021 will focus on business or organizational management, while in 2022, the focus will shift to disaster and crisis management.

Relevant Topics for Future Research

The following presents data related to relevant topics for future research on the human resource management theme. The results of the bibliometric analysis can be seen in Figure 7.

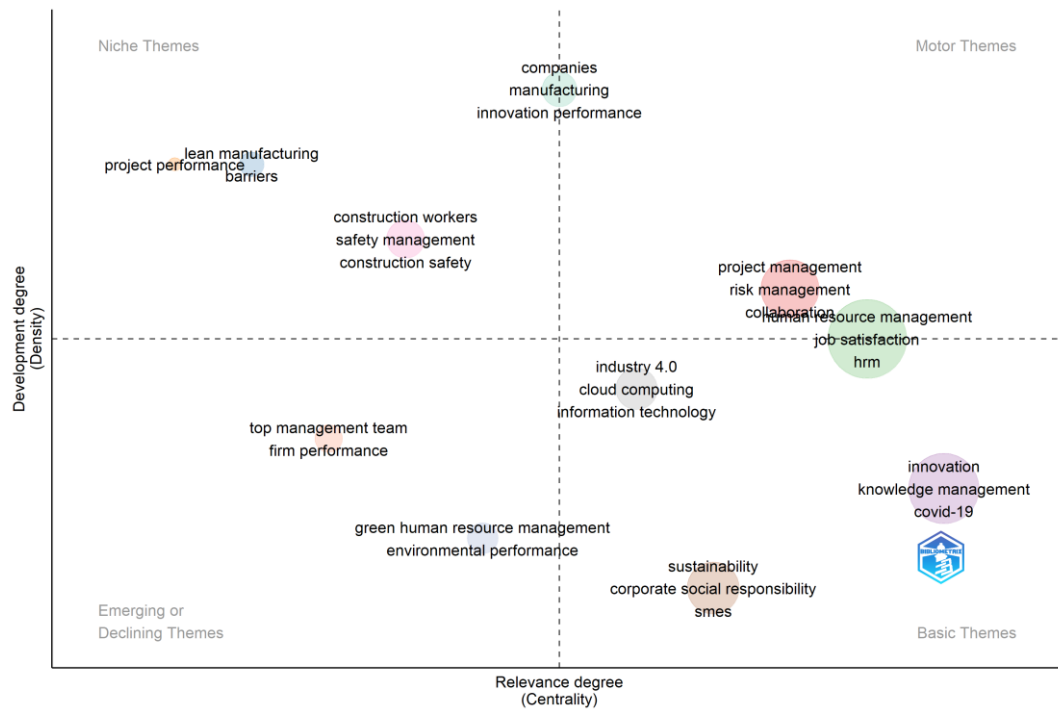


Figure 7. Thematic map.

Figure 7 indicates that there are 4 quadrants of theme groups relevant to future research topics. Research topics in the first quadrant include top management team, firm performance, green human resource management, and environmental performance. These topics are related to concepts such as sustainability, corporate social responsibility, and environmental management. The second quadrant contains topics on lean manufacturing, project performance barriers, construction workers, safety management, and construction safety. The mentioned topics are related to the construction and manufacturing fields. The third quadrant is filled with topics on project management, risk management, collaboration, human resource management, and job satisfaction. The mentioned topics are related to project management and human resource management. These topics can be important in business management as they can help improve efficiency and company performance, minimize risks, and enhance employee satisfaction and well-being.

The fourth quadrant contains research topics such as industry 4.0, cloud computing, information technology, innovation, knowledge management, COVID-19, sustainability, corporate social responsibility, and SMEs. These topics are related to the technology, business, and sustainability fields. In addition, there are topics that fall between quadrant 2 and quadrant 3, such as companies, manufacturing, and innovation performance. These topics are related to innovation performance in the manufacturing sector of companies. Regarding human resource management, all of the themes can be used as future research topics. However, the selection of future research topics should be based on various factors such as personal interest, research needs in the relevant field, and the potential contribution of research to the development of science and practice in the future.

Distribution of human resource management publications

In this study, bibliometric techniques such as keyword and citation analysis, clustering, and visual analysis were used to construct the knowledge structure of human resource managers. The Scopus database is used to perform bibliometric analysis on publications related to human resource management. A total of 1806 publications on human resource management from 2020 to 2022 were selected for analysis in this study. Bibliometric analysis was chosen to help measure individual or institutional performance in the field of human resource management. In addition, it can assist in determining research priorities and development strategies, as well as assisting in obtaining an overview of how the field of human resource management develops and changes over time.

Based on the results of bibliometric analysis, the number of articles in the field of human resource management continues to increase significantly from year to year. This increase occurs due to several factors: (1) Increased interest and need. Human resource management has become increasingly

important for companies and organizations in managing their employees. This is driven by technological advancements and increasingly tight business competition. This aligns with findings by Okaiyeto et al. (2020) who observed a surge in research output driven by the increasing complexity of managing human resources in response to technological advances and heightened competition. In addition, the growth can be attributed to improved accessibility to research tools, support from institutions, and global recognition of HRM as a critical component for organizational success. When comparing the findings with those of Zyoud (2018) the development of HRM theory and methodology seems to mirror the broader trend of scientific advancement, where methodological innovations stimulate further research. This continuous development of theories has propelled HRM into new areas, such as sustainability and crisis management, evident from recent trends during the COVID-19 pandemic. (3) Accessibility of information. With easier access to information and technology, researchers have easier access to conduct research and publish their research findings (Man et al., 2019). (4) Support from educational and industrial institutions. Educational and industrial institutions that continue to encourage research and development in the field of human resource management provide support such as scholarships, grants, and research facilities (Wininger et al., 2017). The combination of the above factors provides a significant boost to the growth of the number of publications in the field of human resource management.

Based on bibliometric analysis, countries such as the United States, China, the United Kingdom, Australia, India, Italy, Germany, Spain, Pakistan, and Malaysia have the most research in the field of human resource management. There are several influencing factors including: (1) The number of universities and research centers. These countries have a large number of universities and research centers that can support research in various fields, including human resource management (B. Zhang et al., 2021). (2) Government support. These countries also have significant government support for research and development in various fields, including human resource management. (3) Resource availability (Zyoud et al., 2017). These countries have access to adequate resources, including quality human resources, good infrastructure, and advanced technology, which can support research and development (Vincent et al., 2020). (4) Market demand. There is significant demand in the global market for research in the field of human resource management, and these countries have large and advanced companies that require such research (Harvey & Turnbull, 2020). The combination of these factors helps make these countries leaders in research and development in the field of human resource management.

According to bibliometric analysis by Netreported, Tongji University, The Hong Kong Polytechnic University, Texas A&M University, University of Johannesburg, University of Twente, RMIT University, University of Technology Sydney, Xi'an Jiaotong University, and Monash University are the top 10 most productive affiliates in the field of Human Resource Management (HRM) according to the Scopus database. According to Kholidah et al., (2022) that Factors that influence affiliate productivity in HRM include: (1) Campus quality, (2) Research facilities, (3) Resource availability, (4) Industry partnerships, and (5) Focus on HRM. These institutions have skilled HRM faculties, adequate research facilities, access to resources, and partnerships with industry to conduct relevant research in the field of HRM.

According to bibliometric analysis, Safety Science is the most productive journal. However, there is a contradiction where Strategic Management Journal is ranked tenth among the most productive sources in publishing human resource management articles, but its articles are the most cited. This is due to the fact that the journal has high-quality articles. Although the number of articles published in the journal is small, the published articles may be of high quality and relevant to popular topics in the field. In addition, this could be due to the researchers' network and the reach of the publication. In terms of journal impact, there is a contrast between the productivity of journals like Safety Science and the influence of highly cited journals such as the Strategic Management Journal. Despite publishing fewer HRM-related articles, the Strategic Management Journal's high citation rate reflects its reputation for quality and relevance, as supported by Yang et al. (2022). This trend suggests that citation impact is not solely dependent on quantity but also on the network and reach of the journal, a point reinforced by (Seetharam et al., 2018).

Based on bibliometric analysis, Wang X and Zhang J are the two most productive authors, both from China. They may have produced a lot of valuable and impactful research in the field of human resource management, making them productive authors well-known in the academic community. Meanwhile, the most cited article in the bibliometric study is "Green innovation and environmental

performance: The role of green transformational leadership and green human resource management" by Sanjay Kumar Singh et al. in 2020. This article discusses green innovation, environmental performance, and the role of green transformational leadership and green human resource management in promoting better environmental performance in companies. Many citations for this article could be due to several factors, such as its relevance to a popular topic, comprehensive coverage, and contribution to new understanding of the relationship between green innovation, leadership, human resource management, and environmental performance (Kwong et al., 2021). This contribution can serve as a reference for researchers and practitioners to conduct research and develop better practices (Li et al., 2022). The article was also published in a prestigious journal with high reputation in the field of human resource management and sustainability, making it more accessible and visible to academics and practitioners.

Trending and relevant topics for future research

According to bibliometric analysis, it is known that the trending keywords in 2020 were "trust," "safety management," and "environmental management." These topics are closely related to business or organizational management. "Trust" pertains to trust and the relationship between organizations and their stakeholders "safety management" relates to risk and safety management in the workplace, and "environmental management" relates to organizational efforts to minimize the environmental impact of their operations (Brewster, 2022). In 2021, the trending terms are "human resource management," "project management," and "innovation." These topics are also related to business or organizational management. "Human resource management" pertains to the management of human resources within organizations, "project management" relates to managing projects from start to finish, and "innovation" pertains to creating and implementing new ideas in organizations to enhance business efficiency or effectiveness (Troth & Guest, 2020). In 2022, the trending keywords are "COVID-19," "knowledge sharing," and "collaboration." These topics are related to disaster and crisis management. "COVID-19" deals with the coronavirus pandemic and ways to handle its impact on health, the economy, and society as a whole. "Knowledge sharing" and "collaboration" are crucial in crisis management because they allow organizations and individuals to share information and work together to address difficult situations (Delery & Roumpi, 2017). These topics may also be related to public health, social science, and organizational management. Based on the above explanation, it can be concluded that in 2020 and 2021, human resource management studies will focus on business or organizational management, while in 2022, human resource management studies will focus on disaster and crisis management.

Based on bibliometric analysis, topics relevant to research in human resource management are divided into 4 quadrants. The first quadrant is called Emerging or Declining Themes. Emerging themes refer to topics that are becoming increasingly important or relevant in a certain field or industry (Duque Oliva et al., 2022). Conversely, declining themes refer to topics that are losing relevance or declining in importance in a certain field or industry (Kalia et al., 2022). The research topics that fall into this quadrant are: top management team, firm performance, green human resource management, and environmental performance (Putriningsih et al., 2016). These topics are related to concepts such as sustainability, corporate social responsibility, and environmental management (Pantiyasa et al., 2023; Suryani et al., 2024). These topics are also related to business or organizational management. "Top management team" is related to leadership at the top level in an organization, "firm performance" is related to the performance and results achieved by an organization, "green human resource management" is related to environmentally responsible management of human resources in an organization, and "environmental performance" is related to an organization's efforts to maintain the environment and minimize negative impacts on the environment.

The second quadrant is called Niche Themes. In bibliometric analysis, Niche Themes refer to a group of research topics that are rarely discussed or less popular in a particular research field (Wang et al., 2021). Niche Themes typically consist of research topics that appear in limited research or are not often discussed in research literature (Aria & Cuccurullo, 2017). The research topics that fall into this quadrant are lean manufacturing, project performance barriers, construction workers, safety management, and construction safety. These topics are related to the fields of construction and manufacturing. These topics can be important in the fields of construction and manufacturing because they can help improve production efficiency, overcome performance barriers, and enhance worker safety and health (Aung et al., 2024). Studies in this field can help identify potential problems and solutions in production, project management, and safety, which can help companies improve performance and efficiency in the field of construction and manufacturing.

The third quadrant is called Motor Themes. Motor Themes in bibliometric analysis refer to concepts or topics that drive the development of research or discussion in a field. Motor Themes can be found through bibliometric analysis by identifying hot topics, research trends, debates, or important issues being discussed in a particular field. Motor Themes can provide a basis for future research, help guide debates and discussions in the academic community, and provide an overview of the important role played by a field in a broader context (Rejeb et al., 2022). Identifying Motor Themes in bibliometric analysis can help researchers or practitioners understand the trajectory of the field, identify gaps in research, and develop research that contributes to further development. Therefore, the use of Motor Themes in bibliometric analysis can be an important tool to support the development of theory and practice in relevant fields (Andati et al., 2022). The research topics included in this quadrant are: project management, risk management, collaboration, human resource management, and job satisfaction. These topics are related to project management and human resource management. These topics can be important in business management because they can help improve company efficiency and performance, minimize risks, and enhance employee satisfaction and well-being. Studies in this field can help identify potential problems and solutions in project management, risk management, and human resource management, which can help companies achieve their business goals more effectively and efficiently.

The fourth quadrant is called Basic Themes. Basic Themes in bibliometric analysis are general concepts or topics that appear in a large number of articles or publications analyzed. Basic Themes can be identified through quantitative analysis of keywords, titles, or words that frequently appear in the text or abstract of publications. In bibliometric analysis, identifying Basic Themes is important for understanding emerging research trends and hot topics in a particular field (Dai et al., 2020). Basic Themes analysis can help evaluate research contributions in a field, and also allows for identification of research gaps or debates in the literature (Abouzid et al., 2021). The research topics that fall into this quadrant are: industry 4.0, cloud computing, information technology, innovation, knowledge management, covid-19, sustainability, corporate social responsibility, and SMEs. These topics are related to the fields of technology, business, and sustainability. These topics are important because they help companies to improve efficiency and performance, leverage new technology, minimize risks, and promote environmental and social sustainability. Studies in these fields can help identify challenges and opportunities in technology, business, and the environment, which can help companies to develop and adapt to rapid market and environmental changes (Bukhari & Rana, 2017). In addition, there are also topics that fall between quadrant 2 and quadrant 3, namely: companies, manufacturing, and innovation performance. These topics are related to innovation performance in the manufacturing sector of companies. This means that these topics discuss how manufacturing companies can improve their innovation performance and how innovation affects overall company performance. Studies in this field can help identify key factors that influence innovation performance and how companies can manage innovation to achieve competitive advantage. This topic falls between quadrant 2 and quadrant 3 because it is related to several different fields, so although it is already quite popular in one field, it is still considered a less popular topic in other fields.

Research on human resource management in the tourism industry is still underdeveloped, providing an opportunity for researchers to fill this gap with innovative approaches. Novelty in this research can be found by exploring emerging or declining themes, as well as niche themes that are less well-known but have the potential for significant contributions. For example, topics such as top team management, corporate performance, green human resource management, and environmental performance can be the focus of research to understand changing trends and identify themes that require future attention (Hutomo et al., 2020; Matthews, 2018). In addition, the driving themes that are considered the most important or influential in this field, such as project management, risk management, collaboration, job satisfaction, industry 4.0, cloud computing, information technology, innovation, knowledge management, Covid-19, sustainability, corporate social responsibility, and SMEs, also offer significant research opportunities (Fashina et al., 2021; Kim et al., 2021; Martens & Vanhoucke, 2018). Choosing the right theme depends on the research objectives and interests, as well as the research questions to be answered. Thus, this research will not only answer fundamental questions in the field of human resource management and tourism but also expand the existing knowledge with new and relevant approaches.

Theoretically, the findings highlight the current gap in HRM research within tourism, presenting an opportunity for scholars to introduce innovative approaches and explore emerging and

niche themes. Topics such as top team management, corporate performance, green human resource management, and environmental performance are identified as areas with potential for substantial contributions, reflecting evolving trends and addressing gaps in the literature. Additionally, motor themes like project management, risk management, collaboration, and industry 4.0 offer insights into influential trends that are shaping the field. Practically, these findings emphasize the need for HRM strategies that align with the unique challenges of the tourism industry, including seasonal fluctuations and cultural diversity. Effective HRM practices are crucial for enhancing traveler satisfaction, improving employee performance, and boosting the competitiveness of tourism destinations. Stakeholders such as HR professionals, tourism managers, and policymakers can leverage these insights to develop targeted strategies that address specific industry challenges. To maximize the practical value of this research, several recommendations are proposed: first, investigating emerging themes like green HRM and environmental performance to address sustainability challenges; second, exploring niche areas such as top team management and corporate performance to gain new insights; third, analyzing motor themes like project management and collaboration to stay updated on significant HRM trends; and fourth, incorporating data from diverse databases to overcome limitations and ensure a comprehensive view of HRM research trends.

In conclusion, selecting research topics should be guided by the study's objectives and interests. Emerging or declining themes are useful for identifying changing trends, while niche themes can uncover less-explored areas. Motor themes provide insights into influential trends, and basic themes offer an understanding of core research topics. By strategically choosing themes based on research questions, scholars can effectively advance the theoretical and practical understanding of HRM in the tourism industry and beyond.

CONCLUSION

This bibliometric analysis of human resource management (HRM) research, covering the period from 2020 to 2022, demonstrates that the field continues to expand with evolving trends and hot topics. The findings reveal that during the observation, the growth rate of publication per year was about 10.86%. Two countries have contributed significantly on the publication of HRM include the United States and China. Besides, the Netreported has published about 42 articles. The Safety Science has the highest citation about 321 citations. This study provides valuable insights into the current state of HRM research, offering a clearer understanding of prevailing trends and gaps. The findings emphasize the dynamic nature of HRM research, illustrating a strong interest in various aspects of the field and revealing areas that warrant further investigation. Notably, this study contributes to existing knowledge by identifying thematic shifts and highlighting underexplored topics, such as the specific application of HRM practices in diverse industry contexts like tourism. This contextualization enhances our understanding of HRM's impact on different sectors and suggests that future research could benefit from focusing on these specialized areas. In particular, the managerial/practical implication can be paid more attention on beneficial impact of higher HRM quality on the business performance. The condition means that the top management should pay more attention to stimulate the higher level (quality) of HRM. Besides, the HRM can be positioned as the main business locomotive to quantee a better business performance. However, this study also has limitations. The reliance on the Scopus database, while comprehensive, excludes articles from other relevant databases such as Web of Science (WoS/WoK), Dimensions, and PubMed. This limitation means that the findings represent a partial view of the HRM research landscape. To address this, future research should incorporate a broader range of databases and link metadata from multiple sources to increase the accuracy and depth of analysis. By doing so, researchers can better capture the full spectrum of HRM developments and refine their understanding of evolving trends and gaps within the field. Overall, this study not only maps current HRM research trends but also provides a foundation for future investigations, encouraging a more nuanced exploration of HRM practices and their impacts across various contexts.

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Sunda Ariana: Conceptualization, Introduction, Writing-Original Draft Preparation. Dewi Sartika: Writing-Review and Editing. Sulaiman Helmi: Methodology, Validation, Formal Analysis. Conceptualization, Writing-Review and Editing. Ratna Sesotya Wedadjati: Methodology, Supervision and Editing. Malik Cahyadin: Conducting the analysis and writing the paper.

CONFLICTS OF INTEREST

The author(s) declare no conflict of interest.

USE OF ARTIFICIAL INTELLIGENCE (AI)-ASSISTED TECHNOLOGY

The authors declare that no artificial intelligence (AI) tools were used in the generation, analysis, or writing of this manuscript. All aspects of the research, including data collection, interpretation, and manuscript preparation, were carried out entirely by the authors without the assistance of AI-based technologies.

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