

The Mapping of Research on Workplace Management and Control Using a SCALAR Method and Bibliometric DSS

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Abstract: Workplace productivity increases the sustainability and well-being of the countries. However, no integrated research utilizing science mapping and bibliometric decision support systems (B-DSS) has yet been undertaken to provide an overview of the latest scientific knowledge in the subject of workplace management and control, to help researchers explore the research gap in this field, and to support discussions about theories that make the scientific writing process more agile, dynamic, and intelligent. This study developed the Smart Science Mapping Method for Workplace Management Research Production (SCALAR method) using a science mapping approach, as well as a bibliometric VOSviewer software, the B-DSS (bibliometric decision support systems) and articles from the Scopus database. Based on the SCALAR method and the B-DSS, an analysis and a determination of the newest knowledge and trends in the research topics in workplace management were performed. In addition, an analysis of the application of management theories and a multi-criteria analysis of alternative topics were also conducted. Furthermore, quantitative and qualitative numerical keyword recommendations were presented on how to improve the efficiency of the analyzed research topics. The SCALAR method and the B-DSS were employed to identify possible areas and gaps for future scholarship in the field of workplace management, as well as the key research directions.

Keywords: Workplace management, Control, Research topics and gaps, Bibliometric DSS, Science mapping, MCA.

1. Introduction

Various researchers have applied artificial intelligence (AI), machine learning, decision support systems, blockchain, big data analytics, sentiment analysis, neural networks for bibliometric analysis, and mapping.

Empirical research, reviews and bibliometric analyses on workplace management and control include numerous related and significant topics at the individual, team, or organizational level. Researchers examined employees' self-verification, trust, and self-evaluations (Booth et al., 2020), emotions (Mantello et al., 2023), and global virtual teams (Tavoletti & Taras, 2023). Other studies examples encompass workplace management effectiveness (Diawati et al., 2019), workplace conflict management (Currie et al., 2017), communication ethics (Alyammahi et al., 2021), workplace management and gender (Migliore, Rossi-Lamastra & Tagliaro, 2022), generational issues in the workplace (Bennett, Pitt & Price, 2012), culture, innovation, and leadership (Haddud & McAllen, 2018), and the post-pandemic workplace (Spell & Bezrukova, 2023). They also incorporate AI in the workplace (Mantello et al., 2023), modern facility, and workplace management (Redlein, Höhenberger & Turnbull, 2020).

The World Bank (Anner, Pons-Vignon & Rani, 2019), World Health Organization (Boniol et al., 2019), Organization for Economic Co-operation

and Development (Lane, Williams & Broecke, 2023), European Parliament (European Parliament. Directorate General for Parliamentary Research Services, 2022), and individual researchers, such as Booth et al. (2020), Kawamata et al. (2023), and Villalobos et al. (2020), etc., have analyzed workplace management and control in the context of different countries and across diverse regions, such as Asia, China, the United States and United Kingdom, South Africa, Japan, the Netherlands, and 15 countries from six regions. The works mentioned above show that research interest in the topic of workplace management and aspects of workplace characteristics is significant. The effects of workplace management and its contextual factors inspired this study.

Advances in bibliometric software such as VOSviewer, Leximancer, and Gephi, as well as widely available and accessible scientific databases such as Web of Science (WoS) and Scopus, have driven the recent increase in bibliometric analysis in research (Donthu et al., 2021). Since the Age of Knowledge replaced the Information Age, the analysis and interpretation of enormous amounts of data have formed the basis of decision-making, especially in the research environment, and scientific portals have become important sources of strategic information for determining possible new directions in scholarship (Pessin, Yamane & Siman, 2022; Zerilli et al., 2019). Scientists have

different reasons for using bibliometric analysis. Sometimes they want to examine the ways in which a specific domain is intellectually structured in the available literature, while others look for research constituents, collaboration patterns, or emerging trends in journal and article performance (Donthu et al., 2021).

While bibliometric analysis has enormous potential, it is often underused when the set of bibliometric data analyzed is limited and the resulting picture of a certain research field is inevitably partial; performance analysis without science mapping represents one case of such underuse (Brown, Park & Pitt, 2020). Studies that use science mapping, which is a process of domain analysis and visualization, can be broader or narrower in scope, focusing on a field of research, a scientific discipline, or specific topics (Chen, 2017).

Science mapping and bibliometric techniques are used in many areas of bibliometric analysis and are essential tools for researchers. They help compile a bibliography necessary to support theoretical points, make the scientific analysis process more dynamic and agile, and add information, and, therefore, they are widely employed in research to present the overall view of the current state of scientific knowledge in a certain area (Pessin, Yamane & Siman, 2022). Smart bibliometrics offers researchers strategic information derived from science mapping and bibliometric analyses, providing them with insights into the global state of scientific research and thus steering their path towards new breakthroughs (Pessin et al., 2023). One methodology proposed for smart bibliometrics, known as *Methodi Ordinatio*, involves a mathematical equation that combines the year of publication with citation numbers and journal impact factors (Pagani, Kovaleski & Resende, 2015).

The knowledge structure of specific research areas is commonly determined by examining publication keywords. Yet a specific research domain can include a great number of keywords and this poses an important problem regarding which of them should be included in an analysis (Chen & Xiao, 2016). After a discussion of the problems posed by the traditional term frequency (TF) method, the authors introduced two alternatives, known as

the TF-Keyword Activity Index and TF-inverse document frequency.

This paper sets out to present the Smart Science Mapping Method for Workplace Management Research Production (SCALAR method) and the bibliometric decision support systems (B-DSS), which are based on VOSviewer software (van Eck & Waltman, 2023) and the multi-criteria analysis INVAR (Degree of Project Utility and Investment Value Assessments) method (Kaklauskas, 2016). No studies have been found regarding the multi-criteria analysis (MCA) of alternative topics in this field, where the grouped decision-making matrix are compiled using VOSviewer software. This method offers researchers a systematic process and the B-DSS to help them reach their research objectives. This methodology is expected to enhance accuracy in the creative process of knowledge production and make a positive global impact on the advancement of workplace management science.

The paper is organized as follows. It begins with a brief literature review in which the field of study, workplace management and control, science mapping, and bibliometric techniques for decision support are defined, their importance is shown, and the research goals are outlined. Section 2 explains how the literature search on workplace management and employee satisfaction at work was conducted, the research, and the findings made. Section 3 presents the SCALAR method and the B-DSS as a systematic process for decision-making to help researchers achieve their objectives. Finally, section 4 summarizes the proposed SCALAR method and newly developed B-DSS and details the areas for future research.

2. Method

The SCALAR method was used to determine the critical research directions and potential areas for workplace management research. The seven stages of this method are described below.

First, a scientific literature search was performed on the Scopus database. WoS and Scopus are traditionally the most frequently used databases and important artefacts for professional work for bibliometric analyses (Jappe, 2020). Scopus is recognized as a database that covers a wide range

of subjects and is considered the largest abstract and citation database (Baas et al., 2020); it covers more journals than WoS (Balstad & Berg, 2020). Therefore, Scopus was employed to analyze the wide-ranging research variable of workplace management. To explore the largest possible number of articles that investigated this topic, as well as employee satisfaction in the workplace, Scopus was searched for relevant peer-reviewed literature published from 1990 (01/01/1990) to 2023 (11/30/2023). This broad research area resulted in this study, which included two main areas: business, management, and accounting, and social science. The searches were performed utilizing a combination of various workplace management, workplace management context, and employee satisfaction terms in titles, abstracts, and keywords, regardless of the language. The search strings of workplace management consisted of a combination of the terms: workplace management, workplace AND management practice*, workplace AND organizational practice*, and workplace management AND well-being, including variations of work environment and intervention*. The search strings for employee satisfaction incorporated a combination of the terms: employee* satisfaction, including variations of job, work, job-related, work-related, workplace-related, worker*, staff, team, personnel, and occupational. The search was carried out with multiple spelling variations (for example, organization or organisation).

In the second stage, the bibliometric DSS (B-DSS) was created by applying the INVAR method. B-DSS contains a database management system, a database, a model-base management system, a model-base, and a user interface. In the multiple correspondence analysis (MCA) matrices, the keywords related to workplace management and job satisfaction were classified based on the most common terms that occurred at least 40 times. Terms were selected to show on the map, in the third stage, if the link strength between one term and others was at least 1000.

This B-DSS accumulates data and information from different sources and then employs mathematical, logical, and informational models for processing them. The user using the B-DSS is able to take a great deal of data and other sorts of information from needed, relevant context data

and then analyze all of it for resolving issues and making decisions. Data and information required to analyze, form, and assess promising decision-making alternatives are provided for users to aid in the identification of possible areas and gaps for future scholarship in the field of workplace management, as well as the key research directions in addition to helping them obtain and save results. Application of the B-DSS enables users to accomplish the following: create their decision support system and recommendation systems and provide digital recommendations for recognizing the main research directions and potential areas and gaps for future workplace management scholarship. The B-DSS is able to model the composite parts of some studied problems and illustrate the changes that occur to it due to immediate micro-, meso-, and macro-environmental changes. The investigated problem can be simulated by the B-DSS, either in its entirety or by its parts in groups or individually. The databases of the B-DSS can store and develop structured and unstructured data and practices that experts in bibliometric analysis accumulate. Such accumulated context data can be applied to analyze and model a studied workplace management bibliometric problem and the parts that compose it. Authors have already performed similar contextual studies in various quality-of-life and context analysis fields (Kaklauskas et al., 2023, Kaklauskas et al., 2024).

In the third stage, network and overlay maps were developed maps to visualize and explore workplace management and its context keywords and citations based on the data obtained during the second analysis stage (Figures 1 and 2). For this analysis and visualization, the VOSviewer software was used (van Eck & Waltman, 2023).

Theory legitimizes theoretical management research and practical professional endeavors by applying theory in management studies (Joullié & Gould, 2023). Therefore, the fourth stage featured an analysis of the use of management theories in workplace and employee work-related well-being management in the last decade, performed with VOSviewer based on text (title and abstract fields) data.

In the fifth stage, the INVAR method (Kaklauskas, 2016) was used to conduct a MCA of two alternative topics: the employer branding concept and the high-performance work system (HPWS).

This analysis seeks to evaluate the priority of selected alternative topics in terms of employees' work-related satisfaction by considering identified common keywords. This study compared concepts that affect the work-related satisfaction of employees based on selected terms describing job satisfaction. In order to compare different types of workplace management and organizational performance-related concepts, this investigation selected the employer branding concept. This concept emphasizes that employees are a company's most valuable asset, and their development and satisfaction can lead to better organizational efficiency (Azhar et al., 2024). The HPWS was also selected, which may have influenced employees to thrive (Allothmany, Jiang & Manoharan, 2023). Also, at this stage, the aim was to determine which alternative is more in line with the global directions of scientific development.

In order to choose the most effective alternative concept related to workplace management, a MCA must be performed after compiling the decision-making matrix. This is completed by comparing the values and significance of the criteria for the alternative concepts and analyzing the conceptual information. These alternatives can only be described on the basis of a system of many criteria with different mutual meanings. Using VOSviewer, the terms of the employer branding concept and the HPWS analysis that overlapped with those describing job satisfaction were selected and then these terms were graphed in Figure 3.

The weight of the term selected to perform a MCA was calculated. The words in a document are not all equally significant. Therefore, term "weighting", which determines the importance of words in a text, is a commonly accepted technique in text classification (Rathi & Mustafi, 2023). VOSviewer software was used to determine the significance of the criteria, with the help of which the three normalized weights (total link strength of the terms, occurrence of the terms, and average normalized number of citations) were integrated. For example, the entire link strength attribute specifies the entire strength of the keyword links of a specified workplace management article with supplementary keywords, i.e., the total link strength refers to the number of articles in which two terms occur together. The keyword "extraction algorithm" based on the TF-inverse

document frequency-based keyword extraction algorithm mostly judges the importance of words to publications by calculating the word "frequency" and is a common statistical extraction method (Pan, Li & Dai, 2019). TF is utilized to evaluate the importance of words in the reviews (Su, Wong & Yip, 2023). Term "occurrence" (frequency) is commonly employed in information retrieval tasks, machine learning, and text mining, and is often utilized to characterize documents. In theory, the more frequently a term occurs in a document, the greater the extent to which it characterizes that document (Ganesan, 2022), as well as workplace management. When specific words are more often analyzed in the context of workplace management in articles written by different authors, they are more significant when examining workplace management and its context. Therefore, it can be said that the three normalized weights integrated (total link strength of the terms, occurrence of the terms, and average normalized number of citations) fully describe the significance of specific concepts.

In the sixth stage, the variation by year, and correlation analysis of the number of publications with the considered keywords from 1990–2023 were performed. The individual topics related to workplace management and its context in a document-term matrix were filled out, and a correlation analysis of the obtained data (Figure 4) was conducted. The top 15 employee satisfaction-related criteria for this analysis were selected, with the highest normalized value calculated by the VOSviewer.

In the seventh stage, the INVAR method (Kaklauskas, 2016) was utilized to present quantitative and qualitative numerical recommendations on how to improve the efficiency of the analyzed alternative research topics (Figure 5). Quantitative recommendations i_{ij} for the keyword x_{ij} show possible improvements in the value of the keyword x_i as a percentage to make the keyword equal to the highest value $x_{i_{max}}$ of the keyword x_{ij} . Qualitative recommendations x_{ij} for the keyword x_{ij} show possible improvements in the utility degree N_j of the keyword x_i as a percentage when $x_{ij} = x_{i_{max}}$. Thus N shows how much the utility degree N_j of an alternative research topic a_j can be increased (in percent) if the keyword value x_{ij} can be equal to the best value of $x_{i_{max}}$ the keyword X_i .

3. Results

3.1 Development of the Workplace Management MCA Matrix

The search on the Scopus database identified 8995 database records on the topic of workplace management and 19743 on job satisfaction during the 1990–2023 period.

Based on the top keyword data obtained with VOSviewer software, the weight calculation for the top keywords relating to workplace management was performed for the B-DSS. The terms related to workplace management and job satisfaction were classified based on the 74 (workplace management; accessible online via Reformation of the Curricula on Built Environment in the Eastern Neighboring Area, n.d. b)) and 101 (job satisfaction; accessible online via (Reformation of the Curricula on Built Environment in the Eastern Neighboring Area (n.d. a), most common terms that occurred at least 40 times. Terms were selected to show if the link strength of one term with others was at least 1000. Total link strength refers to the number of articles in which two keywords happen together. This means that these topics from 1990 to 2023 were the ones most discussed by researchers. Synonymic terms were excluded.

3.2 Research Topic Trends Considering Workplace Management and Work-Related Satisfaction

Network maps of the selected terms were created for (a) workplace management terms and (b) job satisfaction terms to visualize the most frequent topic areas and their network, as detailed in the workplace management MCA matrix. The map of terms indicates that “work environment”, “leadership”, and “personnel management” were the top three concepts that satisfied the threshold and occurred the most in the definition of workplace management (Figure 1(a)). The three most weighted terms in the job satisfaction topic were “workplace”, “leadership”, and “motivation” (Figure 1(b)). This shows the popularity of these specific topics. Terms that do not have a network or have a weak one with other terms may represent a research topic opportunity. The terms related to workplace management and job satisfaction were classified based on the most common terms and

this classification produced four (Figure 1(a)) and five (Figure 1(b)) clusters.

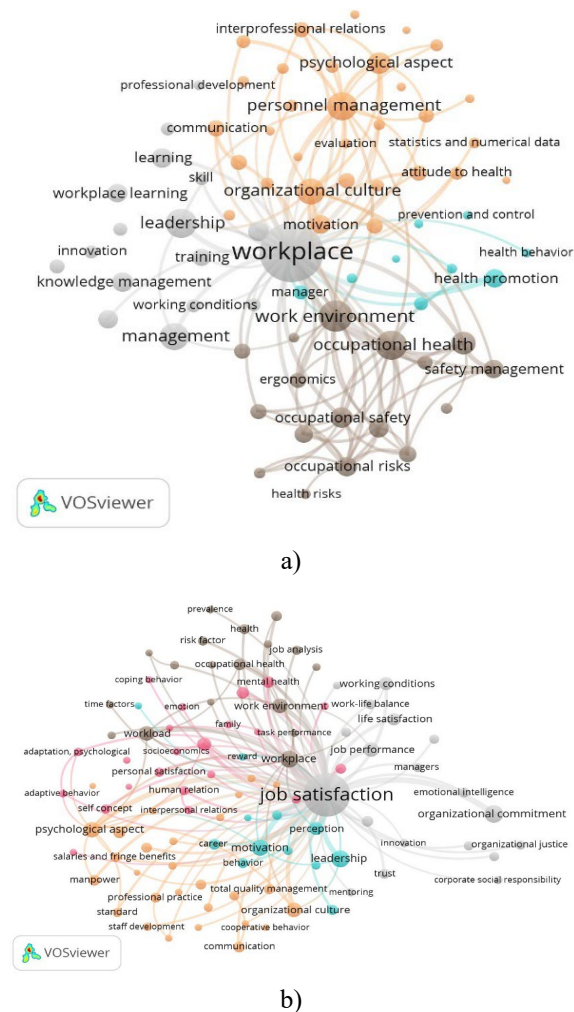


Figure 1. The network visualization of the occurrence of the topic area of (a) workplace management and (b) job satisfaction

As it can be seen in Figure 1, the clusters of keyword co-occurrence are displayed in different colors. For each keyword, the weight of the item determines the size of the term’s circle. The distance among two keywords displays the number of term co-occurrences. The closer two keywords are to one other, the larger the number of co-occurrences. The workplace management map (a) indicates four clusters: workplace, in gray; personnel management, in orange; work environment, in brown; and health promotion, in blue. The job satisfaction map (b) indicates five clusters: job satisfaction, in gray; leadership, in blue; workplace, in brown; psychological aspect, in orange; mental health, in red.

The data in the workplace management MCA matrix and Figure 1 were also used to create

a criteria system for a MCA of workplace management with the INVAR technique (Kaklauskas, 2016).

Figure 2 shows a bibliographic map of the association between (a) workplace management and (b) job satisfaction keywords, whose data are detailed in the workplace management MCA matrix, based on citation scores derived from the Scopus database. The maps show that research focuses on psychosocial aspects, leadership topics, and health. These topics are widely discussed. The most significant terms related to workplace management topics are: occupational risks and safety, leadership, and psychological aspects (Figure 2(a)), and, for job satisfaction topics, the terms are: psychological aspects, human relations, adaptation (psychological), and occupational health (Figure 2(b)).

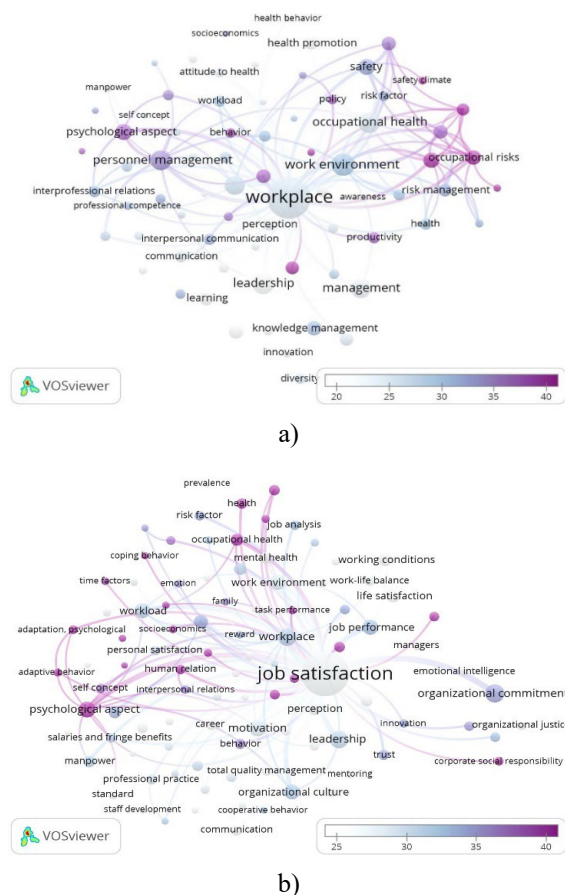


Figure 2. The visualization of the occurrence of the topic area citations during the 1990–2023 period for (a) workplace management and (b) job satisfaction

As it can be seen in Figure 2, the higher the weight of a keyword, the larger the size of the keyword's circle. The keyword color is established by the medium citation score of the keywords. The

colors fluctuate from white (weak score) to purple (high score).

3.3 Theories Related to Workplace and Work-Related Well-Being Management

The job demands-resources (JD-R) model has been broadly applied to clarify organizational processes influencing employee work-related well-being in the last decade. A total of 1225 articles have been published on the basis of this model. This is unsurprising, as the JD-R model involves a broader set of psychosocial environment factors, while other theories or models usually focus on more relatively specific workplace dimensions. The other four dominant organizational and management theories in workplace and work-related well-being studies are the social exchange (499 articles), self-determination (319 articles), leadership (166 articles), and social identity theories (111 articles), which are focused on social, motivation, and leadership issues.

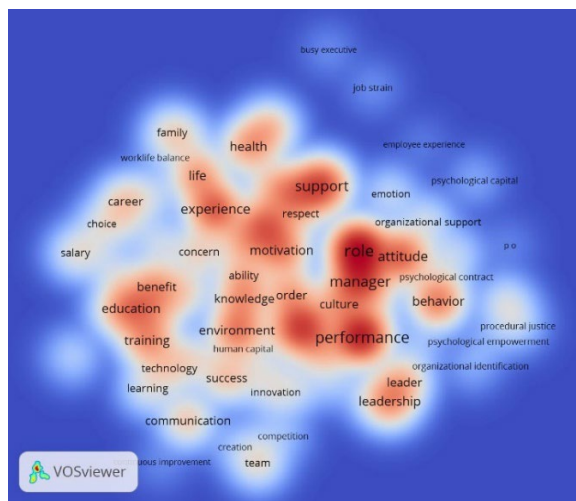
3.4 Terms Related to Workplace Management and Work-Related Employee Satisfaction

Keyword “density” is an important element in ranking workplace management criteria. Using the VOSviewer software, the importance and density of terms associated with the work-related satisfaction, as well as two concepts that affect job satisfaction and are connected to workplace management (the employer branding concept and HPWS) were graphed (Figure 3). While the terms of these three variables vary, the top 79 factors are the same and are shown in the figure.

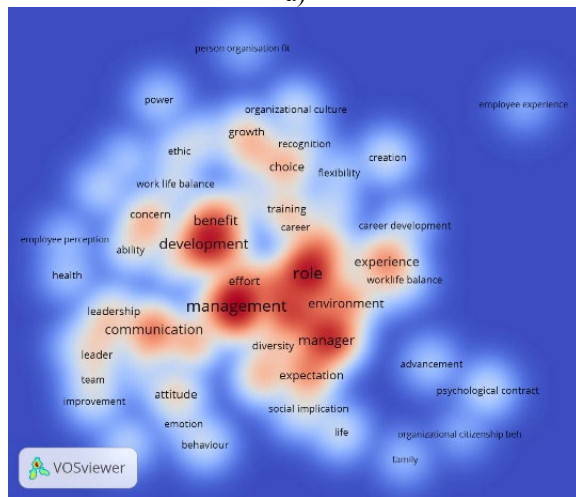
Each point in this visualization is color-coded using a gradient between blue (signify decreasing counts and weights) and red (show increasing counts and weights) to indicate the density of items at a specific point.

A point is colored red when the number of items in its neighborhood is more significant. These have higher weights, as is the case for the terms: role, performance, support, and motivation (in Figure 3(a)); role, management, development, benefit, and manager (in Figure 3(b)), and performance, role, development, and culture (in Figure 3(c)). For other terms, such as: job strain, busy executive, and psychological capital (Figure 3(a)), person-

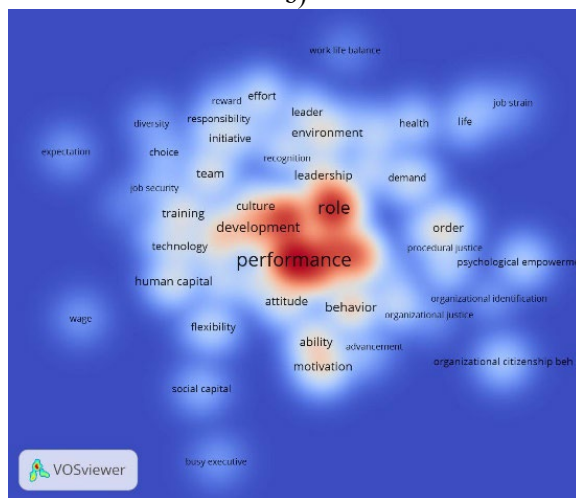
organization fit, family, and emotion (Figure 3(b)), and diversity, choice, and advancement (Figure 3(c)), the points are blue to indicate their smaller numbers and lower weights.



a)



b)



c)

Figure 3. Visualization of the density of the 79 terms related to (a) job satisfaction, (b) the employer branding concept, and (c) the HPWS

This study compared concepts that affect the work-related satisfaction of employees based on 79 selected terms describing job satisfaction, as mentioned above. To compare the concepts, a MCA based on the INVAR method (Kaklauskas, 2016) was used. The same 79 common terms were employed to analyze employer branding concepts and HPWS alternatives.

The matrix of selected terms with the calculated normalized weight (see Section 2) of the terms related to the analyzed alternative topics, employed for the MCA, is available online via (Reformation of the Curricula on Built Environment in the Eastern Neighboring Area (n.d. f)). A MCA showed that the employer branding concept has several positive aspects from the perspective of employee satisfaction, with a utility degree of 100%. The HPWS was rated second, at 71.09% (analysis outputs are accessible online via (Reformation of the Curricula on Built Environment in the Eastern Neighboring Area (n.d. d))).

The change and correlation analysis of the number of publications with the considered keywords for 1990–2023 was performed. To review the significance of individual themes related to workplace management and its context and researchers' interest in them, publications on specific topics were searched in the Scopus. This statistical analysis is provided in the document-term matrix (accessible online via (Reformation of the Curricula on Built Environment in the Eastern Neighboring Area, n.d. c)). Fifteen employee satisfaction-related criteria, with the highest normalized value calculated by the VOSviewer software (see Section 2), were selected for this analysis. The rows in document-term matrix list the number of articles indexed in the Scopus by year according to chosen specific keywords that show healthy growth in publications. For instance, in 2023, 4381 articles were indexed in the Scopus containing the keyword "leadership", whereas there were only 1778 articles listing this keyword in 2013. The top three factors analyzed in regard to scientific production are environment, motivation, and leadership. Between 1990 and 2023, workplace management publications increased 18.4-fold (from 699 in 1990 to 12863 in 2023), with especially rapid growth in the past decade, indicating a growth in workplace management research and scientific interest.

To establish the correlation between the analyzed factors and better understand their relationships, the correlation between the workplace factors was calculated. The radar chart illustrated in Figure 4 was created to analyze all 79 factors related to employee job satisfaction, employer branding, and the HPWS as aggregated categories.



Figure 4. The correlation between three aggregated categories related to workplace management

The radar chart presents a strong and positive link between job satisfaction-related factors and two aggregated categories linked to workplace management practices, where $r = 0.61$ with employer branding concept factors and $r = 0.78$ with HPWS factors, respectively. Although a MCA of two alternatives rated the employer branding concept a higher priority, the HPWS had

a more significant relationship with employee job satisfaction factors.

The INVAR method (Kaklauskas, 2016) was used to calculate and present quantitative and qualitative numerical recommendations on improving the efficiency of the analyzed alternatives (accessible online via (Reformation of the Curricula on Built Environment in the Eastern Neighboring Area, n.d. e)). Figure 5 displays a sample of the output of this analysis.

As it can be seen in Figure 5, the factors on the left-hand side already have the maximum values of the selected keywords compared to workplace factors influencing employee job satisfaction. The values of the factors on the right are limited and could be improved.

Seventy-nine selected workplace factors mentioned in the scientific literature on the topic of the HPWS are ranked on the x -axis from left to right according to their potential for improving the analyzed keywords (Figure 5(a)) and alternative (Figure 5(b)) research topics.

The top three workplace-related and job satisfaction-related factors of the HPWS, which have been the least analyzed in the assessment

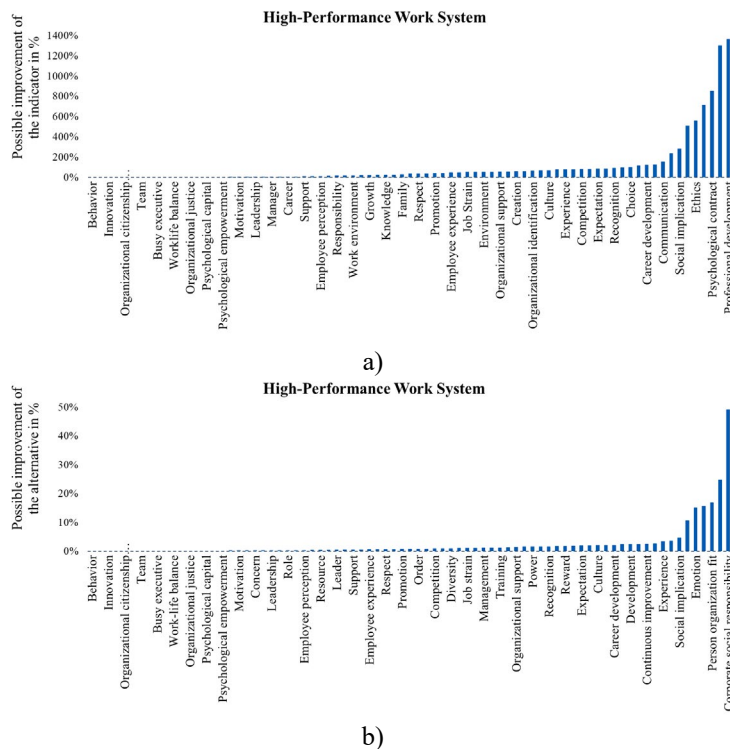


Figure 5. Examples of (a) quantitative and (b) qualitative numerical recommendations on how to improve the efficiency of the analyzed alternative research topics

of the HPWS, although they influence employee job satisfaction and could be improved, are ethics, psychological contract, and professional development in particular (Figure 5(a)).

Figure 5(b) illustrates and highlights that the utility degree of the HPWS as an alternative research topic (in percent) would increase if the values of the lowest alternative keywords (emotion, person-organization fit, and corporate social responsibility) reached the value of the best one (behavior). That means that these factors are important for work-related employee satisfaction and can improve the total benefit of the HPWS as an alternative topic. For scholars, these could be additional topics to consider when analyzing the subject of the HPWS.

4. Conclusion

Mapping science means presenting an overall view of the current state of scientific knowledge (Pessin, Yamane & Siman, 2022). In bibliometric analysis, the evolution of science is measured and compared using statistical and mathematical indicators. It combines the analysis of contributions and their performance with the analysis of interactions between scientists and the subjects they study. Bibliometric techniques and science mapping are tools that help scientists obtain a scientific view of complex discussions and the topics that have been addressed in them (Donthu et al., 2021). This research has been expanded by applying the SCALAR method and the bibliometric DSS (B-DSS). With the created B-DSS, it is possible to analyze various research or knowledge gaps, such as the classic, evidence, disagreement, contextual, empirical, theoretical, and methodological types. To determine which gap researchers should investigate, it is necessary to create a criteria system, choose the significance of these criteria, and perform a MCA with the B-DSS. An analysis and a determination of the newest knowledge and trends in research topics relating to workplace management and control were performed, based on the SCALAR method and the B-DSS.

The latest scientific knowledge related to workplace management needs a methodical overview using smart bibliometric techniques and science mapping. So far, no such methodical

research has been performed, although it would help researchers discover research gaps in this area, support theory discussions, and thus improve the scientific writing process, making it more intelligent, dynamic, and agile. This research utilized the newly developed B-DSS, as well as Scopus articles and the VOSviewer software package, to develop the SCALAR method. Then, it was applied to create network maps of keywords and citations related to workplace management and its context, and to determine the significance of the keywords. The application of management theories in workplace management was also analyzed. A MCA of alternative topics was performed to evaluate the utility degree of the analyzed practices in terms of job satisfaction and present digital quantitative and qualitative recommendations on making these other options more efficient. The SCALAR method and the B-DSS were employed to identify possible research gaps in the field of workplace management and control and the main directions for future research.

The present analysis of the term “workplace management” and its context, using the Scopus database by looking at different aspects (highly cited papers, categories, citations topics, publication titles, abstract, and keywords), determined that the following topics related to workplace factors prevail: job satisfaction, organizational commitment, leadership, motivation, psychological aspect, occupational health, personnel management, organizational culture, well-being, safety, occupational risks, workload, perception, etc. It has been noted that a need exists for holistic workplace management and control analysis utilizing these keywords. A Scopus search involving the keywords workplace AND management, for instance, returned 12750 results of peer-reviewed literature in the subject areas of business, management, and accounting, as well as the social sciences, whereas a search with the keywords workplace AND management AND holistic OR integrated returned 610 results. The analysis from this paper, performed with VOSviewer (Figures 1 and 2), revealed that there is no scientific interest related to integrated or holistic analysis in the field of workplace management. Neither “holistic” nor “integrated” appear on the maps or in the study by Qureshi

(2019) that explores the trending search queries on workplace management employing the tools available on the WoS platform to identify popular topics and the most cited papers, as well as emerging research areas. The holistic approach is also supported by Elovainio et al. (2022), who state that the workplace is a dynamic system comprising multiple interconnected factors.

The recent increase in the count of articles shows that workplace management and control and its

context are a significant field that is gaining the attention of researchers. Given the exponential growth rate of articles in recent years and the huge potential for workplace management practices, the interest of researchers in this area is expected to grow further. The SCALAR method and the B-DSS will offer scientists strategic information and have the potential to connect ideas, researchers, and context. These tools will contribute to open science and help reveal research gaps that need to be filled.

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