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JOB SATISFACTION: A BIBLIOMETRIC ANALYSIS

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Abstract

This study aims to conduct a bibliometric analysis of co-authorship, co-occurrence, and citation related to job satisfaction. The method used in this study involves selecting the keyword "job satisfaction" from ScienceDirect.com, resulting in a total of 30,839 filter records within the range of 2000-2023. After verification, 83 articles that met the criteria were obtained using VosViewer Journal application. The results revealed 70 clusters with the strongest link strength and total link, as well as keywords that are directly related to job satisfaction such as well-being, diversity, COVID-19, autonomy, stress, job fatigue, polynomial regression, and performance. The implications of this study are that it provides valuable insights into the factors and issues that affect job satisfaction, and these findings can be used to inform policies and practices that promote job satisfaction among employees.

Keywords: *Bibliometric analysis, Co-authorship, Co-occurrence, Job Satisfaction, VosViewer*

1. INTRODUCTION

Structured literature reviews are commonly used to identify research gaps and map the boundaries of a body of literature through an iterative process of harmonized search terms, literature selection, and analysis (Fahimnia et al., 2015). Bibliometrics has become increasingly popular across various fields due to the use of software with secondary databases that makes assessing and evaluating vast amounts of scientific data easier, such as artificial intelligence (Makarius et al., 2020). Previous studies have extensively discussed job satisfaction and identified several factors that affect it, including participation and role clarity, relationships with superiors or colleagues, evaluation systems, job content, compensation and salary, and work environment (Pitasari & Perdhana, 2018).

Job satisfaction is an important factor affecting employee performance (Susanto, 2019). It is an expression of a person's emotional behavior or attitude towards their job (Hasibuan, 2014; Sunyoto, 2012). Satisfied employees tend to perform better and feel more comfortable in the work environment, resulting in better quality work output (Punagi & Fauzi, 2022). Various references, such as loving the job, high work morale, and disciplined attitude, can be used to measure job satisfaction (Hasibuan, 2014). Job satisfaction measurement can be assessed based on four components: personality, instructional and extrinsic values, social influence, and job situation (Sari & Hadijah, 2016).

Research has shown that there is a mutually influencing relationship between job satisfaction and employee performance, indicating that an increase in job satisfaction can lead to more productive employees, and vice versa (Nabawi, 2019). Several factors have been identified as affecting job satisfaction, including fairness and appropriateness in providing compensation, placement of employees according to their field of expertise, job demands, work environment atmosphere, completeness of work tools, good

leadership, and work variation (Azhar et al., 2020). According to Azhar et al. (2020), compensation has a positive and significant effect on job satisfaction.

This paper aims to present previous research on job satisfaction that is analyzed using bibliometric analysis to identify co-occurrence, co-authorship, and citation. By identifying patterns of co-occurrence, co-authorship, and citation, this study seeks to provide a comprehensive overview of the current state of research on job satisfaction. Specifically, the study aims to identify key research themes and trends, as well as potential gaps and areas for future research. By synthesizing and analyzing the existing literature on job satisfaction, this study also aims to contribute to the development of a more nuanced and comprehensive understanding of this important topic. Ultimately, the findings of this study may have important implications for policymakers, employers, and employees seeking to improve job satisfaction and enhance workplace productivity and well-being.

2. RESEARCH METHODS

This study employed a descriptive quantitative research design using bibliometric analysis with the Vos Viewer application. The journal database used in this study was obtained from ScienceDirect.com, with the search limited to articles published between 2000-2023 and using the keywords "Job Satisfaction". A total of 23.981 journals were initially retrieved from the search. Subsequently, a filter was applied according to the criteria outlined in Table 1. The resulting 83 articles were further analyzed using bibliometric analysis to identify patterns of co-occurrence, co-authorship, and citation.

The bibliometric analysis provided a comprehensive overview of the current state of research on job satisfaction and enabled the identification of key research themes and trends, as well as potential gaps and areas for future research. The Vos Viewer application was chosen for its ability to handle large amounts of data and to provide visual representations of the bibliometric analysis results, making it easier to interpret and analyze the data. Overall, the bibliometric analysis was a valuable method for synthesizing and analyzing the existing literature on job satisfaction, and may have important implications for policymakers, employers, and employees seeking to improve job satisfaction and enhance workplace productivity and well-being.

Table 1. Screening of Journals with the Keyword "Job Satisfaction" ScienceDirect.com Data Base of 2000-2023

No	Filter	Total number of journals
1.	Key word “Job Satisfaction”	30.839
2.	Years 2020-2023	23.981
3.	Scribed Journal	16.564
4.	Research Articles	13.892
5.	Publication Tittle	1.618
	- Journal of business Research	474
	- Journal of Vocational Behavior	719
	- Human Resource Management Journal	287
	- European Management Journal	138

6.	Subject Area Business Management and Accounting	1.618
7.	Open Access & Open Archive	83

We screened for open access and open archive journals, which resulted in identifying 85 journals. The citation data from these journals was then exported in RIS format for further processing. We chose to use VosViewer application for data analysis because it efficiently handles large volumes of data and provides various visual displays, analysis, and investigations (van Eck & Waltman, 2010).

After processing the RIS file using VosViewer, we obtained Figure 1 which shows the type of data analysis that can be used, i.e., co-authorship and co-occurrence. The co-authorship analysis is based on the author's name and affiliation, while co-occurrence analysis is based on the appearance of keywords (Hartati et al., 2020). We generated this image by selecting "Create a map based on bibliographic data" and then "Read data from reference manager data."

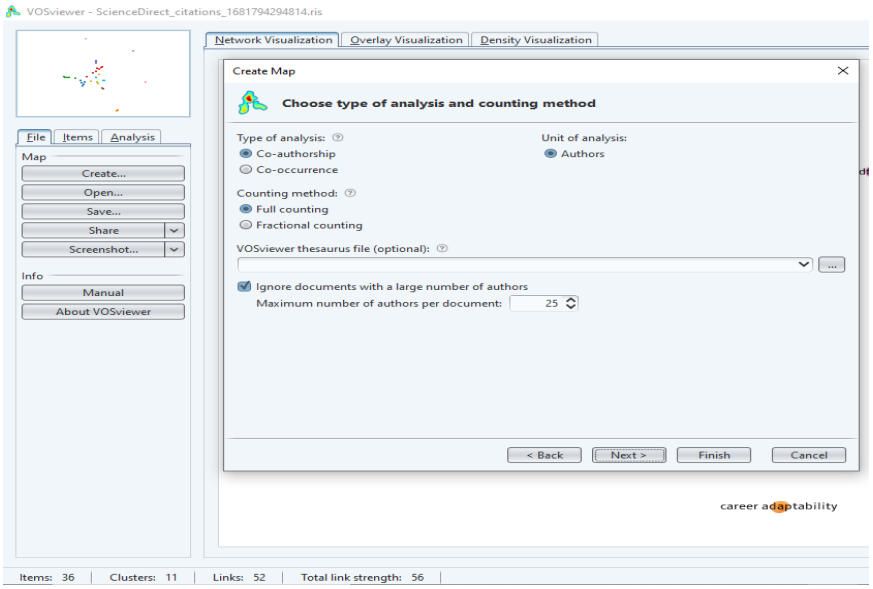

Figure 1. Choice of analysis type and calculation method

For co-authorship, we selected a minimum number of documents of an author with a number of 1, and a number of authors to be selected of 281. For co-occurrence, we chose the minimum number of occurrence of keywords with a total of 2, and a number of keywords to be selected as many as 37. For citation analysis, we selected the minimum number of occurrence of keywords with a total of 0, and a number of keywords to be selected as many as 83.

Overall, this method provides a clear and concise explanation of the steps taken for the data analysis using VosViewer application. However, it would be beneficial to include more information about the criteria used to identify the 85 open access and open archive journals.

3. RESULTS AND DISCUSSION

We conducted a search for journals on the ScienceDirect.com database using the keyword "Job Satisfaction," which resulted in identifying 83 open access and open archive journals. We then used the VosViewer application to analyze the data obtained from these journals. The results obtained from the VosViewer application are presented below:

1) Co-authorship

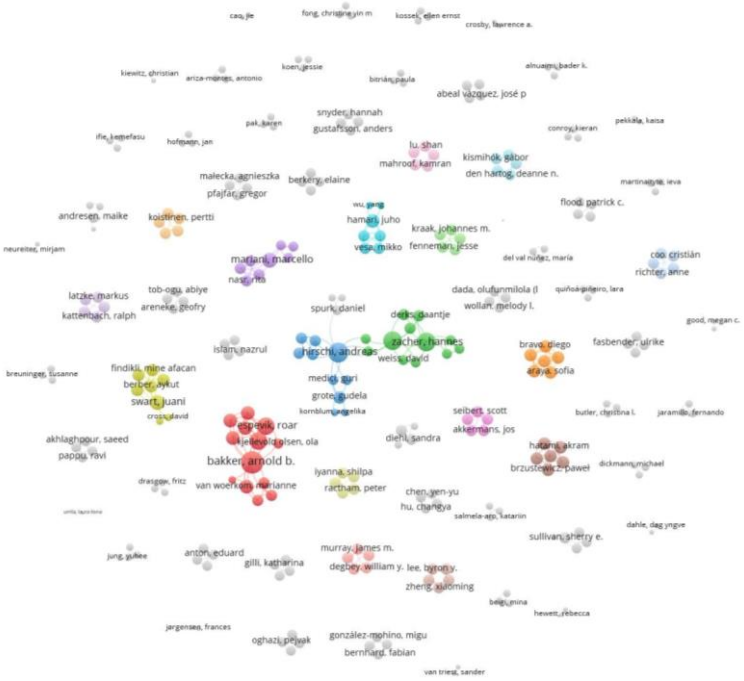

Figure 2. Visualization of the Co-Authorship Metadata Network

Based on Figure 2, there are 70 clusters with the largest link strength and total links on behalf of Bakker, Arnold B, which are shown in red. The lighter the cluster color, the greater the link strength and total links. In writing, we will show 10 authors with the largest link strength and total links in Table 1.

Table 2. List of 10 authors, number of documents, link strength, and total links

No	Author	number of documents	link strength	total link
1	Bakker, Arnold B	4	15	12
2	Hirchi, Andreas	4	11	11
3	Rudolph, Cort W	3	10	9
4	Zacher, Hannes	3	10	9
5	Espevik, Roar	2	9	7
6	Hetland, Jorn	2	9	7
7	Mariani, Marcelo	2	7	7
8	Swart, Juani	2	7	7
9	Hamari, Juho	2	6	6
10	Einarsen, Stale Valvatne	1	6	6

Table 2 displays the results of our analysis, which reveals a trend indicating that a greater number of documents are associated with a higher number of links. This finding

can be explained by the fact that authors who have written more documents are more likely to collaborate with others. Co-authorship, as defined by Laudel (2002), is a reliable measure of research collaboration, as it provides validation and lends credibility to research findings when two or more authors are associated with the same publisher.

Collaboration in research is particularly crucial when authors are separated by multiple boundaries, such as scientific background, economic factors, organization, generation, gender, nationality, etc. (Qiu, 1992; Van Raan, 1998). Cross-boundary collaborations require positive integration and collaboration of different theories and concepts, techniques or data, as demonstrated by Porter et al. (Porter et al., 2006).

2) Co-occurrence

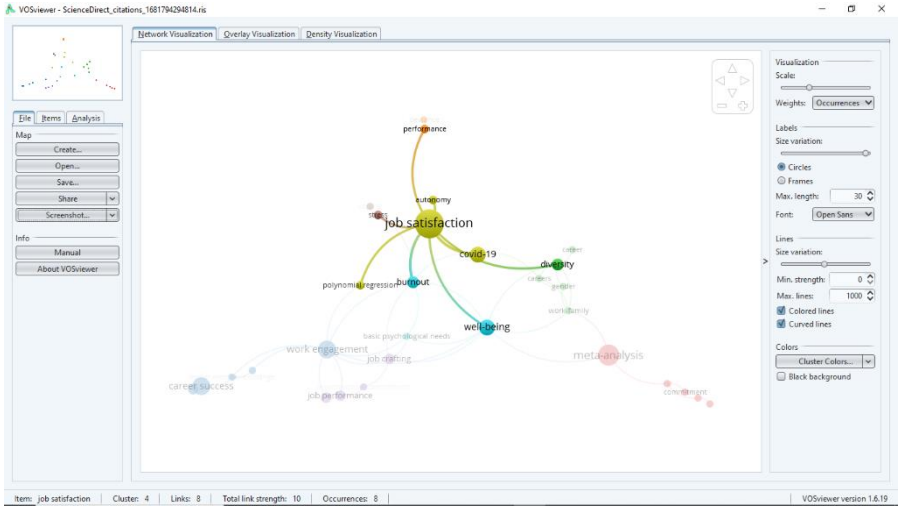

Figure 3. Visualization of Co-occurrence Metadata

Figure 3 shows that there are 8 clusters distinguished by color, consisting of 30 keywords. Notably, several keywords that are directly related to Job Satisfaction are present, including well-being, diversity, covid-19, autonomy, stress, job burnout, polynomial regression, and performance.

Previous research supports the relationship between these keywords and Job Satisfaction. For instance, Turja et al. (2022) found a strong relationship between high aggregate job satisfaction and perceived meaningfulness of work, which is related to task diversity. Conversely, high burnout levels can lead to a decrease in the level of job satisfaction (Ninaus et al., 2021). Additionally, the results of a study by Mockaitis et al. (2022) indicate that autonomy in work has a positive influence on job well-being over time, although support from organizations or companies to overcome job burnout and decrease job dissatisfaction may decline over time.

3) Citation

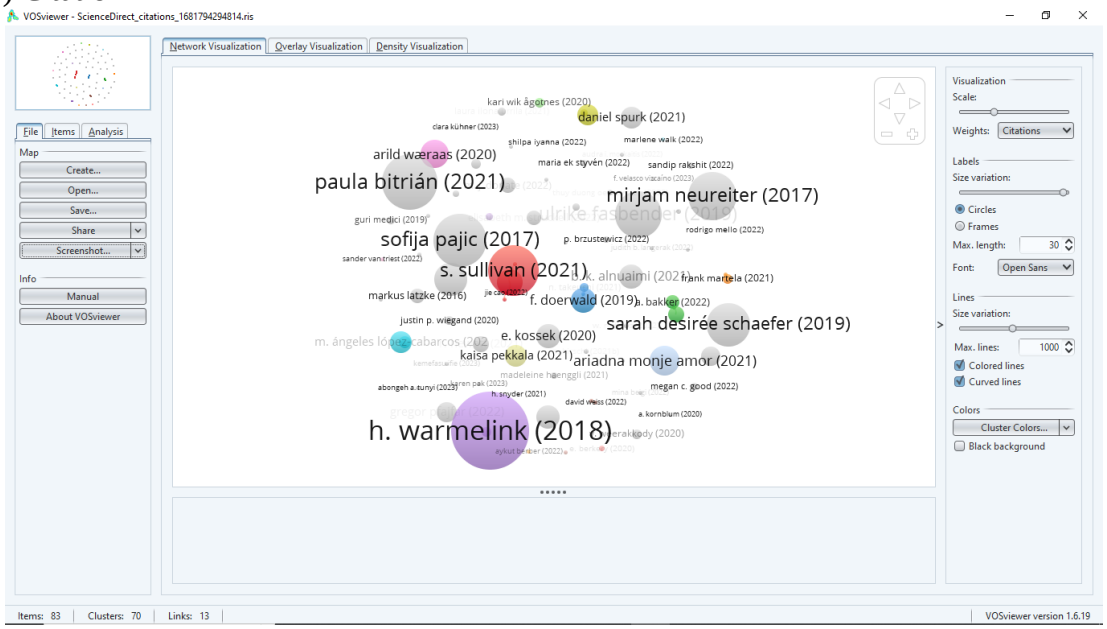

Figure 4. Visualization of Citation Metadata

Figure 4 shows 70 clusters with a total of 13 links, indicating a diverse range of research areas and topics related to Job Satisfaction. To identify the most influential authors and titles, we analyzed the citation metadata and generated Table 2, which lists the top 10 citations based on the number of citations.

Table 3. Top 10 Citations with the Most Citations

No	Author	Title	Source	Number of Citations
1.	(Warmelink et al., 2020)	Gamification of production and logistics operations: Status quo and future directions	Journal of business research	90
2.	(Bitrián et al., 2021)	Enhancing user engagement: The role of gamification in mobile apps	*Journal of Business Research*	63
3.	(Pajic et al., 2018)	Antecedents of job search self-efficacy of Syrian refugees in Greece and the sNetherlands	*Journal of vocational behavior*	60
4.	(Sullivan & Al Ariss, 2021)	Making sense of different perspectives on career transitions: A review and agenda for future research	*Human Resource Management Review*	58
5.	(Neureiter & Traut-Mattausch, 2017)	Two sides of the career resources coin: Career adaptability resources and the impostor phenomenon	*Journal of Vocational Behavior*	55
6.	(Fasbender et al., 2019)	Is the future still open? The mediating role of occupational future time perspective in the effects of career adaptability and aging experience on late career planning.	*Journal of Vocational Behavior*	53

7.	(Schaefer et al., 2019)	Is my company really doing good? Factors influencing employees' evaluation of the authenticity of their company's corporate social responsibility engagement.	*Journal of business research*	49
8.	(Watson et al., 2016)	When do franchisors select entrepreneurial franchisees? An organizational identity perspective	*Journal of Business Research*	37
9.	(Monje Amor et al., 2021)	Structural empowerment, psychological empowerment, and work engagement: A cross-country study	*European Management Journal*	33
10.	(Wæraas & Dahle, 2020)	When reputation management is people management: Implications for employee voice	*European Management Journal*	31

The empirical study conducted by Warmelink et al. (2020) utilized implementation and production control methods in its research design. The study found that the motivational capabilities most commonly implemented are "goals and objectives", "multimedia feedback", and "metaphorical/fictional representations". Additionally, Bitrián et al. (2021) discovered that gamification increases user engagement by satisfying their needs for competence, autonomy/freedom, and bonding, which can lead to positive ratings and word-of-mouth promotion.

Pajic et al. (2018) concluded that individuals with high psychological capital have increased adaptability in their careers, which can provide confidence in job transitions. However, this correlation weakens in the presence of high social barriers and strengthens in the presence of high administrative barriers. Furthermore, career adaptability can help individuals in the group that has the most difficulty adapting to job transitions by providing self-regulatory abilities.

Increased life expectancy has resulted in a desire for later career transitions (Sullivan & Al Ariss, 2021). The changing nature of career paths due to globalization, rapid technical advances, and individual paradigm shifts has led to an increase in career transitions, particularly among the millennial generation, which is estimated to comprise almost 50% of the global workforce by 2020 (Meister & Willyerd, 2010). Career planning in older occupations indirectly involves career adaptability, with a future time perspective acting as the main mechanism (Fasbender et al., 2019). In addition, the impostor phenomenon can negatively impact adaptive readiness and reduce the adaptation response (Neureiter & Traut-Mattausch, 2017).

Schaefer et al. (2019) found that increasing awareness of CSR engagement and providing information to employees regarding CSR engagement is critical. The use of CSR advertisements that are attractive and trustworthy and have adequate cause-company fit can positively influence employees' authenticity assessment of the company's CSR program. Entrepreneurial franchisees chosen by the system have an entrepreneurial character that is part of the group identity, which is reflected in the institutional support provided from the franchisor of the franchise business section (Watson et al., 2016). Furthermore, franchise performance is positively influenced by selecting franchisees who have entrepreneurial values in line with the existing system.

Monje Amor et al. (2021) explained that structural and psychological empowerment are the primary antecedents of work engagement in Spain and the UK. Work engagement

has a positive relationship with performance and a low intention to quit. Combining different theoretical views, psychological empowerment mediates the positive relationship between structural empowerment and work engagement. Wæraas & Dahle's (2020) research found that an organization seeking reputation by way of one official corporate voice while downplaying the voice of employees through technocratic control and the application of coercive HRM is contrary to the reputation and branding theory. Employees should be company ambassadors who are committed and enthusiastic in promoting their organization.

4. CONCLUSION

The conclusions drawn from this journal article are insightful. Firstly, the results from the co-authorship analysis reveal that authors who engage in active journal writing tend to have extensive networks with other authors, allowing for multi-disciplinary collaborations to occur in HRM-related research. This finding highlights the importance of diverse perspectives in conducting research and its impact on the quality of research produced.

Secondly, the co-occurrence analysis indicates that job satisfaction has a strong relationship with various factors such as worker well-being, job diversity, and flexibility/autonomy in work. Additionally, the analysis also suggests that work-related stress is a crucial issue that affects job satisfaction. This finding is significant for organizations as it highlights the importance of creating a positive work environment that prioritizes employee well-being to increase job satisfaction.

Lastly, the citation analysis shows that the highest-cited journal is related to motivation and adaptability at work. This finding highlights the importance of employee motivation and adaptability in modern workplaces, where the pace of change is faster than ever before. It also suggests that research in this area is critical for organizations to stay competitive and succeed in a dynamic business environment.

Overall, the bibliometric analysis provides valuable insights into the current state of HRM-related research. These findings can inform future research and guide organizations in their efforts to create a positive work environment that promotes employee well-being and productivity.

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