

BIBLIOMETRIC ANALYSIS OF EMPLOYEES' SUBJECTIVE WELL BEING

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Abstract

Scholarly interest in employees' subjective well-being has grown tremendously in the last decade because of increasing complexities in the business world. Bibliometric analysis on this topic has yet to be done so far. This study aims to bridge this gap by applying bibliometric techniques to explore the research conducted on employees' personal well-being and provide its evolution through mapping its literature. The authors used evaluative and relational techniques from Scopus metrics and VOSviewer software to identify essential citations, authors, and journals to analyse subjective well-being literature. There were 182 articles retrieved from the Scopus database, which were used to recognise the intellectual foundations and emerging trends of subjective well-being.

Keywords: *Bibliometric analysis, employees, organisations. subjective well-being, VOSviewer.*

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1. INTRODUCTION

Throughout history, happiness has been considered the ultimate aim of life and philosophers such as Aristotle and Confucius have emphasised its importance. It was only recently that behavioural scientists started paying attention to it. Happiness can refer to pleasant moods and emotions or positive evaluations of one's life. According to Webster, "happiness is a state of well-being and contentment" ("Happiness", 2017, p.8). However, this emotional state is complicated to measure. Since being happy is a subjective experience; therefore, the level of happiness will vary from person to person and from time to time. The term "subjective well-being" was introduced to overcome these limitations in measuring happiness. It was coined by Edward Francis Diener in 1984, who defined it as "a person's cognitive and affective evaluations of his or her life" (Diener, Oishi, & Lucas, 2009, p. 187).

Subjective well-being is an umbrella term that includes reflective cognitive judgements such as overall satisfaction with life and effective day-to-day responses in terms of pleasant moods and emotions versus negative emotions and unpleasant experiences. The study of subjective well-being has grown immensely over the past several decades, and many scientists have contributed much towards its development as a field. For instance, Diener et al. (2017) have highlighted the conceptual relationship between subjective well-being and health. Also, Raysamb et al. (2002) have contributed to building a model on subjective well-being, focusing on its association with environmental and genetic factors.

Work is one of the most crucial elements in an individual's life, as one-third of his or her life is spent while working. In today's dynamic environment, the nature of work is undergoing dramatic changes. The working environment is witnessing a revolution like never before. The COVID-19 pandemic has fueled this fire (Juchnowicz & Kinowska, 2021). Human resource management practices such as downsizing or job redesign can adversely impact employees. The growing prominence of layoffs, temporal employment and virtual teleworking has added challenges to the already complex working life. From the organisation's point of view, previous research has established that employees who have improved

health and well-being contribute a lot in achieving the employers' goals (Diener et al., 2017, Kushlev et al., 2019). It can be rightly said that a happy employee is more productive. All these factors have led to the increased necessity of paying attention to the well-being component of employees. As a result, researchers have started investigating the individual and organisational-level antecedents which can be harnessed to increase the health and wellness of employees.

Many literature reviews are conducted to understand the concept of "subjective well-being". Bibliometric analyses have also been conducted to investigate the SWB of the elderly and the economic aspect of SWB. They investigated the impact of income on subjective well-being, the dynamics between job satisfaction and life satisfaction and other such concepts. These reviews highlighted the growth of subjective well-being as a research field. However, its relevance in the context of organisations needs to be addressed. It is one of the most talked-about areas in organisational behaviour and human resource management since employee health and well-being are considered crucial for the success of any organisation. To fill these research gaps, this research restricted the focus of the study to employees only.

However, there has yet to be a bibliometric analysis for reviewing the SWB of employees. This study aims to bridge this knowledge gap and provide a comprehensive picture of the well-being component of employees. The main objective of this study was to generate insights from the knowledge obtained to make new contributions and analyse current trends and research traditions. By investigating the knowledge structure of employees' subjective well-being, we thus filled a significant research gap in the literature and helped extend the current academic base for the study. By investigating well-being research, an in-depth understanding of its future potential and acceleration of the conceptual development of this increasingly evolving research area can be provided.

To provide a comprehensive picture of the evolution of subjective well-being as a research field, this study included all papers irrespective of the country where the research was conducted. However, the focus of

this study was India. Therefore, the results will be analysed in light of the Indian context only.

This study is built on prior literature and uses bibliometric methods to answer the following research questions:

RQ.1 How has well-being literature within the workplace context grown since its emergence?

RQ.2 What are the leading countries contributing to employees' subjective well-being literature?

RQ.3 What is the contribution of the most influential research and articles in employees' well-being literature?

RQ.4 Who are the leading authors in employees' subjective well-being literature?

RQ.5 What are the essential keywords and research themes used to study the subjective well-being of employees?

RQ.6 What are the intellectual foundations/evolutions of employees' subjective well-being?

Thus, employees' subjective well-being is a crucial topic requiring researchers' appropriate attention. The bibliometric analysis includes various tools and techniques that provide a comprehensive overview of the research shaping the field. The employees' subjective well-being is explored in the subsequent sections to identify the leading authors, research, countries, etc., contributing to its development. The two tools used in this study for analysis are Scopus metrics and VOSviewer.

2. Methodology

This section presents a structured, transparent, reproducible methodology to generate new value and original research outputs (Aguinis et al., 2018; Torchia & Calabro, 2011). The five-step process of conducting a systematic literature review and analysis given by Transfield et al. (2003) was adopted to find answers to our research questions.

First, a comprehensive literature search was conducted using an appropriate and complete set of keywords to find all the relevant data sets. In order to identify relevant keywords, the literature reviews of SWB conducted so far were analysed. The keywords

identified from the literature were – “Subjective well-being”, “employee”, “organisation”, “worker”, and “workplace”. Elsevier's “Scopus” database extracted relevant publications from various indexed journals. It was chosen since it provides the most comprehensive and exhaustive set of publications with various ranking and analysing metrics compared to other databases. Different spelling combinations were considered to ensure comprehensibility of the search results, for instance, “well-being” OR “well-being” (Table 1). The subject was limited to Business, Management and Accounting; only journal articles and reviews were considered. Also, the articles were restricted to the English language. Since the focus of the study was limited to employees only, these selection criteria, as mentioned above, were adopted. Glianzen & Moed (2013) have suggested that a minimum of 50 articles can be used for bibliometric analysis. The total number of publications extracted was 182.

Bibliometric methods were adopted to identify the trends in the 182 publications extracted. These methods and science mapping tools are used to visualise and interpret the clusters obtained from the analysis. The software used for this type of analysis includes VOSviewer, BibExcel, CoPalRed, etc. In this paper, VOSviewer visualisation software, developed by Van Eck & Waltman (2010), was used to plot the bibliography and citation trends represented through clusters, tables and maps (Jiang et al., 2019; Walsh & Renaud, 2017). VOS Viewer has gained immense popularity in the past decade, with many scholars and academicians using it for bibliometric mapping and analysis.

Scopus metrics were also used to analyse the obtained metrics to help conceptualise the relevant literature. The Scopus database helps classify publications based on years, countries, organisations, funding partners, etc. We used these metrics for comprehending our citation analysis.

There are three types of techniques used in the bibliometric analysis: Relational, Evaluative and Review techniques. However, we adopted the following two techniques for our study:

1. Evaluative Techniques - Impact metrics, Citation Analysis and Bibliographic coupling

2. Relational Techniques - Co-authorship analysis and Keyword analysis

Further, these techniques manifest across two categories, as adopted in the study –

- a) **Performance Analysis** – Performance analysis examines the various research constituents, including several citations, authors, countries, etc. It is the backbone of any bibliometric study. This analysis helps in outlining the overall picture of the research under study. In this study, the authors have used publication-related and citation-related metrics to structure the overall field. The most comprehensive measures are the number of publications and citations per year or research constituent. The study identifies the distribution of research papers in various time frames, the number of contributing authors, and the number of leading countries.
- b) **Science Mapping** – Science Mapping differs from performance analysis because it determines the relationships between different research themes, and its analysis helps identify the structural connections. The results of science mapping techniques are more instrumental when combined with network analysis in presenting the field's bibliometric structure and intellectual structure. Therefore, citation analysis, bibliographic coupling, and co-authorship analysis were performed in our study.

Bibliographic coupling is a technique in which thematic clusters are formed based on shared references. It is suitable for business scholars as it helps to uncover a broad spectrum of themes and their latest developments. Developing and curating network clusters is crucial for understanding how a research field manifests and develops. For this reason, bibliographic coupling was performed on the dataset of 182 publications extracted from the Scopus database. They were then exported into VOSviewer software. The results of bibliographic coupling resulted in eight clusters. Each cluster contains numerous research publications, on which the content analysis was challenging. Therefore, all the research articles included in a cluster are ranked

based on the highest number of citations using the Scopus database. The top five articles with the most significant citations are selected for further analysis. These clusters were then analysed, and detailed discussions on each cluster were undertaken to identify the intellectual foundations of the SWB literature of employees. Further, network analysis was performed using VOSviewer software to enrich the results.

3. Findings

RQ.1 How has well-being literature within the workplace context grown since its emergence?

The growth of any research theme can be traced by looking at the number of articles published in the consecutive years since its emergence. With the help of Scopus metrics, the authors could trace its emergence. The first article on subjective well-being was published in 1984 when the term was coined in the same year. Then, there was very little work being done on it till 2005. Only after 2005 did the research gain momentum, and scholars started paying attention to it. Fig.1 depicts the emergence of the field and how there has been a steep after the 20th century, and the research area is still growing and exploring new domains.

Since the inception of the growing concern related to individuals' health and mental wellness, only "happiness" was considered to be a measure of assessing the degree of the well-being of an individual. However, happiness was an abstract concept that took much work to measure. Only after coining the term "subjective well-being" was it realised that it could very appropriately define the extent of evaluations of one's life. The well-being aspect of employees has always been talked about. Only in the late 20th century did researchers connect it to job satisfaction, employee productivity, organisational performance, etc. The importance of SWB for employees started gaining attention as it was seen that it played a crucial role in the organisation's success and an employee's productive life. Therefore, it has become one of the most researched topics in organisational behaviour and human resource management.

RQ.2 What are the leading countries contributing to employees' subjective well-being literature?

An article from a country is identified based on the affiliation of at least one author from an organisation. Tracing major countries producing research helps in the topographical depiction of ideas and contexts. As shown in Figure 2, the USA is the most significant contributor in the field by producing 59 articles. It is followed by the United Kingdom and China, producing 33 and 17 articles, respectively. Unfortunately, India must contribute more than seven articles, the lowest among the lot.

Organisational culture plays a crucial role in shaping industry dynamics. Since the culture of every country is different from one another, the priorities given to different workplace components are also different. It can be observed from the data that Europe is leading in publications in SWB literature on employees. The management of European companies has always given importance to the issues and concerns of employees. However, Indian companies have always targeted more challenging aspects of quality management practices. Therefore, less attention is given to soft aspects, including the SWB of employees, resulting in very few Indian articles on the same.

RQ.3 What is the contribution of the most influential research and articles in the well-being literature of employees?

It has been established through past studies that highly cited articles cover the most insightful knowledge and have contributed new and relevant perspectives to a research field. In this study, the top ten most cited articles have been extracted with the help of the Scopus database (Table 2). These are the most influential papers covering different aspects of well-being research in organisations. Spreitzer G. et al. (2005) paper presents a new organisational construct of thriving and explains its importance by linking it to the well-being of employees and organisational success.

On the other hand, Boehm J.K. & Lyubomirsky (2008) suggested that happiness contributes to positive workplace outcomes. Van Steenbergen et al. (2009) recommended a significant association between experiences in the work-family interface and employee health and performance. David Angrave and Andy Charlwood (2015) believed that if a person remained over-employed for more than two

years, then that individual's subjective well-being is reduced.

Research has also studied the impact of high-performance work systems on employees' subjective well-being and job burnout (Fan et al., 2014). It has also been observed that employment levels are associated with subjective well-being, with results showing that an employee who has been over-employed for more than two years faces depression and deteriorating levels of well-being. Moreover, a negative direct effect was found between ethical leadership and employee well-being (Yang C. 2014).

Researchers have also tried to link individual behaviours of positive psychology with organisational-level outcomes. For instance, in a study, Wang J. found that subjective well-being significantly influences individual innovation behaviour, which is mediated by knowledge sharing. Work-related stress has also been linked to SWB with direct and non-direct effects of communication on the same (Monnot M.J. & Beehr T.A. 2018). Dimensions of personality have also played a key role in job satisfaction and employee well-being. Steel P. et al. highlighted in their study that the big five personality traits are associated with job satisfaction, which impacts employees' life satisfaction. Scheck C.L. established a multivariate model depicting the process of work stressors affecting SWB.

Therefore, different researchers have tried to link different components of personal and professional life to the domain of SWB.

RQ.4 Who are the leading authors in the subjective well-being literature of employees?

Authors in a particular field are recognised by their number of publications. They are the leading authors who contribute the most to a particular research field. The top ten authors are considered the leading authors in the subjective well-being literature of employees. These authors are Andresen M., Bamel U., Beehr T.A., Boehm J.K., Charlwood A., Farangi A., Gordon S., Han H., Imhof S., and Johansson Seva I. They have published two papers each. They have been extracted using the Scopus database from the 182 publications extracted.

RQ.5 What are the essential keywords and research themes used to study the subjective well being of employees?

The keywords used by various researchers in their research articles specify the various current hotspots of the literature related to those studies. The analysis of keywords scientifically discovers the interconnections among subfields. The greater the occurrence of a particular keyword, the higher the importance given to a topic. VOSviewer helps extract the keywords based on their occurrence and then plots them on a two-dimensional map.

Figure 3 represents the essential keywords used in employees' subjective well-being literature. The following themes were identified from the map –

- The role of organisational-level antecedents in determining the subjective well being of employees.
- The interdependence between life satisfaction and job satisfaction.
- Various outcomes of SWB are in the form of organisational commitment and performance.
- The synonymous use of happiness, subjective well-being, and employee well-being.

As can be analysed from the results obtained from VOSviewer, organisational commitment and work performance have been linked to the SWB of employees, which implies that employees who have enhanced levels of SWB will be more committed and productive in their work. This can provide implications for managers and employers to find ways of improving employees' quality of life and health. Job and life satisfaction go hand in hand, implying that quality of working life has a crucial impact on quality of life. Management should provide flexible and supportive working conditions to help employees lead healthy lives. Subjective well-being, employee well-being and happiness are used synonymously in well-being literature. This finding also has implications for managers because an employee's working life depends on his/her overall well-being and vice-versa.

RQ.6 What are the intellectual foundations/structural connections of employees' subjective well-being?

Our next aim was to reflect upon the intellectual structure of SWB of employees. Academic articles exhibit intellectual association through referencing patterns (Kessler, 1963). We conducted bibliographic coupling using VOS viewer software to identify the intellectual foundations and sub-domains of the topic of interest. Common referencing patterns form bibliographic couples, and these couples then converge to demarcate an intellectual cluster. These clusters highlight similar academic and managerial concerns. Thus, Bibliographic coupling plays a crucial role in reducing voluminous research content into fewer clusters that lay down the intellectual foundation of a research field.

We performed bibliographic coupling on all 182 documents with a minimum threshold of 10 document citations. The result yielded eight research clusters of SWB of employees. (Fig.4)

The clustering results grouped 182 articles into eight clusters identified from the dataset. Five significant articles in each cluster were targeted based on the highest number of citations. These eight clusters were further analysed to uncover the intellectual foundations of SWB literature:

Cluster-1 Job Insecurity and Employment Condition

The first cluster included articles primarily focused on employment conditions and the nature of employees' work. It contained articles which highlighted the impact of working conditions on job insecurity. Luechinger S. et al. (2010) believed that private-sector employees are more affected due to unemployment which further hampers their well-being. There has been much empirical evidence of relationships between income levels and SWB. Researchers believe that the economic condition of an employee impacts him/her directly or indirectly. Therefore, the quality of the job, the type of employment and workplace performance play a key role in determining the life satisfaction of employees.

Cluster-2 Work and Family characteristics and Subjective well being

Cluster 2 focuses on associating family experiences with work performance and health indicators. In this group of studies, the relationships between attributes of work and family life and the well-being component of employees are analysed. Van Steenbergen E.F. et al. found out that an employee undergoing conflict situations in family life hampers health conditions. If work-family facilitation is provided to them, it improves health and performance outcomes. They conducted a longitudinal study and found similar results, thus confirming the assumptions that situations and family environment impact employees' subjective well-being. Another study examined the impact of high-performance work systems on subjective well-being and observed that these systems increase employees' SWB and decrease burnout. These results were more pronounced for employees having high organisational-based self-esteem. Park H.I. et al. (2011) tried to identify those working conditions or job characteristics that have a long-term impact on employees' overall well-being.

Cluster-3 Individual-level determinants of SWB

This group of studies focused on the characteristics of individual employees and the kind of supervisor support in determining well-being. The different traits of individuals, such as personality, motivation, self-efficacy, etc., have been associated with the extent of wellness of employees. Researchers have identified some new constructs playing a pivotal role in employees' subjective well-being, namely time affluence, prosocial motivation, etc. Time affluence is defined as a feeling that makes individuals realise they have ample time to fulfil their meaningful life activities. It has been found that it is positively associated with SWB. Prosocial motivation means a desire that lets individuals spend their energy benefitting others. Research has established that it negatively impacts employees' SWB because it increases their stress levels. Another study established that SWB mediates the association between supervisor support and turnover intention in hotel industry employees.

Cluster-4 Organizational Characteristics and SWB

Researchers have established that workplace conditions and organisational characteristics profoundly affect employees' SWB. In line with this only, this cluster explains the group of articles that have examined the impact of different organisational characteristics on employees' health and mental well-being. Employees with adequate job autonomy, flexible working conditions, supporting the environment, and motivational leadership increase their job satisfaction and overall life satisfaction. They tend to work harder and improve organisational performance. Caesens G. et al. (2010) showed that perceived organisational support increases work engagement, positively influencing employees' SWB. Higgs M. et al. (2009) conducted a study on managers to identify antecedents of well-being. They found significant interrelationships between emotional intelligence, well-being and personality.

Cluster-5 Psychological needs fulfilment and SWB

In this cluster, studies targeted psychological needs satisfaction and how meaningfulness in life impacts SWB. Different theories of motivation in psychology explain the hierarchy of needs in an individual's life. This cluster links the fulfilment of the needs in an individual's life with his extent of well-being. Han J.H. conducted a survey and found that employees high in extraversion, openness to experience, and agreeableness felt high levels of life satisfaction and positive affect. Moreover, high behaviour intention also resulted in higher levels of SWB. The author, thus, established that personality traits impact SWB, and they were exposed during leisure experiences. Keyes C.L.M. further demonstrated that purpose in life emerges in work-life occupations and enhances overall life satisfaction. Russell J.E.A. explained in his study the importance of promoting well-being in the workplace and argued that workplace well-being is not independent but rather complimentary.

Cluster-6 Cross-cultural comparison of SWB

There has been evidence of different cultures having different interpretations of SWB and their different

means of achieving that. The difference in culture results in different interpretations of the meaning and ways of achieving the SWB of employees. This group of articles highlights the same issue and explains the role of different cultures on SWB. Robertson I.T. et al. highlighted the importance of resilience training of employees and their role in improving the mental health and SWB of employees. Steel P. et al. conducted a meta-analysis and demonstrated that the big five personality traits explain a significant job and overall life satisfaction variance. Ariza Montes A. et al. studied the SWB component of the working life of chefs because they undergo extreme work overload and relatively less recognition. They found that chefs are likely to be satisfied with their lives if a minimum level of working conditions is met.

Cluster-7 Self-employment and SWB

In this cluster, only three studies focused on studying the SWB of self-employed people. Berglund V. et al. (2016) found that personality plays a critical role in self-employed people. They argue that individuals scoring high on 'extraversion,' 'agreeableness,' and 'conscientiousness' have higher levels of overall life satisfaction. Another study points out the internal differences in levels of SWB among self-employed people. Johansson Seva I. et al. consider the role of macroeconomic conditions, namely, gender and immigrant status. They found that life satisfaction was higher in self-employed employees than in self-employed without employees. Economic growth was more important for life satisfaction among self-employed people than with other types of employees because they directly impact a country's economic conditions. Also, women were more satisfied with their lives than their male counterparts. Larsson J.P. et al. (2019) further argued that there are also differences in levels of SWB among entrepreneurs. After conducting a comprehensive literature review, they found that more dynamic and impactful entrepreneurship has higher levels of SWB. They also argue that entrepreneurs have higher levels of life satisfaction than other employees, which are opportunities entrepreneurs further drive.

Cluster-8 Happiness and Career Success

This cluster consisted of articles that examined the role of happiness in achieving success in an employee's career. There has been empirical evidence

of interdependence between workplace success and SWB. In another study (Boehm J.K. et al. 2008), it was observed that happiness was an antecedent to workplace success and that initiating positive affect leads to enhanced workplace consequences. Walsh L.C. et al. (2018) further verified this research and added that enhancing positive emotions improves workplace performance. Tenney E.R. et al. (2016) studied various moderators and mediators, determining pathways that establish a relationship between workplace performance and SWB. They are better health, lower absenteeism, greater self-regulation, stronger motivation, enhanced creativity, positive relationships and lower turnover.

4. Conclusion

This paper used Scopus metrics and bibliometric software to conduct a comprehensive analysis. This paper is the first attempt to use bibliometric techniques for analysing the SWB of employees. It makes leading contributions to the subjective well-being literature of employees through a unique combination of different bibliometric techniques. Firstly, Scopus metrics are used to analyse performance by studying leading authors, countries and publications.

The implications of the results of this analysis are explained further by the authors to draw recommendations for managers and employers. Moving a step ahead, the paper has tried to identify research themes and structural connections with the help of the results of bibliographic coupling. A comprehensive content analysis of the 182 articles retrieved was undertaken to evaluate the research done on the SWB of employees so far. There are numerous novel research avenues which need more attention from scholars. For instance, various organisational and individual-level constructs play a crucial role in determining the SWB of employees, such as prosocial motivation, workaholism, etc. Therefore, the SWB of employees is an essential component of working life, and this paper provides future research directions.

4.1 Limitations

Although it has been extensively tried to include each aspect for analysing SWB literature, this study still has certain limitations.

First, we included studies on only business, management and accounting. However, some studies in psychology and sociology could have analysed the SWB of employees. Furthermore, while conducting content analysis through bibliographic coupling, we considered only the top five most cited articles in each cluster. This could have led to leaving out other important works with lower citations. Although Scopus is the largest and the most widely used database by researchers, some papers might have been skipped in other databases such as Google Scholar, EBSCO, Web of Science, etc. Lastly, we do not use conference proceedings and book reviews, another study limitation.

5. Research Directions and Implications

As illustrated throughout the six research questions, multiple avenues for future research directions and implications exist, which are summarised below:

- The growth of Subjective well-being literature
- The dearth of research work in the Indian context in SWB literature
- Identification of important organisational-level and individual-level constraints contributing towards SWB of employees
- The need for more analytic and interpretative reviews
- Using different bibliometric techniques to explore SWB.

5.1. *The growth of Subjective well-being literature*

After the coining of the term “subjective well-being” in 1984, it was not given much attention in the initial years of the 19th century. Happiness was considered the ultimate aim in life, and all philosophers and intellectual scholars gave it importance. However, people realised its significance only after the first half of the 20th century. SWB literature underwent tremendous growth after 2005, and researchers began to publish essential works in this domain. Therefore,

there has been significant growth in this field, which is still growing and evolving.

5.2. *The dearth of research work in the Indian context in SWB literature*

Employee well-being has been researched extensively in the United States of America and European countries. Most publications are seen in USA and UK, followed by China, Australia and Germany. Unfortunately, the lowest number of publications is seen from India. Indian researchers should sincerely acknowledge this finding and start paying more attention. Well-being is a fundamental construct receiving tremendous attention from Western countries. Indian researchers should start realising its importance and contribute new dimensions to it. After the second wave of the COVID-19 pandemic, India has witnessed considerable losses in almost everything. Therefore, well-being is almost necessary if considered from Indian employees’ perspectives.

5.3. *Identification of important organisational-level and individual-level constraints contributing towards SWB of employees.*

After exploring research papers on the SWB of employees, it was found that it has been linked to many organisational and individual-level constraints, such as perceived organisational support, job satisfaction, personality, interpersonal relationships, job autonomy, etc. From analysing pioneer papers on SWB, it was seen that organisational performance and personality are the most researched aspects of employees’ well-being. Therefore, it is essential to explore more sub-fields in these domains. Also, there is a need for exploring other unidentified areas in organisational behaviour and positive psychology, which can play a crucial role in determining the SWB of employees.

5.4. *The need for more analytic and interpretative reviews*

The results of this paper may guide researchers to conduct impactful studies that involve more analytic and interpretative reviews. As identified from the literature, many unexplored areas of employees' SWB call scholars' attention. Also, specific journals can be targeted for undergoing a complete review of all the literature available in a specific domain. For instance, organisation science and the journal of occupational and organisational psychology are the two most cited journals publishing the highest number of studies on SWB of employees. Therefore, these journals can be specifically targeted to produce a more comprehensive picture of SWB.

5.5. *Using different bibliometric techniques to explore SWB.*

This study combines some techniques of both performance analysis and science mapping. In further research, scholars can use other more sophisticated techniques of bibliometric analysis such as co-citation analysis, co-word analysis, clustering based on multi-dimensional scaling, etc. Other visualisation software, such as Bibexcel, Gephi, Pajek, etc, can be explored. This study uses the degree of centrality and betweenness centrality as network metrics. Researchers can use other network metrics also, such as eigenvector centrality, closeness centrality, PageRank, etc. A combination of different techniques can produce more fruitful and appropriate results.

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