ABSTRACT

Bibliometric Analysis of Research on Workplace Well-Being

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Abstract. Well-being of employees is important in determining the long-term effectiveness of an organization. Furthermore, organizations increasingly recognize the need to take the well-being of their employees seriously to experience higher performance and results. Well-being has expanded beyond physical to focus on building a holistic culture, including physical, emotional, financial, social, career, community, and purpose. However, workplace well-being is still evolving, and more research are needed to develop a scientific foundation. By analyzing citation data, this study was able to map out the most important trends and analyze the current state of employee wellbeing in the workplace from 1980 to 2022 using the VOSviewer program. The "Scopus" database was searched for the topic of "workplace well-being," and bibliometric information was collected from the resulting publications. The first search yielded 1,021 publications, which were then reduced using the established criteria. A total of 274 records were located using this method, and analysis of the most-cited papers, most-significant authors, co-citation of references, and sources was performed to find literature on the topic of employee happiness in the workplace. Effectively charting the development of the concept of "workplace well-being" from 1980 to 2022, this study is an important contribution to the field.

Keywords: employees' well-being, human resources management, PRISMA, workplace well-being

INTRODUCTION

Skillsets, social patterns, information availability, and control methods have all been significantly impacted by the widespread adoption of computers and information systems in the workplace [1]. The demands for well-being are increasing, specifically from employees who come from the millennial and Z generations. Long-term survival and expansion of the business will depend on the well-being of its employees. The term "well-being" refers to the state of mind in which one is both physically and mentally healthy, and where one also feels pleasant feelings like joy and satisfaction. Positive relationships, reaching one's full potential, feeling that life has meaning, and being in charge of one's destiny are all components of well-being [2]. This is influence by employees' relationships with coworkers, decisions made, tools, resources accessible, working hours, salaries, and work safety.

Meanwhile, four dimensions of well-being are integrated and the key to creating greater engagement of employees [3]. First, physical well-being is the state of being in good physical

condition and functioning at optimal level despite age, gender, race, ethnicity, religion, sexual orientation, or any other factor that may affect one's health or well-being.

Second, stability in the face of adversity (physical or mental), including the ability to deal with stress and its bad and positive effects, as well as the ability to recover from setbacks such as illness or injury. Third, financial health, the ability to manage money responsibly, set and reach financial objectives, safeguard financial interests, prepare for future opportunities and requirements like college or retirement, and recover from monetary setbacks and emergencies.

Fourth, social well-being, employees' social well-being is tied to their interpersonal skills, their openness to new experiences and perspectives, their willingness to work with people, their capacity to manage problems, and their flexibility in the face of new situations. The concept of connecting is universal, encompassing social interactions in all spheres of life.

Understanding and implementing well-being in the workplace are still evolving. Therefore, more research are needed to develop a scientific basis for employees' well-being. This research aims to map investigation results on employees' well-being in the workplace. First, this Systematic Literature Review (SLR) provides a perspective of workplace well-being by providing an up-to-date, comprehensive SLR of 274 products indexed on Scopus. Second, this research investigates how workplace well-being will impact business practice. Third, it contributes to the human resources management literature by discussing the potential future research trends related to workplace well-being.

METHOD, DATA, AND ANALYSIS

In order to reduce the possibility of bias and increase the credibility of the results, this study used a systematic method to review the relevant literature. Human resources literature reviews on linked well-being themes were evaluated to make sure the process was solid [1], [2]. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines for reporting systematic reviews were then presented. A checklist and a flowchart make up PRISMA, a process for reporting on systematic reviews. Furthermore, it was created in the biological sciences to improve the openness and precision of literature reviews [3].

1. Design the Plan

In this research, six essential stages of methodology initiated by Jesson et al. [4] were as follows:

- define a research question;
- design a plan;
- Search for the literature;
- apply exclusion and inclusion criteria;
- conduct a quality assessment; and
- discuss the results.

2. Define the Research Question

Questions formulated to define the topic, object, and scope of the research guide the work of a systematic review[6]. Accordingly, the following research questions were identified.

RQ1. What is the state-of-the-art academic research on workplace well-being?

- RQ2. How will workplace well-being change business practices?
- RQ3. What are the future research trends related to workplace well-being?

The research aims of the systematic review method are stated in RQ1 and RQ3, while the objective to explore practical and management implications is specified in RQ2.

3. Search for the Literature

Scopus was selected as the primary information source to assure scientific robustness and inclusivity. Meanwhile, "workplace well-being" was used as the keyword to limit the topic, and article, conference paper, book chapter, and book were selected in the final publication stage. These papers were included in the category "business, management, and accounting." To further ensure international understanding and replication of our study, only articles published in English were considered. The Scopus search string was as follows, with no temporal filtering applied:

TITLE-ABS-KEY (workplace AND well-being) AND (LIMIT-TO (PUBSTAGE, "final")) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "cp") OR LIMIT-TO (DOCTYPE, "bk")) AND (LIMIT-TO (SUBJAREA, "BUSI")) AND (LIMIT-TO (LANGUAGE, "English"))

On July 29, 2022, a total of 1,021 documents were retrieved from the database for analysis. There were 1,016 total articles found, but 5 were duplicates.

4. Apply Exclusion and Inclusion Criteria

Articles published in the less than 1 impact factor were excluded in the screening phase. Impact factors and related citation constituted a tool to permanently identify the most critical journals in the scientific communication system and highlight candidates to be included or dropped, given the need to establish a cost-effective Citation Index [7]. After this process, 302 articles were considered relevant to the research questions. In total, 28 papers were not retrieved because they were unavailable from the institution, hence, 274 full-text items were thoroughly analyzed for this review.

5. Conduct Quality Assessment

During the screening phase, papers published in journals with less than 1 impact factor were not excluded. Moreover, as workplace well-being is a recent topic, conference papers and book chapters were included when available.

6. PRISMA Diagram

Steps are shown in Fig. 1 using an adapted PRISMA diagram [3] for a qualitative systematic review. Information is shown flowing through the various stages of a systematic review as depicted by the PRISMA flow diagram. This maps the number of records identified, included, and excluded and the reasons for exclusions.

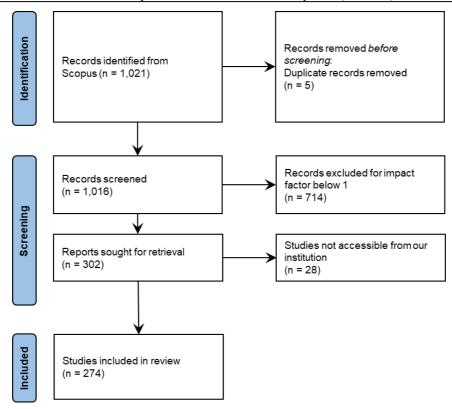


Fig. 1. PRISMA Flow Diagram

7. Bibliometric Mapping/Visualization

Fig. 2 shows the bibliometric subnetwork containing the products included in this research that were most connected (268). This network analysis is based on the connections formed by the literature citations. In the analysis of the citations of the examined publications, bibliographic coupling was conducted using VOSviewer software. This coupling involves measuring the similarity between two publications by identifying the number of references [3]. The sizes of the dots associated with each node represent weights defined by the number of citations made. This method highlights seminal, frequently cited research products. The overlay colors in Fig. 2 provide a visualization based on the publication year for each document.

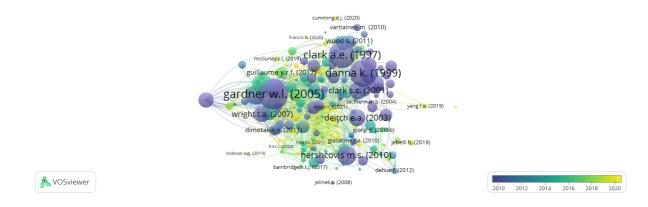


Fig. 2. Bibliometric Network of Included Publications

The co-occurrence analysis is graphically represented in Fig. 3. The number of documents in which two keywords appear in a co-occurrence analysis is used to infer the degree of similarity between the entries. The analysis incorporated search terms from at least five different publications. Similar terms (such "well-being" and "wellbeing," "male" and "female," and "gender") were combined using a thesaurus file. Clusters, groups of keywords with similar connections in a bibliometric network, were created. VOSviewer employs color to signify the cluster to which each node has been assigned, after taking co-occurrence associations into account, to produce this type of bibliometric network representation. Waltman et al. [10] explain the clustering method; a node's importance is determined by how often the associated keyword appears in the document.

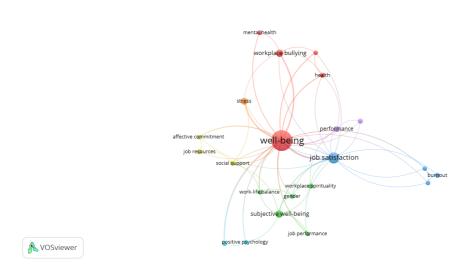


Fig. 3. Co-occurrence analysis of the authors' keywords

8. Analysis Criteria

The application of the exclusion and inclusion criteria detected 274 highly relevant research and accessed the full-text items. Furthermore, the items were read and the critical aspects of the analysis were presented using the VOSviewer output.

RESULT AND DISCUSSION

1. Workplace Well-Being Research Trend

As seen in Fig. 4, there has been an increase in research on workplace well-being in recent years. From 1980 to 2022, there has been an average growth in publications by 30%. The average publication on workplace well-being topics was 9 per year from 1980.

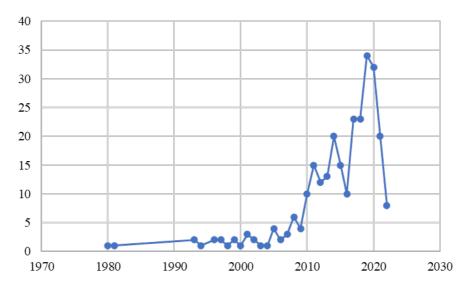


Fig. 4. Workplace Well-Being Research Trend 1980 – 2022

Th five authors with the highest number of citations have been compiled and can be seen in Table 1. Gardner W.L., with two publications published the most on workplace well-being on this list. The article in Table 1 highlighted the need for a good relationship between leader and follower to increase workplace well-being. One of the findings is that heightened levels of follower workplace well-being are the outcomes of authentic leader-follower relationships.

Table 1. Most Influential Authors on Workplace Well-Being

Author	No. of Citation	No. of Publications
Gardner W.L.	996	2
Avolio B.J.	977	1
Luthans F.	977	1
May D.R.	977	1
Walumbwa F.	977	1

Furthermore, Table 2 shows the most productive authors who wrote on workplace well-being. Wood S., had seven publications on workplace well-being and organizational performance. Other research on workplace well-being were centered on job satisfaction, happiness, engagement, inclusivity, and bullying.

Table 2. Most Productive Authors on Workplace Well-Being

Author	No. of Publications	No. of Citation
Wood S.	7	497
De Menezes L.M.	4	453
Alfes K.	4	154
Daniels K.	4	125

Ogbonnaya C. 4 61

In Table 3, the countries that make the most publications related to workplace well-being can be seen. From the table, the United States currently has the highest number of publications.

Country	No. of Publications	No. of Citation
United States	109	6,815
United Kingdom	64	3,403
Australia	32	1,573
Canada	29	1,757
Netherlands	16	1,197

Table 3. Most Productive Country on Workplace Well-Being

2. The Trend of the Research Topic on Workplace Well-Being

Furthermore, to see trends in research topics related to workplace well-being, the analysis was conducted by analyzing the words relevant and appeared the most in the titles, abstracts, and keywords of the publications selected.

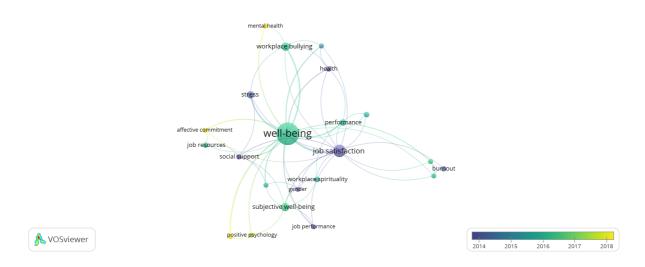


Fig. 5. Co-occurrence Analysis of All Keywords

In the early period, as seen in Fig. 5, several research were conducted on job satisfaction connected to health, social support, and burnout. According to DiPietro et al. [6], some organizations attempt to retain employees by offering higher pay than their competitors. Others try to change their work environment to improve the processes and procedures of

improving the work atmosphere and increasing job satisfaction. Furthermore, job satisfaction is an essential dimension of employees' well-being in its right but is also a desired indicator of organizational success [7]. Research showed that it is a significant predictor of turnover, explaining more variance than the facets (i.e., satisfaction with the work itself, with coworkers, with supervision) considered individually [8]. However, one exciting thing was that women's jobs are worse than men's, but they report higher levels of job satisfaction [9]. Several studies have shown a negative correlation between job satisfaction and stress and drug usage, and a good correlation with marital contentment, health, and well-being [10].

The next period shifted to discussions about work-life balance, gender, workplace bullying, engagement, and emotional exhaustion. The significance of striking a healthy work-life balance has been the subject of increased scrutiny in universities, legislatures, labor laws, and corporations around the world [16]. Increases in job intensity have a negative impact on work-life balance, which is a major societal issue. There is an imbalance, and it's bad for people's health and happiness [17]. In the West, a work-life balance strategy has become an important HR management tool for maximizing employee happiness and productivity [17]. Through recent reforms, efforts to enhance workers' quality of life on the job have been a focal point [19]. The beneficial outcomes of digitization and flexible work arrangements and the unavoidable negative effects they bring should be taken into account [19].

Self-determination and affective commitment theory have emerged as major themes in recent research. Affective commitment has been defined as an employees' emotional bond and involvement with their employer or organization [11]. The beneficial outcomes of digitization and flexible work arrangements and the unavoidable negative effects they bring should be taken into account [20]. The employees that are committed to the company's success tend to remain there [21].

Research in the field of Self-Determination Theory (SDT) consistently demonstrated the importance of the basic psychological needs for autonomy, competence, and relatedness in promoting individuals' well-being [22]. SDT is a theory of motivation where individual pursuit of autonomy, challenge, and enhanced relationships aid well-being [23]. It is a combination of five distinct but interconnected mini-theories of well-being, including (1) aspirations, (2) motivations, and (3) mindfulness to assist the individual in a meeting (4) the three basic needs for autonomy, competence and relatedness, and (5) the context, termed perceived autonomous support (PAS) aids the degree to which individuals can integrate these experiences into a sense of self [24].

CONCLUSION

This research aimed to review the literature on workplace well-being practice and to define potential opportunities for further investigation. As seen from Fig. 5, research on workplace well-being is still minimal, and it is open for further analysis. This current research discusses more emotional well-being, while other dimensions, such as physical, financial, and social have not been elaborated.

From Table 2, the most productive authors only publish seven articles, hence, there are still many opportunities to contribute to this topic. The United States dominates the publication even though every continent and country should have different characteristics in implementing workplace well-being, as shown in Table 3. Furthermore, research on this topic are still predominantly conducted by developed countries such as the United Kingdom, Australia, Canada, and the Netherlands.

This research highlighted the potential future developments related to workplace well-being. Furthermore, the COVID-19 pandemic has far-reaching consequences on the economy, human, social, and environmental systems that support well-being over time. To address these issues, further research on workplace well-being should be conducted by deep diving into the four dimensions.

IMPLICATION/LIMITATION AND SUGGESTIONS

Concerning the limitations, this research was conducted on publications indexed by Scopus. Therefore, significant papers may be indexed in other databases that were not consulted for this analysis. Scopus does not permit the research of a large number of books, book chapters, or non-peer-reviewed papers published on workplace well-being. However, this research has good validity and strict selection for journals with good impact factors, among the possible developments of the practical and theoretical applications.

REFERENCES

- [1] Landy F, Quick JC, Kasl S. Work, stress, and well-being. Int J Stress Manag [Internet]. 1994;1(1):33-73. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-0002326449&doi=10.1007%2FBF01857282&partnerID=40&md5=209741538a075e1baf7122ffe3fb4209
- [2] Ruggeri K, Garcia-Garzon E, Maguire Á, Matz S, Huppert F. Well-being is more than happiness and life satisfaction: A multidimensional analysis of 21 countries. Health Qual Life Outcomes [Internet]. 2020;18(192):1–16. Available from: https://hqlo.biomedcentral.com/track/pdf/10.1186/s12955-020-01423-y.pdf
- [3] Nieboer A, Lindenberg S, Boomsma A, Van Bruggen AC. Dimensions of well-being and their measurement: The Spf-II scale. Soc Indic Res. 2005;73(3):313–53.
- [4] Batat W. The employee experience (EMX) framework for well-being: An agenda for the future. Empl Relations. 2022;44(5):993–1013.
- [5] Dinesh TK, Shetty A, Dhyani VS, T.S S, Dsouza KJ. Effectiveness of mindfulness-based interventions on well-being and work-related stress in the financial sector: A systematic review and meta-analysis protocol. Syst Rev. 2022;11(1):79.
- [6] Page MJ, Moher D, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. PRISMA 2020 explanation and elaboration: Updated guidance and exemplars for reporting systematic reviews. BMJ. 2021;372.
- [7] Jesson J, Matheson L, Lacey FM. Doing your systematic review Traditional and systematic techniques [Internet]. Vol. 3, International Journal of STEM Education. 2011. 193 p. Available from: http://dx.doi.org/10.1186/s40594-016-0036-1
- [8] Booth A, Papaioannou D, Sutton A. Systematic Approaches to a Successful Literature Review. London: SAGE; 2012.
- [9] Reedijk J, Moed HF. Is the impact of journal impact factors decreasing? J Doc. 2008;64(2):183–92.
- [10] Waltman L, van Eck N., Noyons EC. A unified approach to mapping and clustering of bibliometric networks. J Informetr. 2010;4(4):629–35.
- DiPietro RB, Moreo A, Cain L. Well-being, affective commitment and job satisfaction: influences on turnover intentions in casual dining employees. J Hosp Mark Manag [Internet]. 2020;29(2):139–63. A vailable from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85065169062&doi=10.1080%2F19368623.2019.1605956&partnerID=40&md5=1c3abdb204a43d 8f78e68082f36b1706
- [12] de Menezes LM. Job satisfaction and quality management: An empirical analysis. Int J Oper Prod Manag [Internet]. 2012;32(3):308–28. Available from: https://www.scopus.com/inward/record.uri? e i d = 2 s2.0-84856785269&doi=10.1108%2F01443571211212592&partnerID=40&md5=d67166e9293fd648a1 3d180b8f19e500

- [13] Wright TA, Bonett DG. Job satisfaction and psychological well-being as nonadditive predictors of workplace turnove. J Manage [Internet]. 2007;33(2):141–60. Available from: https://www.scopus.com/i n w a r d / r e c o r d . u r i ? e i d = 2 s2.0-34147179368&doi=10.1177%2F0149206306297582&partnerID=40&md5=b42e38b4ceac302f79c b0dce6c09d342
- [14] Clark AE. Job satisfaction and gender: Why are women so happy at work? Labour Econ [Internet]. 1997;4(4):341–72. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-0031536983&doi=10.1016%2FS0927-5371%2897%2900010-9&partnerID=40&md5=8aaf8e0d89 34818a5b529a77d22307d0
- [15] Steel P, Schmidt J, Bosco F, Uggerslev K. The effects of personality on job satisfaction and life satisfaction: A meta-analytic investigation accounting for bandwidth–fidelity and commensurability. Hum Relations [Internet]. 2019;72(2):217–47. Available from: https://www.scopus.com/inward/recommonsurability. https://www.scopus.com/inward/recommonsurability. https://www.scopus.com/inward/recommonsurability. https://www.scopus.com/inward/recommonsurability.html. html. https://www.scopus.com/inward/recommonsurability.html. https://www.scopus.com/inward/recommonsurability.html. html. html
- [16] Akanji B, Mordi C, Simpson R, Adisa TA, Oruh ES. Time biases: exploring the work-life balance of single Nigerian managers and professionals. J Manag Psychol [Internet]. 2020;35(2):57–70. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85080040306&doi=10.1108%2FJMP-12-2018-0537&partnerID=40&md5=82d6ab348c046ea5df3d3808608d2c67
- [17] Törnquist Agosti M, Bringsén Å, Andersson I. The complexity of resources related to work-life balance and well-being–a survey among municipality employees in Sweden. Int J Hum Resour Manag [Internet]. 2017;28(16):2351–74. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85021098940&doi=10.1080%2F09585192.2017.1340323&partnerID=40&md5=6990df01c2df6be cf1c3f9ba33c55d40
- [18] Wong SC -k., Ko A. Exploratory study of understanding hotel employees' perception on work-life balance issues. Int J Hosp Manag [Internet]. 2009;28(2):195–203. Available from: https://wwww.scopus.com/inward/record.uri?eid=2-s2.0-59749096026&doi=10.1016%2Fj.ijhm.2008.07.001&partnerID=40&md5=9c855eac97b6a6d53a1fc5c49a36a557
- [19] Yee RWY, Miquel-Romero M-J, Cruz-Ros S. Work-life management for workforce maintenance: A qualitative comparative study. J Bus Res [Internet]. 2020;121:329–37. Available from: https://wwww.scopuss.com/inward/record.uri?eid=2-s2.0-85091661279&doi=10.1016%2Fj.jbusres.2020.09.029&partnerID=40&md5=e8f33c9a918013116861ec115793dcb6
- [20] Panaccio A, Vandenberghe C. Perceived organizational support, organizational commitment and wellbeing: A longitudinal study. In HEC MONTREAL, 3000 Chemin de la Côte Sainte-Catherine, Montréal, QC H3T 2A7, Canada: Academy of Management; 2009. Available from: https://www.scopus.com/i n w a r d / r e c o r d . u r i ? e i d = 2 s2.0-85088715313&doi=10.5465%2Fambpp.2009.44228413&partnerID=40&md5=497ba991aa9bd715 6ef8181facaad943
- [21] Kirk-Brown A, Van Dijk P. An examination of the role of psychological safety in the relationship between job resources, affective commitment and turnover intentions of Australian employees with chronic illness. Int J Hum Resour Manag [Internet]. 2016;27(14):1626–41. Available from: https://wwww.scopuss.com/inward/recorded are cord.uri?eid=2-s2.0-84936970947&doi=10.1080%2F09585192.2015.1053964&partnerID=40&md5=6a6f84b5b4820c3f2f08f09f228ae9cf
- [22] Huyghebaert-Zouaghi T, Ntoumanis N, Berjot S, Gillet N. Advancing the Conceptualization and Measurement of Psychological Need States: A 3 \times 3 Model Based on Self-Determination Theory. J Career Assess [Internet]. 2021;29(3):396–421. Available from: https://www.scopus.com/inward/reconstruction-10.1177%2F1069072720978792&partnerID=40&md5=7870133f8a06e5b1524e46a36ee4e34d
- [23] Roche M, Haar JM. A metamodel approach towards self-determination theory: A study of New Zealand managers' organizational citizenship behaviours. Int J Hum Resour Manag [Internet]. 2013;24(18):3397–417. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84882253750&doi=10.1080%2F09585192.2013.770779&partnerID=40&md5=e0790dab5799932 e32449bafff2275c4
- [24] Kaeppel K, Grenier RS, Björngard-Basayne E. The F Word: The Role of Women's Friendships in Navigating the Gendered Workplace of Academia. Hum Resour Dev Rev [Internet]. 2020;19(4):362–83.

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