

Bibliometric Analysis of Employee Mental Health

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ABSTRACT

In the modern world of work, employee mental health is very important, especially amidst increasing work pressure, high professional demands, and rapidly changing work environments. Bibliometric methods were used in this study to analyze research trends in employee mental health. VOSviewer was used to analyze the relationship between authors, institutions, and keywords after data were collected from Publish or Perish software accessed from Google Scholar from 2014 to 2024. The results of the analysis showed that subjects such as burnout, work-life balance, and organizational support were the main concerns in academic journals. The impact of the Covid 19 pandemic on employee mental health is discussed in the most appropriate article. Three main clusters emerged from the VOSviewer visualization: (1) burnout and mental health, (2) employees and evaluation, and (3) COVID-19 and the pandemic. As this study shows, cooperation between researchers and institutions has grown, but there are still opportunities for further research, especially on understudied topics such as burnout and meta-analysis. It is hoped that these findings will help policy makers and human resource practitioners create evidence-based strategies and policies to improve employees' mental well-being in the workplace.

Keywords: *Employee Mental Health, Workplace Productivity, Stress Management, Organizational Support, Employee Well-being*

1. INTRODUCTION

Employee mental health has become the center of attention in the world of work. Due to increasing work pressures, professional demands, and rapidly changing organizational environments, more and more employees are experiencing stress, burnout, and other psychological disorders [16]. According to the World Health Organization (WHO) report, mental health problems in the workplace will reduce productivity and can increase absenteeism and employee turnover rates [19]. Therefore, research on employee mental health is crucial for academics, human resource practitioners, and policy makers to create a healthy as well as productive work environment.

As research interest in employee mental health increases, more and more scientific journals are being published on matters such as work-life balance, social support, and company policies [12]. Although publications continue to emerge, there are still gaps in the understanding of the development of this research worldwide. Therefore, a systematic strategy is needed to analyze trends in employee mental health research.

A quantitative analysis known as a bibliometric approach allows researchers to discover publication patterns, citation trends, and intellectual connections between research in a particular field [6]. With the help of software such as vosviewer or public or perish, bibliographic analysis can generate a research network to identify and understand the most influential journals and understand how the topic of employee mental health has evolved over the past few years [17]. It provides deeper insights into the development of mental health research for workplace employees, including the most researched and collaborations between researchers from different countries.

Several previous studies have used bibliometric analysis to understand trends in work psychology and employee well-being studies. For example, research [3] found that employee psychological health issues in the context of the Covid-19 pandemic are increasingly being discussed. In addition, another study [7] showed that work stress and burnout-related studies usually concentrate on certain factors. These factors can be divided into situational factors and individual factors. Situational factors include work requirements such as role championship, conflict, stress, stressful events, workload, and work pressure. Resources can lead to burnout and depersonalization despite the fact that the balance between workplace requirements and job resources greatly impacts burnout and cynicism, and a stronger relationship with sense reduction. Organizational attitudes also developed a moderate to strong relationship with burnout, and workplace management and support for workplace support were negatively associated with burnout.

By conducting a bibliometric analysis of employee mental health research, this study aims to identify the most important trends, the most frequently cited journals, and the key concepts that frequently appear in the academic literature. In addition, this study examines how collaboration between research and development has evolved in this research and whether there are specific geographical patterns in scientific publications related to employee mental health. The results of this study are intended to help practitioners understand future research directions and develop more effective guidelines for improving employee well-being.

Thus, this study provides an in-depth insight into the global employee mental health research landscape. We hope that the results of this study will not only help scholars to understand the development of research in this area, but also provide useful recommendations for organizations to develop guidelines that address mental health issues in the workplace.

2. LITERATURE REVIEW

Employee mental health refers to the psychological well-being of employees and includes factors such as stress, fear, depression, job satisfaction, and work-life balance [5].

2.1 *The Influence of Technology on Employee Mental Health*

Technology is a tool that is never missed by every individual from various circles, from young to old. Many conveniences can be done through an innovation called technology, so that it has a very significant impact in every field including in the health sector where the influence that occurs is one of them on the mental health of each individual [1].

2.2 *Work-Life Balance and Its Impact on Mental Health*

Work-life balance is the synergy between the family and the workplace, thereby improving the quality of both, and is associated with the combination of the family centrally in the organizational field, thereby finding employee engagement [13].

2.3 *Organizational Factors and Their Impact on Mental Health*

Organizations play an important role in the psychological state of employees. Unpleasant organizational factors such as workload, lack of social support, inadequate leadership, role ambiguity, and imbalance in work life can lead to employee stress and burnout. Effects include reduced psychological wellbeing, productivity, and job satisfaction.

3. METHODS

The researcher evaluated the literature related to employee mental health using a bibliometric analysis approach. The researcher chose this method because of its ability to provide capturing insights into research trends, collaboration patterns, and topic developments in this field. The data collection process began by using Publish or Perish software, starting with the researcher entering the keyword “Employee Mental Health” to search for relevant publications. We used the Google Scholar database, which is well-known as a comprehensive source of academic data. Then the researcher set the criteria for publication years published between 2014 and 2024 and only journal articles that went through the peer-review process. Once the data was obtained, we exported the search results in CSV format for further analysis.

Next, the data was analyzed using VOSviewer, which was used to create bibliometric network maps. Data exported from Publish or Perish is imported into VOSviewer, so that researchers can visualize the relationship between authors, institutions, and keywords. The resulting network map will provide an overview of the collaboration between authors and institutions, VOSviewer, so that researchers can visualize the relationship between authors, institutions, and keywords. The resulting network map will provide an overview of the collaboration between authors and institutions, as well as the frequency of keywords that appear in publications. In this way, we were able to identify key themes covered in the literature and rising trends in employee mental health research. We evaluated the number of citations of each article analyzed to ensure the quality and relevance of the data. In addition, a critique of the existing literature was conducted to identify gaps in the research and areas that need further investigation.

To promote understanding, the results of the bibliographic analysis are shown in tables and graphs. The table shows the number of publications, lead authors, and most contributing institutions, while the network map diagram shows collaborations between authors and institutions and trends in keywords appearing in publications. This study is expected to provide deep insights into employee mental health and its impact on productivity through this bibliographic analysis method. In addition, this research is expected to inform workplace practices that support employee mental health.

4. RESULTS AND DISCUSSION

The findings show that the article by [9] and the article titled Employee Mental Health: Stressors, Moderators, and Agenda Organizational Measures with a total of 707 citations were the most frequently cited articles. The most commonly cited article was [8], with the title effect of mindfulness-based reducing employee mental health stress. There were a total of 653 citations in the systematic review.

After accounting for citation frequency and other metrics, the researcher exited the Pop application and switched to analyzing in the VOSviewer app. It was used for three different visualizations: network visualization, overlay visualization, and density visualization.

Table 1. Top 10 Articles Identified by PoP (Unrefined Search)

Author	Title	Cited by
[2]	Organizational climate and employee mental health outcomes: A systematic review of studies in health care organizations	266
[10]	Organizational change and employee mental health	82
[14]	Optimising employee mental health: The relationship between intrinsic need satisfaction, job crafting, and employee well-being	513
[15]	Trends in effectiveness of organizational eHealth interventions in addressing employee mental health: systematic review and meta-analysis	31
[4]	Work stress, mental health, and employee performance	106
[8]	Effects of Mindfulness-Based Stress Reduction on employees' mental health: A systematic review	653

[9]	COVID-19 and employees' mental health: stressors, moderators and agenda for organizational actions	707
[20]	Impacts of the COVID-19 pandemic on employees' work stress, well- being, mental health, organizational citizenship behavior, and employee-customer identification	429
[11]	The mental health benefits of employment: Result of a systematic meta-review	500
[21]	Workplace violence toward mental healthcare workers employed in psychiatric wards	179

After the data was analyzed in the VOSviewer application, the researcher got the final results as there were three clusters. The first cluster in red is burnout, mental health, meta analysis, relationship, systematic review. With occurrences values of 11, 129, 14, 14, and 22 respectively. The second cluster in green is employee, review, work. With occurrences values of 81, 23, and 23 respectively. The third cluster in blue is covid, pandemic. With occurrences values of 45 and 20 respectively.

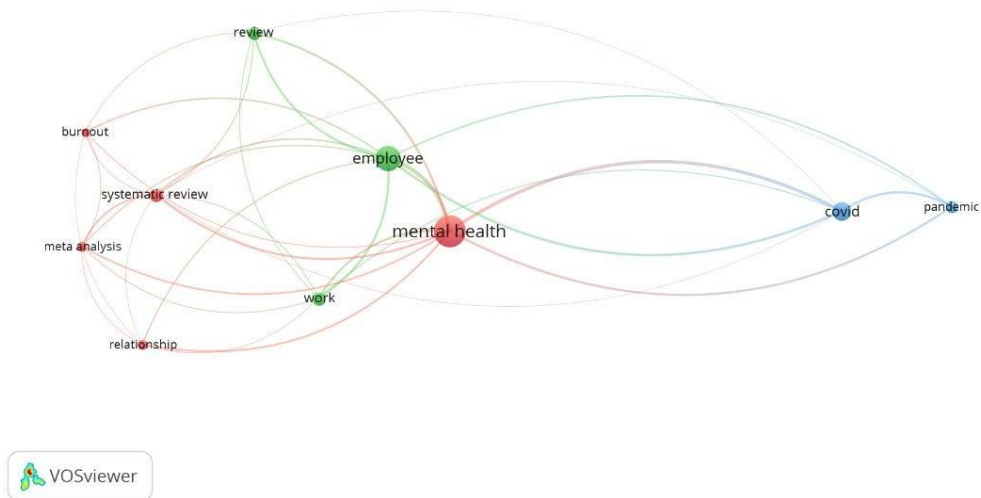


Figure 1. Visualization of The Research Trend Map (Network Visualization)

With the overlay network (Figure 1), we can see that the focus of research on systematic review topics was published in 2017, while research on employee and mental health topics was published in 2018. This can be seen from the colors displayed from blue (lowest score) to yellow (highest score) [18].

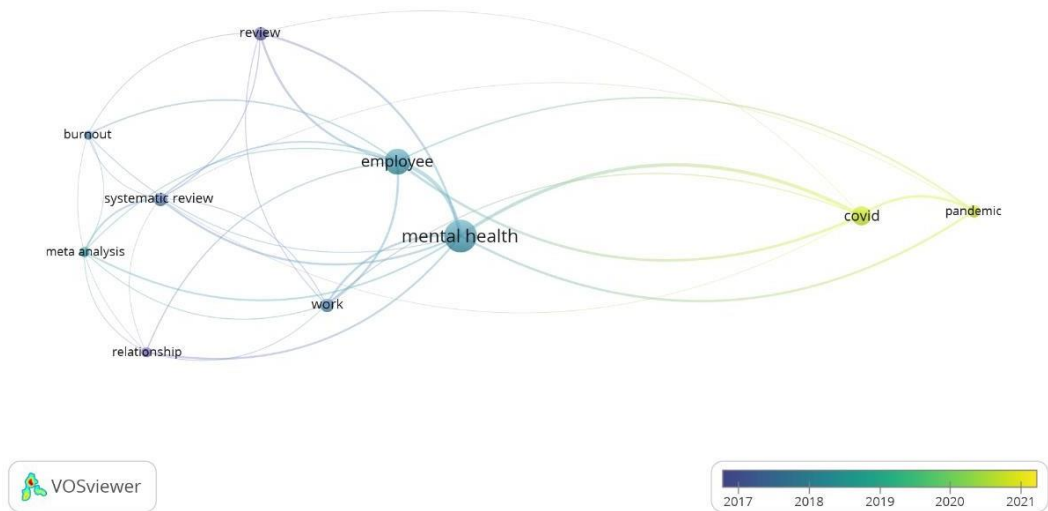


Figure 2. Research Trend Map Visualization (Overlay Visualization)

Each point in the density visualization has a color that indicates the density of the element at this point. By default, colors range from blue to green to yellow. The analysis results that we can see (Figure 2) for topics that are still little discussed are burnout (total link strength 17), relationships (total link strength 23), and meta analysis (total link strength 31).

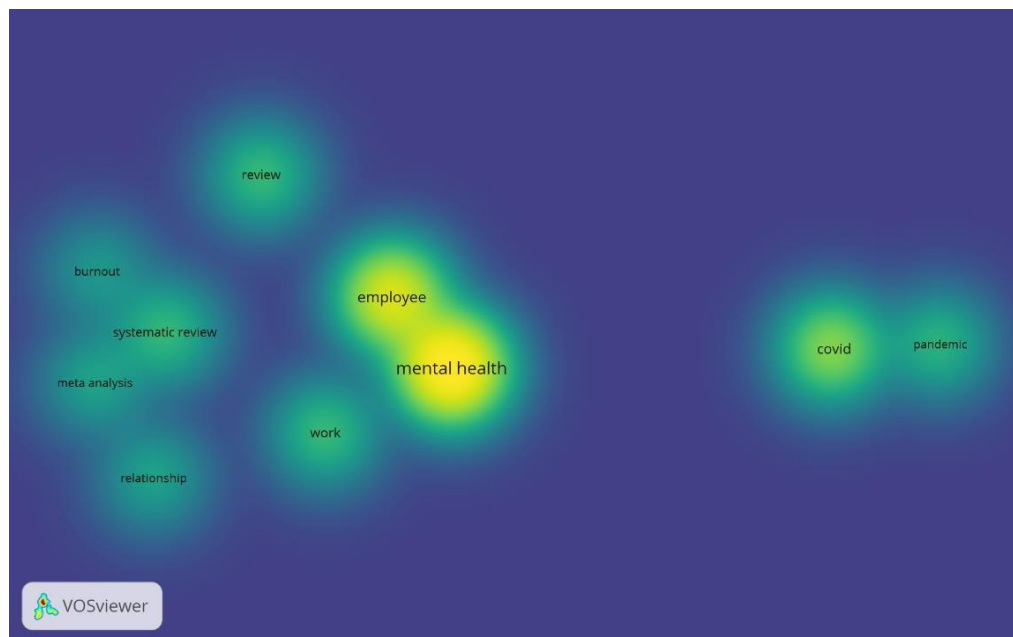


Figure 3: Research Trend Map Visualization (Density Visualization)

The above density display mode shows that the bright yellow color dominates mental health and employee research. The lighter the color, the more research. There is little research on COVID-19, pandemic, burnout, review, systematic, work, and relationships. With the results of this analysis, there are new opportunities to conduct research on these topics.

CONCLUSION

In this section, the research results are explained in accordance with the research objectives. The following conclusions can be drawn from the research conducted. Based on the results above, we can conclude that the number of publications related to employee mental health will increase from 2014 to 2024. This increase is even more pronounced with the Covid 19 pandemic, which has brought attention to mental health issues in the workplace.

The article "COVID-19 and employee mental health: stressors, moderators, and organizational action agenda" was the most cited with 707, followed by the article "Effects of Mindfulness-Based Stress Reduction on employee mental health: A systematic review" with 653. This shows that the effects of the pandemic and psychological treatments have become a big issue.

The results of the VOSviewer visualization show three main clusters found in this study. While the blue cluster concentrates on the COVID-19 pandemic and diseases, the red cluster concentrates on issues such as burnout, meta-analysis, and systematic reviews. The most obvious keywords, such as mental health and employees, featured in many studies, while more abstract themes, such as stress, relationships, and meta-analysis, featured. This suggests that these topics are still rarely talked about.

Therefore, there is a great opportunity for more in-depth research on issues such as burnout, relationships, and meta-analysis techniques relating to employee mental health. Based on these findings, researchers will focus their research on these topics. This is due to the fact that gaining a broader understanding of how to support corporate policies and employee well-being in the modern work environment is crucial.

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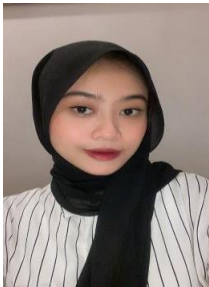
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REFERENCES

- [1] Affarel, M. W., Mulyana, A., & Amalia, M. (2024). Pengaruh teknologi terhadap kesehatan mental: Perspektif hukum. *Jurnal Hukum Kesehatan Indonesia*, 4(1), 1–8. <https://doi.org/10.31893/jhki.v4i1.106>.
- [2] Bronkhorst, B., Tummers, L., Steijn, B., & Vijverberg, D. (2015). Organizational climate and employee mental health outcomes: A systematic review of studies in health care organizations. *Health Care Management Review*, 40(3), 254–271. <https://doi.org/10.1097/HMR.000000000000026>
- [3] Brodeur, A., & Wright, T. (2021). Health anxiety versus economic anxiety surrounding COVID-19: An analysis of search engine trends in the United States. *Social Sciences & Humanities Open*, 4(1), 100078. <https://doi.org/10.1016/j.ssaho.2021.100078>.
- [4] Chen, B., Wang, L., Li, B., & Liu, W. (2022). Work stress, mental health, and employee performance. *Frontiers in Psychology*, 13, 1006580. <https://doi.org/10.3389/fpsyg.2022.1006580>
- [5] Divyakala, C., & Vasumathi, A. (2023). Tracing the threads: A bibliometric exploration of workplace bullying, psychological well-being, and employee performance. *Multidisciplinary Reviews*, 7(3), e2024056. <https://doi.org/10.31893/multirev.2024056>
- [6] Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>.
- [7] Go'o, M. A. L., Andjarwati, T., & Ridwan, M. S. (2024). Pengaruh self-efficacy, kualitas sumber daya manusia, dan resiliensi terhadap burnout dan kinerja karyawan di PT Penaraya Valencia Jakarta Timur. *Transekonomika: Akuntansi, Bisnis dan Keuangan*, 4(4), 123–140. <https://doi.org/10.55047/transekonomika.v4i4.689>.
- [8] Janssen, M., Heerkens, Y., Kuijer, W., van der Heijden, B., & Engels, J. (2018). Effects of Mindfulness-Based Stress Reduction on employees' mental health: A systematic review. *PLOS ONE*, 13(1), e0191332. <https://doi.org/10.1371/journal.pone.0191332>.
- [9] Khan, M. A., & Khan, M. A. (2023). COVID-19 and employees' mental health: Stressors, moderators, and agenda for organizational actions. *Employee Relations*, 45(5), 1187–1205. <https://doi.org/10.1108/EOR-02-2023-0004>.
- [10] Kuvaas, B., & Dysvik, A. (2010). Organizational change and employee mental health. *International Journal of Human Resource Management*, 21(10), 1836–1853. <https://doi.org/10.1080/09585192.2010.500283>.
- [11] Modini, M., Joyce, S., Mykletun, A., Christensen, H., Bryant, R. A., Mitchell, P. B., & Harvey, S. B. (2016). The mental health benefits of employment: Results of a systematic meta-review. *Australasian Psychiatry*, 24(4), 331–336. <https://doi.org/10.1177/1039856215618523>.
- [12] Montano, D., Hoven, H., & Siegrist, J. (2014). Effects of organisational-level interventions at work on employees' health: A systematic review. *BMC Public Health*, 14, 135. <https://doi.org/10.1186/1471-2458-14-135>.
- [13] Rahmi, F. (2021). Peran work-life balance terhadap psychological well-being pegawai yang bekerja selama new normal covid-19. *Jurnal Psikologi*, 17(2), 182–193.
- [14] Slemp, G. R., & Vella-Brodrick, D. A. (2014). Optimising employee mental health: The relationship between intrinsic need satisfaction, job crafting, and employee well-being. *Journal of Happiness Studies*, 15(4), 957–977. <https://doi.org/10.1007/s10902-013-9458-3>.
- [15] Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior*, 36(S1), S72–S103. <https://doi.org/10.1002/job.1924>.
- [16] Stratton, E., Lampit, A., Choi, I., Malmberg Gavelin, H., Aji, M., Taylor, J., Calvo, R. A., Harvey, S. B., & Glozier, N. (2022). Trends in effectiveness of organizational eHealth interventions in addressing employee mental health: Systematic review and meta-analysis. *Journal of Medical Internet Research*, 24(9), e37776. <https://doi.org/10.2196/37776>.
- [17] Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>.
- [18] Van Eck, N. J., & Waltman, L. (2021). VOSviewer manual (version 1.6.1). Centre for Science and Technology Studies (CWTS), Leiden University. Retrieved from https://www.vosviewer.com/documentation/Manual_VOSviewer_1.6.1.pdf.
- [19] World Health Organization. (2024, September 2). Mental health at work. <https://www.who.int/news-room/fact-sheets/detail/mental-health-at-work>.
- [20] Yu, J., Park, J., & Hyun, S. S. (2021). Impacts of the COVID-19 pandemic on employees' work stress, well-being, mental health, organizational citizenship behavior, and employee–customer identification. *Journal of Hospitality Marketing & Management*, 30(5), 529–548. <https://doi.org/10.1080/19368623.2021.1867283>.

- [21] Zhang, L., Li, X., & Zhang, Y. (2017). Workplace violence toward mental healthcare workers employed in psychiatric inpatient wards in China. *International Journal of Nursing Sciences*, 4(1), 12–17. <https://doi.org/10.1016/j.ijnss.2017.01.002>

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