Bibliometric Analysis of Mindfulness in Work-Setting

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ABSTRACT

Research on mindfulness has developed in recent years. This study aims to investigate the trends in existing studies of mindfulness in work-setting in three time periods from 2012-2021. This study used bibliometric analysis with the Scopus database and further analysis used VOSViewer with keyword co-occurrence analysis to reveal current research topics and future research opportunities related to mindfulness in work-setting. The results show that research on mindfulness in work-setting has increased significantly in 2018-2019 from eight articles to 31 articles. Mindfulness (17 articles) and Frontiers in Psychology (9 articles) are the most prolific journals that published research on mindfulness in work-setting. Furthermore, the research topics of mindfulness in work-setting are growing based on three periods from 2012-2021 using high-density keywords. Therefore, this study provides future research on mindfulness in work-setting.

Keywords: Bibliometric analysis, Mindfulness, Work-setting, Workplace, VOSviewer.

1. INTRODUCTION

Research on mindfulness has developed in recent years. Mindfulness is defined as "a receptive attention to and awareness of internal and external experiences as they occur" [1]. Mindfulness has provided many benefits for employees and organizations. Mindfulness can reduce perceived stress [1]. Mindfulness has a positive effect on work-family balance [2]. Mindfulness was also found to have a positive effect on affective commitment [3]. Mindfulness research in the health field is in its mature phase, while mindfulness in the context of work-setting still needs further development. Glomb et al. [4] explains the need for mindfulness research in a work context, as most mindfulness research is conducted outside the work environment and therefore cannot be generalized to a workplace context. This was also expressed by Dane and Brummel [5] that mindfulness has provided a number of benefits, but mindfulness research from a workplace perspective still requires further research. Based on Glomb et al. [4] and Dane and Brummel [5], then we need a bibliometric analysis to see the development of mindfulness studies in the context of a work setting or workplace. Bibliometric emphasizes the statistics and trends of the domain under review [6]. In addition, bibliometric also provides statistical analysis based on methods such as citation relationships, co-occurrence relationships, and topic-based approaches [7]. Therefore, the aim of this paper is to review the existing literature on mindfulness in work-settings. This bibliometric paper of mindfulness in work-setting includes three research questions, namely what is the publication trend of mindfulness in work-setting? (RQ1), what are the journals that published the articles on selected topics? (RQ2), and what research has been done on the topic and the research agenda for the future (RQ3).

2. LITERATURE REVIEW

Mindfulness can be viewed as a state, trait, and practice. Mindfulness as a state explains that mindfulness as a state of awareness, which then each individual experiences a different state of mindfulness and this leads to a tendency that mindfulness is a trait [4]. Mindfulness as a practice provides benefits for employees in the form of mindfulness training, namely MBSR (*Mindfulness-*

Based Stress Reduction) [4]. Mindfulness is also defined as "a receptive attention to and awareness of present events and experiences" [8]. Another definition of mindfulness is "a psychological state in which one focuses attention on events occurring in the present moment" [5]. Mindfulness has four facets, namely awareness, attention, present focus, and acceptance [9]. Mindfulness training and practice creates awareness, whereas attention is defined as the process of focusing awareness on the present experience over a long period of time [9]. Present focus can be interpreted as positioning the mind to exist in the present time, while acceptance is defined as the acceptance of the reality that is happening in the present [9].

3. METHODOLOGY

This study uses bibliometric analysis. Bibliometric is an approach taken to understand research trends and review literature in a particular field. Data was taken using the Scopus database. The selection of the Scopus database is because Scopus has a list of quality journals with a wider scope for review [6]. The steps taken in the search strategy are database search, scholarly filtration, language filtration, and subject filtration [10]. This search strategy does not limit the range of years of research to get a wider scope. First, database search, we use the Scopus database by entering the term "mindfulness" in the title with keywords or abstract using "mindfulness" AND "work-setting" OR

"workplace" OR "workplace mindfulness". Based on the initial search obtained 293 articles. Second, scholarly filtration, we only selected journal articles so that 233 articles were obtained. Third, language filtration, we only selected journal articles that used English so that 228 articles were obtained. Fourth, subject filtration, we chose the fields of psychology and business, accounting, and management so as to produce 131 articles. A total of 131 articles will then be further analyzed using VOSviewer [11] with keyword co-occurrence analysis to understand current topic trends and future research opportunities.

4. RESULTS

4.1 Publication Trends (Number of Publications)

Research on mindfulness in the context of work-setting or workplace shows fluctuations every year, but in general it has increased significantly. Mindfulness studies in the context of work-setting have not been conducted significantly in 2012. Then, in 2018-2019, studies on this topic experienced the most significant development with the highest number of articles in those years (from 8 articles to 31 articles). The number of publications for 2012-2021 can be seen in Figure 1.
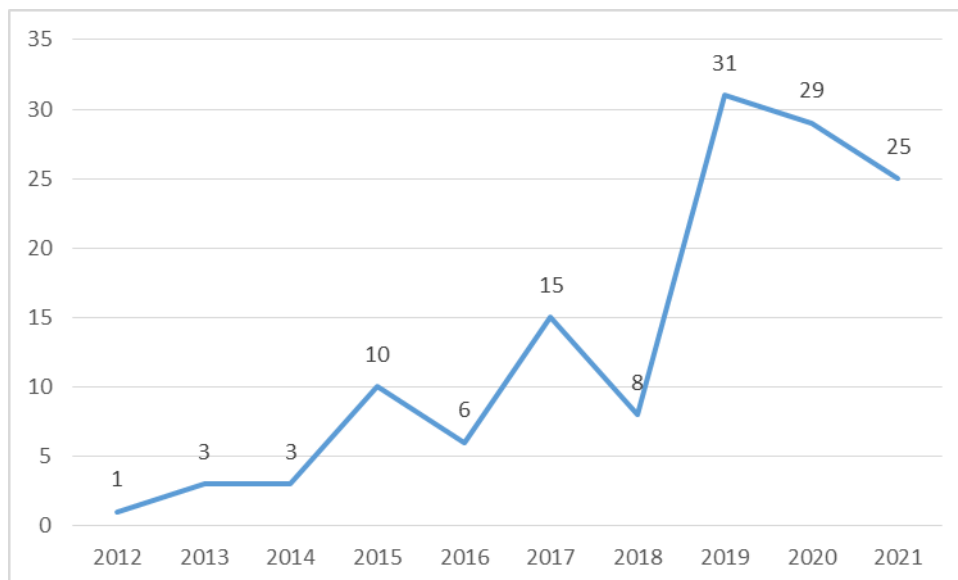

Figure 1. Publication Trend of Mindfulness in Work-Setting from 2012 to 2021

4.2 Publication Source

Based on publication sources, a total of 131 articles were obtained which were distributed in various Scopus indexed journals. The top seven journals that publish the most articles on mindfulness in the context of work-setting are Mindfulness, Frontiers in Psychology, Journal of Occupational Health Psychology, Journal of Applied Psychology, Current Psychology, Journal of Business and Psychology, Journal of Business and Psychology, and Organizational Behavior and Human Decision Processes (Figure 2). Mindfulness is the journal that publishes the most mindfulness topics in work-setting with 17 articles, while Frontiers in Psychology publishes 9 articles.

Figure 2. Top Seven Journals that Published the Articles on the Selected Topic

4.3 Topics

Identification of current and future research topics related to mindfulness in work-setting using density distribution of the keyword co-occurrence analysis. A keyword co-occurrence analysis uses all keywords from 131 articles to understand current topics related to mindfulness in work-setting and future research opportunities. The density map of the keyword co-occurrence is shown in Figure 3. Based on Figure 3, the redder the color of the node, the more important the keywords are regarding mindfulness in work-setting.

Figure 3. Keyword Co-Occurrence Analysis Using Network Density Distribution
(2012-2021)

The distribution of co-occurrence keywords is grouped into three time periods, namely the first period 2012-2014, the second period 2015-2018, and the third period 2019-2021. The first period, 2012-2014, identified by high density keywords is shown in Table 1. Based on Table 1, mindfulness in work-setting was associated with depression (in 2012) while in 2013, mindfulness was associated with leadership, and then in 2014, the association between mindfulness and awareness and burnout was growing.

Table 1. High-Density Keywords (2012-2014)

Years	Keywords
2012	Depression
2013	Leadership
2014	Awareness and burnout

The second period (2015-2018) regarding mindfulness in work-setting shows a growing trend even though it is volatile. High density keywords (2015-2018) are shown in Table 2. In 2015, the topics of organizational justice, performance, well-being, and emotion became the main topics compared to other topics. However, in 2016, the topic of burnout became the single most interesting topic to research. In 2017, the topics developed were not only focused on burnout, but also included emotional intelligence, workplace, sleep, affect, and compassion. Then, in 2018, workplace aggression, workplace, resilience, stress became topics with high-density keyword co-occurrence.

Table 2. High-Density Keywords (2015-2018)

Years	Keywords
2015	Organizational justice, performance, well-being, emotion
2016	Burnout
2017	Emotional intelligence, workplace, sleep, burnout, affect, compassion
2018	Workplace aggression, workplace, resilience, stress

The third period is 2019-2021. The density distribution of keyword co-occurrence analysis describes the main topics in 2019, 2020, and 2021. High-density keywords (2019-2021) are indicated by the color of the nodes getting redder. Table 3 shows high-density keywords (2019-2021). The topic of mindfulness studies in work-setting is increasingly varied and evolving. In 2019, mindfulness research experienced very significant developments covering the main topics of mindfulness at workplace, stress, well-being, task performance, coping, and anxiety. Research topics in 2020 show that the topics developed are increasingly varied, including leadership development, performance, personality, organizational justice, 360 assessment, emotional intelligence, burnout, personality, stress, insomnia, satisfaction, and experimental studies. Leadership topics related to mindfulness began to develop in 2020 until 2021. High-density keywords in 2021 are leadership, stress, workplace, job satisfaction, well-being, mindfulness at the workplace, mindfulness-based intervention, emotional intelligence, compassion, and resilience.

Table 3. High-Density Keywords (2019-2021)

Years	Keywords
2019	Mindfulness at workplace, stress, well-being, task performance, coping, anxiety
2020	Leadership development, performance, personality, organizational justice, 360 assessment, emotional intelligence, burnout, personality, stress, insomnia, satisfaction, experimental study
2021	Leadership, stress, workplace, job satisfaction, well-being, mindfulness at the workplace, mindfulness-based intervention, emotional intelligence, compassion, resilience.

Future research opportunities related to mindfulness in work-setting can be identified by keyword co-occurrence analysis. Figure 3 shows the blue areas that indicate that mindfulness research on the topic is still limited. Some topics that can be research opportunities are group level, authentic leadership, servant leadership, mindfulness leadership, innovation, work engagement, emotional exhaustion, employee performance, high-reliability organization, psychological capital, affective commitment, workplace spirituality, human resource development, mindfulness training, and ethical climate. The topic is still in the growth stage. The topic of mindfulness at the group level still requires further research development. As Yu and Zellmer-Bruhn [12] introduces the definition of team mindfulness, measurement of team mindfulness, and the relationship between team mindfulness and conflict. Mindfulness in work-setting is also interesting to study related to leadership. Research on leadership is also still in the blue area which still requires research development. Other studies that can be related to various outcomes of mindfulness in work-setting are innovation, work engagement, emotional exhaustion, and employee performance. Then, workplace spirituality, human resource development, mindfulness training, and ethical climate are expected to lead to mindfulness in work-setting. Furthermore, mindfulness also has a relationship with high-reliability organizations (HROs), namely organizations that work in high-risk environments and try to prevent catastrophic failures. Identifying various research topics related to mindfulness can help fill existing research gaps so that mindfulness research in work-setting is growing.

5. CONCLUSIONS

This study reviewed 131 articles on the topic of mindfulness in work settings, using the Scopus database to identify research trends, article sources, and research themes. The bibliometric analysis revealed conclusions and a future research agenda. First, the study found that the research trend of mindfulness in work-settings is growing significantly while the trends are inclined from 2019-2021. Second, the most prolific journals that have published on the chosen topic are Mindfulness and Frontiers in Psychology. Third, regarding the research topics, this study classified the topics into three periods, each of which has its own topics. Also, this study found that research topics for future research include group level, leadership, innovation, work engagement, emotional exhaustion, employee performance, high-reliability organization, psychological capital, affective commitment,

workplace spirituality, human resource development, mindfulness training, and ethical climate.

This study also has limitations. The study mainly used the Scopus database, while future studies should use a combination of other databases to extend the keywords. Then, other types of publications should be considered to extend the scope of the literature reviewed. However, the findings of this study can be used to guide future research on mindfulness in the workplace.

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