Tracing the threads: A bibliometric exploration of workplace bullying, psychological well-being, and employee performance

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Abstract This study provides a comprehensive bibliometric analysis that offers a quantitative and integrative examination of the research on workplace bullying, psychological well-being, and employee performance. Understanding the relationships among workplace bullying, psychological well-being, and job performance is critical for organizations to create a positive and healthy work environment. A review of the literature using bibliometric methods was performed on papers within the WoS database to analyze the research landscape regarding workplace bullying, psychological well-being, and job performance. Diverse analytical techniques were utilized, including citation analysis, cocitation analysis, coauthorship analysis, co-occurrence analysis, and bibliographic coupling, and the findings are presented. An analysis of citations, cooccurrences, and keyword cooccurrences in the field identified highly cited publications and key themes: positive psychology and well-being, mental health therapy and intervention, and gender differences in work. These insights can guide researchers in recognizing influential works, understanding collaboration patterns, and exploring emerging research areas. Ultimately, the direction and impact of future studies in the field should be enhanced. This study has practical implications for organizations by synthesizing existing knowledge and guiding the development of interventions and policies to address workplace bullying, enhance psychological well-being, and improve performance. The novelty of this study lies in its comprehensive bibliometric analysis, which offers a quantitative and integrative examination of the research on workplace bullying, psychological well-being, and job performance. By mapping the intellectual structure, identifying trends, and uncovering research gaps, this study provides a unique perspective on the interrelatedness of these constructs.

Keywords: workplace bullying, performance, organization, psychological well-being, bibliometric analysis

1. Introduction

The workplace environment plays an important role in employee well-being and performance (Setyoko & Negative, 2022). Many academic researchers have highlighted various stressors related to the work environment that affect the mental and physical health of workers, such as work pressure, redundancy, workload, job insecurity, workplace bullying, and harassment (Leymann, 1996). Among all the stressors, however, workplace bullying has a far more severe impact on workers than all the other types of work-related stress combined (Einarsen, 1999). This event drew the attention of the academic community to the European working population in the 1990s (Einarsen, 1999), and research conducted over the past two decades shows that bullying is not limited to certain regions or professions but is also a global problem. In the UK, one in 10 workers has experienced workplace bullying (Hoel et al., 2001). Workplace bullying refers to repeated harassment, annoyance, social exclusion, or purposeful attack by a person at work through negative actions over an extended period of time (Ågotnes et al., 2018). This negativity destroys employee morale, which in turn leads to lower employee productivity, job loss, and disengagement, which ultimately affects company performance and financial projections (Escartín et al., 2019). It is therefore plausible to claim that mobbing endangers the existence of a healthy and creative workforce and thus leads to lower productivity in the company (Chirico et al., 2021). Bullying has been shown to cause high costs in terms of organizational losses (Rayner & Hoel, 1997).

Understanding the relationships among workplace bullying, psychological well-being, and job performance is critical for organizations to create a positive and healthy work environment. Research has shown that addressing workplace bullying can lead to improved employee well-being and performance. By implementing preventative measures, promoting a supportive and inclusive culture, and providing resources for intervention and support, organizations can mitigate the negative effects of workplace bullying on employees’ psychological well-being and enhance their performance.

Efforts to combat workplace bullying should go beyond reactive measures and focus on fostering a culture of respect, empathy, and open communication (Mathisen et al., 2008). Creating awareness among employees and managers about the
signs and consequences of bullying, establishing clear policies and procedures for reporting incidents, and providing training on conflict resolution and respectful workplace behavior are essential steps in effectively preventing and addressing workplace bullying (Farley et al., 2023).

Organizations that prioritize the psychological well-being of their employees and actively address workplace bullying are likely to see positive outcomes in terms of increased employee engagement, satisfaction, and performance (Akter, 2019). By creating a supportive and respectful work environment, organizations can promote psychological well-being, foster healthy interpersonal relationships, and unlock the full potential of their workforce.

The novelty of this study lies in its comprehensive bibliometric analysis, which offers a quantitative and integrative examination of the research on workplace bullying, psychological well-being, and job performance. By mapping the intellectual structure, identifying trends, and uncovering research gaps, this study provides a unique perspective on the interconnectedness of these constructs. Additionally, this study has practical implications for organizations by synthesizing existing knowledge and guiding the development of interventions and policies to address workplace bullying, enhance psychological well-being, and improve performance.

1.1. Research gap

Although the literature extensively explores the impact of workplace bullying on psychological well-being and performance, there appears to be a research gap in comprehensive bibliometric analysis that integrates these dimensions. Research often focuses on one aspect in isolation, lacking a holistic examination that considers the interconnectedness of workplace bullying, psychological well-being, and performance through bibliometric methods.

1.2. Research questions

1. How has the publication trend in research on workplace bullying, psychological well-being, and performance evolved from 1997 to 2023, and what factors contribute to the observed growth in scholarly activity?
2. What are the key characteristics and features of the top 25 journals publishing in the field, and how do their publication patterns and citations impact the dissemination of knowledge in the areas of workplace bullying, psychological well-being, and performance?
3. How can highly cited articles and influential publications identified through citation and cocitation analysis provide insights into the critical themes and research directions within the domains of workplace bullying, psychological well-being, and performance?
4. What are the prevailing themes and research foci within the field, as revealed by keyword co-occurrence analysis, and how do these themes contribute to a deeper understanding of the intellectual structure and knowledge landscape in the context of workplace bullying, psychological well-being, and employee performance?
5. How do international collaborations and country-level interactions influence research and knowledge production in the field of workplace bullying, psychological well-being, and employee performance, and what implications do these collaborations have for fostering global advancements and interdisciplinary approaches to addressing workplace-related challenges?

1.3. Justification

Understanding the interplay between workplace bullying, psychological well-being, and performance is vital for creating a conducive work environment. However, holistic analysis through bibliometric methods is crucial for mapping intellectual structure, identifying influential works, and discovering trends and gaps in related research. This study's approach will offer a unique and quantitative perspective, aiding in informed decision-making for organizations and researchers aiming to enhance employee well-being and productivity while addressing workplace bullying.

2. Background of the study and literature

2.1. Workplace bullying

Bullying is typically characterized as a specific type of repeated aggressive behavior in which the aggressor holds a significant power advantage, making it challenging for the victim to effectively protect themselves (Hansen et al., 2006). Adult bullying, especially workplace bullying, has been systematically studied in Scandinavia in the last 5 years, although it has traditionally been applied in the school context (Rayner & Keashly, 2005). There are both similarities and differences in how this phenomenon manifests in school contexts (Einarsen et al., 2018), however, addressing workplace bullying poses specific methodological challenges. The issue of workplace bullying is gaining recognition as a significant problem. Over the last decade, various entities, such as unions, professional associations, and human resources departments (HR), in many countries have increasingly acknowledged that actions such as intimidation, public humiliation, name calling, social exclusion, and unwarranted physical contact can erode employee integrity, trust, and overall productivity. Individuals who have
experienced bullying often endure physical and emotional suffering, reporting stress, depression, and a decrease in self-esteem as the most frequent grievances. In severe instances, victims of workplace bullying may necessitate counseling or psychiatric intervention (Bartlett & Bartlett, 2011). Bullying can extend beyond peer mistreatment and, in some cases, become a tolerated or even endorsed element of an organization’s culture. Several organizations are now acknowledging the imperative to transform their workplace culture and have established well-defined corporate policies aimed at safeguarding their employees from bullying (Walker & Stones, 2020).

The emotional resources of workers can be depleted by workplace bullying (Alshawush et al., 2022). Bullying is linked to various mental health issues, such as depression, anxiety, thoughts of self-harm or suicide, sleep disorders, neck and back pain, cardiovascular disease, diabetes and absenteeism from work. (Martin & LaVan, 2010) Studies indicate that workplace bullying can result in significant job-related issues, including decreased job satisfaction, lower productivity, subpar job performance, burnout, and an elevated intention to leave the job (Hoel & Beale, 2006). The causes of bullying primarily stem from two sources: the attributes of the work environment inducing stress and frustration and the traits of both the perpetrator and the target involved (Hoel & Beale, 2006). The organization’s support helps alleviate workplace bullying’s adverse effects on employee well-being, and this influence is channeled through the reduction of burnout (Bartlett & Bartlett, 2011).

2.2. Psychological well-being

Well-being is a subjective phrase that refers to a person's delight, fulfillment of desires, satisfaction, abilities, and task completion. Workers’ well-being is classified into two types: hedonic and eudaimonic well-being (Hanawi et al., 2020). Psychological well-being refers to a fulfilling and satisfying existence, as well as the individual’s development and self-realization (Koydemir et al., 2021). Psychological well-being (PWB) specifically addresses an individual’s development and self-realization (Ryff, 1989).

The study of psychological well-being was guided by two major positive functioning notions. One approach, dating back to (Bewick et al., 2010), distinguishes between positive and negative affect and refers to happiness as the balance between the two. On the basis of this early operationalization of well-being, conceptual and methodological modifications were made (Ryff & Singer, 2008). However, psychological well-being is harmed when unpleasant feelings are intense or persist for an extended period of time and interfere with a person’s capacity to perform daily life (Winfield et al., 2012). A person is regarded as mentally healthy if he or she is free of anxiety, depression, or other psychological symptoms (Ryff et al., 1995). Psychological well-being is a broad construct that encompasses both positive and negative aspects of adjustment. It includes various indicators, such as self-esteem, social well-being, and life satisfaction, encompassing both hedonic aspects (positive emotions and the absence of negative emotions) and eudaimonic aspects (cognitive assessments of one’s life and purpose) (Matud et al., 2019). According to (Ryff, 1989), psychological intervention programs can enhance eudaimonic well-being.

2.3. Performance

Performance refers to the overall outcome or success of an individual during specified periods of duty, as measured against established, agreed-upon standards, goals, or criteria. Job performance is impacted by a variety of personal traits. In today's competitive and globalized era, companies require high-achieving employees (Pawirosumarto et al., 2017). Extensive research has been conducted to comprehend the behaviors, concepts, and resources that contribute to employee performance in various contexts, disciplines, and cultures (Bono & Judge, 2003; Piccolo & Colquitt, 2006). Organizations can effectively leverage and invest in employees' physical, cognitive, and emotional capabilities by investigating and integrating the literature on performance-enhancing behaviors and factors (Grimani et al., 2019a; Pham-Thai et al., 2023). Implementing initiatives that promote physical activity and healthy nutritional behavior in the workplace can have an optimistic impact on worker health and business performance(Grimani et al., 2019b). Research indicates that individuals with anxiety and depression may engage in decision-making and risk-taking behaviors that are detrimental to organizational performance (Hennekam et al., 2020).

2.4. Relationship between workplace bullying, psychological well-being, and performance

Research has demonstrated that mental health conditions, such as depression, can harm job performance (Lerner & Henke, 2008). Additionally, evolving societies, cultural environments, and lifestyle factors can influence employee performance and disrupt work-life balance(Kumar et al., 2021). The Conservation of Resources (COR) theory highlights that when employees experience a depletion of physical and emotional resources, their performance can be affected (Xia et al., 2019). Poor lifestyle choices, including unhealthy habits, have been shown to significantly hinder job performance, resulting in increased costs for organizations, such as increased rates of sick leave and reduced employee morale (Hassard et al., 2018). Job performance is determined by the effective utilization of an individual’s abilities, skills, and aptitudes within the organizational context (Hennekam et al., n.d.). The definition of performance can vary depending on the complexities and

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intricacies of the specific job (Atashi et al., 2019). Moreover, life events and changes can have both positive and negative influences on an employee’s work performance (Khoshnaw & Alavi, 2020).

Employees who have low commitment to their work are more likely to experience psychological states characterized by emotional distress and fatigue, as noted by (Chordiya et al., 2017). Task competence refers to the level of proficiency with which employees carry out their job responsibilities, as defined by (Motowidlo & Van Scotter, 1994). Performance, on the other hand, encompasses the outcomes that arise from specific job functions or actions within a specified timeframe (Krijgsheld et al., 2022a). Performance is a multifaceted concept that can be examined in terms of in-role job performance and innovative job performance, as highlighted by (Henttonen et al., 2016). In-role job performance pertains to the tasks performed within the assigned duties of individuals, requiring them to exhibit formal behaviors to achieve their performance objectives outlined in the job description (Thørrisen et al., 2019). On the other hand, innovative job performance involves activities that go beyond the typical job requirements to generate novel outcomes (Krijgsheld et al., 2022). The performance of employees has gained significant attention due to the increasing concerns of human resources and organizational experts regarding the level of output obtained from workers (Hemakumara, 2020). Job performance is a construct that encompasses behaviors within employees’ control that contribute to organizational goals (Ramos et al., 2019).

3. Methodology

To achieve its purpose and objectives, the current research adheres to the principles of SLR (Krijgsheld et al., 2022b). A literature review was conducted following the guidelines given by Kitchenham (2004) and Massaro et al. (2016). The researchers considered Web of Science and Scopus as the data sources to ensure both methodical reliability and inclusivity. An SLR has three major stages: (i) plan, which includes defining the research questions that will guide the rest of the work and emerging the planned review procedure; (ii) conducting, which includes choosing primary research and measuring study quality; and (iii) reporting, which includes defining propagation mechanisms and templates for the main report.

3.1. Search of literature

The authors retrieved peer-reviewed journal articles related to workplace bullying, psychological well-being, and employee performance from the WOS database. From a total of 1983 articles, 378 were included in the final analysis. The search criteria key terms used were “workplace bullying”, “psychological well-being” and “employee performance”. The language of the query was further refined to English and document type, and 378 articles were ultimately included in the analysis.

3.2. Analytical Tool

Several software options are available for conducting bibliometric reviews, including CiteSpace, BibExcel, R, and others, each with its own set of advantages and disadvantages (Zupic & Čater, 2015). For the current bibliometric analysis, VOSviewer and Biblioshiny from R software were selected. VOSviewer is a noncommercial software package known for its ability to analyze bibliometric data from databases such as WoS or Scopus practically, garnering increased interest among scholars in bibliometric analysis methods in recent years (Donthu et al., 2021).

4. Results and Discussion

The analysis findings are structured into two specific subsections for clarity and detailed understanding. In Section 4.1, a thorough exploration of the initial descriptive statistics of the articles selected for review is presented. This section aims to provide an insightful overview of the basic characteristics and features of the included articles. Moving on to Section 4.2, an in-depth depiction of the outcomes obtained from employing various science mapping techniques is presented. This section delves into a comprehensive illustration of the analytical approaches and visual representations utilized to map the scientific landscape within the subject area.

4.1. Initial describe statistics

The initial statistical analysis of the gathered dataset provides valuable insights for the authors to delineate the existing knowledge foundation within the field. Figure 1, illustrating the publication trend of articles spanning from 1997 to 2023, vividly portrays the remarkable growth in research within this domain. This unequivocally indicates the burgeoning interest and scholarly activity in this area of study. This escalating trend underscores the imperative for organizations to prioritize and focus on the psychological well-being of their employees. Recognizing and nurturing the mental well-being of employees is becoming increasingly crucial in contemporary work environments.
Table 1 Top 25 journals publishing in the area.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Journal</th>
<th>Documents</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>“International Journal of Environmental Research and Public Health”</td>
<td>51</td>
<td>470</td>
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<tr>
<td>2</td>
<td>“International Archives of Occupational and Environmental Health”</td>
<td>24</td>
<td>597</td>
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<tr>
<td>3</td>
<td>“International Journal of Workplace Health Management”</td>
<td>16</td>
<td>252</td>
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<td>4</td>
<td>“Journal of Nursing Management”</td>
<td>11</td>
<td>172</td>
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<tr>
<td>5</td>
<td>“Journal of Occupational and Environmental Medicine”</td>
<td>11</td>
<td>205</td>
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<tr>
<td>6</td>
<td>“Industrial Health”</td>
<td>10</td>
<td>300</td>
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<tr>
<td>7</td>
<td>“Bullying and Harassment in the Workplace: Developments in Theory”</td>
<td>9</td>
<td>641</td>
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<tr>
<td>8</td>
<td>“Qualitative Research in Organizations and Management”</td>
<td>9</td>
<td>119</td>
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<tr>
<td>9</td>
<td>“Scandinavian Journal of Work Environment &amp; Health”</td>
<td>9</td>
<td>702</td>
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<tr>
<td>10</td>
<td>“International Journal of Organizational Analysis”</td>
<td>8</td>
<td>88</td>
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<tr>
<td>11</td>
<td>“Journal of Occupational Health”</td>
<td>8</td>
<td>182</td>
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<tr>
<td>12</td>
<td>“Occupational medicine-oxford”</td>
<td>8</td>
<td>279</td>
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<tr>
<td>13</td>
<td>“BMC Public Health”</td>
<td>7</td>
<td>999</td>
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<tr>
<td>14</td>
<td>“Journal of Human Resource Management”</td>
<td>7</td>
<td>40</td>
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<tr>
<td>15</td>
<td>“Societies”</td>
<td>7</td>
<td>9</td>
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<td>16</td>
<td>“Stress and Health”</td>
<td>7</td>
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<tr>
<td>17</td>
<td>“Journal of Industrial Psychology”</td>
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<tr>
<td>18</td>
<td>“International Journal of Manpower”</td>
<td>5</td>
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<tr>
<td>19</td>
<td>“Journal of Workplace Behavioral Health”</td>
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<td>20</td>
<td>“Frontiers in Psychiatry”</td>
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<td>21</td>
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<td>24</td>
<td>“Organisationnaya Psikologiya”</td>
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<td>3</td>
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<tr>
<td>25</td>
<td>“Safety and Health at Work”</td>
<td>4</td>
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Table 1 shows that Frontiers in Psychology has the highest production, with 37 documents. Sustainability (Switzerland) has the next highest production, with 11 documents. The third highest production journal is Current Psychology, employee Relations, International Journal of Stress Management, and Journal of Organizational Behavior, with 5 documents. These documents have been published in the area of workplace bullying, Psychological Well psychological well-being, and
performance. However, the journal with the highest number of citations is Frontiers in Psychology, with 505 citations. The journal of Organizational Behavior has 493 citations, followed by the Journal of Organizational Behavior, with 493 citations.

4.2 Science mapping techniques

Utilizing bibliometric methods, science mapping is advantageous in two primary ways: (1) to aid novice researchers in rapidly grasping the field’s structure and (2) to introduce quantitative rigour into the field.

Science mapping, as a network analysis, encompasses a range of methodologies, including citation analysis, co-occurrence analysis, bibliographic coupling, coauthorship analysis, and cocitation analysis. These techniques leverage bibliographic information to help researchers discern the underlying structure of a network. In the current research, theories related to workplace bullying, psychological well-being, and employee performance have been explored using multiple analytical approaches. The following sections delve into each of these methods, providing a comprehensive overview of their applications and significance in uncovering insights within these research domains.

4.2.1 Citation analysis

Citation analysis proves valuable in identifying highly influential publications within a specific field. To gain a broad understanding of the current research on workplace bullying, psychological well-being, and performance, a descriptive citation analysis was conducted on 407 articles sourced from the Web of Science database. Approximately 58% (n = 235) of these 407 articles, which were part of the bibliometric analysis, had more than 5 citations. Table 2 shows the ten most-cited articles in this field. Notably, Ryff (2014)[n = 1053], Schmitt (2014)[n = 970], Boehm (2012)[n = 482], Houben (2015)[n = 462], Ryff (2006)[n = 375], and Grossman (2007)[n = 300] emerged as highly cited articles.

From the insights provided in Table 2, it becomes evident that the majority of highly cited publications were released between 2014 and 2016. Figure 3 illustrates the citation network of these published works, revealing distinct clusters that showcase the interconnectedness of key works. Notably, (Ryff et al., 2014), (Boehm et al., 2012), and (Ryff et al., 2006) exhibited the strongest link strength within the citation network.

4.2.2 Cocitation analysis

Cocitation analysis is a valuable tool that helps researchers understand the core themes explored by a group of authors frequently cited together. This method gauges how often a particular author and article are cited, revealing the most influential publications in a specific field based on citations. Through a cocitation analysis, a total of 18,552 cited references were identified. Table 3 outlines the ten most influential publications identified through this analysis.

In Figure 4, the cocitation network structure is visually represented with a minimal citation threshold value of 15. This network structure provides graphical insight into the connections and relationships among the highly cited works, aiding in the comprehension of the interwoven themes and influential contributions within the domain of workplace bullying, psychological well-being, and performance.

Figure 4 revealed a total of five clusters. These clusters aid in identifying research areas and patterns of collaboration. These five clusters represent the majority of the research conducted in the fields of workplace harassment, psychological well-being, and performance. Other researchers have cited (ryff cd., 1989) the most; therefore, this is the foundational publication in the field. The study showed that traditional measures of psychological well-being lack theoretical grounding and that aspects such as positive relationships with others, autonomy, purpose in life, and personal growth were not well represented in previous research, resulting in a more differentiated pattern of well-being across different age groups. The theoretical paradigm of psychological well-being (Ryff et al., 1995), which consists of six dimensions of wellness, was validated using data from a nationally representative sample of adults. Diener et al. (1985) demonstrated favorable psychometric properties, such as high internal consistency and temporal reliability, and predictably correlated with other measures of subjective well-being and particular personality traits. This study examines the hedonic and eudaimonic approaches, their divergent and complementary research foci, and the influence of antecedents and stability across time and culture (Ryan et al., 2001). The consistent emergence of positive and negative affect as prevalent and independent dimensions in affect structure was highlighted by Watson et al. (1988). The CES-D (Radloff L S., 1977) is a brief self-report measure devised to assess depressive symptomatology in the general population. The NRS-2002 demonstrated high internal consistency, adequate test-retest repeatability, and construct validity through correlations with other depression measures and clinical ratings. (Cohen j., 1988) added to the existing methods for analyzing two-way contingency tables and permitted the evaluation of specific hypotheses regarding the association, including measures of strength, significance tests, estimation, power analysis, and computer programs for calculations. (Keyes clm, 2002) discovered that subjective well-being (SWB), which is associated with life satisfaction and the balance of positive and negative affect, and psychological well-being (PWB), which is associated with engagement with life challenges, are conceptually related but empirically distinct constructs. This article reviews the current evidence supporting Wilson's conclusions and discusses contemporary theories of SWB that emphasize dispositional influences, adaptation, objectives, and coping mechanisms.
4.2.3. Co-occurrence analysis of the keywords

Keywords play a crucial role in enabling researchers to explore the prevalent themes within any field of study (Strozzi et al., 2014). Conducting a keyword co-occurrence analysis helps in identifying frequently used keywords associated with publications, offering insights into the intellectual structure of the field. Figure 5 illustrates the keyword co-occurrence network, setting the minimum number of keyword occurrences to five. The network diagram clearly shows the organization of keywords into seven distinct subgroups.

Within the 407 research articles examined, a total of 2,048 keywords were identified. However, only 168 keywords met the stipulated minimum threshold of occurrences, signifying their significance and recurrence in the corpus of literature related to workplace bullying, psychological well-being, and performance. This analysis aids in revealing the core themes and recurring concepts that characterize this field of study. 36 unique keywords occurred more than 15 times. Figure 5 demonstrates that psychological well-being is the keyword with the greatest number of occurrences (n = 126) and relationships (n = 671). The most frequently occurring keywords were psychological well-being (n = 126), depression (n = 87), health (n = 78), stress (n = 69), well-being (n = 66), mental health (n = 52), social support (n = 38), and mental health (n = 36). Psychological health (n = 5), culture (n = 5), posttraumatic stress disorder (n = 6), attitudes (n = 6), and gender (n = 7) are among the keywords that have received increased attention in recent years. These keywords reflect the current emphasis in the field of study and provide ample opportunity for future research in this area.

Four clusters were identified, and it was determined that the keywords that were organized together within the same clusters had a direct relationship. Different clusters represent distinct themes and research foci for the researchers. The analysis of all four clusters revealed that all of the keywords could be categorized into three primary groups.

4.2.3.1. Positive psychology and well-being

The theme encompasses the study and promotion of positive emotions, psychological strengths, and optimal functioning for individuals and communities. They touch upon topics such as emotions, gratitude, happiness, health, life satisfaction, optimism, resilience, and self-determination theory. The inclusion of older adults suggested a focus on aging and well-being, while physical activity and mortality indicate the importance of maintaining a healthy lifestyle.

4.2.3.2. Mental health therapy and intervention

This theme focuses on well-being therapy and interventions to promote mental health and overall well-being. The survey included keywords related to disorders, interventions, psychotherapy, mindfulness, and stress reduction. The inclusion of exercise suggested its importance in promoting mental well-being. Meta-analysis refers to the statistical method used to synthesize and analyze research findings in the field. Prevalence and prevention indicate a focus on understanding the occurrence of mental health issues and implementing strategies to address them. Trauma highlights the significance of psychological support and therapy for individuals who have experienced traumatic events. Overall, the theme emphasizes the study, prevention, and treatment of mental health disorders to enhance well-being.

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Document Title</th>
<th>First Author</th>
<th>Year</th>
<th>Citations</th>
<th>Links</th>
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<td>1</td>
<td>“Psychological Well-Being Revisited: Advances in the Science and Practice of Eudaimonia”</td>
<td>Ryff</td>
<td>2014</td>
<td>1053</td>
<td>26</td>
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<td>3</td>
<td>“The Heart’s Content: The Association Between Positive Psychological Well-Being and Cardiovascular Health”</td>
<td>Boehm</td>
<td>2014</td>
<td>482</td>
<td>11</td>
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<td>4</td>
<td>“The Relation Between Short-Term Emotion Dynamics and Psychological Well-Being: A Meta-Analysis”</td>
<td>Houben</td>
<td>2015</td>
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<td>5</td>
<td>“Psychological well-being and ill-being: Do they have distinct or mirrored biological correlates?”</td>
<td>Ryff</td>
<td>2006</td>
<td>375</td>
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<td>6</td>
<td>“Mindfulness training as an intervention for fibromyalgia: Evidence of postintervention and 3-year follow-up benefits in well-being”</td>
<td>Grossman</td>
<td>2007</td>
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<td>“Predicting Psychological and Subjective Well-Being from Personality: A Meta-Analysis”</td>
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<td>Fava</td>
<td>2005</td>
<td>180</td>
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<td>9</td>
<td>“Perspectives and research on the positive and negative implications of having multiple racial identities”</td>
<td>Shih</td>
<td>2005</td>
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<td>10</td>
<td>“Well-being therapy: Conceptual and technical issues”</td>
<td>Fava</td>
<td>1999</td>
<td>141</td>
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</table>
4.2.3.3. Gender Differences in Work

The theme revolves around the intersection of gender, work, and aging. Keywords related to women, age, and adults were used, highlighting the specific context of gender differences in the workforce as individuals grow older. The theme explores outcomes such as work performance and behavior, considering how gender differences may influence these factors. Additionally, support and stress are included because they can impact work experiences and outcomes for both men and women. Overall, this theme focuses on understanding the effects of gender differences in the workplace and how they relate to work performance, behavior, support systems, and stress levels as individuals age.

Figure 6 shows an overlay visualization that combines keyword occurrence with the co-occurrence network visualization from Figure 5. This overlay helps in identifying when specific keywords emerged based on the year. Notably, keywords such as “emotion regulation,” “cognitive therapy,” “dimensions,” “emotional intelligence,” “mindfulness,” “coping,” and “abuse” are more recent author keywords, as highlighted in Figure 6. The yellow circles represent the most recently used keywords in the field.

Moreover, the overlay visualization indicates that research momentum in this field has been gaining traction since 2012 and has seen consistent growth since 2014. Starting in 2020, keywords such as “women,” “stress,” “performance,” “well-being,” “gender,” “emotion,” and “burnout” have been the most frequently used keywords by authors. Additionally, since late 2018, researchers have begun examining mental health at work and psychological well-being from a gendered perspective. This visualization offers a dynamic view of the evolving themes and trends within the research field over time.

Table 3 Highly cocited documents.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Authors</th>
<th>Cited Frequency</th>
<th>Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ryff cd, 1989</td>
<td>90</td>
<td>496</td>
</tr>
<tr>
<td>2</td>
<td>Ryff cd, 1995</td>
<td>69</td>
<td>456</td>
</tr>
<tr>
<td>3</td>
<td>Diener e, 1985</td>
<td>53</td>
<td>279</td>
</tr>
<tr>
<td>4</td>
<td>Ryan rm, 2001</td>
<td>43</td>
<td>339</td>
</tr>
<tr>
<td>5</td>
<td>Watson d, 1988</td>
<td>43</td>
<td>259</td>
</tr>
<tr>
<td>6</td>
<td>Radloff l s, 1977</td>
<td>32</td>
<td>141</td>
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<td>7</td>
<td>Cohen j., 1988</td>
<td>24</td>
<td>107</td>
</tr>
<tr>
<td>8</td>
<td>Keyes dlm, 2002</td>
<td>24</td>
<td>226</td>
</tr>
<tr>
<td>9</td>
<td>Diener e, 1999</td>
<td>21</td>
<td>166</td>
</tr>
<tr>
<td>10</td>
<td>Hu lt, 1999</td>
<td>21</td>
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</tr>
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</table>
Figure 3 Cocitation network analysis of cited references.

Figure 4 All keyword co-occurrence network analysis, with a minimum threshold of 5.
Figure 5 Overlay visualization of all keywords in the field.

Figure 6 Thematic map.

Thematic analysis is a qualitative method used to identify and analyze themes or patterns within a dataset. In this case, the analysis was conducted in R-Studio using the Web of Science database. Based on the findings, four themes were identified:

1. **Basic Theme**: This theme focuses on psychological well-being, subjective well-being, and life satisfaction. These concepts are studied together; within this theme, there is also an exploration of well-being, mental health, and stress.
2. Motor Theme: The motor theme includes the study of depression, anxiety, and quality of life. Additionally, burnout is also examined within this theme. It seems that these concepts are analyzed together, possibly in relation to their impact on individuals' overall well-being.

3. Niche Theme: The niche theme encompasses the study of COVID-19, gratitude, and job stress. These findings suggest that researchers have explored the effects of the pandemic on individuals' well-being, specifically examining the role of gratitude and job-related stress in this context.

4. Emerging Theme: The emerging theme focuses on the study of emotional regulation and mindfulness. These concepts are likely investigated together to understand how individuals manage their emotions and promote well-being through mindfulness practices.

The "Keyword Plus" approach was employed to analyze these themes. Keyword Plus is a technique used to enhance the search results in the Web of Science database by considering additional keywords that are closely related to the primary search terms. This approach allows for a more comprehensive exploration of the topics of interest.

Figure 7 offers a summary of collaborative activities between countries, revealing the frequency and patterns of interactions. Notably, Canada collaborated with China four times and with Turkey five times, indicating moderate levels of cooperation with both nations. The United States shows a higher degree of collaboration, with nine instances of collaboration with Canada, four with Germany, and four with the United Kingdom. However, the most significant collaboration for the USA is with Italy, with an impressive frequency of thirteen instances, suggesting a robust and extensive partnership. Overall, this map serves as a valuable tool for understanding international relationships and identifying areas for further cooperation.

5. Conclusions and direction for future research

In conclusion, the citation analysis, cocitation analysis, and keyword co-occurrence analysis conducted in this study provide valuable insights into the fields of workplace bullying, psychological well-being, and performance. The findings highlight the most impactful publications, influential authors, collaboration patterns, and thematic areas of research.

The citation analysis revealed the most highly cited publications in the field, with Ryff (2014), Schmitt (2014), Boehm (2012), Houben (2015), Ryff (2006), and Grossman (2007) identified as the most cited authors. These publications have significantly contributed to the body of knowledge in the field and have been influential in shaping subsequent research.

The cocitation analysis further explored the primary themes focused on by the frequently cited authors. The works of Ryff (1989), Ryff et al. (1995), Diener et al. (1985), Ryan et al. (2001), Watson et al. (1988), Radloff (1977), Cohen (1988),
Keyes (2002), and Diener (1999) emerged as the most influential publications cited by researchers in the field. These works have contributed to the understanding of psychological well-being, subjective well-being, depression, affect structure, and statistical analysis methods, among other topics.

The keyword co-occurrence analysis helped identify the intellectual structure of the field by analyzing the frequently used keywords. The analysis revealed three main categories: positive psychology and well-being, mental health therapy and intervention, and gender differences at work. These categories reflect the focus on promoting positive emotions, psychological strengths, and optimal functioning; studying mental health disorders and interventions; and understanding gender differences in the workplace.

Overall, this study provides a comprehensive overview of the current scholarship on workplace bullying, psychological well-being, and job performance. The findings can guide researchers in identifying influential publications, understanding collaboration patterns, and exploring emerging research areas. The identified gaps and recent keywords also offer significant opportunities for future research in this field, particularly in investigating the intersection of gender, work, and mental health. Based on these findings, the following future directions have been suggested:

1. Longitudinal studies: Conducting longitudinal studies can provide a deeper understanding of the relationships between workplace bullying, psychological well-being, and job performance over time. Such studies can help identify causal relationships, explore the long-term effects of workplace bullying on well-being and performance, and uncover potential mediating or moderating factors.

2. Intervention and Prevention Strategies: Future research should focus on developing and evaluating effective intervention and prevention strategies to address workplace bullying and enhance psychological well-being and performance. This could include interventions at the individual, organizational, and societal levels, considering factors such as leadership, organizational culture, policies, and support systems.

3. Intersectionality and Diversity: Investigating the intersectionality of workplace bullying, psychological well-being, and job performance is an important direction for future research. Examining how factors such as gender, race, ethnicity, age, and socioeconomic status intersect with workplace dynamics can provide a more comprehensive understanding of the experiences and outcomes related to workplace bullying and well-being.

4. Technological Advances: With the increasing use of technology in the workplace, future research should explore the impact of technology-mediated forms of workplace bullying on psychological well-being and performance. This could include cyberbullying, online harassment, and the role of social media platforms in shaping workplace dynamics.

5. Positive Organizational Psychology: Building on the emerging field of positive psychology, future research should explore the application of positive organizational psychology principles to address workplace bullying and enhance psychological well-being and performance. This could involve investigating positive leadership approaches, strengths-based interventions, and fostering positive work environments.

6. Well-being Promotion: Future research should focus on developing and evaluating interventions aimed at promoting psychological well-being in the workplace. This could include interventions that enhance resilience, mindfulness, positive emotions, social support, work-life balance, and self-care practices.

7. Cross-Cultural Studies: Conducting cross-cultural studies can provide valuable insights into the cultural variations in workplace bullying, psychological well-being, and job performance. Comparing different cultural contexts can help identify cultural factors that influence these phenomena and inform the development of culturally sensitive interventions.

8. Multidimensional Approaches: Expanding the understanding of psychological well-being and performance by considering multidimensional approaches is an important future direction. This could involve examining dimensions such as subjective well-being, eudaimonic well-being, work engagement, meaning and purpose, and positive work relationships.

In summary, future research in the fields of workplace bullying, psychological well-being, and performance should focus on longitudinal studies, intervention strategies, intersectionality and diversity, technological advances, positive organizational psychology, well-being promotion, cross-cultural studies, and multidimensional approaches. By addressing these directions, researchers can contribute to enhancing well-being and creating healthier and more productive work environments.

6. Final considerations

The findings of this study have practical implications for organizations and policymakers. Understanding the most impactful publications, influential authors, and thematic areas can guide organizations in developing interventions and policies to address workplace bullying, enhance psychological well-being, and improve performance (Yusuf et al., 2023). Organizations can use this knowledge to create supportive work environments, implement training programs, and establish policies that promote employee well-being and prevent workplace bullying. The identification of key publications and
influential authors can inform the development of evidence-based interventions to address workplace bullying and enhance psychological well-being (Estrada-Araoz et al., 2023). Researchers can use these findings to build upon existing knowledge and develop interventions that target specific areas highlighted in the analysis, such as positive psychology approaches, mental health therapy, and gender differences in the workplace (Kholida et al., 2023). The analysis of cocitation and co-occurrence networks can facilitate collaboration among researchers working in the field. Identifying clusters of researchers and their research interests can foster networking opportunities and collaboration on future research projects. This can lead to interdisciplinary research collaborations and the exchange of ideas to advance the field.

The data obtained for the study was from the Web of Science database, which may have limited the scope of the analysis. Different databases may provide different coverage and may not capture all relevant publications in the field. Future studies could consider the use of multiple databases or alternative sources to obtain a more comprehensive picture of the literature. The inclusion criterion for selecting articles in the analysis may have introduced selection bias. Restricting the analysis to articles with a minimum number of citations or focusing on a specific time frame may have excluded important publications or overlooked emerging research trends. Future studies could consider broader inclusion criteria to capture a wider range of relevant publications. The findings of this study may not be fully generalizable to all contexts and populations. The analysis was based on a specific set of articles and may not represent the entire body of literature on workplace bullying, psychological well-being, and job performance. Different research areas and geographic regions may exhibit variations in terms of influential publications, cocitation patterns, and keyword co-occurrence. Future research could replicate the analysis in different contexts to assess the generalizability of the findings. The analysis of citations, cocitations, and keyword co-occurrence is subjective to some degree. The interpretation and categorization of publications, authors, and keywords rely on the researchers’ judgment and may introduce bias. However, efforts were made to ensure rigor and consistency in the analysis through careful consideration and consensus among the researchers involved. Although the analysis provided insights into the development and trends in the field, it is important to note that the data are limited to a specific period. The trends and patterns identified may have evolved or changed since the data cutoff point. Future studies could consider conducting an updated analysis to capture recent developments in the field. Although this study provides valuable insights into the fields of workplace bullying, psychological well-being, and performance, it is important to acknowledge the limitations mentioned above. Addressing these limitations in future research can contribute to a more comprehensive understanding of the field and its implications.

Ethical considerations

Not applicable

Conflict of Interest

The authors have no conflict of interest to declare.

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Alshawush, K., Hallett, N., & Bradbury-Jones, C. (2022). The impact of transition programs on workplace bullying, psychological well-being, and job performance. Different research areas and geographic regions may exhibit variations in terms of influential publications, cocitation patterns, and keyword co-occurrence. Future research could replicate the analysis in different contexts to assess the generalizability of the findings. The analysis of citations, cocitations, and keyword co-occurrence is subjective to some degree. The interpretation and categorization of publications, authors, and keywords rely on the researchers’ judgment and may introduce bias. However, efforts were made to ensure rigor and consistency in the analysis through careful consideration and consensus among the researchers involved. Although the analysis provided insights into the development and trends in the field, it is important to note that the data are limited to a specific period. The trends and patterns identified may have evolved or changed since the data cutoff point. Future studies could consider conducting an updated analysis to capture recent developments in the field. Although this study provides valuable insights into the fields of workplace bullying, psychological well-being, and performance, it is important to acknowledge the limitations mentioned above. Addressing these limitations in future research can contribute to a more comprehensive understanding of the field and its implications.

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