

Mapping of Employee Engagement Research: Bibliometric Analysis during 2016-2022

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Abstract

Scholars and practitioners point out that the current low level of employee engagement in the workplace is one of the most worrisome global economic problems. The potential consequence of this phenomenon is a decline in job performance. Therefore, it becomes essential to understand the concept of work engagement, its meaning for employees, and its implications for employers. This study examines the development of research on the topic of employee engagement. The study aims to determine: (1) the development of the number of international publications in the field of employee engagement in the Google Scholar database from 2016-2022; (2) core journals in international publications on the topic of employee engagement, (3) a map of the development of international publications in research fields with the topic of employee engagement, based on co-words. Collecting data by conducting searches through Publish or Perish (Pop) with the keyword's employee, engagement, employee, with the category of the article title, abstract, and keywords in the period 2016-2022. Data in the form of the number of publications per year, publishers, and journals containing articles on employee engagement and subjects were analyzed using Microsoft Excel. Meanwhile, the trend of topic mapping was analyzed using VosViewer software. The study results show that the 2016-2022 growth development of Google Scholar indexed articles in 2020 reached 193 publications (19.3%). Most international publications are published in the International Journal of Management Review as many as 17 articles. The results showed that the research on employee engagement was still dominated by transformational leadership and organizational culture. For further research, the authors suggest the need for additional data sources so that more research results are more accurate and comprehensive.

Keywords

employee engagement;
bibliometric; voisviewer; google scholar



I. Introduction

Employees are one of the company's primary resources. The ability to successfully manage relationships with employees can determine long-term profitability for an organization. By creating a welcoming environment that will enable development that leads to employee engagement, employers can increase their chances of hiring and retaining high-performing employees. Some studies show that the level of employee involvement in organizational goals or a company is still shallow worldwide (Akter et al., 2022; Bashir et al., 2022; Chaudhary et al., 2022; Eniola, 2022; Grubert et al., 2022; Hammon et al., 2022; Han et al., 2022; Prentice, 2022). In line with the literature-based analysis, an employee engagement framework was developed describing the relationship between leader, team, perceived organizational support, and organizational culture

mediated by employee motivation (Al Mehrzi & Singh, 2016). Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). The success of leadership is partly determined by the ability of leaders to develop their organizational culture. (Arif, 2019). Employee engagement is an essential issue in management theory and practice. However, there are still significant differences in concepts, theories, influencing factors, and outcomes of employee engagement, and there is still no authoritative standard. This article attempts to review and summarize the results of previous research on employee engagement.

Employee engagement has emerged as an essential management-focused activity to compete and perform in a dynamic and competitive environment linked to organizational goals and objectives (Gupta & Sharma, 2018). The problem of low employee engagement and its negative impact on business results has also attracted the attention of academics. Several articles that use employee engagement as the basis of their research include (Erwin et al., 2019; Mkheimer & Mjlae, 2020; Ostrowski, 2017; Sharma & Garg, 2017; Wang, 2016), which found that organizational engagement climate is positively related to human resources. Work and employee engagement. To get a complete understanding of employee engagement, a literature review is needed to get more information about the factors that can increase employee engagement with their place of work.

Bibliometric analysis is a popular and rigorous method for exploring and analyzing large amounts of scientific data (AU - AlRyalat et al., 2019; Donthu et al., 2021). Scholars use bibliometric analysis for various reasons, such as to: uncover emerging trends in article and journal performance, collaboration patterns, and research constituencies, and to explore the intellectual structure of a particular domain in the existing literature. a Specific area, while highlighting the areas that appear in that field. However, its application in business research is relatively new and, in many cases, not yet developed. Bibliometric indicators are calculated over time and generally use two approaches, namely the number of publications, an indicator that measures productivity, and many citations. This indicator measures the impact of the resulting articles (Donthu et al., 2021). Bibliometric indicators are calculated over some time and generally use two approaches, namely the number of publications, an indicator that measures productivity, and the number of citations. This indicator measures the impact of the articles produced (Effendy et al., 2021). Bibliometrics and scientometrics were introduced by Pritchard and Nalimov, and Mulchenko in 1969. Pritchard said bibliometrics is a method that uses mathematics and statistics to books and other communication media. Nalimov and Mulchenko define scientometrics as a qualitative method that deals with science analysis as an information process (Glänzel, 2003; Moral-muñoz et al., 2020).

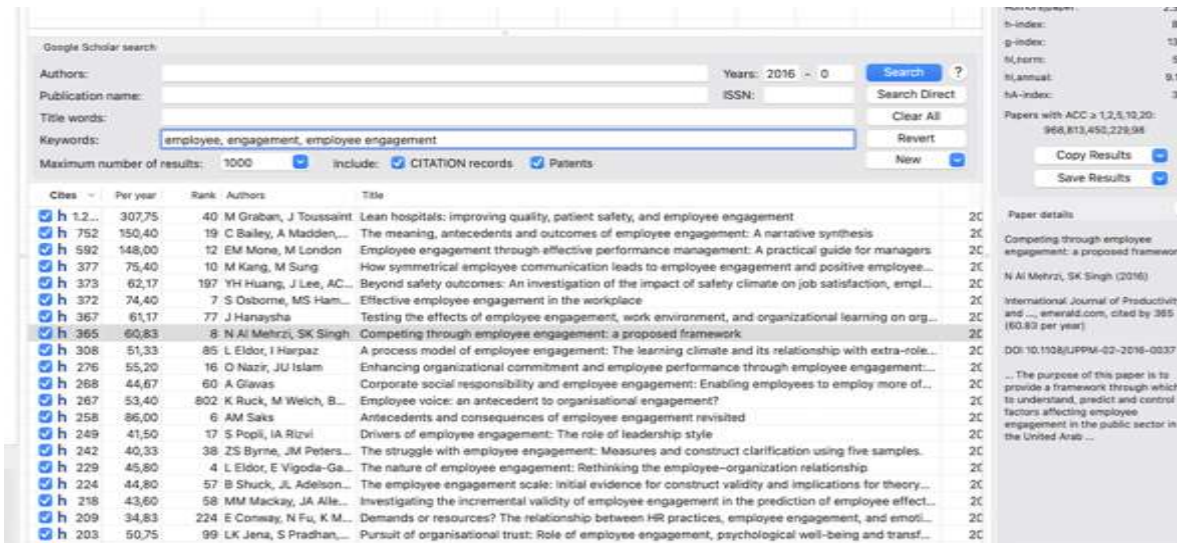
Google is an information search engine that is popularly used by users at this time. This is because of its easy use, simple display, and provides accurate results for its use. For 23 years since the founding of Google, namely on September 4, 1998, Google has consistently provided innovative services to meet the information needs of its use in economics, education, management, social, research, and even entertainment. One of Google's services that support information needs in research and education is Google Scholar or Google Scholar. Google Scholar is an educational service provider feature that helps users meet their information needs in the form of searching scientific journals and online publications from various disciplines connected around the world. This service was launched by Google in 2004 and is usually used by students, researchers, lecturers, academics, and even students to find references to scientific works through journals from scientific publications. In addition to helping search for references, Google Scholar is also equipped with citation services or quotes from credible researchers around the world; this

can help users in finding references for writing scientific papers and avoiding plagiarism. Currently, Google Scholar has provided quotes from various fields of Science such as general knowledge, natural Science, health, technology, philosophy, law, social, and many more presented in various sources such as books, theses, articles, abstracts, academic publishers. University journals, professional communities, and other academic organizations. To build and visualize a bibliometric network indexed by Google Scholar, a bibliographic field visualization application called Vosviewer is needed. The network referred to by the term (term) includes journals, researchers, or individual publications. Such networks can be built on citations, bibliographic coupling, co-citations, or co-authorship relationships.

VOSviewer is software for building and visualizing bibliometric networks. These networks, for example, can include individual journals, researchers, or publications. They can build on citations, bibliographies, co-citing, or co-authoring relationships. VOSviewer also offers text mining functionality that can be used to build and visualize co-occurring networks of essential terms drawn from the scientific literature. VosViewer is a free computer program for visualizing and exploring bibliometric knowledge maps (Shah et al., 2019; VOSviewer, 2020; Wong, 2018). VOS stands for in VosViewer is Visualization of Similarities. The algorithm used in this program is almost the same as Multi-Dimensional Scaling (MDS). Database Files VOSviewer supports four types of bibliographic database files: Web of Science files, Scopus files, Dimensions files, and PubMed files. The advantage of VosViewer compared to other analytical applications is that this program uses a text mining function to identify combinations of relevant noun phrases by mapping and an integrated clustering approach to examine co-citation data and co-occurrence networks (van Eck & Waltman, 2014). Although there are many programs for analyzing text units and matrix similarities, VosViewer's strength lies in its visualization. The program's interactive options and functions make it easy to access and explore its networks of bibliometric data, such as several citations or co-occurrence relationships between key terms and concepts.

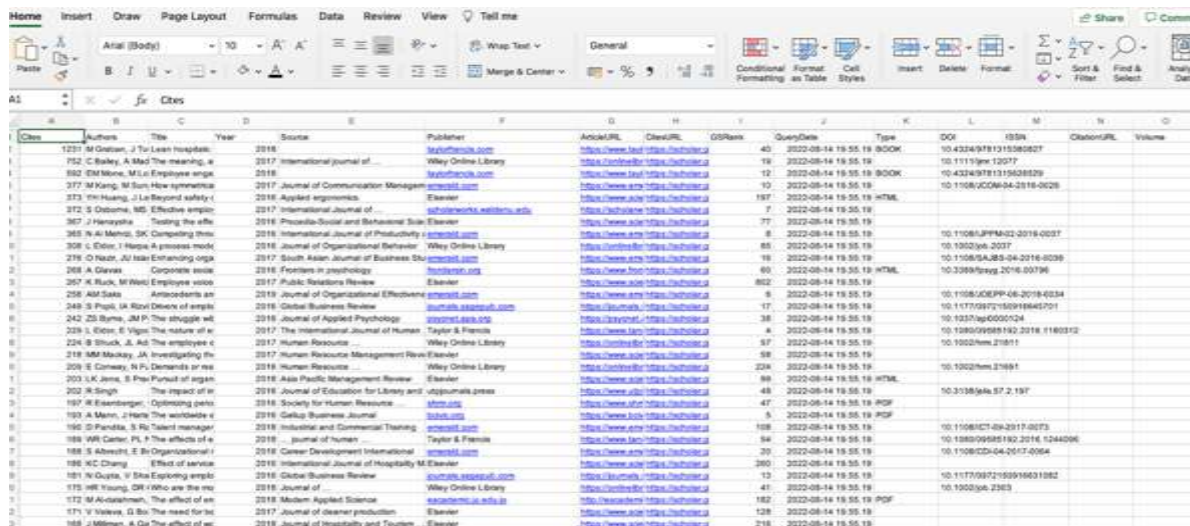
II. Research Method

This research uses data from international publications on employee engagement from 2016-2022, sourced from the Google Scholar database. Data collection through Publish or Perish (PoP) searches with the keyword's employee, engagement, employee engagement in the period 2016-2022, and as many as 1000 articles were collected as shown in Figure 1 below.



Source: PoP August 14, 2022
 Figure 1. Google Scholar data search with PoP

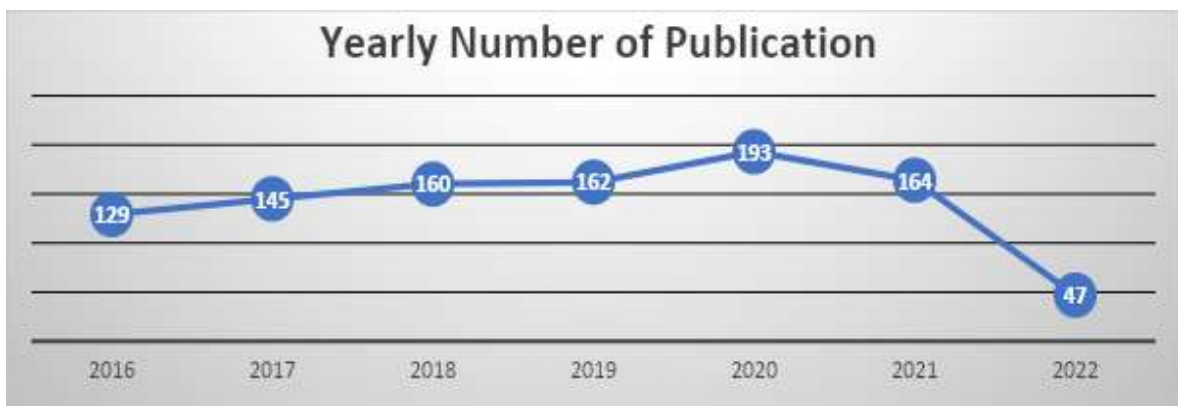
Data obtained and stored in RIS file or Research Information Systems Citation File, and CSV or comma separated values format. The Ris file used in the next step is to enter the file into the Vosviewer software to visualize network patterns or relationships between bibliometrics into three categories, including network visualization, Overlay visualization, and density visualization. Network visualization aims to visualize whether or not the network or the relationship between research terms is strong; Overlay visualization aims to visualize historical traces based on the year the research was published, while density visualization aims to display the density or emphasis on the research group. Meanwhile, the CSV file is downloaded as an excel file to analyze the number of publications per year, journals containing articles, authors, research subjects, and publishers. The image below is the data in CSV format, which is converted into excel form.



Source: PoP August 14, 2022
 Figure 2. Google Scholar data with CSV

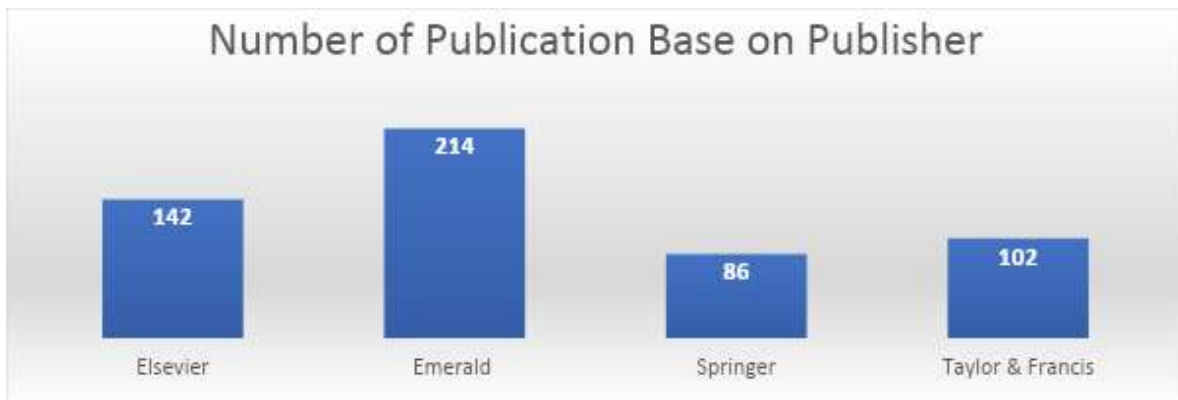
III. Result and Discussion

The results of research documents on employee engagement topics in Google scholar indexed journals through Publish or Perish obtained 1000 documents. From the data analysis, it was found that the growth of publications on employee engagement from 2016-2020, which was taken from data on the 2016-2022 GS experienced a significant increase. The highest growth rate of publications on employee engagement occurred in 2020, reaching 193 publications (19.3%) but declined in early 2020 since the emergence of the pandemic. The complete growth of international publications on using employee engagement can be seen in graph 1. The significant publishers who publish much of this topic at the highest rank are emerald publishers, with several articles published as many as 214. Followed by Elsevier, Taylor & Francis, and Springer. Details can be seen in graph 2.



Source: PoP August 14, 2022

Figure 3. Number of Publications from Google Scholar data for the period 2016-2022



Source: PoP August 14, 2022

Figure 4. Number of Publications from Google Scholar data from Four Publishers

"The meaning, antecedents, and outcomes of employee engagement: A narrative synthesis " was published by the Willey Online Library in the International Journal of Management Review in 2017 with a total of 752 citations. In table 1, articles are mapped based on 19 articles with the most citations.

Table 1. Research Data with the Most Citations

No	Cites	Authors	Title	Year	Source	Publisher
1	752	C Bailey, A Madden, K Alfes	The meaning, antecedents, and outcomes of employee engagement: A narrative synthesis	2017	International Journal of Management Review	Wiley Online Library
2	377	M Kang, M Sung	How symmetrical employee communication leads to employee engagement and positive employee communication behaviors: The mediation of employee	2017	Journal of Communicati on Management	Emerald
3	373	YH Huang, J Lee, AC McFadde n, LA Murphy ...	Beyond safety outcomes: An investigation of the impact of safety climate on job satisfaction, employee engagement, and turnover using social exchange theory	2016	Applied ergonomics	Elsevier
4	372	S Osborne, MS Hammou d	Effective employee engagement in the workplace	2017	International Journal of Applied Management and Technology	scholarwork s.waldenu.e du
5	367	J Hanaysha	Testing the effects of employee engagement, work environment, and organizational learning on organizational commitment	2016	Procedia- Social and Behavioral Sciences	Elsevier
6	365	N Al Mehrzi, SK Singh	Competing through employee engagement: a proposed framework	2016	International Journal of Productivity and Performance	Emerald

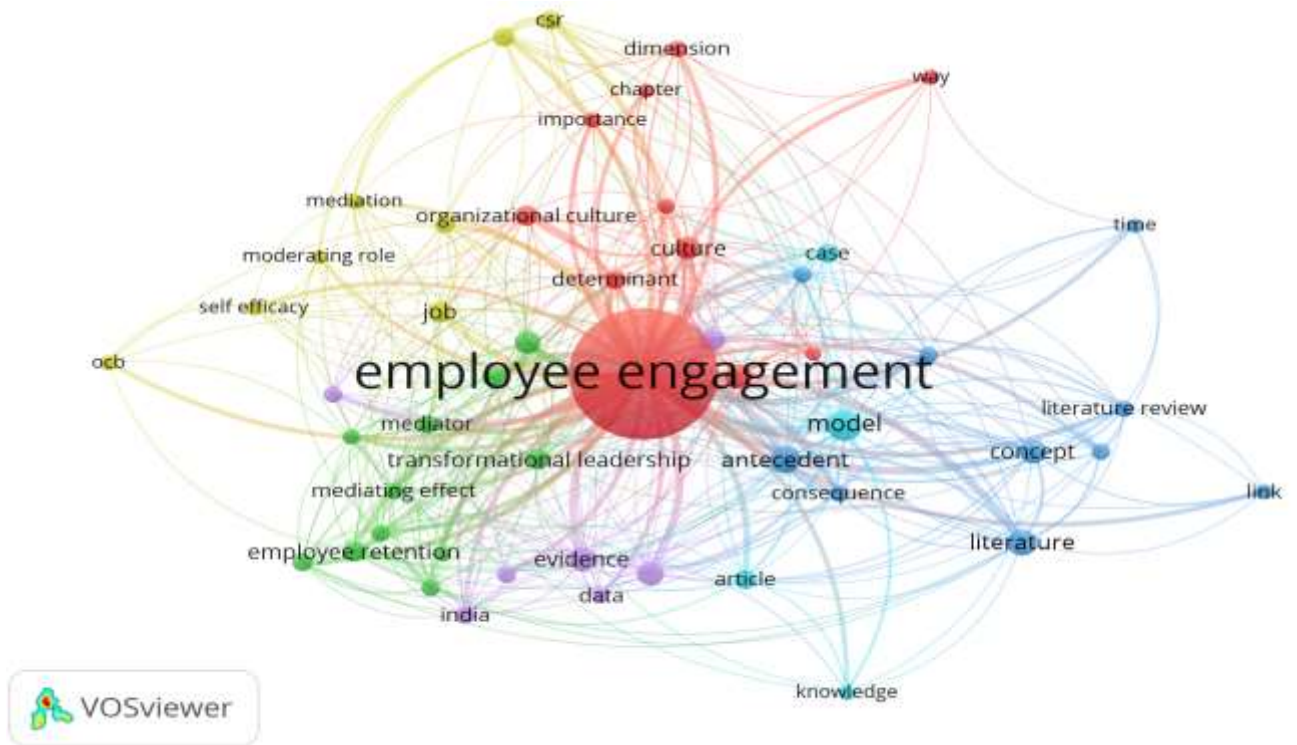
No	Cites	Authors	Title	Year	Source	Publisher
					Management	
7	308	L Eldor, I Harpaz	A process model of employee engagement: The learning climate and its relationship with extra-role performance behaviors	2016	Journal of Organizational Behavior	Wiley Online Library
8	276	O Nazir, JU Islam	Enhancing organizational commitment and employee performance through employee engagement: An empirical check	2017	South Asian Journal of Business Studies	Emerald
9	268	A Glavas	Corporate social responsibility and employee engagement: Enabling employees to employ more of their whole selves at work	2016	Frontiers in psychology	frontiersin.org
10	267	K Ruck, M Welch, B Menara	Employee voice: an antecedent to organizational engagement?	2017	Public Relations Review	Elsevier
11	258	AM Saks	Antecedents and consequences of employee engagement revisited	2019	Journal of Organizational Effectiveness : People and Development	Emerald
12	249	S Popli, IA Rizvi	Drivers of employee engagement: The role of leadership style	2016	Global Business Review	Sage
13	242	ZS Byrne, JM Peters, JW Weston	The struggle with employee engagement: Measures and construct clarification	2016	Journal of Applied Psychology	psycnet.apa.org

No	Cites	Authors	Title	Year	Source	Publisher
			using five samples.			
14	229	L Eldor, E Vigoda-Gadot	The nature of employee engagement: Rethinking the employee–organization relationship	2017	The International Journal of Human Resource Management	Taylor & Francis
15	224	B Shuck, JL Adelson, TG Reio Jr.	The employee engagement scale: Initial evidence for construct validity and implications for theory and practice	2017	Human Resource Management Review	Wiley Online Library
16	218	MM Mackay, JA Allen, RS Landis	Investigating the incremental validity of employee engagement in the prediction of employee effectiveness: A meta-analytic path analysis	2017	Human Resource Management Review	Elsevier
17	209	E Conway, N Fu, K Monks, K Alfes...	Demands or resources? The relationship between HR practices, employee engagement, and emotional exhaustion within a hybrid model of employment relations	2016	Human Resource Management Review	Wiley Online Library
18	203	LK Jena, S Pradhan, NP Panigrahy	Pursuit of organizational trust: Role of employee engagement, psychological well- and transformational leadership	2018	Asia Pacific Management Review	Elsevier
19	190	D Pandita, S Ray	Talent management and employee engagement–a meta-	2018	Industrial and Commercial	Emerald

No	Cites	Authors	Title	Year	Source	Publisher
			analysis of their impact on talent retention		Training	

Source: data processed 2022

Map of publication development by keyword shows that based on co-words, the development map of the employee engagement topic in the GS database for 2016-2020 is formed into 5 clusters. Cluster 1 is red, consisting of the topics dimension, chapter, cultural importance, determinant, and way. Cluster 2 in green consists of mediator, transformational leadership, mediating effect, and employee retention. Cluster 3 is blue with the case topics, model, antecedent, concept, literature review, consequence, article, and knowledge. Cluster 4 is yellow with the topics of mediation, moderating role, organization culture, self-efficacy, OCB, CSR, and job. Moreover, the fifth cluster is purple with the topic of evidence, data, and India.



Source: Vosviewer

Figure 5. Development map of publications based on keywords

IV. Conclusion

Based on the results of bibliometric mapping using Vosviewer using network visualization, Overlay, and density, it can be concluded that in the period 2016-2022, this research focusing on employee engagement experienced the development of publications fluctuating from the total publications indexed by Google Scholar, which is 1000 documents. The highest publication growth occurred in 2020, reaching 193 journals (19.3%), while the lowest publication occurred in 2022 because the data was taken until July 2022 with a total of 47 journals (4.7%). The direction of this research is in line with new findings on the problems of the business world in understanding the key factors to increase employee engagement. In addition, the bibliometric mapping identifies writers who take the theme of employee engagement and who have a collaborative relationship with one another.

The last mapping is the development of employee engagement based on co-occurrence (keywords). This mapping identifies that organizational culture and transformational leadership are at the heart of the most researched issues. Contribution to Science This research is a study in the field of human resource management that examines bibliometric analysis using the Google scholar database and analysis support software Vosviewer. The results of this research can be used as a basis for further research or research in similar fields regarding the bibliometric analysis. This research can also be a source of inspiration for research in other fields related to bibliometrics.

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