



## Exploring Potential Topics in Organizational Citizenship Behavior of Era 4.0 in Indonesia: A Bibliometric Analysis

Arif Rahman Hakim<sup>1</sup> \*

Aniek Rumijati<sup>2</sup> ‡

**Abstract:** *The concept of organizational citizenship behavior (OCB) is increasingly recognized as a vital factor contributing to organizational success. OCB is critical in the 4.0 era because it helps organizations adapt to changes and complexities. This research seeks to identify the development of OCB-related publications from co-author and co-occurrence and see the potential for future research. Bibliometric analysis was performed using the VOSViewer program. A total of 789 articles from Scopus and Scholar for 2019-2023 that meet the criteria were used in this analysis. The results showed that the co-author analysis was dominated by "asbari, masduki" authors with 17 articles. The co-occurrence cluster, which consisted of 99 items with 13 clusters, found that the topics of job satisfaction, organizational commitment, motivation, and employee engagement dominated the largest node, which showed many articles discussing these topics in the context of OCB. Interestingly, job satisfaction has become a frequent research topic in recent times. The research also revealed potential issues to be researched, such as SDGs, job embeddedness, Islamic work ethics, organizational trust, learning organization, and CSR in the future. An important concept is that organizations should concentrate on cultivating OCB employees in a positive environment for organizational success. The increase in OCB is positively correlated with employee performance and organizational productivity. This study provides a unique perspective on how OCB evolves in emerging economies like Indonesia and suggests globally relevant strategies to enhance organizational effectiveness in Industry 4.0.*

**Keywords:** *Organizational Citizenship Behavior, SDGs, Era 4.0, Bibliometric Analysis.*

### Introduction

The era driven by technological advancement has fundamentally transformed the global business landscape through the Industrial Revolution 4.0. This period is characterized by the smooth incorporation of digital technologies, automation, data analytics, and connectivity, significantly impacting organizations and how individuals work. OCB is increasingly recognized as a critical construct in the Industry 4.0 era, where organizations must navigate rapid technological advancements and workforce transformations (Ali & Xie, 2020). Its voluntary, extra-role behaviors enable organizations to build adaptive, innovative, and collaborative environments, which is essential for maintaining a competitive edge.

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\*University of Muhammadiyah Malang, Indonesia. Email: arifrahmanhakim219@gmail.com

‡ University of Muhammadiyah Malang, Indonesia. Email: rumijati@umm.ac.id

OCB has many benefits in organizations; for example, OCB increases innovation. During the age of Industry 4.0, organizations must innovate to stay competitive. OCB is like offering new ideas or supporting colleagues, fostering an environment conducive to innovation and adaptability, which is crucial in the face of rapid technological advances (Ismail & Rodzalan, 2021), encouraging employee engagement, and increasing organizational productivity (Fan et al., 2023). Research has shown that OCB contributes to individual and collective performance, ultimately creating a resilient organizational culture in the face of global challenges (Germeys et al., 2019; Yaakobi & Weisberg, 2020). OCB is necessary for effective organizations, as OCB encourages efficient and effective functioning; its findings also encourage organizations to implement practices that can enhance OCB behavior to boost operational efficiency, leading to a more enduring competitive edge. Hence, Yang et al., (2023) mentioned that the increasing scientific interest and research on the topic of OCB over the past few decades has been seen, hence the need for a comprehensive bibliometric analysis of the research, especially since 2011.

Over the last twenty years, scholars have dedicated considerable effort to investigating knowledge in the area of organizational citizenship behavior (Guiling et al., 2022). Their findings show that there has been a dramatic upward trend in the study of OCB. Additionally, the United States leads in OCB production, journals, citation impact, co-authoring, institutions, and authors, followed by China, Indonesia, India, South Korea, Malaysia, Pakistan, the United Kingdom (Scopus.com, 2023). Majeed & Jamshed (2021) showed that OCB is slowly becoming necessary for organization workers. Therefore, the primary focus of the investigation is to comprehend how OCB operates within organizations (Kim & Park, 2019). Based on (Carpenter et al., 2014), substantial research is being conducted on the growing popularity of OCB and similar frameworks. Given the significance of OCB to organizational performance, numerous studies have explored the connection between OCB and human resource policies and practices to identify possible OCB antecedents (Lin et al., 2016; Andrade & Neves, 2022; Tinti; et al., 2017).

The dominance of publications from the United States, China, Canada, Pakistan, and other countries shows the importance of OCB in the organization. Research on OCB has grown rapidly in developed countries with a focus on technology and innovation (Fan et al., 2023; Guiling et al., 2022). However, there is a gap in the literature that explores OCB in developing countries such as Indonesia, which have distinctive characteristics of work culture and organizational environment. Indonesia, with its strong cultural characteristics of collectivism, provides a unique opportunity to explore OCB in a local context. This study fills this gap by conducting a bibliometric analysis that maps OCB research trends in Indonesia during the 4.0 Era, highlighting local dynamics that influence global concepts such as OCB. Although OCB has been widely studied, its transformation and role in the Industry 4.0 era still need to be explored. This analysis uncovers OCB's evolving research landscape, covering classic themes such as job satisfaction and organizational commitment, to emerging issues such as the SDGs and Islamic work ethic while offering important insights into OCB's relevance in the digital and competitive environment of the era of technological change.

This study focuses on mapping publication and citation trends related to Organizational Citizenship Behavior (OCB) in Indonesia during the period 2019-2023, a period chosen because it reflects the rapid development of OCB research in the era of digital

transformation. This study was designed to answer the main questions, namely: (RQ1) What are the publication and citation trends of OCB research in Indonesia during the period? (RQ2) What are the co-author and co-occurrence relationships found in OCB research in Indonesia? Moreover, (RQ3) What topics have the potential to be further developed in OCB studies, especially in the context of the 4.0 era and Indonesia's local challenges? This study is anticipated to contribute to the advancement and importance of organizational citizenship behavior in organizations, especially in Indonesia. By only targeting research in the Indonesian context, this is a differentiator from other studies from countries with dominant OCB publications. This study wants to explore the OCB in Indonesia alone so that the data used is not too general and organizations/companies in Indonesia and other countries can finally apply the contribution.

## **Literature Review**

Organizational citizenship behavior (OCB), a highly regarded concept in organizational behavior, was first introduced over 25 years ago and grounded in cognitive theory. Organ (1988) defines organizational citizenship behavior (OCB) as voluntary actions by individuals that are not formally rewarded but collectively contribute to the organization's effective functioning (in Luthans, 2010). Luthans (2010) states that the personality foundation for OCB reflects the tendency of employees to have a cooperative, helpful, caring, and conscientious nature. Organizational Citizenship Behavior (OCB) refers to actions beyond formal job roles that can positively affect the organization, and managers can influence these behaviors (O'Grady, 2018). OCB is a key factor for sustainable organizational development. Research has focused on the outcomes of organizational citizenship behavior in terms of performance, employee psychology, and behavior (Yang et al., 2023).

Several factors influence OCB behavior, according to P. M. Podsakoff et al., (2000), including 1) task characteristics, 2) job attitude, 3) task variables, 4) various types of leader behavior, 5) job satisfaction, 6) perception of fairness, and 7) organizational commitment positively related to civic behavior. Furthermore, Rianti (2014) also mentioned factors affecting OCB, including 1) job satisfaction, 2) positive organizational climate, 3) personality and mood, 4) organizational commitment, 5) perception of organizational support, 6) length of service, 7) gender, and 8) age. Organ (1997); P. M. Podsakoff et al., (2000) classify OCB into five popularly used dimensions or indicators. Five-Dimensional Model: Organ and Podsakoff proposed the five-dimensional model of OCB, which categorizes these behaviors into five main dimensions, including 1) Altruism: Helping and helping colleagues or organizations without expecting anything in return, 2) Courtesy: Acts of courtesy and concern for others within the organization, 3) Sportsmanship: Tolerance for discomfort and challenge without complaining, 4) Civic virtue: Active participation in the organization's decision-making process and concern for its well-being, and 5) Conscientiousness: Exceeding in terms of performance and work effort.

OCB has consistently been proven to improve organizational performance through improved quality, efficiency, and creativity (Yaakobi & Weisberg, 2020). The main factors influencing OCB include organizational culture, transformational leadership, organizational support, and job satisfaction (O'Grady, 2018; Sastrawijaya et al., 2019). Bibliometric-based

studies highlight OCB as a major theme in human resource management research, with significant implications in various fields. The following are some previous studies that are used as the basis for this research's literature review, shown in Table 1:

**Table 1. Table of review papers OCB**

Author	Aim	Sample Size	Method	Main Findings/Results
(Yang et al., 2023)	To analyze factors influencing OCB in promoting organizational sustainability.	2692 articles	Bibliometric Analysis	Leadership style and individual factors like psychological states are crucial for OCB and sustainability.
(Guiling et al., 2022)	To analyze global research trends on OCB from 2000 to 2019 using bibliometric indicators.	4,324 articles	Bibliometric Analysis with VOSviewer	The United States leads in OCB research; main themes include job satisfaction and leadership as key drivers.
(Fatihudin et al., 2020)	To evaluate how TQM, OCB, and service quality affect the performance of private universities.	250 universities	Component-Based SEM	TQM and OCB significantly enhance university performance, mediated by service quality.
(O’Grady, 2018)	To sensitize managers to the existence, antecedents, and outcomes of OCB in healthcare organizations.	Literature Review	Conceptual Analysis	OCB positively impacts organizational performance; leadership and culture influence its presence.
(Suriansyah et al., 2019)	To analyze the relationships among university autonomy, lecturer empowerment, and OCB.	350 lecturers	Descriptive and Correlational Survey	Significant relationships exist among university autonomy, lecturer empowerment, and OCB.
(Yaakobi & Weisberg, 2020)	To explore how occupational and collective efficacy moderate the relationship between OCB and performance.	276 employees	Experimental Study	OCB enhances quality, creativity, and efficiency, and its effects are amplified by collective efficacy at the team and management levels.
(Fan et al., 2023)	To review the dual roles of OCB and counterproductive work behavior (CWB) in organizational performance.	Review paper	Literature Review	OCB improves organizational effectiveness; CWB reduces it. Balance is necessary for optimal outcomes.
(Suryani et al., 2023)	To explore the influence of Islamic Work Ethics (IWE) and leader humility on thriving at work and OCB.	418 employees	Multiple Regression Hierarchy	IWE and leader humility positively impact thriving and OCB; thriving mediates IWE’s effect on OCB.
(Nurjanah et al., 2020)	To examine transformational leadership, job satisfaction, and organizational commitment on OCB.	196 civil servants	Partial Least Squares (PLS)	Organizational commitment mediates the impact of leadership and satisfaction on OCB effectively.
(Widodo & Ciptaningsih, 2023)	To assess employability, personality, and talent management effects on lecturers' OCB.	230 lecturers	Path Analysis	Employability, personality, and talent management positively influence OCB, mediated by job involvement.
(Arumi et al., 2019)	To examine the role of organizational culture and commitment in enhancing OCB.	169 respondents	Path Analysis	Organizational commitment mediates the relationship between culture and OCB; a strong culture enhances OCB.
(Majeed & Jamshed, 2023)	To explore the impact of transformational leadership on OCB through workplace spirituality and emotional intelligence.	408 academicians	PLS-SEM	Transformational leadership significantly enhances OCB mediated by workplace spirituality and emotional intelligence.

Author	Aim	Sample Size	Method	Main Findings/Results
(Idris et al., 2021)	To investigate transformational leadership and learning culture's role in promoting OCB among nurses.	205 nurses	PLS-SEM	Learning culture and job satisfaction mediate the relationship between leadership and OCB positively.
(Satrianto & Gusti, 2023)	To examine the role of Islamic work ethics and OCBE in improving environmental performance in SMEs.	500 SMEs owners	PLS-SEM	OCBE mediates the relationship between Islamic work ethics and environmental performance.
(Maryam et al., 2021)	To investigate safety climate and employee engagement impacts on sewage workers' OCB.	610 workers	SEM	Both safety climate and engagement significantly improve OCB among sewage workers.
(Widodo et al., 2023)	To explore visionary leadership effects on teachers' OCB mediated by QWL and organizational commitment.	387 teachers	SEM Analysis	Visionary leadership improves OCB through the mediation of QWL and organizational commitment.
(Alifuddin & Widodo, 2022)	To explore cultural intelligence's effect on teachers' interpersonal communication, PsyCap, and OCB.	450 teachers	SEM and Correlation Analysis	Cultural intelligence significantly affects interpersonal communication, PsyCap, and OCB.
(Hermanto & Srimulyani, 2022)	To analyze the mediation role of OCB dimensions in the relationship between organizational justice and employee performance.	820 teachers	SEM and Sobel Test	Organizational justice enhances OCB dimensions (OCBI, OCBO), positively impacting employee performance.
(Udin, 2023)	To investigate the mediating role of knowledge-based work passion between transformational leadership and OCB.	221 lecturers	SEM with AMOS	Knowledge-based work passion mediates the effect of transformational leadership on OCB positively.
(Romi et al., 2020)	To investigate Islamic work ethics-based OCB's role in improving job satisfaction and organizational commitment.	365 lecturers	SEM with AMOS	Islamic work ethics positively affect OCB and commitment; job satisfaction impacts OCB significantly.
(Sastrawijaya et al., 2019)	To investigate variables influencing OCB among early childhood teachers in Cirebon, Indonesia.	196 teachers	Sequential Exploratory Analysis	Organizational support, servant leadership, and work engagement positively influence OCB.
(Supriadi et al., 2019)	To examine OCB as a model for reducing turnover intentions.	210 employees	Structural Equation Modeling	OCB reduces turnover intentions by fostering commitment and self-efficacy.

Source: developed by researchers (2023)

Based on Table 1 above, research on OCB has a broad global scope and is becoming a global trend. Bibliometric analysis shows the continued development of OCB research around the world. This reflects the relevance of OCB in organizational contexts across different countries and cultures (Guiling et al., 2022). OCB is associated with positive organizational outcomes (Fan et al., 2023). Employee OCB positively predicts overall employee performance, performance creativity, and performance efficiency (Germeys et al., 2019; Park, 2016; Yaakobi & Weisberg, 2020). In emerging markets like China, OCB research has highlighted the role of cultural values and transformational leadership in driving

extra-role behaviors (Zhang et al., 2017). These studies underscore the universal importance of OCB while revealing context-specific nuances. Workers who participate in OCB typically experience greater job satisfaction, commitment, and performance. This means that OCB can help organizations achieve their goals more effectively, especially in the face of fierce competition in this digital age (Idris et al., 2021). OCB research continues to provide valuable insights into employee volunteer behavior and its impact on organizations. In the challenging era of Industry 4.0, OCB remains an important topic in human resource management and organizational development.

## **Research Method**

The research applied bibliometric analysis, a commonly utilized and rigorous approach, to investigate and scrutinize extensive scientific data (Donthu et al., 2021). In summary, bibliometric analysis assists researchers in 1) identifying trends within the research field, 2) measuring the impact of specific publications or authors, and 3) comparing the productivity of different research groups. A review of the literature using bibliometric analysis was undertaken using PRISMA criteria. The PRISMA 2020 guidelines offer contemporary instructions for reporting systematic reviews, incorporating the latest developments in identification methods, and selecting, assessing, and synthesizing studies (Page et al., 2021). In summary, PRISMA is a set of guidelines that helps authors report systematic reviews and meta-analyses wholly and transparently. The PRISMA analysis involves four steps, as illustrated in Figure 1, which outlines the research process for performing a systematic review and selecting relevant documents.

### **Level 1: Eligibility Criteria**

The inclusion criteria (IC) for manuscript review standards are as such:

IC1: Original study, presented in English

IC2: The research focuses on Organizational Citizenship Behavior within the context of Human Resource Management or Organizational Behavior.

Only articles or manuscripts written in English (IC1) will be selected, as English serves as the universal language for researchers and academics. Additionally, IC2 specifies that the primary focus of the selected articles must fall within the scope of OCB, HRM, or Organizational Behavior. Manuscripts that do not meet these criteria will be excluded from the dataset.

### **Stage 2: Resources**

Researchers used popular online databases such as Scopus (Elsevier) and Google Scholar. The selection of data information sources is related to the convenience of locating acceptable documents in this investigation.

### **Stage 3: Study selection**

The study selection (SC) process employed in this study was divided into four parts:

SC1: The paper must include the keywords Organizational Citizenship Behavior; Indonesian.

SC2: The paper is carefully checked based on the journal's title, abstract, and keywords according to the eligibility criteria (IC2). It must be in the context of OCB, HRM, and Organizational Behavior,

SC3: The paper must be authored or produced by an Indonesian author (or linked with a non-Indonesian author), and the item should be in Indonesia,

SC4: The paper should be fully accessible to researchers and complete from Title, Abstract, and Keyword to reference.

The writer properly carries out all processes of selecting studies connected to eligible materials so that a paper suitable for usage fulfills the requirements established.

#### **Stage 4: Data Collection Process**

The search for relevant research journal data or literature was conducted through Scopus, a reputable international database, via the scopus.com website. The data collected spans from 2019 to 2023 (the past five years) using the keyword "Organizational Citizenship Behavior; Indonesia". The search applied the following filters: 1) Document type limited to articles to focus the results, 2) Country limited to Indonesia, and 3) Language restricted to English articles. A total of 132 articles published on Scopus were gathered.

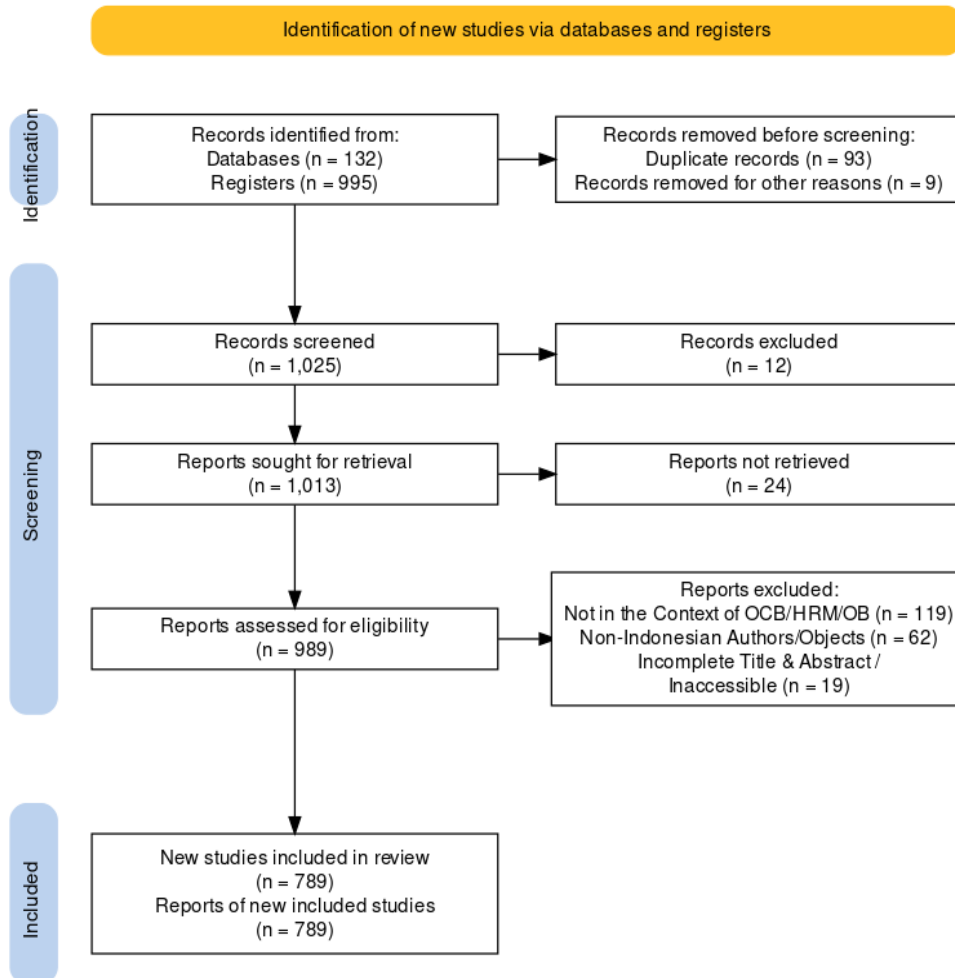
The second data collection was conducted on Google Scholar, using Publish or Perish software to search for articles published between 2019 and 2023 (the last five years) with the keyword "Organizational Citizenship Behavior; Indonesia" and the document type filter set to journal articles. A total of 995 articles were collected from Google Scholar. The search results from both Scopus and Google Scholar were exported as CSV and RIS files to serve as the foundation for mapping and analysis. In total, 132 documents were gathered from Scopus and 995 from Google Scholar, resulting in a combined database of 1,127 documents. The selection of data sources from Scopus and Google Scholar is due to the access and subscription of the author's organization. The author assumes that articles published in Scopus are quality and credible articles.

Figure 1 shows the outcomes of the four PRISMA stages used to choose appropriate document manuscripts following the data collection process. Document selection with the online PRISMA flow created by (Haddaway et al., 2022) after passing the detailed review stage by the author. **Identification stage:** The main database of Scopus obtained amounted to 132 documents, and those registered from Scholar data amounted to 995 documents. 93 documents were omitted because they needed to meet the eligibility criteria (IC1). Namely, the manuscript was not in English (data scholar), and nine documents were omitted because of the researcher himself, so the remaining documents that passed IC1 were 1,025. **Screening Stage:** 1,025 documents entered the screening stage; 12 Scopus documents were found to be excluded and eliminated because they needed to include Article manuscripts. So there are 1,013 documents taken for the next stage; after review, it was found that documents were not taken or did not meet because they did not include documents in the 2019-2023 range of as many as 24 documents (Scopus data), so that the remaining 989 documents.

**The next screening stage is SC2, with 989 documents; SC2 is the manuscript that must be included in the context of OCB, HRM, and Organizational Behavior.** After review, 119 scholarly documents were found that did not meet IC2 and SC2, so they were eliminated. Furthermore, screening related to SC3 related to authors and objects must be from and located in Indonesia; the screening results showed that 62 Scholar documents did not meet SC3, so they were eliminated again. The last selection study, SC4 related to manuscripts, can be accessed fully and completely from Title, Abstract, Keywords to References and obtained 19 documents (14 Scopus documents and 5 scholar documents) that still need to meet SC4 and must be eliminated. There were 5 documents omitted on the grounds of researchers. After

the study selection (SC) process, 789 documents that met the eligibility criteria (IC) and study selection (SC) were identified and used as the research analysis database. This includes 78 documents from Scopus and 715 documents from Google Scholar.

The data selected after the PRISMA method are analyzed using VOSviewer software, a free tool for bibliometric analysis, was created by Eck and Waltman. VOSViewer features an intuitive graphical interface, enabling researchers to visualize the generated maps effortlessly (Liao et al., 2018). This study utilizes observable data, including relationships between researchers (co-authorship) and co-occurring keywords, a method also referred to as



flow diagram output (Haddaway et al., 2022)

co-word analysis. Co-word *analysis* calculates the number of keywords from a research document that appear simultaneously in the papers studied (Tupan, 2016).

## Result and Discussion

### Number of Publications and Citations

Based on selected article documents with the keyword "OCB; Indonesia" in 2019-2023, the number of publications with topics relevant to the keywords and context "**Human Resource Management, Organizational Citizenship Behavior, and Organizational Behavior**" found 78 Scopus articles and 711 Scholar articles. The number of citations in Scopus articles



in 2019-2023 is 279, and the number of scholarly articles is 15,209. Below is Table 2, which displays the publication count and citation numbers for the two journal sources utilized:

**Table 2.** Number of Scopus and Scholar Publications

Year	Number of Articles (n)		Number of Citations	
	Scopus	Scholar	Scopus	Scholar
2019	19	125	65	3.242
2020	17	213	133	6.194
2021	11	195	39	3.467
2022	10	134	28	1.971
2023	21	44	14	335
<b>Total</b>	<b>78</b>	<b>711</b>	<b>279</b>	<b>15.209</b>

Source: processed data (2023)

The highest number of Scopus publications with these keywords occurred in 2023, with 21 articles published and cited 14 times, as shown in Table 2 and Figure 2. At the same time, the most citations occurred in 2020, where all Scopus publications in that year had been cited 133 times. One of the most cited journal articles is a study from (Haerani et al., 2020) Meanwhile, Scopus' lowest publication with this keyword occurred in 2022, with 10 publications and 28 citations. Figure 2 shows the development of publication and citation of Scopus Keyword OCB data; Indonesia 2019-2023.

Furthermore, publication on Google Scholar data with OCB keywords; Indonesia in 2019-2023 with the most publications occurred in 2020 as many as 213 Scholar articles with 6,194 citations, and in 2020, this became a publication in Scholar related to these keywords with the most citations. Journal articles with the most citations are found in the study (Paais & Pattiruhu, 2020). Meanwhile, the least cited journal articles are in 2023, with 335 citations and a small number of 44 publications. The development of publications with OCB keywords, Indonesia 2019-2023, can be seen in Figure 3 above, where there is a decrease in publications related to these keywords.

Table 3 below shows the top 5 Scopus journal articles related to OCB keywords in Indonesia from 2019-2023. Rank 1 from the Scopus publication with 26 citations obtained by the study (Haerani et al., 2020), this study highlights the importance of individual-organizational conformity and organizational fairness in influencing employee performance in state-owned enterprises in Indonesia. While people-organizational fit contributes to job satisfaction, organizational fairness is more important in building human resource performance by fostering job satisfaction, organizational commitment, and OCB (Haerani et al., 2020). Additionally, it was discovered that OCB positively impacted employee performance. Employees who engage in OCB go above and beyond the standard requirements of their work and volunteer to help others without expecting anything in return or recognition. This behavior improves employee performance (Haerani et al., 2020).

Meanwhile, the 5th rank of the Scopus publication was obtained by research from (Putri et al., 2019) with citations as many as 15 times. The quantitative research findings revealed a robustly favorable correlation between the identified variables (organizational support, servant leadership, and work engagement) and OCB. Higher levels of these variables were associated with higher OCB rates among ECCE teachers in Cirebon. These findings suggest that higher levels of organizational support, servant leadership, and work engagement are associated with higher rates of OCB among teachers (Putri et al., 2019).

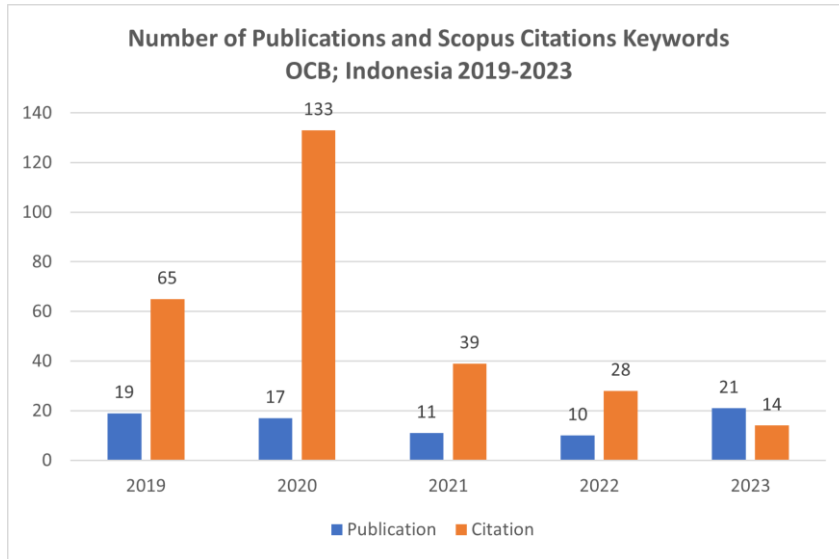


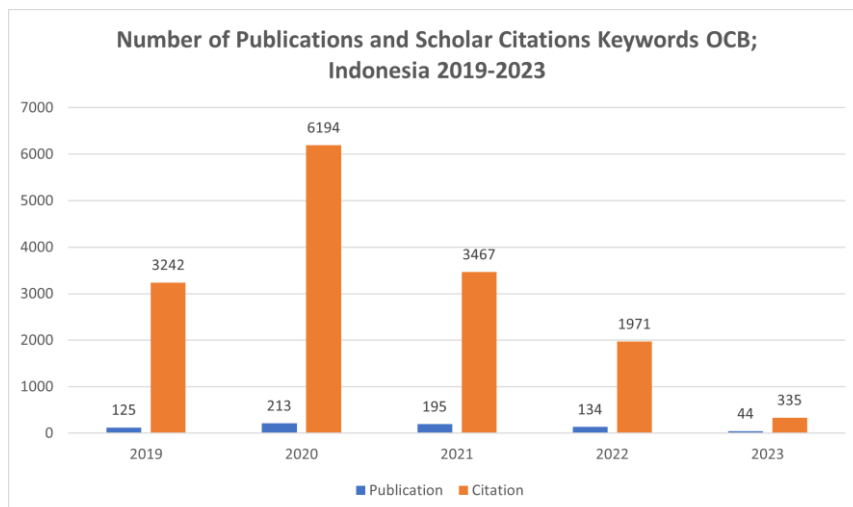
Figure 1. Number of Publications and Citations Scopus Figure 2. PRISMA

Table 3. Top 5 citations on Scopus keyword OCB; Indonesia 2019-2023

Rank	Author & Year	Title	Citation	Source	Publisher	URL/DOI
1	Haerani S.; Sumardi; Hakim W.; Hartini; Putra A.H.P.K. (Haerani et al., 2020)	Structural model of developing human resources performance: Empirical study of Indonesia States Owned Enterprises	26	Journal of Asian Finance, Economics and Business	Korea Distribution Science Association (KODISA)	10.13106/jafeb.2020.vol7.no3.211
2	Hapsari D.; Riyanto S.; Endri E. (Hapsari et al., 2021)	The Role of Transformational Leadership in Building <b>Organizational Citizenship: The Civil Servants of Indonesia</b>	23	Journal of Asian Finance, Economics and Business	Korea Distribution Science Association (KODISA)	10.13106/jafeb.2021.vol8.no2.0595
3	Nurjanah S.; Pebianti V.; Handaru A.W. (Nurjanah et al., 2020)	The Influence of Transformational Leadership, Job satisfaction, and organizational commitments on <b>Organizational Citizenship Behavior (OCB)</b> in the Inspectorate General of the Ministry of Education and Culture	21	Cogent Business and Management	Cogent OA	10.1080/23311975.2020.1793521
4	Udin U.; Yuniawan A. (Udin & Yuniawan, 2020)	Psychological capital, personality traits of big-five, <b>organizational citizenship behavior</b> , and task performance: Testing their relationships	18	Journal of Asian Finance, Economics and Business	Korea Distribution Science Association (KODISA)	10.13106/JAFEB.2020.VOL7.NO9.781
5	Putri E.R.; Udin; Djastuti I. (Putri et al., 2019)	Structural empowerment and service-oriented <b>organizational citizenship behavior: The mediating roles of innovativeness and job satisfaction</b>	15	Quality - Access to Success	SRAC - Romanian Society for Quality	https://www.researchgate.net/publication/333249423

Source: processed data Scopus (2024)

Furthermore, table 4 and Figure 3 show the top 5 Scholar journal articles related to OCB keywords; Indonesia from the 2019-2023 range is the most cited. The top 1st citation was obtained from a study article from (Paais & Pattiruhu, 2020) With 683 citations. The findings of this study are: 1) Employee performance is notably enhanced by both the motivation found in work and the prevailing culture within the organization; 2) Leadership significantly impacts employee job satisfaction, yet it does not affect performance; and 3) Motivation, leadership, and cultural factors account for 57.4% of job satisfaction, while motivation, leadership, culture, and job satisfaction together account for 73.5% of employee performance. These discoveries emphasize the intricate relationship among motivation, leadership, corporate culture, job fulfillment, and employee effectiveness, offering valuable guidance for organizations seeking to enhance their HRM approaches (Paais & Pattiruhu, 2020).



**Figure 3.** Number of Publications and Citations Scholar

Then, the top 5th rank of scholar publications related to this keyword obtained journal articles from the findings (Effendi et al., 2020) with 182 citations. The study's key findings are: 1) The COVID-19 outbreak has heightened the recognition among SME managers of how crucial social media is for their businesses; 2) The decision of SMEs to embrace social media is notably shaped by factors such as their technological environment, organizational setup, external conditions, and familiarity with social media platforms; 3) During crises like the COVID-19 pandemic, SMEs require governmental assistance, which encompasses aid for affected businesses and initiatives aimed at forecasting the pandemic's effects, stimulus for purchasing power, tax relaxation, and assistance in product promotion strategies. These findings underscore the importance of social media adoption for SMEs during crises and the need for government support to adapt to the changing business environment (Effendi et al., 2020).

**Table 4. Top 5 citations on Scholar keyword OCB; Indonesia 2019-2023**

Rank	Author & Year	Title	Citation	Source	Publisher	URL/DOI
1	M Paais, JR Pattiruhu (Paais & Pattiruhu, 2020)	Effect of motivation, leadership, and organizational culture on satisfaction and employee performance	683	Journal of Asian Finance, Economics and Business	koreascience .kr	<a href="https://koreascience.kr/article/JAKO202026061031735.page">https://koreascience.kr/article/JAKO202026061031735.page</a>
2	S Haryono, Ba Sulistyo (Pancasila et al., 2020)	Effects of work motivation and leadership toward work satisfaction and employee performance: Evidence from Indonesia	316	Journal of Asian Finance, Economics and Business International	koreascience .kr	<a href="https://koreascience.kr/article/JAKO202017764018192.page">https://koreascience.kr/article/JAKO202017764018192.page</a>
3	M Asbari, DD Hidayat, A Purwanto (Asbari et al., 2021)	Managing employee performance: From leadership to readiness for change	205	Journal of Social and Management Studies (IJOSMAS)	ijosmas.org	<a href="https://ijosmas.org/index.php/ijosmas/article/view/12">https://ijosmas.org/index.php/ijosmas/article/view/12</a>
4	K Haldorai, WG Kim, HS Chang, JJ Li (Haldorai et al., 2020)	Workplace spirituality as a mediator between ethical climate and workplace deviant behavior	185	International Journal of Hospitality Management	Elsevier	<a href="https://www.sciencedirect.com/science/article/pii/S0278431919301914">https://www.sciencedirect.com/science/article/pii/S0278431919301914</a>
5	MI Effendi, D Sugandini... (Effendi et al., 2020)	Social media adoption in SMEs impacted by COVID-19: The TOE model	182	Journal of Asian Finance, Economics and Business	pdfs.semanti cscholar.org	<a href="https://pdfs.semanticscholar.org/de01/b0452c7eddb7cc2a2cbdf83bb3ce458935d.pdf">https://pdfs.semanticscholar.org/de01/b0452c7eddb7cc2a2cbdf83bb3ce458935d.pdf</a>

Source: processed data Scholar (2024)

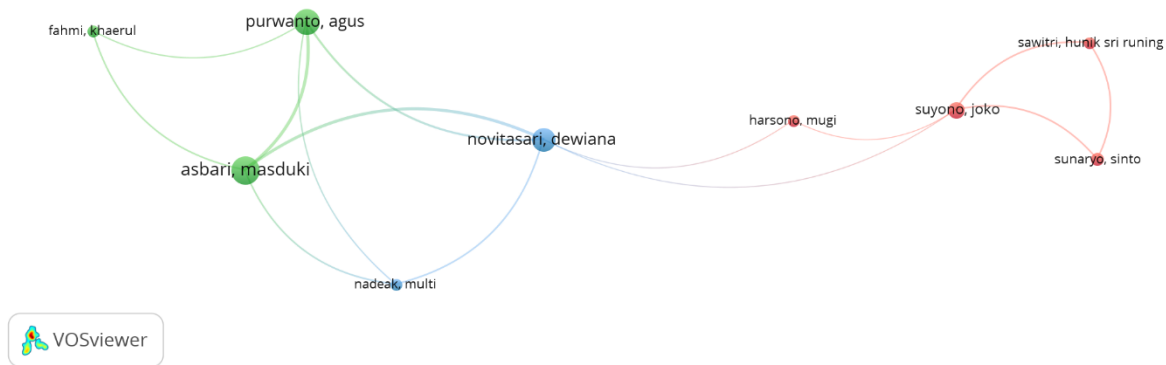
Publication in Scholar related to OCB Keywords; Indonesia 2019-2023 When viewed from the number of citations available, the top 5 publications have yet to explicitly discuss related Organizational Citizenship Behavior. However, from the top 5 journals in Table 3, it is still included in the context of Human Resource Management and Organizational Behavior, which, when viewed from the topics discussed, can also provide relationships and influences on employee OCB behavior in the Company. Even so, the author found one of the papers related to OCB from the analyzed Scholar database. For example, a study (Danilwan et al., 2020) According to the author's analysis, it ranks in the top 21st with a total of 112 citations.

A vital study finding (Danilwan et al., 2020) Green Performance Management and compensation influence organizational citizenship behavior and sustainable environmental performance. This underscores the significance of matching HR strategies with environmental sustainability objectives to enhance employee conduct and overall organizational effectiveness. In addition, the research underscores the importance of organizations focusing on developing productive and environmentally friendly HR-related strategies to achieve profitable results and sustainable growth.

Another finding is that the study (Arumi et al., 2019) obtained citations 83 times and was in the top/rank 39 on the analyzed scholarly data. An important finding of this study is the crucial role organizational commitment plays as a mediator between organizational culture and organizational citizenship behavior (OCB). This research emphasizes that when organizational culture is effectively aligned with local culture and is conducive to forming firm commitments among employees, it can lead to the emergence of OCB (Arumi et al., 2019). Organizations can work to create an environment that not only improves employee behavior and commitment but also adds to the organization's overall achievement.

### Co-Authorship Relationship

Figure 4 shows the results of VOSViewer analysis of Co-Author relationships from selected journal documents. The results of the Co-Author obtained 3 clusters formed, where cluster 1 marked in red consists of Author 1) harsono, mugi; 2) sawitri, hunik sri running; 3) Sunaryo, Sinto; and 4) Suyono, Joko. Cluster 2, marked in green, consists of Author 1) asbari, masduki; 2) Fahmi, Khaerul; and 3) Purwanto, Agus. Cluster 3 is marked in blue, consisting of Authors 1) nadeak, multi, and 2) Novitasari, Dewiana. The results of this Co-Author show the collaboration of each author in scientific publications with the keyword OCB; Indonesia in 2019-2023. Furthermore, table 5 shows the resulting article documents and collaboration



**Figure 4.** Relationship between Co-Authors

between authors (shown in link and link strength).

Cluster 1, shown in Table 5, shows that author Suyono, Joko dominates the number of publications, as many as 5 articles including (Novitasari, Riani, et al., 2021; Sawitri et al., 2021; Sunaryo et al., 2021, 2022; Waskito et al., 2020). Author “**Suyono, Joko**” also has 4 links or collaborations with other authors in scientific publications with authors 1) sawitri, hunik; 2) Sunaryo, Sinto; 3) Novitasari, Dewiana: and 4) Harsono, Mugi. In addition, author Suyono Joko has collaborated with other authors with 8 total link strengths in the selected journal database. The findings (Novitasari, Riani, et al., 2021) Show how to improve OCB by providing examples of ethical practices. High professional commitment, reinforced by ethical leaders, will help improve OCB and make the organization more effective. These discoveries underscore the significance of ethical guidance from leaders and organizational fairness in promoting OCB among academics in private universities.

**Table 5. Co-Author Relationship Results**

Clusters	Co-Author	Documents	Links	Link Strength	Co-Author Relationship
Cluster 1	harsono, mugi	3	2	2	suyono, joko novitasari, dewiana
	sawitri, hunik sri runing	3	2	6	sunaryo, sinto suyono, joko
	sunaryo, sinto	4	2	6	sawitri, hunik suyono, joko
	suyono, joko	5	4	8	sawitri, hunik sunaryo, sinto novitasari, dewiana harsono, mugi

Clusters	Co-Author	Documents	Links	Link Strength	Co-Author Relationship
Cluster 2	asbari, masduki	17	4	27	fahmi, khaerul purwanto, agus nadeak, multi novitasari, dewiana
	fahmi, khaerul	3	2	5	asbari, masduki purwanto, agus
	purwanto, agus	14	4	20	asbari, masduki fahmi, khaerul nadeak, multi novitasari, dewiana
Cluster 3	nadeak, multi	3	3	8	asbari, masduki purwanto, agus novitasari, dewiana
	novitasari, dewiana	12	5	20	harsono, mugi suyono, joko asbari, masduki purwanto, agus nadeak, multi

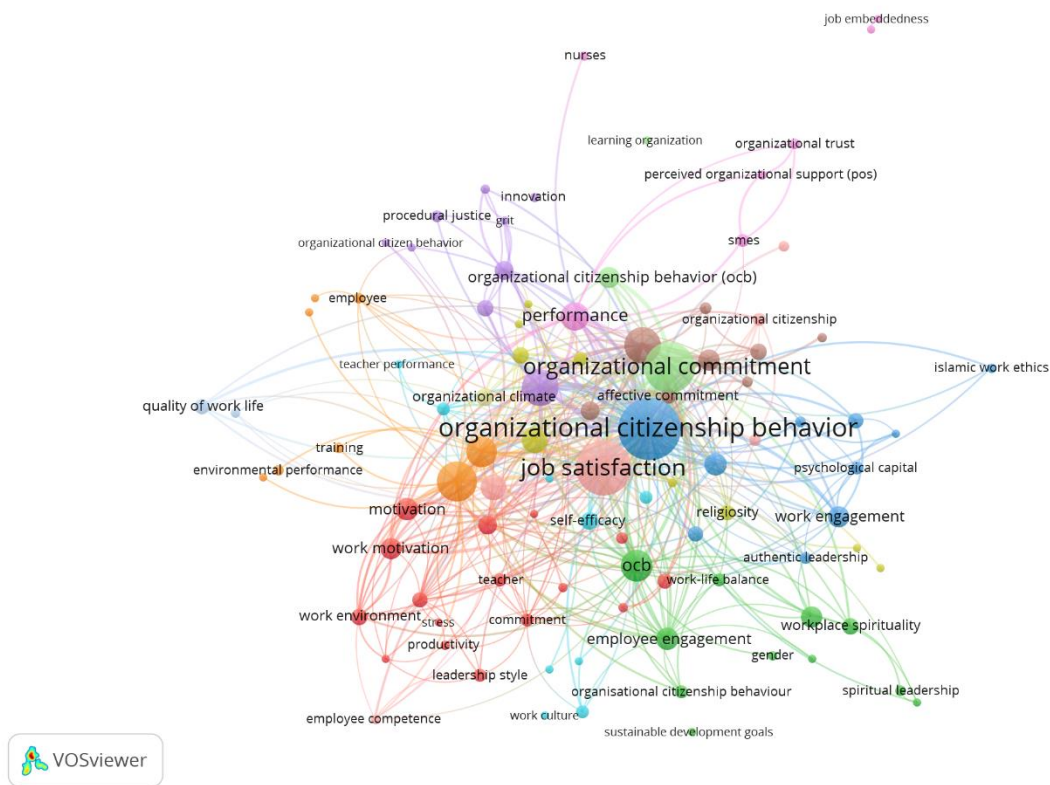
Source: VOSViewer process data output (2024)

Furthermore, Cluster 2, shown in Table 5, is known that the author of **asbari, masduki** dominates the number of publications as many as 17 articles covering (Amri et al., 2021; Asbari et al., 2021; Asbari, Bernardo, et al., 2020; Asbari, Purwanto, et al., 2020; Chidir et al., 2020; Goestjahjanti et al., 2020; Haq et al., 2022; Muliati et al., 2022; Nadeak et al., 2021; Novitasari, Kumoro, et al., 2020; Novitasari, Supriatna, et al., 2021; Novitasari, Asbari, et al., 2020; Nugroho et al., 2020; Purwanto et al., 2021, 2022; Putra et al., 2021; Santoso et al., 2020). Author “**asbari, masduki**” also has 4 links or collaborations with other authors in scientific publications with authors 1) fahmi, khaerul; 2) Purwanto, Agus; 3) Nadeak, Multi; and 4) Novitasari, Dewiana. In addition, the author of “Asbari, Masduki” has collaborated with other authors, with 27 total link strengths in the selected journal database. The findings (Nadeak et al., 2021) found that training significantly and positively impacts employee performance in MSME organizations. These impacts are mediated, at least partially, by Organizational Citizenship Behavior (OCB). HR managers in MSME organizations utilize coaching as a strategic tool to improve employee performance, talent development, and organizational effectiveness.

Finally, Cluster 3, shown in Table 5, is known that the author “**novitasari, dewiana**” dominates the number of publications, as many as 12 articles including (Amri et al., 2021; Goestjahjanti et al., 2020; Haq et al., 2022; Muliati et al., 2022; Nadeak et al., 2021; Novitasari, 2020; Novitasari, Asbari, et al., 2020; Novitasari, Kumoro, et al., 2020; Novitasari, Riani, et al., 2021; Novitasari, Supriatna, et al., 2021; Purwanto et al., 2022; Putra et al., 2021). Author “**novitasari, dewiana**” also has 5 links or collaborations with other authors in scientific publications with authors 1) harsono, mugi; 2) Suyono, Joko; 3) asbari, masduki; 4) Purwanto, Agus; and 5) Nadeak, Multi. In addition, the author of “**novitasari, dewiana**” has collaborated with other authors, with 20 total link strengths in the selected journal database. The study (Novitasari, 2020) underscores the vital role of transformational leadership fosters a workplace atmosphere where employees are inspired to exhibit OCB, such as helping colleagues, volunteering for additional tasks, and contributing to overall organizational effectiveness.

### Co-Occurance Relationship

The co-occurrence illustrates the correlation between keywords derived from the selected and utilized journals. The keywords "Organizational Citizenship Behavior" and "Indonesia," spanning from 2019 to 2023, resulted in a co-occurrence network, as depicted in Figure 5. This network model consists of 99 items and 13 clusters, with each item in clusters 1-7 fully displayed in Table 6. **Cluster 1** has 16 items shown in red nodes. Cluster 1 is dominated by "work motivation" items with 52 total link strengths and 22 occurrences, meaning that 22 times the keyword "work motivation" appears in documents and is used in research. The keyword "motivation" also has 38 total link strengths and 23 occurrences, so it was found that 23 times the keyword "motivation" appeared in documents and used other research. The findings show that "Work motivation positively affects OCB" (Jufrizen & Hutasuhut, 2022; Sylviana et al., 2020). Similarly, it was found that "motivation significantly affects OCB" (Ningrum et al., 2020; Puspita & Dewi, 2020). Motivation plays a vital role in driving OCB Behavior, with significant implications for individual and organizational outcomes (Suharnomo & Hashim, 2019) It is evident that motivation significantly influences OCB, and there is no denying that it enhances employee performance.



**Figure 5.** Relationship Co-Occurance Network Visualisation

**Cluster 2** has 11 items shown in green nodes. Cluster 2 is dominated by the item "ocb" with 100 total link strengths and 47 occurrences, meaning that as many as 47 times the keyword "ocb" appears in other documents. The keyword "employee engagement" also has 47 total link strengths and 25 occurrences, so it was found 25 times to appear in other documents with the keyword "employee engagement." Studies show employee engagement impacts OCB (Fadha et al., 2021; Mahmudi & Elmi, 2020; Maryam et al., 2021). Employee engagement fosters a sense of ownership and responsibility towards organizational goals, increasing OCB and contributing to organizational success (Qayyum et al., 2022). Engaged employees who feel attached and committed to their organization are likelier to go outside the tasks outlined in their job description (Maryam et al., 2021).

**Cluster 3** has 10 items shown in blue nodes. Cluster 3 is dominant and refers to the item "organizational citizenship behavior" with 340 total link strength and 184 occurrences, meaning that as many as 184 times the keyword "organizational citizenship behavior" appears in the document and is used in research, this is proven by the largest node in the network visualization model formed. Cluster 3, in addition to OCB, is dominated by the keyword "perceived organizational support" and has 38 total link strengths and 24 occurrences. It was found that perceived organizational support affects OCB in organizations (Aprilani et al., 2021; Ghulami & Agustina, 2020; Kristiani et al., 2019; Paramartha et al., 2019). Higher levels of perceived organizational support lead to an increase in OCB (Firmansyah et al., 2022). When employees perceive that their organization supports them, they are inclined to participate in activities outside their official job duties more frequently (Gunawan et al., 2023). Supported workers will participate in actions like assisting coworkers, surpassing their assigned tasks, and adding to a favorable workplace atmosphere.

**Cluster 4** has 9 items shown in green and yellow nodes. Cluster 4 shows the item keyword "organizational justice" with 62 total link strengths and 32 occurrences, meaning that 32 times the "organizational justice" keyword appears in documents and is used in other studies. Research shows that organizational justice significantly impacts OCB (Dearsy & Ratnawati, 2022; Trisnawati et al., 2020; Winarsih & Riyanto, 2020). Higher OCB levels are associated with better organizational fairness as perceived by employees, underscoring the importance of employees' feelings and acceptance of fairness (Juliana et al., 2022). Workers who view their organization as just are more likely to engage in voluntary activities that support the organization, and conversely.

**Cluster 5** has 9 items shown in purple nodes. Cluster 5 shows the item keyword "organizational culture" with 137 total link strengths and 64 dominating occurrences, meaning that as many as 64 times the keyword "organizational culture" appears in the research document. Organizational culture is one of the variables that have a significant impact on employee OCB behavior and was found to be significant (Kumar & Hamid, 2021; Mahmudi & Elmi, 2020; Wibawa et al., 2022; Winarsih & Riyanto, 2020). Organizations that want to increase OCB among their employees should focus on developing a positive organizational culture (Sumardjo & Supriadi, 2023). A positive organizational culture can increase commitment and job satisfaction, increasing OCB rates. Hence, the connection between organizational culture (shared values, beliefs, and norms of behavior) and OCB is essential to creating a healthy and productive work environment.

**Cluster 6** has 9 items shown in sky blue nodes. Cluster 6 showed the item keyword "self-efficacy" with 27 total link strengths and 16 dominating occurrences, meaning that 27 times the keyword "self-efficacy" appeared in the research document. Studies show that self-efficacy significantly impacts OCB behavior (Almahdali et al., 2021; Lestari & Saputra, 2022; Pratiwi & Nawangsari, 2021). Self-efficacy relates to a person's confidence in completing a task or activity. (Soelton, Sudiro, et al., 2020) They disclosed that people with high self-efficacy tend to exceed the expectations of their job requirements. Employees with solid self-confidence are more inclined to engage in OCB more frequently (Anfajaya & Rahayu, 2020). Self-efficacy influences employee attitudes and actions, ultimately impacting the organization's overall civic behavior.

Finally, **Cluster 7** has 8 items shown in orange nodes. Cluster 7 showed the item keyword "employee performance" with 154 total link strength and 77 occurrences. This showed that 77 times the keyword "employee performance" appeared in documents and was used in other studies. Employee performance is a keyword used as a dependent variable in variable relationship research, and OCB is a variable that affects employee performance. Consistently, research shows OCB to be a factor that significantly influences employee performance (Almahdali et al., 2021; Berdiyana & Witjaksono, 2022; Suharnomo & Hashim,



2019; Wulandari & Putri, 2020). Employees with good OCB can collaborate effectively, comply with regulations, and complete tasks efficiently, positively impacting their performance (Hamid et al., 2023). OCB behavior improves employee performance by encouraging a supportive workplace, uplifting spirits, and enhancing efficiency through voluntary actions that benefit coworkers and the organization.

**Table 6. Co-Occurance Items by Cluster**

Item and Cluster	Total Links	Occurrence	Item and Cluster	Total Links	Occurrence
<b>Cluster 1 (16 items)</b>			<b>Cluster 2 (11 items)</b>		
commitment	21	9	conscientiousness	5	4
compensation	26	12	employee engagement	<b>47</b>	<b>25</b>
competence	36	18	gender	9	5
discipline	9	4	<b>ocb</b>	<b>100</b>	<b>47</b>
innovative behavior	12	4	organizational citizenship behaviour	16	9
knowledge management	13	7	organizational citizenship behaviour	25	21
leadership style	17	8	person-organization fit	10	4
motivation	<b>38</b>	<b>23</b>	spiritual leadership	7	6
organization citizenship behavior	9	5	sustainable development goals	2	4
organizational learning	11	5	work-life balance	18	9
organizational performance	20	12	workplace spirituality	22	13
productivity	10	5	<b>Cluster 4 (9 items)</b>		
stress	5	4	attitude	11	5
teacher	16	9	communication	6	4
work environment	33	14	emotional intelligence	21	14
<b>work motivation</b>	<b>52</b>	<b>22</b>	organizational behavior	7	4
<b>Cluster 3 (10 items)</b>			<b>organizational justice</b>	<b>62</b>	<b>32</b>
authentic leadership	10	7	psychological ownership	<b>7</b>	<b>4</b>
cultural intelligence	8	4	public sector	8	4
innovative work behavior	20	11	religiosity	14	11
interpersonal communication	20	6	trust	15	10
islamic work ethics	8	5	<b>Cluster 6 (9 items)</b>		
job performance	22	11	career development	17	8
<b>organizational citizenship behavior</b>	<b>340</b>	<b>184</b>	ethical leadership	15	8
perceived organizational support	<b>48</b>	<b>24</b>	hospital	6	4
psychological capital	17	8	intrinsic motivation	13	8
work engagement	40	21	public service motivation	9	4
<b>Cluster 5 (9 items)</b>			<b>self-efficacy</b>	<b>27</b>	<b>16</b>
Grit	13	4	situational leadership	7	4
higher education	29	13	teacher performance	9	4
Innovation	6	5	work culture	5	4
job involvement	18	5	<b>Cluster 7 (8 items)</b>		
organizational citizen behavior	8	4	employee	11	6
<b>organizational culture</b>	<b>137</b>	<b>64</b>	<b>employee performance</b>	<b>154</b>	<b>77</b>
Personality	39	17	environmental performance	4	6
			green training	4	4

Item and Cluster	Total Links	Occurrence	Item and Cluster	Total Links	Occurrence
procedural justice	15	7	Indonesia		
talent management	12	4	local government	3	4
			sustainability	6	4
			training	13	6

Source: VOSViewer process data output (2024)

Furthermore, table 7 shows clusters 8-13, **Cluster 8** has 8 items in gray-brown nodes. **Cluster 8** shows the item keyword "transformational leadership" with 141 total link strengths and 64 dominating occurrences, meaning that as many as 64 times the keyword "transformational leadership" appears in the research document. In cluster 8, the keyword "transformational leadership" is also the most significant node. Many findings prove that transformational leadership significantly impacts OCB (Basalamah & Ardana, 2020; Elmi et al., 2019; Meliala & Saparuddin, 2023; Wibawa et al., 2022). Transformational leadership behavior is closely related to higher OCB rates among employees. Transformational leaders can inspire and motivate, encouraging OCB-like behavior among their followers (Hermawanto et al., 2022). Transformational leaders build employee trust, increasing job satisfaction and OCB (Nohe & Hertel, 2017).

Then, **Cluster 9** has 7 items shown in pink nodes. Cluster 9 shows the item keyword "performance" with 74 total link strengths and 37 dominating occurrences, meaning that as much as 37 times the keyword "performance" appears in the research document. This performance is one of the impacts of OCB behavior, especially employee performance. It was discovered that engaging in OCB significantly affects job performance and significantly enhances employee engagement and performance (Hermawan et al., 2020). OCB improves performance, quality, and job satisfaction (Yaakobi & Weisberg, 2020). OCB plays an important function in improving the effectiveness of a company.

**In cluster 10**, there are 6 items shown in light pink nodes. Cluster 10 shows the keyword "job satisfaction" with 290 total link strength and 141 dominating occurrences. This keyword is the largest node in the formed overall network occurrence model. Many studies consistently prove that job satisfaction positively correlates with OCB behavior (Berdiyana & Witjaksono, 2022; Elmi et al., 2019; Meliala & Saparuddin, 2023; Saputra & Riana, 2021). This suggests that employees with higher job satisfaction might perform tasks beyond their official duties (Romi et al., 2020). This finding is relevant to what was revealed: "Job satisfaction is the main thing in determining OCB behavior, and it is said that job satisfaction is correlated with OCB.

Then, cluster 11 with 3 items is shown as a light green node. Cluster 11 showed the item keyword "organizational commitment" with 239 total link strength and 121 occurrences, which became the dominating and most extensive keyword in the network model of this study. Studies have widely revealed that organizational commitment greatly influences OCB. (Basalamah & Ardana, 2020; Juliana et al., 2022; Regen et al., 2022; Roza et al., 2021; Trisnawati et al., 2020). Employees who are highly committed to their organizations are more likely to exhibit OCB (Hermawanto et al., 2022). Committed employees are more invested in the success of the organization. Nurjanah et al., (2020) mentioned that higher organizational commitment is associated with higher OCB levels. Organizations should aim to boost employee dedication to enhance performance and foster a more positive work atmosphere.

The next cluster is **cluster 12**, with 2 items in light blue with the keyword "quality of work life (QWL)," which obtained 17 total links strength and 12 occurrences. Work-life quality was positively correlated with OCB (Anma et al., 2021; Hermawanto et al., 2022; Ruhana, 2019; Sumarsi & Rizal, 2022). QWL covers many factors, including job satisfaction, work-life balance, and a supportive work environment, which are critical to motivating employees to demonstrate OCB (Pio &. Quality of work life refers to the overall satisfaction,

well-being, and effectiveness experienced by employees in the work environment. A high quality of work life is crucial for organizations to attract and keep employees, boosting OCB.

Finally, **cluster 13**, with 1 item, shows a light green-yellow node. The keyword item is "organizational climate," and it has 29 total links strength and 16 occurrences. Organizational climate refers to the atmosphere or environment prevailing in an organization, including its culture, norms, and values. Past research has shown that the atmosphere within an organization impacts how employees engage in OCB (Damayanti & Dewi, 2020; Soelton, Noermijati, et al., 2020; Yusnita et al., 2022). A positive organizational climate is associated with higher OCB rates among employees (Yusnita et al., 2022). A supportive, trusting, and fair organizational climate creates employees' sense of belonging and psychological security, motivating them to go the extra mile and get involved in OCB.

**Table 7. Co-Occurance Items by Cluster (advanced)**

Item and Cluster	Total Links	Occurrence	Item and Cluster	Total Links	Occurrence
<b>Cluster 8 (8 items)</b>			<b>Cluster 10 (6 items)</b>		
affective commitment	32	12	employee competence	16	5
knowledge sharing	30	17	empowerment	16	7
organizational citizenship behaviour (OCB)	14	7	<b>job satisfaction</b>	<b>290</b>	<b>141</b>
psychological empower	14	6	leadership	60	31
servant leadership	42	22	organizational citizenship	18	9
transactional leadership	9	5	work-life balance	10	6
<b>transformational leadership</b>	<b>141</b>	<b>64</b>	<b>Cluster 11 (3 items)</b>		
turnover intention	22	13	learning organization	3	4
<b>Cluster 9 (7 items)</b>			organizational citizenship behavior (OCB)	44	21
job embeddedness	5	4	<b>organizational commitment</b>	<b>239</b>	<b>121</b>
Nurses	7	5	<b>Cluster 12 (2 items)</b>		
organizational identification	5	4	corporate social responsibility	5	5
organizational trust perceived	13	6	<b>quality of work life</b>	<b>17</b>	<b>12</b>
organizational support (pos)	14	5	<b>Cluster 13 (1 item)</b>		
<b>Performance</b>	<b>74</b>	<b>37</b>	organizational climate	29	16
Smes	18	9			

Source: VOSViewer process data output (2024)

Based on tables 6 and 7 and the explanation above, it is known that some keywords or items that have dominant total links and occurrences in each cluster include: 1) work motivation; 2) OCB; 3) organizational justice; 4) organizational citizenship behavior; 5) self-efficacy; 6) employee performance; 7) organizational culture; 8) job satisfaction; 9) transformational leadership; 10) organizational commitment; 11) quality of work life; 12) performance; and 13) organizational climate. The keywords organizational citizenship behavior and job satisfaction are the most significant nodes formed from VOSviewer's network visualization output model. Each keyword item influences and has an impact on each other. The variables of each of these items dominate existing studies associated with OCB. In other words, many studies have used these independent or dependent variables.

From Figure 5 above, it can also be seen that some items or variables have little occurrence found in research articles. In other words, this variable still needs to be researched more about OCB or the context of HRM. For example, items 1) innovative behavior; 2) organizational learning; 3) person-organization fit; 4) sustainable development goals (SDGs); 5) Islamic Work Ethics; 6) psychological ownership; 7) grit; 8) talent management; 9) situational leadership; 10) green training; 11) job embeddedness; 12) perceived organizational support (POS); 13) learning organization; and 14) corporate social responsibility (CSR). Therefore, an essential implication of this finding is that it can provide a potential gap for further research to be carried out with these variables by being associated with OCB variables or other variables in the context of HRM. For example, it is interesting to study the relationship with OCB or in the context of HRM, such as currently trending SDGs.

The cluster analysis highlights the unexplored but significant potential of the Sustainable Development Goals (SDGs) and Islamic Work Ethics in the context of Organizational Citizenship Behavior (OCB). The SDGs, as a universal framework for sustainability, offer a pathway to align individual employee behavior with organizational strategies for environmental, social, and economic sustainability (Sachs et al., 2020). This alignment is particularly relevant in encouraging green MSDM practices that encourage pro-environmental behavior, an important component of OCB in the modern workplace (Ren et al., 2018). Integrating the SDGs into a company's strategy can align the organization with global sustainability standards, driving innovation and long-term competitiveness. Businesses adopting SDG-focused practices can increase their social and environmental impact, attracting stakeholders and investors committed to sustainability.

In addition, Islamic Work Ethics emphasizes moral behavior and cooperation based on ethical values and mutual respect. This ethics resonates strongly in Indonesia, where workplace culture is often linked to spiritual and religious values (Sachs et al., 2020). By integrating Islamic Work Ethics into organizational policies, companies can promote trust, fairness, and collaboration, which are crucial for growing OCB (Kumar & Hamid, 2021). Islamic Work Ethics promotes justice, accountability, and social responsibility. These principles improve employee morale and organizational commitment and encourage an ethical decision-making process, leading to increased trust and performance within the organization. Companies implementing these ethics can balance profitability and ethical governance, creating a competitive advantage in a market increasingly driven by values.

OCB plays an important role in supporting organizations in adapting to the dynamic changes brought about by Industry 4.0. This era is marked by deep automation, digitalization, and connectivity, which demand that employees not only have technical skills but also exhibit extra-role behaviors that support a collaborative and innovative work environment. Using SDGs and Islamic Work Ethics as part of an organization's policies can strengthen business competitiveness by creating an environment that supports sustainability and a healthy work ethic. Thus, organizations that want to thrive in the digital era need to place OCB as one of the key pillars in their human resource management strategy by leveraging technology to strengthen employee engagement and collaboration in the face of new challenges emerging in Industry 4.0.

## **Conclusion**

This research intends to perform a bibliometric examination of Organizational Citizenship Behavior within Indonesia, using Scopus journal articles and as many as 789 selected documents from 2019-2023. This study has explored the growth and citation of OCB-related publications, the relationship between co-authors, and the relationship between keywords. The most Scopus publications in 2023 were 21 articles, and the most Scholar publications in

2020 were 213. The results of the VOSviewer analysis showed that 13 clusters formed with 99 items formed. The dominance of the variables "job satisfaction", "organizational commitment", "motivation", "employee engagement", and "performance" shows a strong relationship with OCB itself and is a topic that is often researched.

In addition to the dominance of variables with the largest nodes, the findings also point to potential topics that can be used in research attributed to OCB. Topics such as sustainable development goals, job embeddedness, Islamic work ethics, organizational trust, learning organization, and corporate social responsibility are interesting to study in the context of OCB and HRM because they are found to be still minimally studied in the research, especially in the MSME sector with more potential. This study highlights that OCB behavior is influenced by various vital factors such as job satisfaction, organizational commitment, motivation, and leadership, and OCB behavior consistently contributes to overall organizational success. Organizations need to foster helpful behavior and go beyond the formal duties of each employee.

This study provides a comprehensive bibliometric analysis of OCB research in Indonesia, identifying underexplored areas such as SDGs and Islamic Work Ethics. The study contributes to academic literature and practical applications in the Industry 4.0 context by focusing on these emerging themes. The findings highlight that integrating sustainability and ethical frameworks into HR policies enhances OCB and fosters a more resilient and innovative organizational culture, which is critical for navigating technological disruptions. The study is limited to OCB research in Indonesia, potentially restricting its applicability in global contexts. Although the study identifies emerging themes such as SDGs and Islamic Work Ethics, these areas require further empirical validation to establish their impact on OCB. Future studies could extend this analysis to compare findings across multiple developing economies, explore the role of Industry 4.0 technologies, such as AI and IoT, in shaping OCB behaviors, particularly in SMEs and technology-driven industries, and conduct comparative studies between Indonesia and other emerging economies to explore cultural and contextual differences in OCB.

## **Ethical Consideration**

This study adheres to ethical standards in conducting bibliometric research, as it involves publicly available secondary data from scientific publications without directly involving human or animal subjects. Data was sourced from Scopus and Google Scholar databases, and no personal or sensitive information was used. As such, the study did not require formal ethical clearance. However, the authors ensured that all data were collected, analyzed, and reported using academic integrity and transparency principles. In addition, the researchers strictly adhered to intellectual property rights by properly citing all sources referenced in the study using established academic practices. No conflicts of interest or unethical practices were involved during the conduct or reporting of this study.

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