

DISCUSSION ON HUMAN SECURITY (HEALTH SECURITY) OF THE COVID-19 PANDEMIC IN INDONESIA: BIBLIOMETRIC ANALYSIS AND VISUALIZATION ARTICLE INDEXED IN SCOPUS

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ABSTRACT

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Keywords:

Bibliometric Analysis, VOSViewer, Human Security, Health Security, Indonesia.

This research was conducted to look at the human security disaster management of the Covid-19 pandemic in Indonesia which is indexed by Scopus. Referring to the United Nations Development Program (UNDP) statement regarding human security, there are seven areas, namely: Regarding the health security sector, the environmental security sector, the food security sector, the economic security sector, the individual security sector, the community security sector, and the political security sector. Of the seven areas, one of them is the problem of health resilience, and the Covid-19 Pandemic is included in the category of health security. UNDP defines health insurance as protection from disease and unhealthy lifestyles, which threaten inadequate health services, new and recurring diseases including epidemics, and pandemics, malnutrition, and unsafe lifestyles. Until this article was written, there has been no research that has seen that the Covid-19 Pandemic is part of a human security disaster, which is more specifically included in the health security category. In this study, data was taken online through the Scopus database which was then analyzed using the VOSviewer bibliometric visualization. The findings in this study are that the human security disaster during the Covid-19 pandemic is a problem in the field of human health security which is included in the human security category according to UNDP. Until now there has not been much research conducted by academics and researchers from Indonesia, because they only found 25 article documents.

INTRODUCTION

Regarding human security (health security) during the Covid-19 pandemic, academics and researchers who are conducting research using the VOSviewer bibliometrics are still not doing much research. The bibliometric method first emerged from library and information science (Pritchard, 1969), instruments applied in bibliometric analysis and VOSviewer can evaluate the progress of a discipline (Zupic & Cˇater, 2015). The VOSviewer bibliometric method is also capable of classifying literature and bibliographic studies (Donthu *et al.*, 2020). Of the many academics or researchers who have conducted their research using bibliometric analysis, namely (Ramos-Rodríguez *et al.*, 2004), such as research in the field of scientific communication that has been carried out by (Borgman, CL and Furner, 2002), later in the field of measurement analysis research in journal impact (Glanzel & Moed, 2002), furthermore in the field of research analysis the ranking of universities by (Moed *et al.*, 1985; Raan, 2014) and also several other researchers who have done their research.

Bibliometric analysis has also been used in various fields of research, such as research in the field of innovation (Biemans *et al.*, 2007), research in the field of management (Zupic and Cˇater, 2015), tourism research (Merig´Hai *et al.*, 2019; Mulet-Forteza *et al.*, 2018; Vishwakarma & Mukherjee, 2019), research in the field of business (Valenzuela-Fernandez *et al.*, 2019), and research in the field of geophysics (Mulet-Forteza *et al.*, 2020). Meanwhile, research on human security in the field of environmental security against climate change has been carried out by (An *et al.*, 2022), besides that, research on human security in the field of food safety has been carried out by (Bellia *et al.*, 2022) a bibliometric investigation using science mapping concerning relationships between issues related to street food and food safety in the scientific literature. Another case is Collins C. Okolie and Abiodun A. Ogundeji (2022) have researched the impact of the Covid-19 Pandemic on food security. Until now there hasn't been any study that focuses on the Covid-19 Pandemic, the part of disasters that fall into the category of human security, including health security using VOSviewer bibliometric analysis.

METHODS

In directing this examination the strategy utilized was the examination of the VOSviewer bibliometric audit in light of Scopus-listed diary articles. Information was drawn from the biggest data set of multidisciplinary peer-inspected Scopus writing (Mongeon & Paul-Hus, 2016). Online information assortment was completed on 12 February 2023 because of the watchwords "Fiasco The board and the Coronavirus Pandemic" and tracked down 1,959 articles. Then the specialist reduced the words to "Human Security and the Coronavirus Pandemic in Indonesia" which found 25 article records. Articles chosen from the Scopus data set are put away as a CSV record. Then, at that point, broke down utilizing investigation with VOSviewer programming. To give an unmistakable picture should be visible in the exploration stream in Figure 1 underneath:

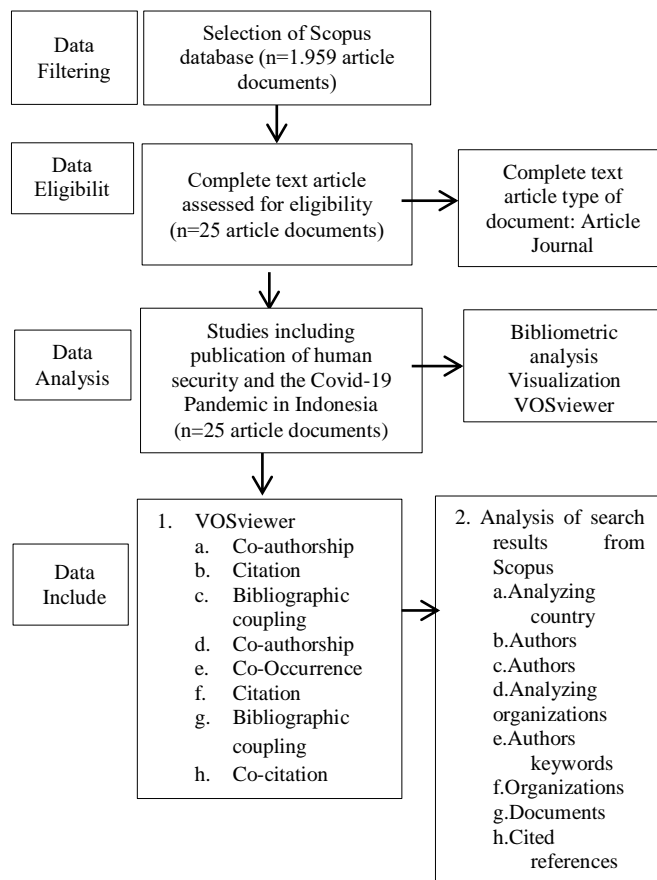


Figure 1. Bibliometric analysis work steps using VOSviewer

RESULTS AND DISCUSSION

Based on the information retrieved from the Scopus database via search results, it is clear that there are still not many studies from Indonesian academics or researchers on the handling of the human security disaster during the Covid-19 pandemic, especially regarding health safety which is included in the field of human security. There are 1,959 reports gotten from the Scopus data set on the Coronavirus catastrophe on the board, while information on Coronavirus in Indonesia contains 4,319 records. Then a more unambiguous quest for Indonesian essayists who expounded on Coronavirus tracked down 34 records. Besides, in regards to explore on human security and the Coronavirus pandemic, there are 2,649 reports, more specifically on bibliometric exploration and human security, there are 101 archives, as well as VOSviewer examination and human security, there are 22 records. From a few fitting information, a few records are qualified for research that has been done, specifically information on human well-being and the Coronavirus Pandemic in Indonesia which contains 25 reports. Reports from the Scopus data set come from diaries, procedures, gatherings, and book audits, 25 examination records on human security and the Coronavirus Pandemic in Indonesia should be visible in the table underneath:

Article Title	Authors	Publication Year	Document Source
The COVID-19 pandemic impact on the global tourism industry SMEs: a human capital development perspective	Faeni, D.P., Puspitaningtyas Faeni, R., Alden Riyadh, H., Yuliansyah, Y.	2023	Review of International Business and Strategy 33(2), pp. 317-327
Indonesian Food Law Politics in the Era of the Covid-19 Pandemic to Realize Food Security	Pajrin, R., Wiwoho, J., Imanullah, M.N., Pujiyono	2023	AIP Conference Proceedings 2586,070011
The effect of health gate sterilizer use on work motivation during post-COVID-19 pandemic: an analysis of educational staff	Paramitha, S.T., Komarudin, K., Fitri, M., Ramadhan, M.G.	2022	Journal of Public Health in Africa 13(s2),2417
COVID-19 public health and social measures: a comprehensive picture of six Asian countries	Foo, C.D., Verma, M., Tan, S.M., Tangcharoensathien, V., Legido-Quigley, H.	2022	BMJ Global Health 7(11),e009863
The effects of the Covid-19 pandemic on food safety between Indonesia and Bangladesh: A comparative study	Prasetya, T.A.E., Mamun, A.A., Rosanti, E., Arifah, D.A., Maruf, K	2022	Heliyon 8(10),e10843
Public health face mask detection of Covid-19 utilizing convolutional neural network (CNN)	Putri, T.S.N.P., Fikih, M.A., Kasan, N., Setyawan, N.	2022	AIP Conference Proceedings 2453,020056
The evaluation of the effect of Gammarana intervention in reducing stunting during the Covid-19 pandemic: Protocol evaluation of stunting intervention in Enrekang District	Sirajuddin, Sirajuddin, S., Thaha, R., Junadi, P., Ali, P.B.	2022	Journal of Public Health Research 11(1),2393
Information Security Awareness Evaluation of Telemedicine Application Users using Human Aspect Information System Questionnaire	Destya Atlanta, N.S., Candiwan, C., Sari, P.K., Omar Sharif, O.	2022	IEEE 8th International Conference on Computing, Engineering, and Design, ICCED 2022
Permaculture Landscape as an Adaptive Strategy towards Food Security at Community-Scale	Kurniawati, I., Dahlan, M.Z., Faisal, B.	2022	IOP Conference Series: Earth and Environmental Science 1092(1),012015
The Importance of Strengthening Legal Concepts in Overcoming Cybercrime During the Covid-19 Pandemic in Indonesia	Ardiansyah, Rafi, M., Amri, P.	2022	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 13333 LNCS, pp. 469-479
4th International Conference on HCI for Cybersecurity, Privacy, and Trust, HCI-CPT 2022 Held as Part of the 24th HCI International Conference, HCII 2022	[No author name available]	2022	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in

			Bioinformatics) 13333 LNCS
The COVID-19 pandemic from the perspective of Indonesia's national security	Azizah, M., Subiyanto, A., Triutomo, S., Aji, L.J.	2021	E3S Web of Conferences 331,01006
The development of a face recognition model in the Indonesia pandemic context based on Dunn and arc face loss function	Wirianto, Mauritsius, T.	2021	International Journal of Innovative Computing, Information and Control 17(5), pp. 1513-1530
Global Fund contributions to health security in ten countries, 2014–20: mapping synergies between vertical disease programs and capacities for preventing, detecting, and responding to public health emergencies	Boyce, M.R., Attal-Juncqua, A., Lin, J., McKay, S., Katz, R.	2021	The Lancet Global Health 9(2), pp. e181-e188
Words matter: Political and gender analysis of speeches made by heads of government during the COVID-19 pandemic	Dada, S., Ashworth, H.C., Bewa, M.J., Dhatt, R.	2021	BMJ Global Health 6(1),3910
Institutionalizing wastewater surveillance systems to minimize the impact of COVID-19: Cases of Indonesia, Japan, and Viet Nam	Takeda, T., Kitajima, M., Huong, N.T.T., Hung, D.T., Haramoto, E.	2021	Water Science and Technology 83(2), pp. 251-256
Face Mask Detection using Haar Cascade Classifier Algorithm based on the Internet of Things with Telegram Bot Notification	Rahmatulloh, A., Gunawan, R., Sulastri, H., Pratama, I., Darmawan, I.	2021	2021 International Conference Advancement in Data Science, E-Learning and Information Systems, ICADEIS 2021
Food security challenges and opportunities in Indonesia post-COVID-19	Rozaki, Z.	2021	Advances in Food Security and Sustainability 6, pp. 119-168
Decision support system for cash direct assistance for victims of the covid-19 outbreak based on cloud computing	Inayatulloh	2021	Proceedings of the International Conference on Industrial Engineering and Operations Management pp. 2617-2624
5th IFIP WG 5.15 International Conference on Information Technology in Disaster Risk Reduction, ITDRR 2020	[No author name available]	2021	IFIP Advances in Information and Communication Technology 622
Tropical peatlands and their conservation are important in the context of COVID-19 and potential future (zoonotic) disease pandemics	Harrison, M.E., Wijedasa, L.S., Cole, L.E.S., Upton, C., Page, S.	2020	PeerJ 8,e10283
Indonesian government's COVID-19 measures, January-may 2020: Late response and public health securitization	Chairil, T.	2020	Jurnal Ilmu Sosial dan Ilmu Politik 24(2), pp. 128-152
Sentiment Analysis of the Covid-19 Virus Infection in Indonesian Public Transportation on Twitter Data: A Case	Sari, I.C., Ruldeviyani, Y.	2020	2020 International Workshop on Big

Study of Commuter Line Passengers			Data and Information Security, IWBIS 2020 9255531, pp. 23-28
Determinants of psychological distress of Indonesian health care providers during the COVID-19 pandemic	Margaretha, S.E.P.M., Effendy, C., Kusnanto, H., Hasinuddin, M.	2020	Systematic Reviews in Pharmacy 11(6), pp. 1052-1059
COVID-19, agriculture, and food security in Indonesia	Rozaki, Z.	2020	Reviews in Agricultural Science 8, pp. 243-261

Table 1 the exploration of human security and the Coronavirus Pandemic in Indonesia has 25 article archives, not which are all writers from Indonesia, yet there are likewise from Singapore, Vietnam, and the US. What's more, this information is qualified to be examined with the VOSviewer bibliometrics.

There are just 25 qualified information reports, this information the specialist will break down concerning explore on human well-being, one of which is well-being security, remembering the Coronavirus Pandemic in Indonesia. How much are Indonesian scholastics or scientists directing their examination concerning exploring subjects that have been distributed in the Scopus data set? The principal insightful representation to be dissected is the country co-initiation examination, and the outcomes got through the VOSviewer bibliometrics are as per the following:

Table 2.
Co-authoring related to the author's country

Country	Scopus Article Documents
Indonesia	21
Singapura	2
Vietnam	2
Amerika Serikat	2

Source: Scopus Databases

From table 2 above in regards to the nation of the beginning of specialists who research human security and the Coronavirus Pandemic in Indonesia, it is found that Indonesian scientists have 21 report articles distributed in Scopus, while analysts from Singapore, Vietnam, and the US have similar records, for example, there are 2 archives. To see the organization in creator hubs by country, you can see Figure 2 underneath:

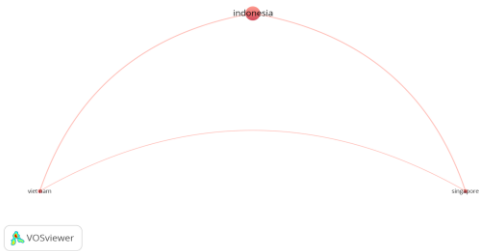


Figure 2. Network of co-authoring articles on human security and the Covid-19 Pandemic in Indonesia in terms of countries

Figure 2 above shows the co-composing of articles about human security and the Coronavirus pandemic in Indonesia. In Figure 2, the enormous hubs show a huge country, to be specific Indonesia, which has 21 report articles. The connections between hubs show the connection among nations, and the thickness of the connections or lines and the distance between hubs show the degree of a coordinated effort between nations recorded as hard copy articles about human security and the Coronavirus Pandemic in Indonesia. Then bibliometric examination VOSviewer will dissect the number of references by the creator, from the Scopus data set find the names of creators who have been distributed in Scopus and refer to one another, this matter should be visible in the picture underneath:

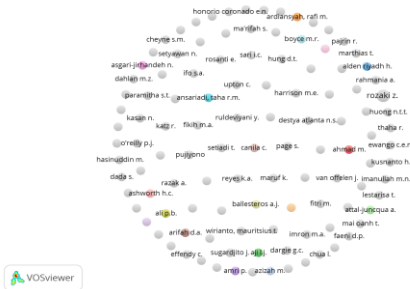


Figure 3. Author citation network

From figure 3 over the names of the writers who composed articles about human security and the Coronavirus Pandemic in Indonesia, there are 25 records showing that in a meta-examination of the number of writer references, each writer has something like one reference. In the representation introduced in Figure 3, every hub addresses a creator or a gathering of creators. Bigger hubs demonstrate more persuasive creators. However, the outcomes above have similar reports and have several references by different creators. However, the outcomes above have similar reports and have several references by different creators. Moreover, the VOSviewer bibliometric

examination will see the degree to which the creator's bibliographic cooperation is connected, and should be visible in the picture underneath:

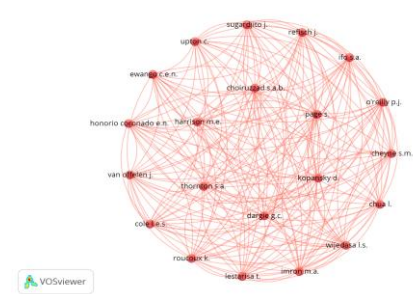


Figure 4. Author bibliographic coupling network

Figure 4 above shows the VOS watcher's bibliometric examination of human security and the Coronavirus Pandemic in Indonesia, the aftereffect of which is a writer bibliographic coupling examination of 25 articles meeting the limit that has something like one reference in each writer. In the perception introduced in Figure 4, every hub addresses a creator or a gathering of creators, really bigger hubs can demonstrate more persuasive or critical creators. In any case, the outcomes that have been gotten above will generally share records practically speaking, and have a few references among creators and different creators.

The next step will be to visualize about co-authorship - analyzing country organizations which can be seen in Figure 5 below:

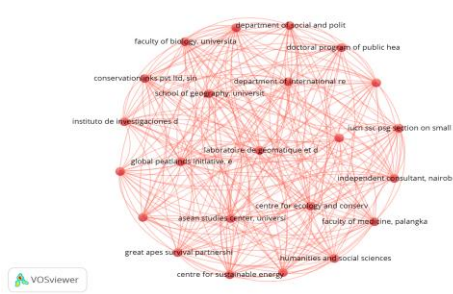


Figure 5. Co-Authorship - Organizations

The picture above it explains that the big nodes or big nodes show writers or researchers from significant organizations, from the results of the VOSviewer bibliometric analysis 85 organizations meet the threshold. The links between nodes show the relationship between organizations, and the thickness of the links and the distance between nodes shows the level of collaboration between organizations, as shown in Figure 5, the center of the network in Figure 5 is an organization from Indonesia because the article discusses human security (health security) Pandemic Covid-19 in Indonesia. Furthermore, findings from the Scopus database using VOS viewer's bibliometric analysis on co-occurrence - authors keywords, there are 70 article keywords according to the title or core

theme that meet the threshold, keywords are filtered using a minimum appearance of 3 times the keyword that best meets the threshold, 3 words Keys that often appear can be seen in table 3 and figure 6 below:

Table 3.
Co-Occurrence - Author's keywords

Keywords	Occurrence	Total link strength
Covid-19	10	8
Indonesia	7	8
Food security	3	4

Source: Scopus Databases

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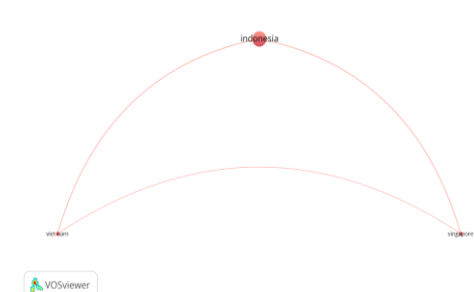


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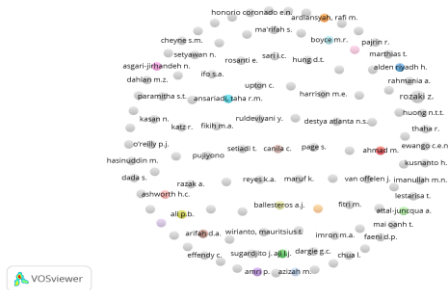


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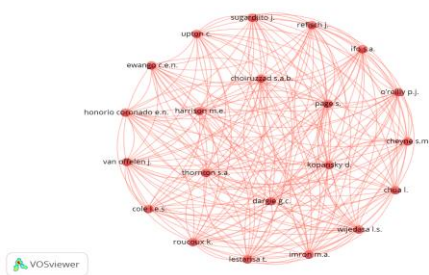


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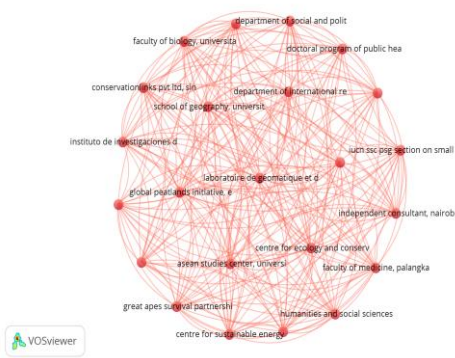


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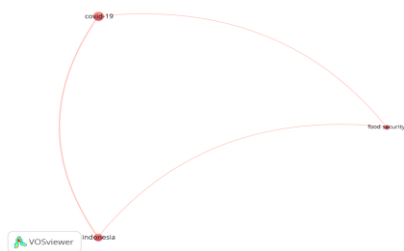


Figure 6. Co-Occurrence - Author's keywords

The keyword "Covid-19" is the most prevalent and the largest node in Figure 6, followed by the keywords "Indonesia" and "food security." It can be deduced from Figure 6 that the size of the nodes and words in Figure 6 represents the weight of each keyword, with a larger size indicating greater weight. Figure 6's node-to-node distance illustrates the strength of the connection between them; a smaller distance denotes a stronger relationship. When two terms are linked together, it means that they frequently appear together; the thickness of the link shows how frequently they occur together. The cluster of nodes that share the same hue. The "Indonesia" node is connected to the "Covid-19" node by a substantial line, as seen in Figure 7. Following that, we'll examine the citation organizations shown in Table 4 and Image 7.

Organizations	Documents	Citations
Department of Agribusiness of Universitas Muhammadiyah Yogyakarta	1	39
Vayu global health foundation, Boston, United States Women in global health, Washington, District of Columbia, United States	1	26

Source: Scopus Databases

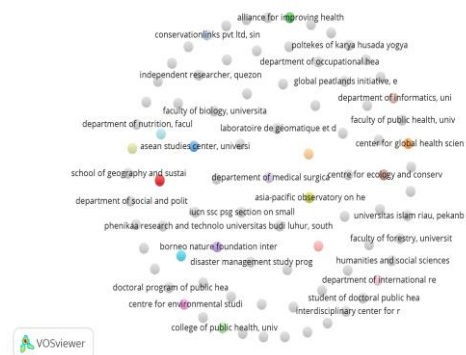


Figure 7. Citations - Organizations

In Table 4 and Figure 7, 85 organizations meet the threshold, and each organization has one article document. From Table 4 it can be seen that the organization that has many citations is Agribusiness of the Muhammadiyah University of Yogyakarta, this organization has 39 citations. Then followed by the Vayu global health foundation organization, Boston, United States with 26 citations, the same thing is also owned by the Women in a global health organization, Washington, District of Columbia, United States with 26 citations. Figure 7 shows that the largest node is the most significant, namely from the Agribusiness organization of Muhammadiyah University of Yogyakarta, due to the discussion of human security (health security) during the Covid-19 pandemic in Indonesia. In Figure 7 there are 84 organizational clusters, of which an average of one organization has one Scopus-indexed article document. Then the next analysis is to analyze

the bibliographic coupling - documents, this matter can be seen in Table 5 and Figure 8.

Table 5.

Bibliographic coupling - Documents

Document	Citations
Rozaki Z. (2020)	39
Dada S. (2021)	26
Sari I.C. (2020)	12
Boyce M.R. (2021)	10

Source: Scopus Databases

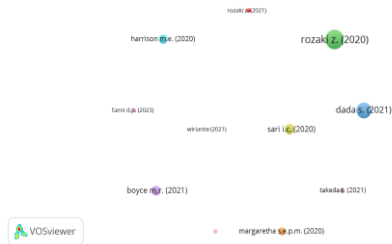


Figure 8. Bibliographic coupling - Documents

There are 25 article documents on human safety (health security) during the Covid-19 pandemic in Indonesia, 12 of which fulfill the criterion, and at least one author has one citation, as shown in Table 5 and Figure 8 above. The greatest network, as depicted in Figure 8, has 25 article papers, but not all currently available documents are connected. The color of the nodes in Figure 8 indicates the eleven clusters into which the papers are separated. Each node in the representation shown in Figure 8 represents a single author or a group of authors. Authors with larger nodes have greater influence than other authors. In Figure 8, Rozaki Z. (2020) is the author with the highest number of citations with 39, followed by Dada S. (2021) with 26. The proximity distance between the two nodes depicts how close the two researchers' relationships are. In other words, authors who are acquainted with one another frequently quote the same source. Following that, we will examine the references that were co-cited and are shown in Figure 9.

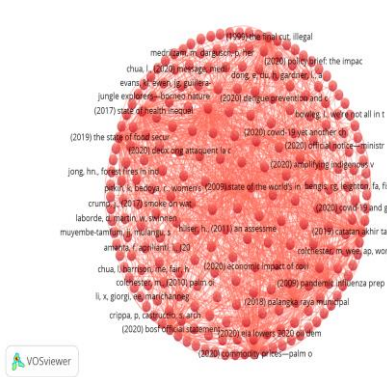


Figure 9. Co-citation - Cited references

From Figure 9 above, there are 1157 cited references, with at least one cited reference. In the visualization contained in Figure 9, each node represents cited references. Larger nodes show heavily quoted references. The proximity distance between nodes represents the closeness of the relationship.

Research on the Covid-19 Pandemic is developing rapidly, but specifically for research on human security (health security) the Covid-19 Pandemic in Indonesia is still not much that has done specifically work on human security and health security because of the Scopus database there is only 25 documents and article. From the analysis of co-authorship - analyzing organizations 85 organizations have a threshold, but not all of them are from Indonesia, other organizations are from the United States. Keyword the co-occurrence analysis of keywords in an article reveals trends and connections between them. These keyword patterns facilitate researchers' ability to recognize new research patterns. As previously mentioned, the focus of the latest research is on human safety (health security) during the Covid-19 pandemic in Indonesia. For citation analysis - the organizations that have a lot of citations are organizations from Indonesia, namely the Department of Agribusiness of Yogyakarta Muhammadiyah University. Furthermore, the analysis of bibliographic coupling - documents, that 25 article documents on human safety (health security) during the Covid-19 pandemic in Indonesia, 12 article documents meet the threshold, and at least one author has a citation. Nevertheless, not every document is linked, and the largest network contains 25 article documents. The final analysis is co-citation-cited references which shows that it is based on the results of the citation network, from more than 1157 cited references.

1. CONCLUSION

Research using VOSviewer is still not widely used in the social sciences. In this conclusion, there are only 25 appropriate article documents. The results above show that articles regarding human safety (health security) during the Covid-19 pandemic in Indonesia are still rarely studied specifically. Because there are still few enthusiasts, further research is needed on handling the Covid-19 human security crisis in Indonesia. To obtain the most accurate and thorough analysis results, this study recommends additional research that combines articles from trusted international journals that have been indexed by Scopus or Web of Science, because all analyzes using bibliometric VOSviewer data are taken from Scopus. For further research, data can be taken from the Web of Science. In addition, the method used can combine analysis from one of the bibliometrics theories according to VOSviewer.

There are still very few Indonesian scholars or experts leading research and distributing official global diaries recorded by Scopus. Based on the Scopus data collection, only 25 recorded articles were found, in which the underlying exploration emerged from 2020 to mid-2023. Research on the Corona virus human security crisis for executives in Indonesia is a hole or holes for further exploration because there is not much interest. Therefore, this study proposes a further examination that requires articles from leading global diaries listed by Scopus or Web of Science, besides that the techniques used can consolidate the investigation of one of the hypotheses as shown by bibliometrics VOSviewer, with the hopes and goals get the biggest and far-reaching inspection results. This research uses the VOSviewer bibliometrics as an addition to similar research. We hope that in the future many Indonesian researchers or academics will conduct research. the author expects input and criticism in this study, for further research that is more comprehensive. The authors thank the Scopus database, the bibliometric analysis tool VOSviewer for facilitating visualization analysis, and the authors also thank the published journals.

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REFERENCES

Abdullah, I. (2020). COVID-19. threat and fear in

Indonesia. *Trauma Theory Res. Pract. Policy*, 12(5), 488–490.
<https://doi.org/10.1037/tra0000878>

Airlangga, E., & Akrim, A. (2020). Learning from COVID-19, will this pandemic reappear: a reflection for Indonesian children future. *Syst. Rev. Pharm*, 11(6), 1008–1015.
<https://doi.org/10.31838/srp.2020.6.144>

Aldila, D., Ndi, M. Z., & Samiadji, B. . (2020). Optimal control of COVID-19 eradication program in Indonesia under the effect of community awareness. *Math. Biosci. Eng.*, 17(6), 6355–6389.
<https://doi.org/10.3934/mbe.2020335>

An, N., Yao, Q., & Shen, Q. (2022). A Review of Human Settlement Research on Climate Change Response under Carbon-Oriented: Literature Characteristics, Progress, and Trends and Trends. *Buildings*, 12(1614), 1–2. <https://doi.org/10.3390/>

Angeline, M., Safitri, Y., & Lutfhia, A. (2020). Can the damage be undone? Analyzing misinformation during the COVID-19 outbreak in Indonesia. In: *Proceedings of 2020 International Conference on Information Management and Technology*, 360–364.
<https://doi.org/10.1109/ICIMTech50083.2020.9211124>

Ansori, A. N. ., Kharisma, V. D., Muttaqin, S. S., & Antonius, Y. (2020). A genetic variant of SARS-CoV-2 isolates in Indonesia: spike glycoprotein gene. *J. Pure Appl. Microbiol.*, 14(1), 971–978.
<https://doi.org/10.22207/JPAM.14.SPL1.35>

Azikin, A., Karno, Nurhascaryani, P., Fitriani, Suhaeti, & Cahyono, Y. (2020). Indonesian government telematics in Covid-19 pandemic handling. *European Journal of Molecular and Clinical Medicine*, 7(7), 125–133.

Bellia, C., Bacarella, S., & Ingrassia, M. (2022). Interactions between Street Food and Food Safety Topics in the Scientific Literature—A Bibliometric Analysis with Science Mapping. *Foods*, 11(6).
<https://doi.org/10.3390/foods11060789>

Biemans, W., Griffin, A., & Moenaert, R. (2007). Twenty years of the Journal of Product Innovation Management: History, participants, and knowledge stock and

- flows. *Journal of Product Innovation Management*, 24(3), 193–213. <https://doi.org/10.1111/j.1540-5885.2007.00245.x>
- Borgman, CL and Furner, J. (2002). Scientific and bibliometric communication. *Annual Review Of Information Science and Technology*, 36(1).
- Caraka, R. E., Lee, Y., Kurniawan, R., Herliansyah, R., Kaban, P. A., Nasution, B. I., Gio, P. U., Chen, R. C., Toharudin, T., & Pardamean, B. (2020). Impact of COVID-19 large-scale restriction on environment and economy in Indonesia. *Global Journal of Environmental Science and Management*, 6(Special Issue), 65–84. <https://doi.org/10.22034/GJESM.2019.06.SI.07>
- Collins C. Okolie dan Abiodun A. Ogundeji. (2022). Effect of COVID-19 on agricultural production and food security: A scientometric analysis. *HUMANITIES AND SOCIAL SCIENCES COMMUNICATIONS*. <https://doi.org/10.1057/s41599-022-01080-0>
- Donthu, N., Kumar, S., & Pattnaik, D. (2020). Forty-five years of business research journals: a bibliometric analysis. *Journal of Business Research*, 109, 1–14.
- Falefi, R., Purwoko, A., & Susilawati. (2020). Impact of COVID- 19 ' s Pandemic on the Economy of Indonesia. *Budapest International Research and Critics Institute-Journal*, 3(2), 1147–1156.
- Glanzel, W., & Moed, H. F. (2002). Journal Impact Measure in Bibliometric Research: A State-of-the-art Report. *Scientometrics*, 53(2), 171–193.
- Ing, E. B., Xu, Q. A., Salimi, A., & Torun, N. (2020). Physician deaths from corona virus (COVID-19) disease. *Occupational Medicine*, 70(5), 370–374. <https://doi.org/10.1093/occmed/kqaa088>
- Merig Hai, J., Mulet-Forteza, C., Valencia, C., & Lew, A. (2019). Twenty years of tourism geography: a bibliometric overview. *Tourism Geography*, 21(5), 881–910.
- Moed, HF, Burger, WJM, Frankfort, J., & Van Raan, A. (1985). Use of bibliometric data for measuring university research performance. *Research Policy*, 14(3), 131–149.
- Mongeon, P., & Paul-Hus, A. (2016). Coverage of web science journals and Scopus: Comparative analysis". *Scientometrics*, 106(1), 213–228.
- Mulet-Forteza, C., Martorell-Cunill, O., Merig´o, J., Genovart-Balaguer, J., & Mauleon-Mendez, E. (2018). Twenty-five years of travel and tourism marketing journals: a bibliometric ranking. *Journal of Travel and Tourism Marketing*, 35(9), 1201–1221.
- Mulet-Forteza, C., Salv., S., Monserrat, S., & Amores. (2020). *Pure and applied geophysics: a bibliometric overview*. 177(2), 531–570.
- Nurmandi, S., Achmad, & Sulistyaningsih, T. (2020). *Analysis of Government Official Twitters during the Covid-19 Crisis in Indonesia*. January.
- Pritchard, A. (1969). Statistical bibliography or bibliometrics. *The Journal of Documentation*, 25(4), 338–349.
- Qodir, Z., Effendi, G. N., Jubba, H., Yogyakarta, U. M., Nurmandi, A., Yogyakarta, U. M., Hidayati, M., & Yogyakarta, U. M. (2020). COVID-19 AND CHAOS IN INDONESIA SOCIAL-POLITICAL. *Talent Dev. Excellence*, 12(1), 4629–4642.
- Raan, T. Van. (2014). Fatal Attraction : Conceptual and methodological problems in the ranking of universities by bibliometric methods. *Scientometrics*, 62(1), 133–143. <https://doi.org/10.1007/s11192-005-0008-6>
- Ramos-Rodríguez, AR, & Ruíz-Navarro, J. (2004). Changes in the intellectual structure of strategic management research: a bibliometric study of strategic management journals 1980-2000. *Journal of Strategic Management*, 25(10), 981–1004.
- UNDP. (1994). Human Security. *United Nations Development Programme.*, 24–34.
- Valenzuela-Fernandez, L., Merig Hai, JM, Lichtenthal, JD dan Nicolas, C. (2019). Bibliometrik analisis 25 tahun pertama dari jurnal business-to-business marketing.

Journal of Business-to-Business
Marketing. Vol. 26. No. 1, 75-94.

Vishwakarma, P., & Mukherjee, S. (2019). Forty-three years of tourism leisure research journey: a bibliometric analysis. *Tourism Recreation Research*, 44(4), 403–418.

Yuliana. (2020). Coronavirus disease (Covid-19).

A literature review. *Wellness Healthy Mag*, 2(1187–192).

Zupic, & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472.