

BIBLIOMETRIC MAPPING OF PUBLIC TRUST IN THE FREE NUTRITIOUS MEAL PROGRAM

Irma Cahyani & Iip Permana

Universitas Negeri Padang, Indonesia

irmacahyani2323@gmail.com; ipaddr@fis.unp.ac.id

Article Info:

Submitted:	Revised:	Accepted:	Published:
Jun 8, 2026	Jul 6, 2026	Jul 18, 2026	Jul 23, 2026

Abstract

Public trust is essential to the effective evaluation, legitimacy, and continuous improvement of the Free Nutritious Meal Program. Although research on government programs has expanded, bibliometric evidence concerning the position of public trust within the scientific literature on this program remains limited. This study maps the bibliometric landscape, thematic structure, and relative position of public trust in studies related to the Free Nutritious Meal Program published between 2016 and 2026. A descriptive quantitative approach employing bibliometric methods was used. Data were retrieved from Google Scholar through Publish or Perish using the keywords “public trust,” “government program,” “free nutritious meal program,” and “social media.” A total of 995 documents meeting the established inclusion criteria were exported in RIS format and analyzed using VOSviewer through network, overlay, and density visualizations. The findings reveal that the bibliometric network comprised 112 items distributed across eight clusters, interconnected by 1,941 links with a total link strength of 5,520. The dominant keywords were public trust, government, social media, and health, indicating that existing scholarship has primarily examined public trust in relation to governance, digital communication, and public health. By contrast, research specifically addressing public trust in the Free Nutritious Meal Program remains underdeveloped. These findings demonstrate a clear thematic gap and highlight the need for

further investigation into the determinants, formation, and consequences of public trust in the program. This study contributes a systematic overview of the field and provides a foundation for future research on government communication, program legitimacy, and public perceptions of nutrition-related social policies.

Keywords: Bibliometric Analysis; Free Nutritious Meal Program; Government Communication; Public Trust; Social Policy

INTRODUCTION

The increasing number of scientific publications on public trust, food policy, nutrition, governance, public health, and digital communication reflects the growing academic interest in the importance of public trust. Public trust refers to citizens' confidence in the government's ability to fulfill its responsibilities competently, fairly, and in the public interest (Ningsih & Sasmita, 2025). A high level of public trust plays a crucial role in enhancing public compliance and supporting the effective implementation of government policies (Balkis et al., 2021). In the era of digital governance, public trust is increasingly shaped by the rapid flow of information across digital platforms and social media, where public opinions, emotional responses, and online interactions play a significant role in influencing perceptions of government programs (Wardana, 2024).

One of the government policies that has attracted considerable public attention is the Free Nutritious Meal Program, launched by the National Nutrition Agency to reduce malnutrition and stunting while improving the quality of Indonesia's human resources (BGN, 2025). However, the implementation of the program has encountered several challenges. During the first 1.5 years of its implementation, the National Commission on Human Rights recorded 449 food poisoning incidents affecting approximately 38,000 people (Arlinta, 2026). In addition, the Attorney General's Office named seven suspects in an alleged corruption case involving the implementation of the Free Nutritious Meal Program (Arlinta, 2026).

In the era of digital governance, social media has become one of the primary channels for disseminating information about government policies. The rapid exchange of information, opinions, and user interactions enables citizens to access, evaluate, and respond to government policies in real time. In addition, social media serves as an alternative platform for public service delivery, public policy formulation, and the collection of public feedback (Muhammad et al., 2018). Accurate and transparent information has the potential to

strengthen public trust, whereas the spread of misinformation, disinformation, and negative sentiment may undermine citizens' trust in government policies. Therefore, social media functions not only as a communication medium but also as a space for shaping public opinion, which plays a significant role in influencing public trust in government.

Although the number of studies on public trust has continued to increase, research that systematically maps the intellectual structure, thematic development, evolutionary trends, and publication patterns of this field using a bibliometric approach remains relatively limited. Bibliometric analysis provides a comprehensive overview of the development of a research field by identifying publication trends, collaboration networks, influential authors, and the thematic structure of scientific literature (Donthu et al., 2021; Öztürk et al., 2024)

Although the number of studies on public trust has continued to increase, research that systematically maps the intellectual structure, thematic development, evolutionary trends, and publication patterns of this field using a bibliometric approach remains relatively limited (Klarin, 2024). Bibliometric analysis provides a comprehensive understanding of the development of a research field by identifying publication trends, collaboration networks, influential authors, and the thematic structure of scientific literature (Donthu et al., 2021). Previous bibliometric studies have also demonstrated that research on public sentiment toward government policies, including policies communicated through social media, continues to evolve as an important area of scholarly inquiry (Permana & Maani, 2024). The findings of this study are expected to provide a comprehensive overview of the development of public trust research and contribute to the existing body of knowledge by serving as a conceptual foundation for future studies on public trust in various government policies, including the Free Nutritious Meal Program. Furthermore, this study is expected to serve as a valuable reference for future research in this field.

METHODS

This study employed a quantitative approach using bibliometric analysis. Bibliometric analysis is a method used to systematically evaluate and map the development of a research field by analyzing the characteristics of scientific publications, such as publication trends, citations, keywords, and relationships among documents and research concepts (Donthu et al., 2021). This approach enables researchers to objectively identify the intellectual structure and evolution of a research field through science mapping (Aria & Cuccurullo, 2017).

The population of this study consisted of all scientific publications indexed in Google Scholar related to public trust in school feeding programs within the context of government and social media, published between 2016 and 2026. Bibliometric data were collected from Google Scholar using two search strategies to obtain broader literature coverage. The first search query employed the keywords ("public trust") AND ("school feeding program" OR "school meal program" OR "nutrition program" OR "food program") AND (government OR governance) AND ("social media") to identify publications discussing public trust in government-led food and nutrition programs within the context of social media. The second search query used the keywords "Public Trust" AND "Government Program" AND "Free Nutritious Meal Program" AND "Social Media" to retrieve publications specifically related to the Free Nutritious Meal Program.

The results from both search strategies were then merged into a single dataset, followed by a deduplication process to remove duplicate records, resulting in a final dataset suitable for bibliometric analysis. Publish or Perish (PoP) is a software tool used to retrieve and analyze publication metadata and citation metrics from various scholarly databases, including Google Scholar. It also enables bibliographic data to be exported in various formats, such as RIS, for further bibliometric analysis (Harzing, 2016). The retrieved data were subsequently analyzed using VOSviewer, software developed to construct and visualize bibliometric networks, including citation, co-authorship, co-citation, bibliographic coupling, and keyword co-occurrence networks (Waltman, 2021). Following the data cleaning process conducted in Mendeley, a total of 994 documents met the predefined inclusion criteria and were considered eligible for further analysis. These documents constituted the final dataset for this study, representing scholarly publications within the established scope of the research. The resulting dataset provides a reliable basis for subsequent bibliometric analysis by ensuring the relevance, consistency, and quality of the bibliographic records. The literature search was conducted using Google Scholar for publications published between 2016 and 2026 based on the predefined search keywords. The retrieved records were subsequently imported into Mendeley for the deduplication process to remove duplicate documents. After the data cleaning process, a total of 994 documents met the inclusion criteria and were retained for further analysis. The final dataset was then exported in Research Information Systems (RIS) format and imported into VOSviewer to perform bibliometric analysis.

RESULTS

The bibliometric analysis conducted using VOSviewer generated a network visualization consisting of 112 items grouped into 8 clusters. These items were interconnected through 1,941 links, with a Total Link Strength (TLS) of 5,520. The number of links represents the frequency of co-occurrence relationships among the terms identified in the analyzed documents, whereas the Total Link Strength (TLS) indicates the overall strength of the connections between terms within the network. The relatively high values of both the number of links and the TLS suggest that the research topics are closely interconnected, forming a well-integrated and cohesive research network.

Based on the network visualization, the term "public trust" emerged as the most dominant keyword, as indicated by its largest node size and central position within the network. This finding suggests that *public trust* constitutes the primary focus of the analyzed studies and maintains strong connections with numerous other research topics. In addition to *public trust*, several other terms exhibited relatively high occurrence frequencies, as reflected by their comparatively large node sizes. These terms include *social media*, *food*, *health*, *policy*, *nutrition program*, *response*, *strategy*, *information*, *service*, and *Twitter*. The larger node sizes associated with these terms indicate that they appear frequently in the analyzed publications and are closely connected to the central research theme.

In contrast, several terms were represented by relatively small nodes and were located at the periphery of the network, including *government action*, *greater public trust*, *healthy meal*, *public trust doctrine*, *mass media*, *ethic*, *low public trust*, *free nutritious meal program*, *government program*, and *school meal program*. The smaller node sizes indicate that these terms appeared less frequently than the dominant keywords in the analyzed publications. Nevertheless, these terms still contribute to the overall research network by representing more specific research topics or emerging areas that have received relatively limited scholarly attention.

Overall, the network visualization indicates that research in this field has developed in a multidisciplinary manner, characterized by strong interconnections among key topics such as *public trust*, *policy*, *social media*, *health*, *nutrition program*, *information*, *public response*, and *strategy*. The high number of links and the substantial Total Link Strength (TLS) indicate that these concepts are closely interconnected, reinforcing one another and evolving simultaneously within the analyzed body of literature. These findings indicate that research on *public trust* is not only focused on aspects of health, communication, and nutrition

programs but also encompasses broader dimensions of governance, including institutional quality, transparency, accountability, and corruption-related issues. This indicates that *public trust* is a multidimensional concept that is closely associated with various social, political, and public administration aspects. Therefore, *public trust* can be considered a central theme that connects diverse research perspectives and reflects the multidisciplinary nature of the analyzed literature.

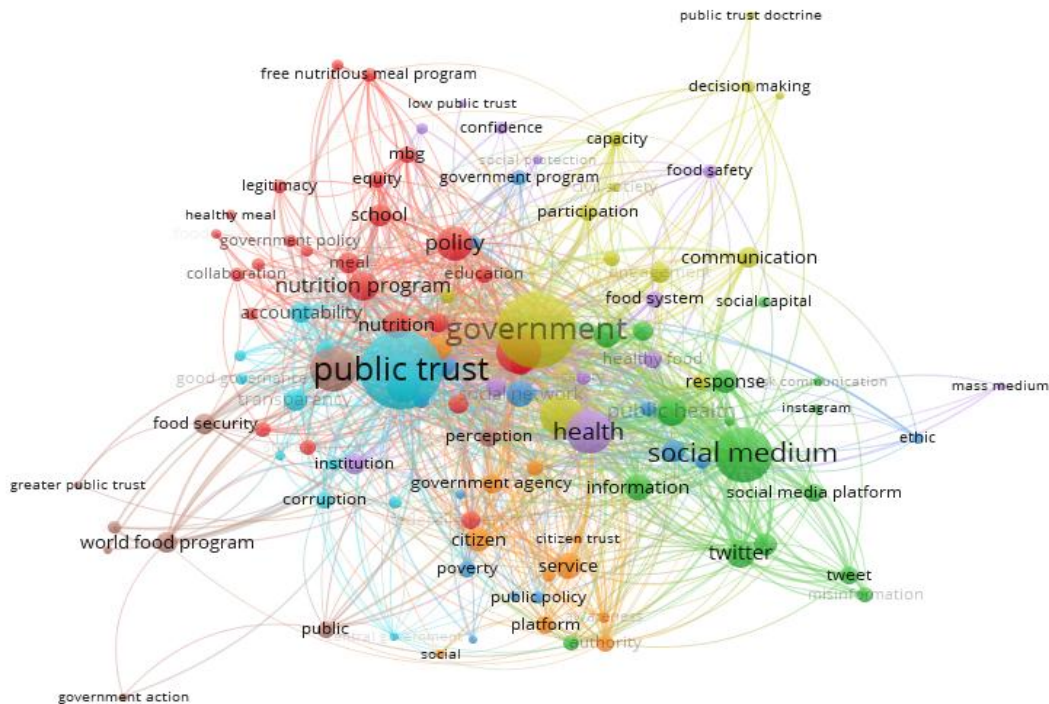


Figure 1. Keyword Co-occurrence Network Visualization

Sumber: Processed by the authors, 2026.

Figure 1 presents a network visualization of keyword co-occurrence in the literature corpus on public trust toward the free nutritious meal program. The terms "public trust," "government," and "social medium" occupy central positions as the main connecting hubs between clusters, with the policy cluster (policy, school, nutrition program, mbg, and free nutritious meal program) shown in red, the governance cluster (good governance, corruption, accountability, and transparency) shown in cyan, the capacity and decision-making cluster (capacity, decision making, and communication) shown in yellow, and the social media cluster (social medium, twitter, response, and information) shown in green. The largest nodes are observed for "public trust," "social medium," and "nutrition program," indicating that these three terms are the most dominant topics and are closely interrelated within the analyzed literature.

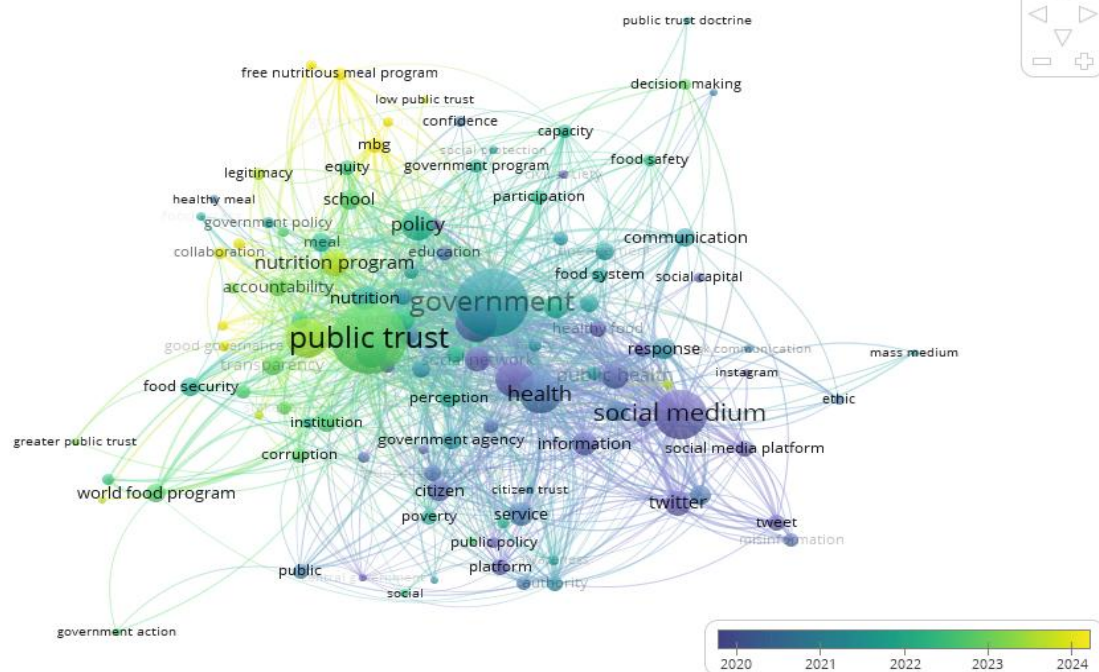


Figure 2. Overlay Visualization Based on Publication Year

Sumber: Processed by the authors, 2026.

This figure presents an overlay visualization from VOSviewer showing the trend of research topics on public trust toward the free nutritious meal program based on publication year, with a color scale ranging from dark purple (2020) to yellow (2024). The nodes "public trust," "government," and "social medium" remain the most dominant throughout the period. Topics such as "twitter," "health," and "citizen trust" appear in purple-blue, indicating that they were more frequently discussed in 2020–2021. In contrast, terms such as "free nutritious meal program," "mbg," "nutrition program," and "accountability" appear in green-yellow, indicating that these topics have only recently emerged and gained attention in 2023–2024. This suggests a shift in research focus from public trust issues centered on social media toward public trust issues that are more specifically related to the implementation of the free nutritious meal program.

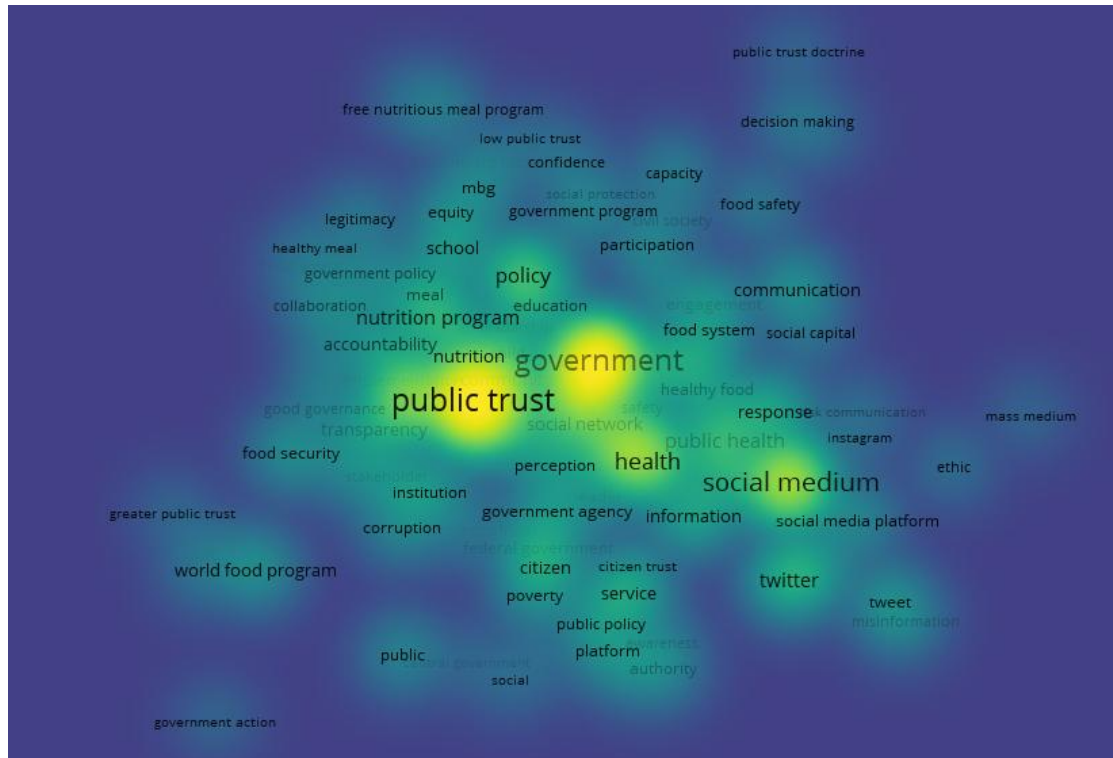


Figure 3. Keyword Density Visualization

Sumber: Processed by the authors, 2026.

Figure 3 presents the density visualization generated using VOSviewer. In this visualization, bright yellow indicates keywords with the highest frequency and density, while green to dark purple represents lower keyword density. The brightest areas are concentrated around the keywords "public trust," "government," "health," and "social media," indicating that these are the most frequently discussed topics in the analyzed literature. In contrast, keywords such as "public trust doctrine" and "government action" appear in darker, peripheral areas, suggesting that these topics have received relatively little attention. Overall, the visualization shows that existing studies mainly focus on public trust, government, health, and social media, whereas topics related to governance and program accountability remain underexplored.

Table 1. Keywords along with (frequency of occurrence), links, and link

Keywords	Occurrences	Links	Link Strength
Public Trust	374	104	1211
Government	347	105	1107
Social Medim	184	80	529
Nutrition Program	51	53	162

Table 1 highlights the most influential keywords in the bibliometric network. Public trust emerges as the central theme, reflecting its strong connection with various research topics in the literature. Government also plays a key role, indicating that discussions of public trust are closely associated with government-related issues. Meanwhile, social media appears as an important context through which public trust is examined. In comparison, nutrition program represents a more specific research topic that is connected to the broader themes of public trust, government, and social media. Overall, the results indicate that studies on nutrition programs are primarily framed within discussions of public trust, government, and social media, suggesting that these three themes constitute the main research directions in the existing literature.

DISCUSSION

The results of this bibliometric analysis provide a comprehensive overview of the development of research on public trust in the Free Nutritious Meal Program, both in terms of its thematic structure and chronological evolution. The keyword co-occurrence network, consisting of 112 items grouped into eight clusters with 1,941 links and a Total Link Strength (TLS) of 5,520, indicates that this research field is highly interconnected and has evolved into a cohesive, multidisciplinary body of literature rather than a collection of isolated studies.

The centrality of the term *public trust* within the network, supported by its position as the keyword with the highest number of occurrences (374), the greatest Total Link Strength (1,211), and the second-highest number of links (104), as presented in Table 1, confirms that *public trust* functions as the core conceptual framework that connects various research themes. This finding is consistent with the theoretical perspective that public trust is a multidimensional construct reflecting citizens' confidence in the competence, fairness, and responsiveness of government institutions (Ningsih & Sasmita, 2025; (Balkis et al., 2021). Furthermore, the strong association between *public trust* and *government* (347 occurrences, 105 links, and a Total Link Strength of 1,107) reinforces the argument that trust in public policies, including the Free Nutritious Meal Program, cannot be examined independently of the performance and credibility of government institutions.

In line with the findings of the research focus on school meal programs has evolved from merely examining program implementation to exploring their broader impacts on children's nutrition and health outcomes (Maulidah et al., 2025; Ellegaard, 2026). The

findings of this study demonstrate a similar trend, as reflected by the emergence of the terms *food security*, *food system*, and *healthy food* in the bibliometric analysis. These findings indicate that research on the Free Nutritious Meal Program extends beyond the provision of nutritious meals to encompass broader issues, including food security, food systems, and healthy dietary practices as key factors supporting improved public health, particularly among children (Ferrer-Serrano et al., 2026).

The overlay visualization illustrates the evolution of research themes over time. During the earlier period, studies primarily focused on government, public policy, and health-related issues. With the rapid advancement of digital technologies, research attention gradually shifted toward the role of social media as a platform for shaping public opinion, disseminating information, and fostering public trust in government policies. This trend indicates that social media has become an important factor in understanding the dynamics of public trust in government programs, including the Free Nutritious Meal Program.

Meanwhile, the density visualization reveals that the highest concentration of research is centered on the keywords *public trust*, *government*, *social media*, and *health*. These four themes represent the most extensively studied areas within the existing literature. In contrast, studies specifically addressing the Free Nutritious Meal Program remain relatively sparse. This finding suggests that although research on public trust has expanded considerably, studies explicitly examining public trust in relation to the Free Nutritious Meal Program are still limited.

These findings highlight substantial opportunities for future research to further investigate public trust in the Free Nutritious Meal Program, particularly within the context of government policy implementation in Indonesia. Future studies should explore how public trust is shaped by citizens' experiences with program implementation, the quality of information received by the public, and interactions and emotional expressions on social media. Such research would not only enrich the literature on public trust but also provide evidence-based recommendations for policymakers to enhance the effectiveness of the implementation of the Free Nutritious Meal Program.

CONCLUSION

This study successfully mapped the development of the scientific literature on public trust in the Free Nutritious Meal Program during the 2016–2026 period using a bibliometric approach. The findings indicate that this research field has a well-connected intellectual structure, as evidenced by a co-occurrence network comprising 112 items grouped into eight clusters, with 1,941 links and a Total Link Strength (TLS) of 5,520. The keywords *public trust*, *government*, *social media*, and *health* emerged as the most dominant themes, suggesting that research on public trust has primarily focused on governance, digital communication, and public health. Furthermore, the overlay visualization revealed a shift in research focus from government and public policy toward the role of social media in shaping public opinion and trust. The density visualization further demonstrated that studies specifically addressing public trust in the Free Nutritious Meal Program remain relatively limited, highlighting significant opportunities for further investigation.

This study makes three main contributions to the existing body of knowledge. First, it provides a comprehensive bibliometric mapping of research on public trust in the Free Nutritious Meal Program, offering a clear overview of the intellectual structure, major research themes, and the evolution of this research field. Second, by employing network, overlay, and density visualizations, this study identifies the relationships among key research topics, demonstrating the strong connections between public trust, government, social media, and health. Third, the findings reveal an important research gap, namely the limited number of studies specifically examining public trust in the context of the Free Nutritious Meal Program. This gap provides a valuable foundation for future research and offers evidence-based insights for policymakers seeking to strengthen public trust in the program.

Based on the findings, several recommendations can be proposed for future studies. First, future research should expand the scope of bibliographic data by incorporating multiple international databases, such as Scopus, Web of Science, and Dimensions, to provide a more comprehensive representation of the literature. Second, bibliometric analysis should be complemented with systematic literature reviews or empirical research to gain a deeper understanding of the factors influencing public trust in the Free Nutritious Meal Program. Third, future studies should investigate more specifically the roles of social media, government communication, and citizens' emotional responses in shaping public trust toward the Free Nutritious Meal Program. Such research would contribute to the

advancement of the literature while providing practical, evidence-based recommendations for improving the implementation and public acceptance of the program.

REFERENCES

- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959–975. <https://doi.org/10.1016/j.joi.2017.08.007>
- Arlinta, D. (2026, June 15). *Total 38.000 Orang Terdampak Keracunan MBG, Komnas HAM Desak Evaluasi Menyeluruh*. Kompas.id. <https://www.kompas.id/artikel/total-38000-orang-terdampak-keracunan-mbg-komnas-ham-desak-evaluasi-menyeluruh>
- Biro Hukum dan Humas Badan Gizi Nasional. (2025, December 19). *Infografis Data Capaian Program MBG per 19 Desember 2025*. Badan Gizi Nasional. <https://www.bgn.go.id/infographic/7>
- Balkis, A. H., Hutagalung, B. K. S., & Oktaviani, N. H. (2021). Urgensi Public Trust dalam Mempengaruhi Pola Perilaku Kepatuhan Masyarakat pada Masa Pandemi Covid-19 di Indonesia. *Spirit Publik: Jurnal Administrasi Publik*, 16(2), 129–136. <https://doi.org/10.20961/sp.v16i2.54156>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Ellegaard, O. (2026). The method of bibliometric analysis: A critical evaluation. *Scientometrics*, 131(6), 4175–4196. <https://doi.org/10.1007/s11192-026-05670-6>
- Ferrer-Serrano, M., Fuentelsaz, L., & Latorre-Martínez, M. P. (2026). Knowledge transfer and networks: A bibliometric approach through performance analysis, science mapping, and dynamic network analysis. *Journal of the Knowledge Economy*, 17(2), 5237–5272. <https://doi.org/10.1007/s13132-025-02814-6>
- Furqon, M. A., Hermansyah, D., Sari, R., Sukma, A., Akbar, Y., & Rakhmawati, N. A. (2018). Analisis Sosial Media Pemerintah Daerah di Indonesia Berdasarkan Respons Warganet. *Jurnal Sosioteknologi*, 17(2), 177–184. <https://journals.itb.ac.id/index.php/sostek/article/view/6488>
- Harzing, A.-W. (2016, February 6). *Publish or Perish*. Harzing.com. <https://harzing.com/resources/publish-or-perish>
- Klarin, A. (2024). How to conduct a bibliometric content analysis: Guidelines and contributions of content co-occurrence or co-word literature reviews. *International Journal of Consumer Studies*, 48(2), Article e13031. <https://doi.org/10.1111/ijcs.13031>
- Maulidah, N., Sidik, G. S., & Wismaliya, R. (2025). Mindful Eating dan Literasi Pangan: Kajian Bibliometrik untuk Penguatan Program MBG di Sekolah Dasar Indonesia. *Jurnal Pedagogik Pendidikan Dasar*, 12(1), 100–111. <https://ejournal.upi.edu/index.php/jppd/article/view/85088>
- Ningsih, A. Y., & Sasmita, S. (2025). Kepercayaan Publik (Public Trust) kepada Pemerintah dalam Penanganan Kerusakan Jalan di Nagari Aie Dingin Kecamatan Lembah Gumanti Kabupaten Solok. *Jurnal Politik dan Pemerintahan Daerah*, 7(1), 150–160. <https://doi.org/10.36355/jppd.v7i1.238>

- Öztürk, O., Kocaman, R., & Kanbach, D. K. (2024). How to design bibliometric research: An overview and a framework proposal. *Review of Managerial Science*, 18(11), 3333–3361. <https://doi.org/10.1007/s11846-024-00738-0>
- Permana, I., & Maani, K. D. (2024). Publication trend of public sentiment towards Indonesia government policies. *Sinkron: Jurnal dan Penelitian Teknik Informatika*, 8(3), 2061–2069. <https://doi.org/10.33395/sinkron.v8i3.13843>
- van Eck, N. J., & Waltman, L. (2021). *VOSviewer* (Version 1.6.17) [Computer software]. Centre for Science and Technology Studies, Leiden University. <https://www.vosviewer.com>
- Wardana, I. G. N. W., & Prabawati, N. P. A. (2024). Efektivitas Pelayanan Publik dalam Perspektif Good Governance di Era Digital. *Socio-Political Communication and Policy Review*, 1(6), 1–8. <https://doi.org/10.61292/shkr.178>