

Global Trends in Public Service Quality Research: Bibliometric Analysis and Network Visualization Based on VOSviewer

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ABSTRAK

Penelitian ini melakukan analisis bibliometrik terhadap literatur kualitas pelayanan publik yang terindeks dalam basis data *Dimensions* periode 2020–2024. Sebanyak 390 dokumen dianalisis menggunakan VOSviewer untuk memetakan tren publikasi, kontributor berpengaruh, jaringan kolaborasi, dan evolusi tematik riset. Produktivitas publikasi mencapai puncak pada 2023 dengan 111 dokumen, didorong meningkatnya perhatian akademik pasca pandemi COVID-19. Amerika Serikat mendominasi dengan 222 dokumen, diikuti Belanda, Inggris, dan China. Jaringan *co-authorship* mengidentifikasi tiga kluster komunitas intelektual, dengan Jeremy L. Hall sebagai penulis paling produktif. *Overlay visualization* mengungkap pergeseran paradigmatis dari isu keterwakilan birokrasi menuju transformasi tata kelola berbasis bukti.

ABSTRACT

This study conducts a bibliometric analysis of public service quality literature indexed in the *Dimensions* database over 2020–2024. A total of 390 documents were analyzed using VOSviewer to map publication trends, influential contributors, collaboration networks, and thematic evolution. Publication productivity peaked in 2023 with 111 documents, driven by growing academic interest following the COVID-19 pandemic. The United States dominated with 222 documents, followed by the Netherlands, the United Kingdom, and China. Co-authorship network analysis identified three major intellectual clusters, with Jeremy L. Hall as the most productive author. Keyword overlay visualization revealed a paradigmatic shift from bureaucratic representation toward evidence-based governance transformation.

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1. INTRODUCTION

Public services are a fundamental instrument of the state in fulfilling the basic rights of every citizen to goods, services, and administrative services. The mandate of the 1945 Constitution affirms the state's obligation to ensure the welfare of its citizens, so the effectiveness of government is highly dependent on the quality of public service delivery. Professional, efficient, and accountable public services not only enhance citizen satisfaction but also foster long-term public trust. This makes the quality of human resources—including competence, work ethics, and the adaptive ability of the apparatus—a determining factor for the success of public services in the modern era.

A number of previous studies have examined various dimensions of public service quality. Rhee & Rha (2009) it found that service quality attributes differed significantly based on customer typology: beneficiaries were more concerned with process quality and outcomes, while intermediary customers prioritized design quality and relationships. In the context of bureaucratic reform, Singh & Slack (2022) show that the implementation of New Public Management (NPM) contributes to a measurable improvement of service quality. Li & Shang (2020) identified eight dimensions of quality in the framework of e-Government: system quality, reliability, security, accessibility, information quality, service capability, interactivity, and responsiveness. However, there has been no comprehensive bibliometric study that maps the trends and developments of public service quality research systematically in the 2020–2024 period, this gap motivated the present study.

This study investigates a bibliometric analysis of the literature on the quality of public services using the VOSviewer software. In particular, this study seeks to: (1) identify trends in scientific publications in the field of public service quality in 2020–2024; (2) map influential contributors based on the productivity of authors and country affiliates; (3) analyze co-authorship networks across authors and countries; and (4) analyze the co-occurrence pattern of the author's keywords to uncover the developing research theme clusters.

2. LITERATURE REVIEW

2.1 *Quality of Public Services*

The quality of public services is a multidimensional concept that has become a central concern in the study of public administration over the past few decades. Public services are defined as any form of activity carried out by government agencies in order to meet the basic needs of citizens for administrative goods, services, and services (Osborne et al., 2013). Quality in the context of public services cannot be measured solely from the perspective of the internal efficiency of the bureaucracy, but must include the dimensions of service user satisfaction, accountability of organizers, and responsiveness to the evolving needs of society (Bovaird & Löffler, 2003).

Rhee & Rha (2009) found that the attributes of service quality differ significantly based on customer typology: direct beneficiaries are more concerned with process quality and outcomes, while intermediary customers tend to prioritize design quality and relationships. These findings confirm that a single approach to measuring the quality of public services cannot accommodate the complexity of the relationship between service providers and different segments of society served. Subsequently, Li & Shang (2020) identified eight dimensions of quality in the *e-Government framework*, including system quality, reliability, security, accessibility, information quality, service capability, interactivity, and responsiveness — a framework that is increasingly relevant as the digital transformation of bureaucracies accelerates in various countries.

2.2 *Bureaucratic Reform and New Public Management*

Bureaucratic reform is the government's systematic response to the increasingly complex demands of improving the quality of public services. The *New Public Management* (NPM) paradigm that has developed since the 1980s has brought a fundamental shift in

governance, namely by adopting private sector management principles such as outcome orientation, competition, and performance accountability into the delivery of public services (Hood, 1991). NPM emphasizes that bureaucratic efficiency and effectiveness can be improved through decentralization of authority, performance-based contracts, and empowerment of citizens as sovereign service customers (Pollitt & Bouckaert, 2011).

Singh & Slack (2022) show that the implementation of NPM contributes to measurable improvement of service quality, especially through stricter accountability mechanisms and service orientation that is more responsive to the needs of citizens. However, a number of criticisms have also emerged against this paradigm, especially regarding the risk of commodification of public services and the weakening of universal and non-discriminatory service values (Osborne, 2006). Responding to the limitations of NPM, the *New Public Governance* (NPG) paradigm then developed by emphasizing multi-stakeholder collaboration, co-production of services between the government and citizens, and public trust as the main foundation of service quality (Osborne et al., 2013). This paradigm shift has also shaped the direction of contemporary research that increasingly focuses on relational and participatory dimensions in the implementation of public services.

2.3 Bibliometric Analysis in Public Administration Studies

Bibliometric analysis is a quantitative method used to map the intellectual structure of a field of science through statistical analysis of scientific publications, including citation patterns, author collaboration, and keyword co-occurrence (Donthu et al., 2021). This method is increasingly used in the study of public administration due to its ability to uncover research trends, identify influential contributors, and visualize knowledge networks in a systematic and reproducible manner (Zupic & Čater, 2015). The VOSviewer tool is one of the most widely used tools in bibliometric analysis due to its ability to generate intuitive and informative network visualizations, including *co-authorship*, *co-citation*, and *co-occurrence* maps of keywords (van Eck & Waltman, 2010).

In the context of public administration, a number of bibliometric studies have successfully mapped the development of specific sub-fields, such as *public service motivation* research (Ritz et al., 2016), collaborative governance (Emerson & Nabatchi, 2015), and public sector innovation (Arundel et al., 2019). These studies have consistently shown that bibliometric analysis is able to uncover intellectual trajectories that are not always visible through the study of the conventional literature, especially in identifying paradigm shifts and the emergence of clusters of new research themes. However, bibliometric studies that specifically focus on the quality of public services with a time span of 2020–2024 are still very limited, so this study is here to fill the gap while providing an up-to-date map of the research landscape in this ever-evolving field.

3. RESEARCH METHODS

This study uses a bibliometric analysis method (De Bellis, 2009). Bibliometric analysis is a field of research that combines information science methodologies, statistics, and data analysis to study patterns in the scientific literature (Muhammad & Triansyah, 2020). The main purpose of bibliometric analysis is to understand, measure, and analyze the impact of scientific work and research trends in various disciplines (Sari, 2023). This method has been recognized as a comprehensive strategy for investigating and deciphering information from a large number of scientific works, as well as being used to identify the center of attention within a particular area of exploration (Zupic & Čater, 2015). In its development, bibliometrics can include the analysis of various formats of scientific publications, including electronic journals (Diodato & Gellatly, 2013).

Data were collected using the *Dimensions* database as a search source. The keywords used in the search process are “*public service quality*” in the title, abstract, and keyword fields. The search is limited to the period 2020–2024 to ensure the relevance and currency of the data. From the search

results, 390 documents were obtained which were then selected based on inclusion criteria: journal articles indexed in the *Dimensions* database, in English, and published in the range of 2020–2024. Duplicate articles as well as documents that are not relevant to the main topic were excluded from the analysis. The filtered data were then exported in CSV format and processed using the VOSviewer software to produce visualizations of *co-authorship networks* between authors, *co-authorship* between countries, and *keyword overlay visualization* to map the thematic evolution of public service quality research globally.

The selected data were then analyzed using the VOSviewer software to build and visualize the bibliometric network. The analysis carried out comprised three types, namely: (1) *co-authorship* analysis to map collaboration networks between authors and between countries; (2) *co-occurrence* analysis of the authors' keywords to identify the dominant research theme cluster; and (3) *overlay visualization analysis* to map the temporal evolution of the research theme based on the average year of publication of the keywords. The network visualization is displayed in the form of a bibliometric map that is interpreted based on *node* size, link thickness, and color gradation that reflects the period of emergence of the research theme.

4. RESULTS AND DISCUSSION

This section presents findings from a bibliometric analysis of the public service quality literature processed using the VOSviewer tool. The analysis was carried out on scientific documents indexed in international databases in the period 2020–2024, including mapping publication trends, identifying influential contributors, and visualizing collaboration networks and keyword co-occurrence. The results of the analysis are presented systematically following four research objectives that have been set, namely: (1) trends in scientific publications; (2) mapping of contributors based on the productivity of authors and country affiliations; (3) *co-authorship* networks across authors and countries; and (4) *co-occurrence* patterns of authors' keywords along with developing research theme clusters. Each finding is visualized using the VOSviewer network map and interpreted critically to reveal the intellectual structure and direction of research development in this field.

One of the key analyses in this bibliometric study is the temporal evolution mapping of keywords using *Overlay visualization* VOSviewer. These visualizations allow researchers to identify when a theme began to evolve and how the research landscape changes over time. In the resulting network map, each *node* represents a keyword that appears in the literature, where the size of the *node* reflects the frequency with which the keyword appears, while the color gradation shows the average year of publication — ranging from dark blue representing the period around 2010–2012 to bright yellow-green reflecting the period 2018–2020.

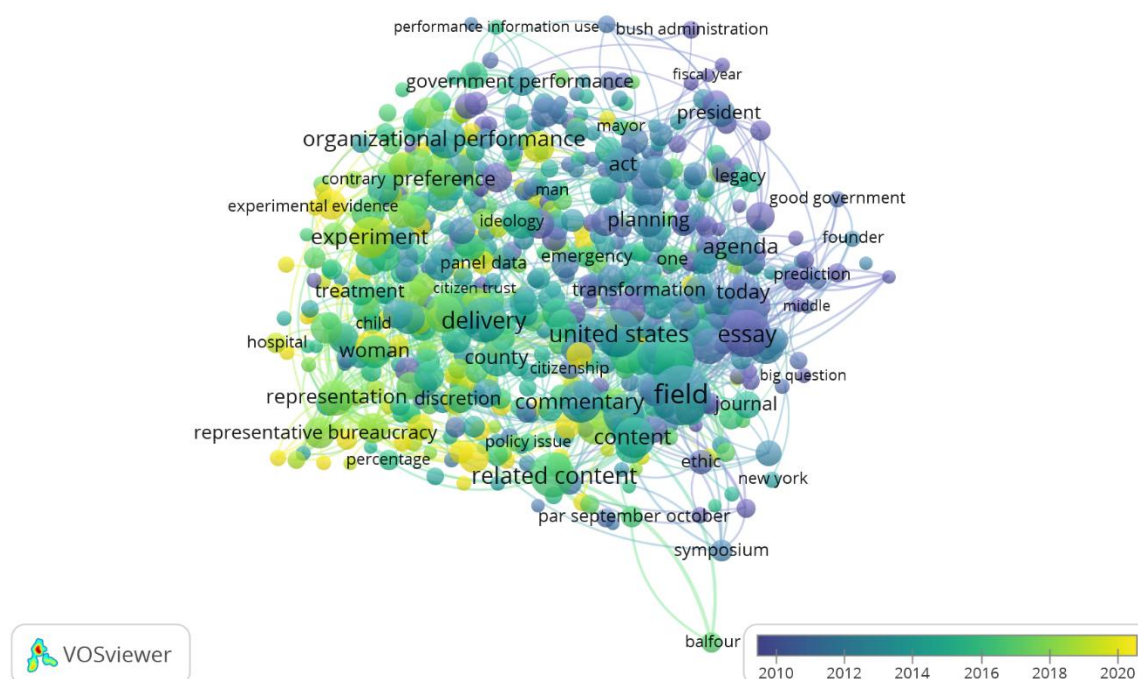


Figure 1. Overlay visualization (keyword co-occurrence)

In the early period marked by dark blue, keywords such as *"representative bureaucracy"*, *"representation"*, *"discretion"*, *"data panel"*, and *"citizen trust"* dominated the network. This indicates that research on the quality of public services at that time focused heavily on the issue of bureaucratic representation and citizen trust, which reflects the classic debate in public administration about the extent to which state apparatus represents the diversity of the communities it serves. Entering the middle of the decade, which was marked by the dominance of green, clusters of keywords such as *"organizational performance"*, *"government performance"*, *"delivery"*, *"experiment"*, and *"women"* began to appear more prominent. This shift shows that the research focus is moving towards the evaluation of the performance of public organizations and the issue of gender equality in services, while at the same time signaling the adoption of quantitative and experimental methodological approaches in the study of public services. In the current period characterized by bright yellow-green colors approaching 2018–2020, keywords such as *"united states"*, *"essay"*, *"agenda"*, *"planning"*, *"transformation"*, and *"field"* are increasingly appearing in the literature. The emergence of the keywords *"transformation"* and *"agenda"* indicates increasing academic attention to bureaucratic reform and governance transformation, while the large keywords *"essay"* and *"field"* indicate that the genre of reflective writing and field studies are increasingly relevant in discussing the future direction of public administration science. Overall, this overlay visualization reveals a clear trajectory that public service quality research is moving from a perspective of representation and trust to evidence-based performance evaluation, and is now increasingly oriented towards the contemporary public policy transformation and reform agenda—findings that are consistent with global trends in public administration science that increasingly emphasize accountability, service innovation, and governance inclusivity.

In addition to mapping the temporal evolution of keywords, the next analysis focuses on patterns of international collaboration between countries through a *country-based co-authorship* network visualized using VOSviewer. This network map provides an overview of which countries are most actively contributing to public service quality research and how close the collaborative relationship is between them.

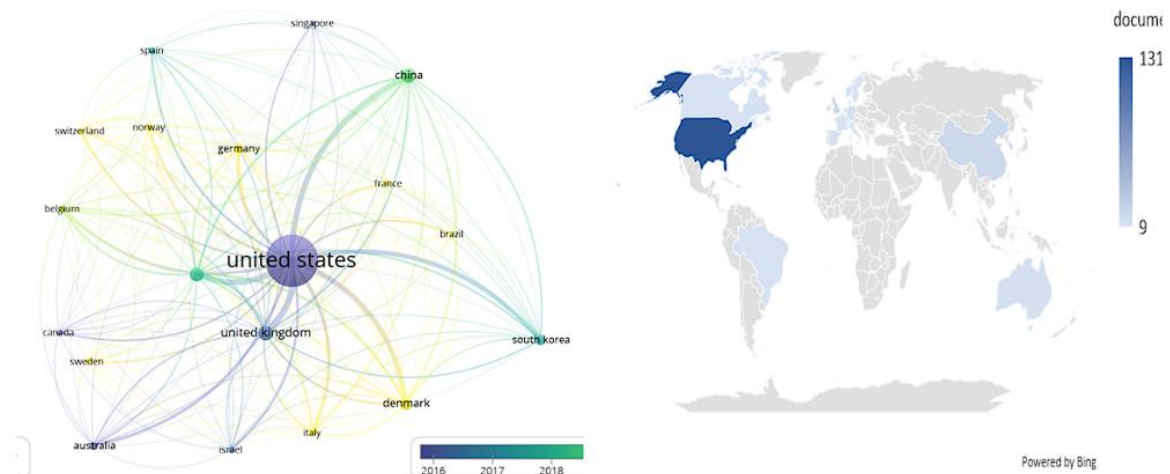


Figure 2. Country co-authorship network

The visualization indicates *the co-authorship network* between countries, the United States occupies the central position with a contribution of 222 documents in the 2020–2024 period, far surpassing the Netherlands in second place with 45 documents, followed by the United Kingdom with 37 documents, Denmark with 33 documents, and China with 32 documents. The dominance of the United States is reinforced by a map of the distribution of documents that shows the most intense blue color in the region. The color gradation on the network connection lines that range from dark blue to yellow-green indicates the temporal dimension of the collaboration, where the blue color reflects the collaboration that was established earlier around 2016, while the yellow-green color indicates a more recent collaboration closer to 2018. This pattern suggests that international collaboration in public service quality research continues to expand gradually, with the emergence of new partners from the Asian region such as China, Singapore, and South Korea who are increasingly actively involved in the more recent period. Meanwhile, the dominance of Western European and North American countries in this network reflects that public service quality research is still highly concentrated in the Western hemisphere, although signs of internationalization to the Asian and Oceania regions are beginning to be seen through the involvement of Australia, South Korea, Singapore, and China in global collaboration networks.

To deepen the understanding of the structure of collaboration, the next analysis focuses on *co-authorship networks* at the individual level of authors. If the previous map shows a pattern of collaboration between countries on a macro level, then this visualization reveals in a more granular way how researchers connect with each other and form research groups that reflect the intellectual community in this field.

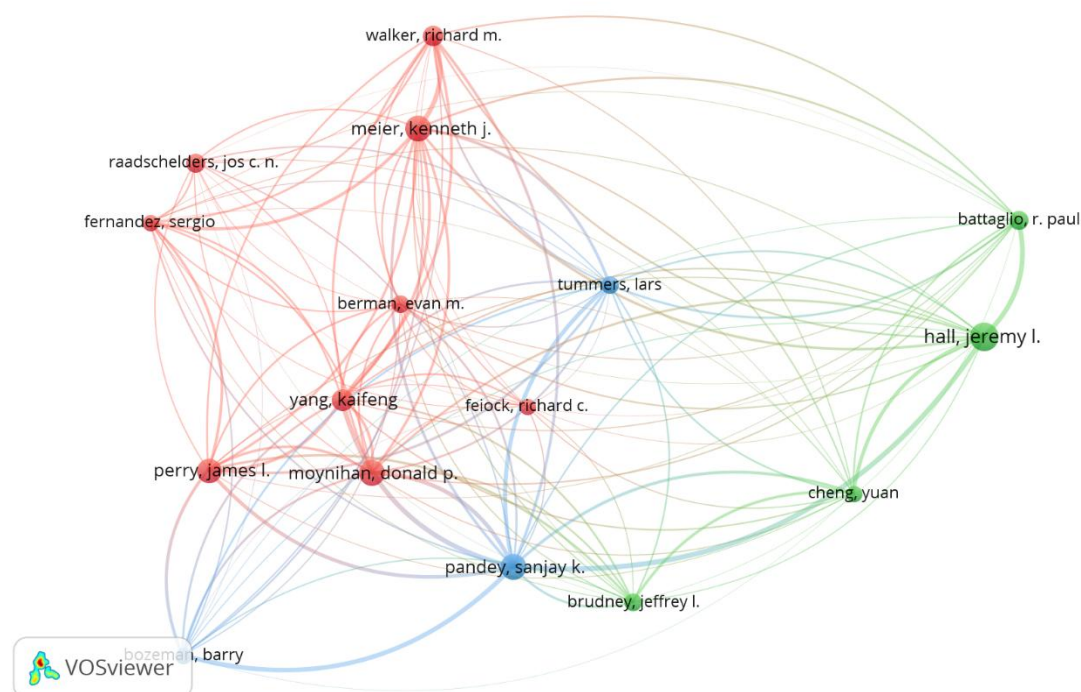


Figure 3. Co-authorship network

Based on the visualization of the *co-authorship* network between authors, at least three main collaboration clusters were identified that were differentiated by red, green, and blue color codes. The red cluster is the most dominant and dense group, which includes names such as Walker, Meier, Raadschelders, Fernandez, Berman, Yang, Feiock, Perry, and Moynihan—widely recognized figures in the public administration literature and global public service management. The green cluster on the right side of the network features a collaboration group driven by Jeremy L. Hall as the most prolific author with 17 publications in the 2020–2024 period, along with Battaglio and Cheng, which shows the existence of a separate research community with an orientation towards public sector human resource management and organizational performance. Meanwhile, the blue cluster connects authors such as Tummers, Pandey (11 publications), and Brudney, who is known to specialize in the themes of policy implementation, public service motivation, and voluntary involvement in public service. What is interesting to observe is the existence of several authors who act as a bridge between clusters, reflecting their strategic role in integrating various schools of thought in public service quality research. Overall, the network map confirms that global public service quality research is growing through structured collaborations in interconnected intellectual communities, with a strong dominance of scholars based in the United States and Western Europe.

The results of bibliometric analysis of 390 scientific documents for the 2020–2024 period show a rich picture of the development of public service quality research globally. In terms of publication trends, research in this area shows interesting dynamics with meaningful fluctuations: starting from 86 documents in 2020, briefly dropping to a low of 57 documents in 2021, then gradually recovering to 71 documents in 2022, and reaching the highest peak throughout the analysis period in 2023 with 111 documents, before dropping back to 65 documents in 2024. The decline in 2021 is likely to reflect the disruption of academic activities due to the COVID-19 pandemic, while the sharp surge in 2023 indicates that the pandemic has become a new catalyst that encourages academics to more intensively examine the issue of quality and resilience of public services, considering that the crisis has clearly exposed the gap in bureaucratic capacity in various countries in providing responsive and adaptive services.

In terms of country contributions, the United States remains dominant with 222 documents, but the Netherlands' position in second place with 45 documents — surpassing the United Kingdom

with only 37 documents — is an interesting finding and reflects the strong tradition of comparative public administration research in Europe. The emergence of China with 32 documents and South Korea with 18 documents hints at a geopolitical shift in global public administration knowledge production, in line with the two countries' increasing investment in governance research and bureaucratic modernization. However, the disparity in contributions between the United States and other countries is still striking, reflecting that the Dimensions database used is still dominated by publications from the North American scientific tradition—an institutional bias that needs to be noted in interpreting these findings.

The *co-authorship network* between authors reveals that research on the quality of public services does not develop atomistically, but is structured in polarized but interconnected intellectual communities. The formation of the three main clusters reflects different but complementary scientific traditions, with Jeremy L. Hall as the most prolific author, followed by Pandey, Cheng, and Tummers. This pattern is consistent with the argument in the bibliometric literature that the advancement of a field of science is characterized by the formation of *invisible colleges* — informal networks of scientists who share common research paradigms and agendas — and the presence of connecting authors between clusters is evidence that the boundaries of these intellectual communities are permeable, with the communities themselves constantly interacting.

Keyword visualization overlays provide the richest temporal dimension in this analysis. The thematic trajectory revealed shows a meaningful shift from the dominance of bureaucratic representation and citizen trust issues, towards evidence-based performance evaluation, to adaptive governance transformation discourse. This shift is not just a change in terminology, but rather reflects a paradigm shift in the way public administration scientists view service quality — in line with Rhee & Rha (2009) argument that service quality is multidimensional and contextual, and reinforces the findings of Singh & Slack (2022) that *New Public Management* reform has reshaped the way academics and practitioners define quality service standards. At the same time, the emergence of the theme of *e-Government* and digitization of services in the latest cluster is in line with the eight-dimensional framework of quality identified by Li & Shang (2020), indicating that the digital transformation agenda has become an inevitable new current in contemporary public service quality research.

5. CONCLUSION

This study has conducted a bibliometric analysis of 390 scientific documents on the quality of public services indexed in the *Dimensions* database in the period 2020–2024, using the VOSviewer tool to map publication trends, influential contributors, collaborative networks, and thematic evolution of research. Overall, the findings of this study provide a comprehensive overview of the intellectual structure and development trajectory of the field of public service quality at the global level.

In terms of publication trends, public service quality research peaked in 2023 with 111 documents, indicating that this field continues to be relevant and increasingly receiving academic attention, especially after the COVID-19 pandemic. In terms of country contribution, the United States still dominates with 222 documents, but the emergence of the Netherlands, Denmark, China, and South Korea as significant contributors marks the ongoing internationalization process in the production of global public administration knowledge. The network of *co-authorship* between authors reveals the formation of three distinct but interconnected intellectual communities, with Jeremy L. Hall as the most prolific author, followed by Pandey, Cheng, Meier, and Tummers who became the main pillars of the international public administration literature of this period. Meanwhile, keyword visualization overlays show a meaningful paradigmatic shift — from a focus on bureaucratic representation and citizen trust, to evidence-based performance evaluation, and now increasingly oriented towards adaptive and innovative governance transformation.

This research has several limitations that need to be considered. The data are sourced from a single database, namely Dimensions, so the findings do not fully represent the entire public service quality research landscape that is also spread across various other databases such as Scopus and Web of Science. In addition, the dominance of English in the database has the potential to overlook the research contributions of developing countries that publish works in local languages. In the future, similar research should expand the scope of data sources by integrating several leading journals at once, as well as combining bibliometric approaches with systematic content analysis to produce more holistic mapping — especially in order to strengthen the academic voice of Global South countries, including Indonesia, in the global discourse on the quality of public services.

REFERENCES

- Arundel, A., Bloch, C., & Ferguson, B. (2019). Advancing innovation in the public sector: Aligning innovation measurement with policy goals. *Research Policy*, 48(3), 789–798. <https://doi.org/10.1016/j.respol.2018.12.001>
- Bovaird, T., & Löffler, E. (2003). Evaluating the Quality of Public Governance: Indicators, Models and Methodologies. *International Review of Administrative Sciences*, 69(3), 313–328. <https://doi.org/10.1177/0020852303693002>
- De Bellis, N. (2009). *Bibliometrics and Citation Analysis: From the Science Citation Index to Cybermetrics*. Scarecrow Press. <https://www.bloomsbury.com/us/bibliometrics-and-citation-analysis-9780810867130/>
- Diodato, V. P., & Gellatly, P. (2013). *Dictionary of Bibliometrics*. Routledge. <https://doi.org/10.4324/9780203714133>
- 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>
- Emerson, K., & Nabatchi, T. (2015). *Collaborative Governance Regimes*. Georgetown University Press. <https://press.georgetown.edu/Book/Collaborative-Governance-Regimes>
- Hood, C. (1991). A public management for all seasons? *Public Administration*, 69(1), 3–19. <https://doi.org/10.1111/j.1467-9299.1991.tb00779.x>
- Li, Y., & Shang, H. (2020). Service quality, perceived value, and citizens' continuous-use intention regarding e-government: Empirical evidence from China. *Information & Management*, 57(3), 103197. <https://doi.org/10.1016/j.im.2019.103197>
- Muhammad, I., & Triansyah, F. A. (2020). *Panduan Lengkap Analisis Bibliometrik dengan VOSviewer: Memahami Perkembangan dan Tren Penelitian di Era Digital TT - A complete guide to bibliometric analysis with VOSviewer: Understanding research developments and trends in the digital age*. Penerbit Adab.
- Osborne, S. P. (2006). The new public governance? *Public Management Review*, 8(3), 377–387. <https://doi.org/10.1080/14719030600853022>
- Osborne, S. P., Radnor, Z., & Nasi, G. (2013). A new theory for public service management? Toward a (public) service-dominant approach. *The American Review of Public Administration*, 43(2), 135–158. <https://doi.org/10.1177/0275074012466935>
- Pollitt, C., & Bouckaert, G. (2011). *Public Management Reform: A Comparative Analysis: New Public Management, Governance, and the Neo-Weberian State* (3rd ed.). Oxford University Press. <https://global.oup.com/academic/product/public-management-reform-9780199595082>
- Rhee, S.-K., & Rha, J.-Y. (2009). Public service quality and customer satisfaction: Exploring the attributes of service quality in the public sector. *The Service Industries Journal*, 29(11), 1491–1512. <https://doi.org/10.1080/02642060902793441>
- Ritz, A., Brewer, G. A., & Neumann, O. (2016). Public service motivation: A systematic literature review and outlook. *Public Administration Review*, 76(3), 414–426. <https://doi.org/10.1111/puar.12505>

- Sari, D. E. (2023). Analisis Bibliometrik Pustakaloka: Jurnal Kajian Informasi dan Perpustakaan Periode 2017-2021. *LIBRARIA: Jurnal Perpustakaan*, 11(1). <https://doi.org/10.21043/libraria.v11i1.19766>
- Singh, G., & Slack, N. J. (2022). New Public Management and Customer Perceptions of Service Quality: A Mixed-Methods Study. *International Journal of Public Administration*, 45(3), 242–256. <https://doi.org/10.1080/01900692.2020.1839494>
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>