
Research Trends in Collaborative Governance: A Bibliometric Analysis

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Received: January 29, 2023; In Revised: May 30, 2023; Accepted: July 23, 2023

Abstract

Collaborative Governance terms become a phenomenon in the private sector and the public sector. Collaborative Governance is conceptualized as public governance in decision-making processes and actions that involve actors from government and other sectors. Collaborative development Governance plays an important role in solving public problems, especially on economic and environmental issues. The method used in seeing the development of the concept Collaborative Governance is carried out using the bibliometric analysis method. This research provides knowledge and makes recommendations for journal readers and writers who can become references by adjusting the issues chosen. This research highlights the trend of research collaborative Governance is seen from the authors and journals that have written the most regarding collaborative concepts governance. The results of this study indicate the writing of articles about the concept collaborative Governance fluctuates every year. The biggest contributor to concept thinking collaborative governance seen from the highest number of citations namely Kirk Emerson a researcher from the University of Arizona. Collaborative governance as a concept from 2020 to 2023 has trending contextual issues related to Covid-19, air pollution, cities, environmental governance and urban development. The productivity of international journals is related to the concept collaborative governance namely the Journal of Public Research Administration.

Keywords: *Collaborative Governance, bibliometric analysis, VOSviewer.*

Introduction

Over the last few decades, research on the topic Collaboration received attention from many researchers and began to appear in various research fields such as political science , economics , education , public administration And history , Increased attention to the creation of new businesses and innovation as drivers of economic growth, as well as improvements in public policy have brought the concept collaboration to the forefront (Kornatowski, 2010; Roy, 2015; Beaudoin et al., 2022) . Collaborative considered as a driver of change and innovation by introducing innovative opportunities to achieve efficient and effective performance in the public and private sectors (Hamann & April, 2013) . In the era of the Covid-19 Pandemic, there was a trend related to studies collaborative governance (Arinanda et al., 2022) . Economic recovery during the Covid-19 pandemic or other natural disasters is important and is part of solving problems with a e collaborative governance (Lai, 2012) .

Collaboration is an important pillar in economic recovery, which is known as the collaborative economic concept (Menor-campos, 2019) . During the Covid-19 pandemic, the concept of collaboration developed very rapidly. Many governments in various countries implement the *Public – Private concept Emergency Collaborations* (PPEC) (Diehlmann et al., 2021) or also known as emergency collaboration between the public and private sectors . With

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the concept of *Public – Private Emergency Collaborations* (PPEC) increase motivation and reputation in an emergency. Emergency conditions such as Covid-19 create joint motivation to get out of this emergency with various strategies such as collaboration between the private sector and the public sector. Lessons from disaster events reveal that recovery from disasters (physical, financial, and mental) often requires collaboration and partnership (Richmond & Knight, 2021) .

Collaborative governance has become a key word in the study of public administration and public management in the twenty-first century (Nabatchi, 2015) . The concepts of governance and collaboration refer to any form of business involving public policy issues outside the boundaries of the government bureaucracy. To continue the discussion in the next session, a definition and exploration of the term collaborative concept is needed governance. Many also say that the term collaborative governance (Morse & Stephens, 2012) is a complex term. Public governance becomes a matter of different things than just government. Public governance is more explained on the decision-making process and actions that involve actors from the government and other sectors. Specifically, that governance is as (1) law, administrative rules and practices of achieving public goals. (2) collective decision-making (deliberation) through mutually agreed mechanisms (Bevir & Rhodes, 2001)

Terms collaborative Governance put forward a more specific definition by Ansell and Gash (Ansell & Gash, 2008) . In general, it is explained that Collaborative Governance is a process that involves various relevant stakeholders to promote the interests of each agency in achieving common goals. According to Ansell and Gash (2008) define Collaborative Governance is an arrangement that regulates one or more public institutions directly involved with non-public stakeholders in a formal, consensus-oriented, and deliberative collective decision-making process that aims to make or implement public policies or manage programs or public assets. Almost the same definition was conveyed by Balogh et al (Emerson et al., 2012) that Collaborative Governance is a process and structure in the management and formulation of public policy decisions that constructively involve actors from various levels, both at the level of government and/or public agencies, private institutions and civil society in order to achieve public goals that cannot be achieved if carried out by only one party.

This research highlights the trend of collaborative governance over the last thirty years, the journals that publish the most research, authors, organizations most relevant to the publication of collaborative governance and provide an overview of collaborative governance based on the primary bibliometric approach. In addition, the analysis was carried out by considering the various levels of information found, which includes journals, papers, authors, institutions, countries and shows the relationship between the citing journal and those cited. Bibliometrics collaborative governance presented by identifying and visualizing research collaborative governance that have influenced the journal over the years. The software used is visualization of similarities (VOS) viewer software. This mapping analysis was carried out using biography, incident analysis, and citations.

Methods

Bibliometric analysis was carried out in two stages. In the first stage of the article between 2010 and 2023 with the title and abstract of collaborative governance selected from indexed journals in well-known academic databases, namely Scopus. Then the data is filtered by selecting article documents, social science fields, open access and English language documents. So that found as many as 201 article documents. The Scopus Data Base includes almost all high -ranking academic journals in collaborative governance, this was chosen because of its wider coverage of good quality journals. The Scopus Data Base is used to search for papers related to collaborative

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governance published from 2010 to 2020 includes information on title, author, keywords, abstract, journal and year. They provide the necessary bibliographical information for analysis. This source has scholarly relevance in the field of collaborative governance and enables consistent conclusions about any subject under study. Scopus is one of the most comprehensive bibliographical resources available, and provides users with online access to a number of resources, including a very large database of citations, but not all journals or articles indexed. Selecting a single data base is the actual best alternative to performing a bibliometric analysis, although it must be underlined that it will never include all of the information available and that limitations will always exist in using this approach. These records are then exported to VOSviewer for analysis.

Bibliometrics is a method that originally started with the aim of measuring academic performance through the number of citations from certain authors or institutions, but now bibliometrics is also used to understand the structure and pattern of development of various fields of knowledge. Bibliometric analysis consists of applying statistical methods to determine qualitative and quantitative changes in a particular scientific research topic, establishing a profile of publications on that topic, and detecting trends within a discipline. (van Eck & Waltman, 2014). Bibliometric indicators, including document type, year of publication, distribution of publications by country or region, journals, research institutions, international cooperation, and keywords, which are then used for further analysis. this type of analysis provides useful information to experts wishing to evaluate scientific activity. Bjork, Offer and Söderberg, (2014) show that the usefulness of bibliometric analysis lies in obtaining an overview of a particular research field. Bibliometrics involves applying different methods to determine qualitative and quantitative changes in the subject of scientific research, establishing profiles of publications on specific topics and identifying structural aspects and trends within a discipline.

Graphical mapping is an important methodology in the field of bibliometrics, because it allows for intellectual relations within a dynamic field of knowledge. This methodology has been refined with software that enables analysis of bibliographic information. The software used in this research is VOS viewer version 1.6.16. VOSviewer is a program developed for creating and viewing bibliometric maps. VOSviewer can display maps in a number of ways, each emphasizing a different aspect of the map. VOSviewer offers an easy-to-use software tool focused entirely on distance-based visualization of bibliometric networks. In the visualization provided by VOSviewer, the distance between two nodes roughly represents the interconnectedness of those nodes. By providing distance-based rather than graph-based visualization, VOSviewer is well suited for visualizing larger networks. Due to its strong focus on visualization, VOSviewer offers analyzing bibliometric networks . (van Eck & Waltman, 2014)

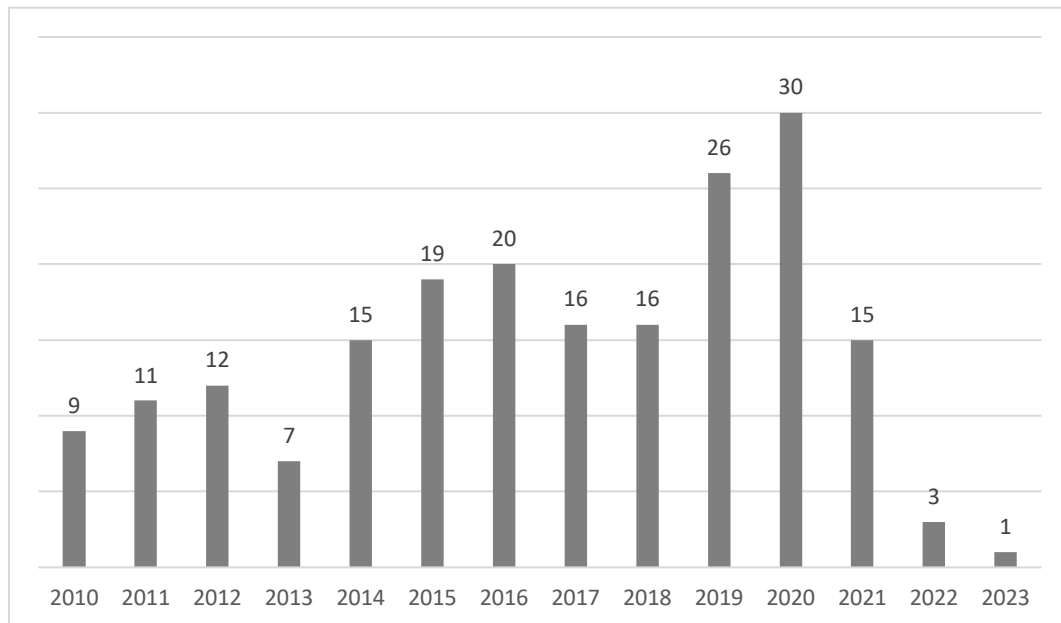
Note that the visualization of a graph is represented by a network of elements, where the size of the circle varies according to the importance of the elements, while the network connections represent how closely related the elements are. Place circles and colors are used to group items. Bibliographic material was mapped using VOSviewer software for graphical visualization, and presented via a network representation, where the size of the circles increases with item relevance and network connections identify closely related items. Circle placement and color are used to group items. The results are visualized based on co-occurrences, year, keywords, authorships, journal sources.

Results and Discussion

Trends in publications *collaborative governance* observed from 2010 to 2023. The publication of articles about this is seen from Scopus data which is taken with the keyword collaborative governance. Publication trends are only seen from the 201 selected articles that are filtered and adjusted to the categories that have been determined in the method discussion. The following is an overview of publication trends with the keyword collaborative governance:

Figure 1

Quantity of publications with the keywords *Collaborative Governance*



Source: Processed by Authors, 2023

The graph shows the number of articles published from 2010 to 2023. In the development of articles collaborative governance from 2010 to 2023 will experience fluctuations. Publication of articles about the highest collaborative governance in 2020 with a total of 30 articles. The condition of the Covid-19 pandemic has resulted in an increase in publications related to collaborative governance because it is highly relevant to contextual issues (Divekar et al., 2021).

Table 1
 Most cited articles

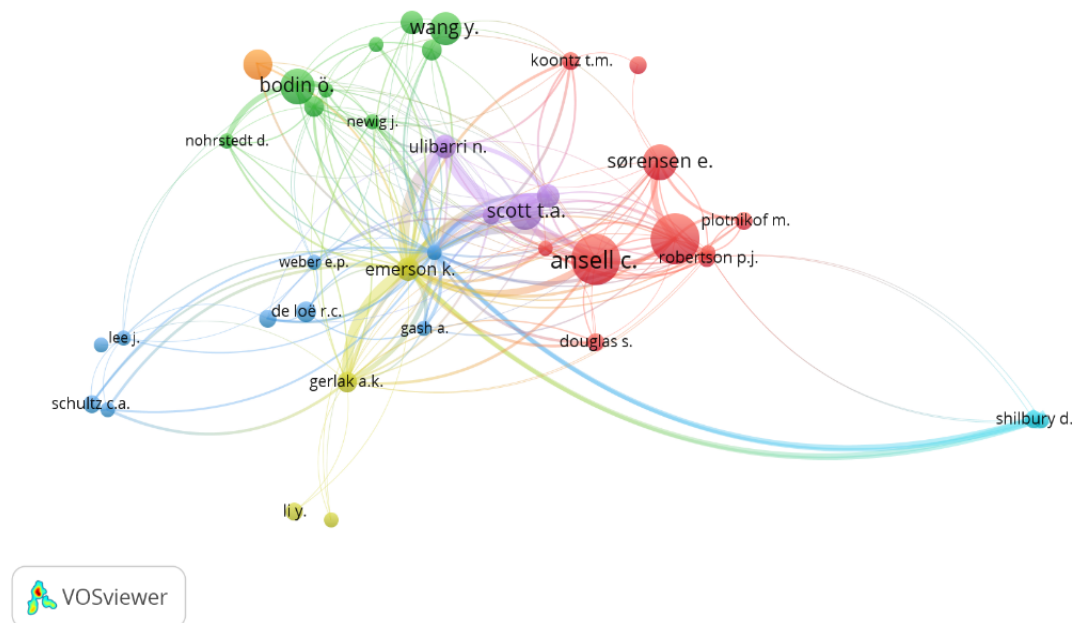
No.	Citations	Authors	title	year	Journals Source
1	1465	K. Emerson	An integrative framework for collaborative governance	2012	Journal of Public Administration Research and Theory
2	214	M. Howlett	From the 'old' to the 'new' policy design: Design thinking beyond markets and collaborative governance	2014	Policy Sciences
3	189	J. Newig	The Environmental Performance of Participatory and Collaborative Governance: A Framework of Causal Mechanisms	2018	Policy StudiesJournal
4	166	K. Emerson	Evaluating the productivity of collaborative governance regimes: A performance matrix	2015	Public Performance and Management Reviews
5	145	T.Scott	Does Collaboration Make Any Difference? Linking Collaborative Governance to Environmental Outcomes	2015	Journal of Policy Analysis and Management
6	144	Y.Ma	Challenges of collaborative governance in the sharing economy: The case of free-floating bike sharing in Shanghai	2018	Journal of cleaner production
7	139	E. Johnston	Managing the inclusion process in collaborative governance	2011	Journal of Public Administration Research and Theory
8	106	K. Emerson	Adaptation in Collaborative Governance Regimes	2014	Environmental Management
9	104	Y.Yan	Emissions trading system (ETS) implementation and its collaborative governance effects on air pollution: The China story	2020	Energy Policy
10	102	AM Guerrero	Achieving social-ecological fit through bottom-up collaborative governance: An empirical investigation	2015	Ecology and Society

Source: Processed by Authors, 2023

Table shows the most cited and observed documents. The five most cited articles are: *First*, an article entitled *An integrative framework for collaborative governance* by (Emerson et al., 2012) with 1465 citations. *Second*, the article entitled *From the 'old' to the 'new' policy design : Design thinking beyond markets and collaborative governance* by (Howlett, 2014) with 214 citations. *Third*, an article entitled *The Environmental Performance of Participatory and Collaborative Governance : A Framework of Causal Mechanisms* by (Newig et al., 2018) with 189 citations. *Fourth*, an article with the title *Evaluating the productivity of collaborative*

Figure 5

Visualization by authorship created by VOSviewer software



Source: Processed by Authors, 2023

Image of large and small circles connected by several lines. The image shows the author who published the article in the collaborative field governance. The authors who have written more authors are placed in a larger circle. A minimum number of authors with a number of publications is 5 and a minimum of 10 citations per author to be included in this analysis. There are 212 authors, and as many as 43 authors who have fulfilled the above requirements. For all authors, the number of publications, the number of citations and their total link strength is calculated. Authors with the largest total link strength are selected and presented in the following table:

Table 2
 Authors with the most publications

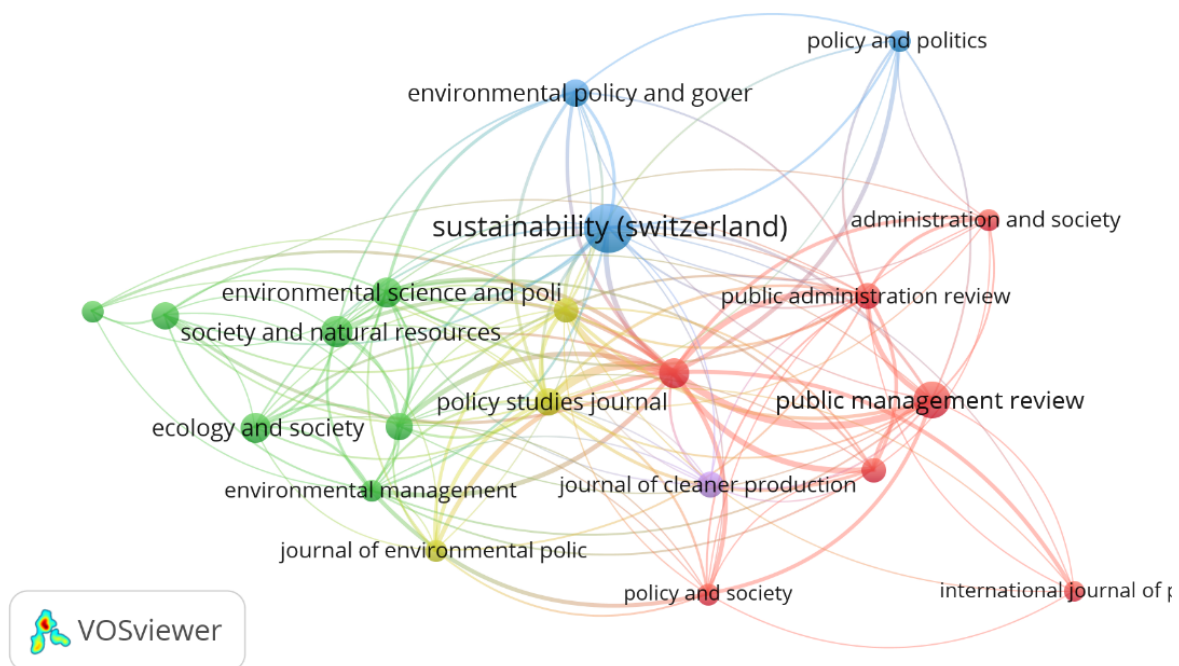
No.	Authors	Documents	Citations	Total links strength
1	Emerson K	8	1649	168
2	Nabatchi T	5	1698	148
3	Ansel C	17	661	63
4	Scott	12	256	94
5	M. Howlett	12	749	21

Source: Processed by Authors, 2023

The table above shows that Emerson has 8 articles with 1649 citations and total links strength as many as 168 research central themes. *First*, Kirk Emerson is a researcher from the University of Arizona which focuses on Conflict Resolution, Collaboration & Governance. *Second*, Tina Nabatchi is a researcher with the topic social policy and public administration and international relations. *Third*, Chris Ansell a researcher from the University of California, Berkeley with a focus on public studies administration and public policy. *Fourth*, Scott Douglas is a researcher from Utrecht University with a research focus on economy, organization and public policy. *Fifth*, Howlett is a researcher from Simon Fraser University with a focus on public studies policy analysis, politics economy, and environmental policy.

Figure 6

Journal visualization map Resources Collaborative Governance



Source: Processed by Authors, 2023

Picture above shows a visualization map of journal publications. There are 48 sources with a minimum document of 1 and a minimum of citations of 0, and 36 linked sources are found. As shown in Figure 3, the size of the node represents the number of journal publications, and the color of the node indicates the sub domain of public research collaborative governance. five clusters were obtained from this analysis to explore the most productive journal relationships and clusters which are then presented in the following table:

Table 3

Journal Productivity with Publications *Collaborative Governance*

No.	Source	Documents	Citations	Total links strength
1.	Journals of Public Research Administration	20	2128	254
2.	Policy Studies Journals	18	516	94
3.	Public Administration Reviews	15	781	90
4.	Public Management Reviews	30	571	80
5.	Public Performance and Management	14	305	78

Source: Processed by Authors, 2023

Conclusion

The results of the research show that the research is about collaborative governance have done in the last 13 years. VOSviewer software is used to perform evaluative analysis and to visualize all this information. This article evaluates global research trends in *collaborative publications governance* from 2010 to 2023. *Collaborative Research governance* has been an area of extensive research over the last 13 years, especially publications on *collaborative governance* has increased exponentially since 2010 peaking in 2020. There is a growing interest in research *collaborative governance* which is in accordance with the conditions of trending issues such as covid-19 and climate change.

The results of the analysis using the bibliometric method found keywords that often appear, such as “*Collaborative Governance*”, “*Collaboration, Decision Making*”, “*Public Policy*” and “*Stakeholders*”. Topics or issues that often arise are related to the collaborative concept governance like *crisis management, smart city, covid-19, smart city and climate change*. This bibliometric analysis provides the basis for the publication of research around the world about *collaborative governance* that has continued to grow, the journal that contains the most is the Journal of Public Research Administration. The bibliometric approach is used to identify key themes in each study or scope of knowledge or research that has been carried out so far and is useful for determining novelty in conducting further research. Bibliometric study must be overcome. First, Databases of other international authorities eg PubMed or WoS should be merged. However, Scopus is one of the most widely used global databases for analysis of scientific publications. Second, bibliometric analysis methods can only be used for existing classifications included in Scopus. Based on these limitations, a deeper content analysis is recommended for further research when characterizing bibliometric analyses. Bibliometric studies and journal mapping can be a plus for journals, as they allow readers to get a fast and reliable overview of research areas and topics, trends, advances, developments, production, influence and editorial policies of the journal

Concretely, this research visually shows a comprehensive picture of the fields related to *collaborative governance* in terms of production of regular publications, the main domain of *collaborative research governance*, the most influential countries (institutions, sources and writers), and interesting research directions in *collaborative governance*. We also present

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research collaborations between countries (regions), organizations and authors based on a series of collaborative analyzes. Bibliometric analyzes of existing work provide valuable and important references for researchers and practitioners in the collaborative research *community governance*.

References

- Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory* , 18 (4), 543–571. <https://doi.org/10.1093/jopart/mum032>
- Arinanda, A., Yani, A., Aiyub, A., Nazaruddin, N., & Aisyah, T. (2022). Collaborative Governance in Minimizing the Covid-19 Pandemic in North Aceh Regency. *International Journal of Public Administration Studies* , 2 (1), 14. <https://doi.org/10.29103/ijpas.v2i1.8681>
- Beaudoin, C., Mistry, I., & Young, N. (2022). Collaborative knowledge mapping to inform environmental policy-making: The case of Canada's Rideau Canal National Historic Site. *Environmental Science & Policy* , 128 , 299–309. <https://doi.org/https://doi.org/10.1016/j.envsci.2021.12.001>
- Bevir, M., & Rhodes, R. (2001). A Decentered Theory of Governance: Rational Choice, Institutionalism, and Interpretation. *Public Administration* , 49.
- Bjork, S., Offer, A., & Söderberg, G. (2014). Time series citation data: The Nobel Prize in economics. *Scientometrics* , 98 (1), 185–196. <https://doi.org/10.1007/s11192-013-0989-5>
- Diehlmann, F., Lüttenberg, M., Verdonck, L., Wiens, M., Zienau, A., & Schultmann, F. (2021). Public-private collaborations in emergency logistics: A framework based on logistical and game-theoretical concepts. *Safety Science* , 141 (August 2020), 105301. <https://doi.org/10.1016/j.ssci.2021.105301>
- Divekar, N., Itankar, N., & Malge, S. (2021). Exploring the Research Trends in COVID-19 in Collaboration with Industry 4.0 Technology as an Indispensable Effective Tool to promote Global Health through Bibliometric Analysis. *Journal of Physics: Conference Series* , 1964 (4), 0–11. <https://doi.org/10.1088/1742-6596/1964/4/042001>
- Emerson, K., & Nabatchi, T. (2015). Evaluating the productivity of collaborative governance regimes: A performance matrix. *Public Performance and Management Review* , 38 (4), 717–747. <https://doi.org/10.1080/15309576.2015.1031016>
- Emerson, K., Nabatchi, T., & Balogh, S. (2012). An integrative framework for collaborative governance. *Journal of Public Administration Research and Theory* , 22 (1), 1–29. <https://doi.org/10.1093/jopart/mur011>
- Hamann, R., & April, K. (2013). On the role and capabilities of collaborative intermediary organizations in urban sustainability transitions. *Journal of Cleaner Production* , 50 , 12–21. <https://doi.org/https://doi.org/10.1016/j.jclepro.2012.11.017>
- Howlett, M. (2014). From the 'old' to the 'new' policy design: Design thinking beyond markets and collaborative governance. *Policy Sciences* , 47 (3), 187–207. <https://doi.org/10.1007/s11077-014-9199-0>
- Kornatowski, G. (2010). Partnerships and governance: Struggle, cooperation, and the role of NGOs in welfare delivery for the homeless in Hong Kong. *City, Culture and Society* , 1 (3), 155–164. <https://doi.org/https://doi.org/10.1016/j.ccs.2010.10.006>

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- Lai, AY (2012). Organizational collaborative capacity in fighting pandemic crises: A literature review from the public management perspective. *Asia-Pacific Journal of Public Health* , 24 (1), 7–20. <https://doi.org/10.1177/1010539511429592>
- Menor-campos, A. (2019). *Effects of Collaborative Economy : A Reflection* .
- Morse, RS, & Stephens, JB (2012). Teaching Collaborative Governance: Phases, Competencies, and Case-Based Learning. *Journal of Public Affairs Education* , 18 (3), 565–583. <https://doi.org/10.1080/15236803.2012.12001700>
- Nabatchi, KE and T. (2015). *Collaborative Governance Regimes* (RAW Gormley, MBR O'Leary, AOBN Riccucci, & HGFDH Rosenbloom (eds.); 1st ed.). Georgetown University Press.
- Newig, J., Challies, ED, Jager, NW, Kochskaemper, E., & Adzersen, A. (2018). The Environmental Performance of Participatory and Collaborative Governance: A Framework of Causal Mechanisms. *Policy Studies Journal* , 46 (2), 269–297. <https://doi.org/10.1111/psj.12209>
- Richmond, J., & Knight, C. (2021). Partnerships and Collaboration: Working Together to Build and Achieve Disaster Recovery. *The Journal of Global Awareness* , 2 (Fall/Winter), 1–12. <https://doi.org/10.24073/jga/2/02/08>
- Roy, P. (2015). Collaborative planning – A neoliberal strategy? A study of the Atlanta BeltLine. *Cities* , 43 , 59–68. <https://doi.org/https://doi.org/10.1016/j.cities.2014.11.010>
- Scott, T. (2015). Does Collaboration Make Any Difference? Linking Collaborative Governance to Environmental Outcomes. *Journal of Policy Analysis and Management* , 29 (3), 451–478. <https://doi.org/10.1002/pam>
- van Eck, NJ, & Waltman, L. (2014). Visualizing Bibliometric Networks. In *Measuring Scholarly Impact* . https://doi.org/10.1007/978-3-319-10377-8_13