



Public Participation in the Social Science: A Systematic Literature Review

Muhammad Ainul Usama ¹⁾*, Ulung Pribadi ²⁾ & Al Fauzi Rahmat ¹⁾

1) Master of Government Affairs and Administration, Universitas Muhammadiyah Yogyakarta, Indonesia

2) Doctoral of Islamic Politics – Political Science, Universitas Muhammadiyah Yogyakarta, Indonesia

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Abstract

Public participation is the right and obligation of citizens to contribute to development by contributing to initiative and creativity. Public participation has also attracted a lot of attention from academia as a concept of public policy. The authors conducted a systematic literature review of published articles in the social sciences to enhance our understanding of public participation. Some of the main issues are explained in this area through the NVIVO 12 plus software that qualitative analysis tool. The main issues are community, development, government, information, and interests. This article raises several propositions on the matter. This article suggests some new topics for further research.

Keywords: Public Participation; Social Sciences; Literature Review

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*Corresponding author:

E-mail: mainulusama@gmail.com

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INTRODUCTION

Public participation in general can be defined as stakeholders in the decision-making process (Pagliara & Di Ruocco, 2018). Public participation also plays an important role in making policies to manage environmental risks as well as natural resources (Song, 2020). The literature that discusses public participation from various perspectives has experienced extraordinary developments. A study examining public participation in the context of disaster risk management (Duan, Liu, Wang, & Wei, 2020). Another study examined public participation in the context of urban, environmental and computer systems (Hasanzadeh, Kajosaari, Häggman, & Kyttä, 2020). One scholar explained that the public participation used for land use planning and management also strengthens the resilience of complex and contemporary problems (Brown & Kyttä, 2014).

In addition, there is a public participation study implemented to address stakeholder issues in protected area management (Nita, Ciocanea, Manolache, & Rozyłowicz, 2018). There is also research that can be applied to energy innovation networks and social science (Liu, Bouman, Perlaviciute, & Steg, 2019). A researcher conducted a study on the application of public participation to improve education management and citizen science literacy and environmental health (Sandhaus, Kaufmann, & Ramirez-Andreotta, 2019). A researcher conducts a study on public participation to evaluate public participation in a retrospective regulatory review (DeMenno, 2019). In addition, there are also those who reveal the role of public participation in encouraging local waste management so as to reduce hazardous waste (Jomehpour & Behzad, 2020). One scholar explains the relationship between public participation and maritime policy (Kakee, 2020). Lastly, a scholar investigating public participation can be applied to environmental innovation networks (Johnson, 2020).

However, scholars rarely create a mind map of the public participation literature. No scholar has yet mapped in detail what issues are related to the theme of public participation. This study attempts to fill this knowledge gap by explaining issues in public participation

studies based on articles written by social science scholars. This study addresses the following questions: (1) what are the main issues and derivative issues of public participation in social science journals? (2) What are the contributions of these central issues to the development of public participation theory and the practical needs of policymakers?

RESEARCH METHODS

The Scopus Database contains all previously published journal articles on public participation in social science. All articles relating to the beginning or previous years until 2020 are in the Scopus Data Archive. This study received an accurate and representative sample because this study took an entire sample of all publication years to avoid the tendency for a limited sample size. According to Wang et al (2018) there are five steps in conducting a systematic literature review: (1) preparing and formulating material; (2) conducting literature searches; (3) collect and evaluate data; (4) analyze and interpret data; and (5) present the results and propose future research. Obtaining articles in this study is using the Scopus database. The settings in the database search are: Title is public participation; Access types are open access and others; Years from last year to 2020; All authors' names; the subject area is social science; Types of documents are articles; The publication stage is final; Source titles are all social science journals; The key word is public participation; Language is English; Countries/ regions are all countries and the source type is the journal.

This research has resulted in 48 journal articles. In analyzing, visualizing, and categorizing the data from this study is to use the Nvivo 12 Plus application. According to Sotiriadou et al., (2014) NVivo is useful as analysis software that helps scan data for terms and phrases and makes it easier to catalog textual document elements. Therefore, this study uses the NVivo application in indexing journal article data elements by searching for terms related to public participation.

RESULTS AND DISCUSSION

This section describes the description and analysis of the results from data processing. The description includes the year published, journal titles, and citations to journal article authors. The analysis of findings contains the main issues, namely community, development, government, information and interests.

Publication Year

Figure 1 shows a trend that the number of publications related to public participation has increased sharply. Year 2001 to 2017 there is only one article, year 2018 began to increase to 9 articles, in 2019 and 2020 it increased sharply to 18 articles.

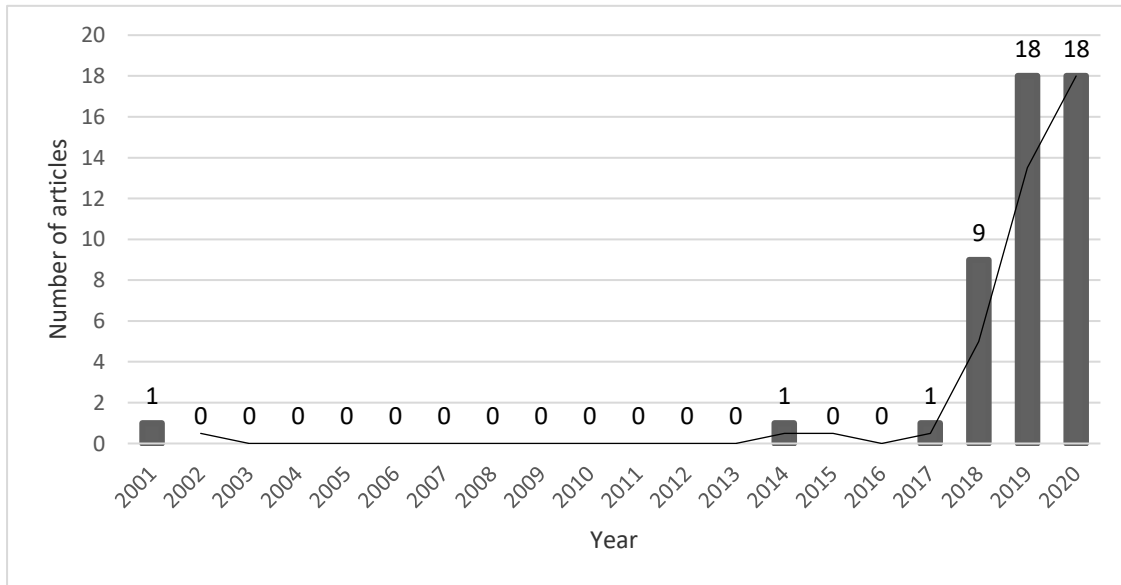


Figure 1. Evolution over the Time in Posts about Public Participation
Source: Academic Scopus Database

Journal Title

In the social science field, all journal articles are on public participation. In the Scopus data, this article has been indexed. The names of journals containing at least two

articles on public participation are listed in Table 1. The three journals with the highest number of articles are Sustainability, Journal of Planning and Management, and Urban Policy and Research.

Table 1. The Analyzed Journals

No.	Journal	Number of Articles	%
1	Continuity	9	18.75
2	Journal of Planning and Management	3	6.25
3	Urban Policy and Research	3	6.25
4	Energy Research & Social Sciences	2	4.16
5	Royal Geographical Society	2	4.16
6	Policy & Politics	2	4.16
7	Review of Environmental Impact Analysis	2	4.16

Noted: Only journals that publish at least two articles on network governance have been selected.
Source: Academic Scopus Database

Citation per Author(s)

Figure 2, is a numerical quote per author. In the area of public participation, the number of citations per author's statistic can indicate the author's academic influence. Here are 11 authors with the highest total citations. They are Greg & Marketta (2014) with 316 citations; Rene, Donald, Stephen & Stehman (2001) with

130 citations; Lu, Thijs, Goda & Linda (2019) with 23 quotes; Rajab and Iswandi (2019) with 17 quotes; Andreea, Cristiana, Steluta & Laurentiu (2018) with 14 quotes; Adam and Roy (2020) with 9 quotes; Caroline, Heleen & Driessen (2019) with 7 quotes; Francesca and Irina (2018) with 7 quotes; Helen Pallet (2018) with 6 quotes; Mercy B. DeMenno (2019) with

6 citations; Krystof, Piotr, Agnieszka, & Piotr (2019) with 5 quotes.

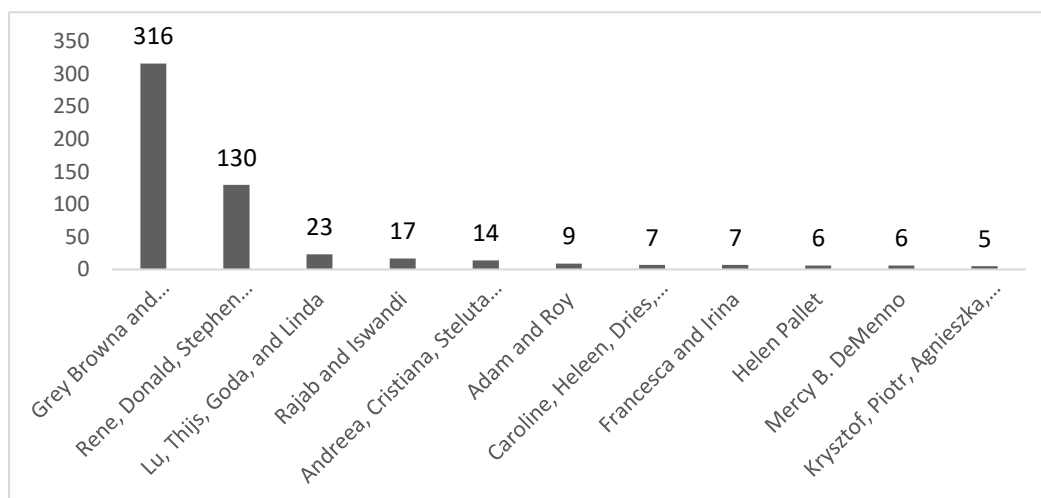


Figure 2. Number of citations per author (top 21 authors)
Source: Academic Scopus Database

The Main Issues on Public Participation

NVivo is software in analyzing qualitative data that is useful in collecting optimal literature analysis methods (Gregorio, 2000). So in this study using Nvivo 12 in demonstrating events and keywords so that it is easy to provide an overview of significant public participation issues discussed in social science journals. NVivo assists scholars as a method of literature review and as the most common technique in data analysis at NVivo. Nvivo through an automated coding tool is useful for compiling coding schemes and processing data (Brandão & Miguez, 2017). NVivo makes it easier for scholars to organize knowledge, gain insights, interpret information, define patterns, and draw conclusions.

The public participation image node is the keyword in Figure 3, while the relationship node is designated via the link. In the figure, the frequency percentages are represented by numbers that appear together. Figure 3 confirms that the sequence of the percentage of common events regarding public participation from the highest is system, process, management, government, planning, community, policy, interest, development and finally information. The percentage of frequencies that have the same percent is process, management and government. However, this study chose the focus of five main keywords, namely community, development, government, information and interest.

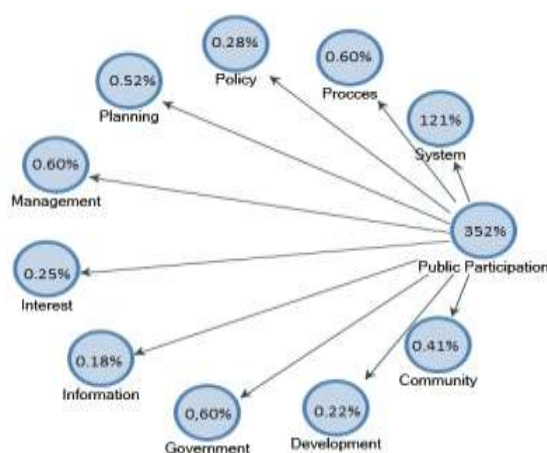


Figure 3. The Main Issues on Public Participation
Source: NVIVO 12 Plus

Issue 1: Government Issue

Figure 4 shows the presentation of the frequency of occurrence of the word government in other words. The government said has a high presentation frequency of appearance along with two other words namely local government, and provincial government.

This finding shows that the word government is very closely related to the other two words. Meanwhile, the word government has a lower percentage of co-occurrences. These words are the problem of governing institutions and government policy.

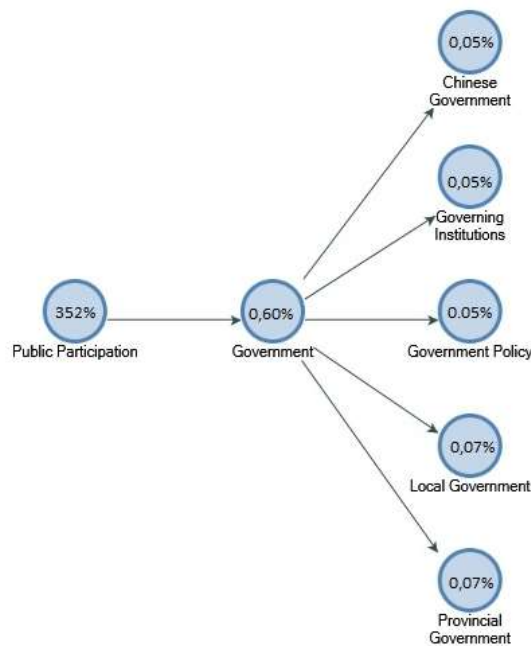


Figure 4. Government Issues of Public Participation
Source: NVIVO 12 Plus

According to scholars in Chinese government, increasing public participation depends on changing the idea of decision makers, from management to governance, the development of a government whose orientation has triggered challenges to the relationship between government, market and society. The increase in Chinese public participation in EDM must also be based on legalizing the environmental rights of citizens (Feng, Wu, Wu, & Liao, 2020). In China, public participation in urban planning is a contentious issue (Zhang, Hooimeijer, Lin, & Geertman, 2020). Another scholar of research on environmental disputes in China has found that public participation has largely failed to make an impact in China (Johnson, 2020).

Other scholars explain by providing it with a relatively complete list of constraints in the public sector including pressure and delivery burdens, a culture of risk avoidance, poor skills in active risk management, lack of incentives or rewards for adopting innovations, short-term budgets and planning horizons, over-reliance on players. as a source of innovation, and limiting cultural or organizational settings (Brown & Kyttä, 2014). Another scholar explained that in the UK, science wise is a government-funded body whose goal is to promote and support the practice of public dialogue (local deliberations with community members) (Pallett, 2018). Other scholars describe public participation and its relation to appeal rights in planning

decisions on major inland wind farms in England and Denmark (Armeni & Anker, 2020). Another scholar explained that in executive orders, the participatory process facilitates the exchange of information and is relatively representative and responsive to stakeholders (DeMenno, 2019).

Proposition one: the problem of government public participation is closely related to local government, provincial government.

Issue 2: Community Issue

The presentation of the frequency of occurrence of the word community in other words is shown in Figure 5. Together with the other two terms, the term community has a high percentage of appearances among others, namely community leaders and community participation. This result reveals that the words of the community are related to the other two words. The word community has a lower percentage of the frequency of occurring together. The words are community residents, local communities and rural communities.

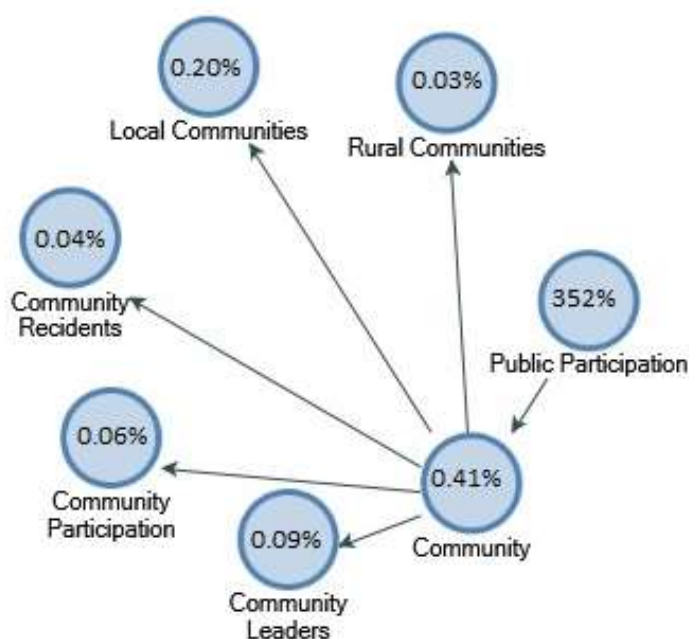


Figure 5. Community Issues
Source: NVIVO 12 Plus

According to scholars, an important role in public participation is the community of environmental non-governmental organizations. In China the mobilization of political participation in environmental governance can motivate and encourage the improvement of local environmental problems, but requires sufficient political opportunity space and sufficient, efficient funds and also a culture of public participation (Wang, Cao, Yuan, & Zhang, 2020). Another scholar stated that the use of open access from a public participation geographic information system (PPGIS) which has developed significantly in the field of research and practice provides a wider potential for communities to obtain information.(Hasanzadeh et al., 2020). Another

scholar explained that research on public participation in rural areas really requires a two-way dialogue between researchers and communities (Sandhaus et al., 2019).

Proposition two: in public participation, community leaders and community participation are very important.

Issue 3: Interest Issue

Figure 6 shows the percentage frequency of occurrence of the term interest in other terms. The word Interest has a high presentation frequency of appearances, along with three other terms, namely interested public, interested business, and interest groups. These findings indicate that the meaning of

interest is closely related to the other three terms. Meanwhile, in other words, the word interest has a lower percentage of occurrence

frequency. These words are on conflicting interests and interesting case.

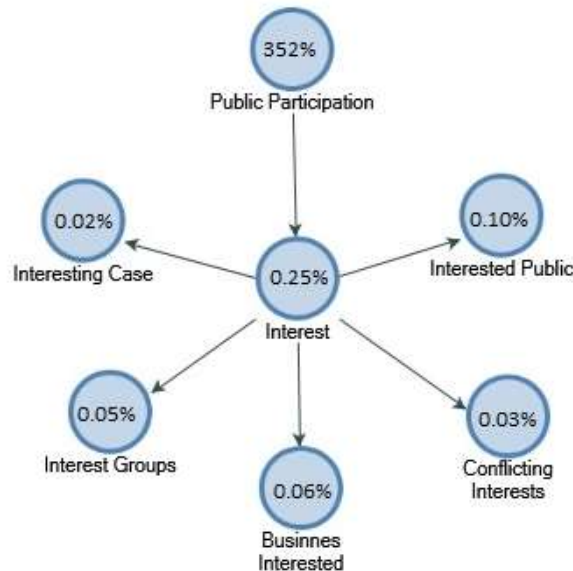


Figure 6. The Interest Issues on Public Participation
Source: NVIVO 12 Plus

According to scholars, public participation is related to interested public, business interested, and interest groups. The scholars explain the management of protected areas which are considered to have conflicts, especially between stakeholders and public bodies (Nita et al., 2018). Other scholars have examined the application of a carbon tax with results showing it is more profitable to promote low-carbon manufacturing than government subsidies for low-carbon reproduction. This shows that the government and society do have a complementary and mutually coordinating relationship (Chen & Hu, 2020).

Another scholar explains that the cost in effective institutional design contributes greatly to the development of a sustainable society, as an effort to resolve current failures in promoting urban sustainability (Fu & Ma, 2020). Another scholar explains that trust in responsible agents as well as public influence over decisions may have the same effect on project recipients in different countries and cultures (Liu et al., 2019). Two scholars explain that decision makers, administrators, with the

help of researchers and economists, must calculate precisely the costs and benefits of PP. They have to publish reports systematically regardless of whether the project is cost effective or not (Pagliara & Di Ruocco, 2018).

Proposition three: the problem of public participation interest is closely related to interested public, interested business, and interest groups.

Issue 4: Development Issue

In figure 7, the percentage frequency the emergence of the term development is indicated in other words. There are two terms that have a high percentage of occurrence frequency, namely sustainable development and urban development. These findings indicate that the keyword development is closely related to the other two keywords. Meanwhile, the word development has a lower percentage of attendance frequency with several other words. These words are the development process, policy development and technological development.

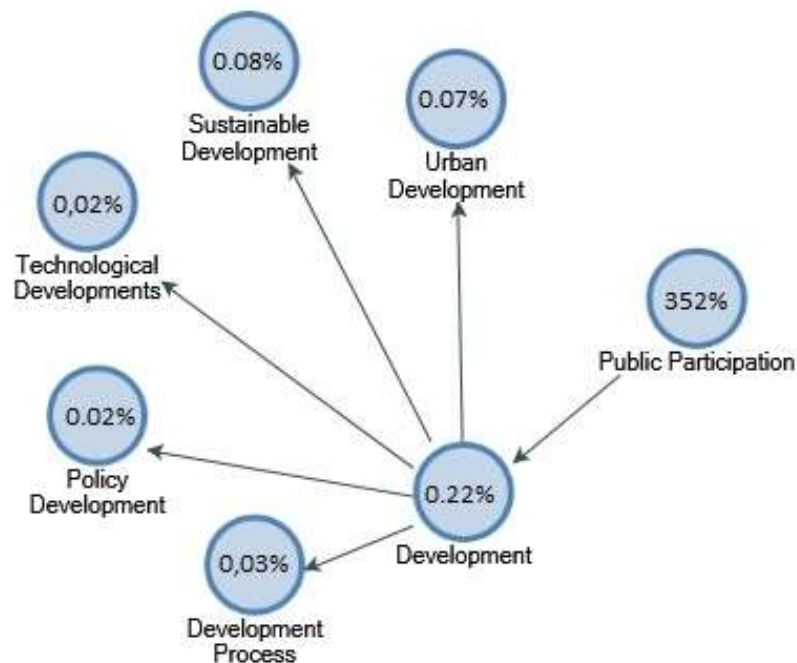


Figure 7. Development Issues on Public Participation
Source: NVIVO 12 Plus

Experts explain that development is related to sustainable development and urban development. Scholars who research on groundwater resources can also influence participation in developing and implementing groundwater policies (Piyapong, Thidarat, Jaruwan, Siriphan, & Passanan, 2019). In the neighboring cities of Iran, the Caspian Sea faces the problem of high volume of waste with an unsatisfactory response from public participation (Jomehpour & Behzad, 2020). Pacific island countries have been active in developing deep sea mining management mechanisms. The scholars who studied it explained that the development of environmental law is a key factor in the legal framework of sustainable deep sea mining (Kakee, 2020). Other scholars describe a monitoring system that tracks the process of creation and loss of trust occurring at the same time through a complex development pattern (Franceschini & Marletto, 2019).

Proportion four: the issue of public participation development is closely related to two other keywords, namely sustainable development and urban development.

Issue 5: Information Issue

In figure 8, the presentation of the frequency of occurrence of the information term is shown in other words. The information term and the other three terms have a percentage frequency high occurrence in other words. These words are technical information, geographic information system and relevant information. These findings indicate that the information findings are closely related to the other three words. Meanwhile, the word information which has a lower percentage of occurrence frequency includes several other words, namely the problem of environmental information and valuable information.

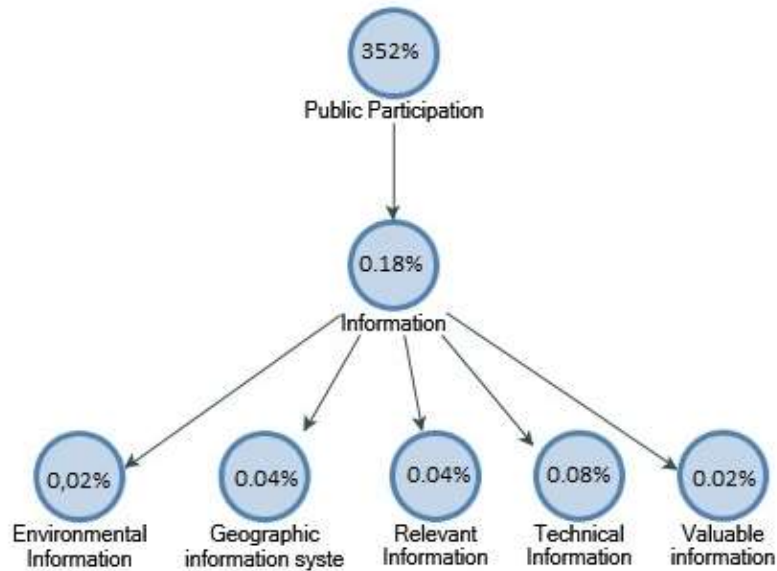


Figure 8. Information Issues on Public participation
Source: NVIVO 12 Plus

One scholar stated that the new orthodoxy of government in the digital era is that governmental procedural services have officially existed in the online world (Moore, 2019). Scholars explain that geographic information systems have the ability to assist experts in conducting their research because they are able to visualize spatial data and represent the impact of locally based transportation alternatives (Giuffrida, Le Pira, Inturri, & Ignaccolo, 2019). Scholars who research on meteorological disasters explain that public participation is very important in preventing the risk of public disasters (Duan et al., 2020). Other scholars make it clear that the combination of public participation, information design, and face-to-face community reporting with trusted researchers can help support information gaps in surrounding communities (Sandhaus et al., 2019). Other scholars have examined the level of dependence on groundwater use which also affects public participation in obtaining information relevant to groundwater use policies (Piyapong et al., 2019). Another scholar

also explained that using a more pleasant delivery can make it easier for people to understand the information conveyed (Russell, 2020).

Proposition five: public participation is in dire need of technical information, geographic information systems and other relevant information.

CONCLUSIONS

Public participation by several scholars has been discussed from a social science perspective. This study contributes to the broadening of the debate and viewpoints of these social science scholars. The literature review of these articles on public participation has attempted to provide an opportunity to consider the state of the art and determine courses of study. Forty-eight journal articles published in the Scopus database were reviewed in this study. In-network governance, this study examines five fundamental issues, namely community issues, development issues, government issues, information issues and

interest issues. There are also five prepositions formed in this review. First, government public participation is closely related to local government, provincial government. Second, in public participation, community leaders and community participation are very important. Third, the issue of public participation interest is closely related to interested public, interested business, and interest groups. Fourth, the problem of public participation development is closely related to two other keywords, namely sustainable development and urban development. And Fifth, public participation urgently needs technical information, geographic information systems and other relevant information.

In mapping the concept of public participation in the search for the relationship between ideas and other important concepts, this research provides a new theoretical contribution. The following practical steps are also provided by this study: (1) public participation skills can be used by individuals in decision making and implementation to expand the capacity of public institutions; (2) elected officials can take advantage of the experience of public participation as an effort to improve democratic institutions, and (3) awareness of public participation can be used by appointed officials to increase the efficiency of government processes.

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