Connecting Pixels to Trust: A Systematic Review of the Relationship Between Government Social Media Usage and Citizens' Trust in Government

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Abstract

Government social media has garnered significant attention due to its impact on citizens' attitudes, prompting extensive academic research. This review aims to delineate a decade-spanning corpus of literature, discern prevalent research trends, and propose a prospective research agenda in this domain. Employing systematic literature review and PRISMA methodologies, our investigation identified 22 published articles through comprehensive keyword searches across Scopus, Google Scholar, CNKI, and ProQuest databases, ensuring a diverse representation of geographic areas to capture the global perspective on this issue. This study mainly utilizes a mixed research methodology encompassing bibliometrics and content analysis to analyze data results. This paper conducted a bibliometric analysis revealing that the relationship between government social media usage and citizens' trust in the government remains a contentious topic. To delve deeper into this relationship, the selected literature were categorized into three distinct research themes through content analysis, forming a comprehensive conceptual framework. Upon meticulous analysis, the findings suggest that future research should explore the communication field more extensively, encompass a broader range of research topics, employ refined concepts, and examine the mediating role of audience behavior, particularly focusing on the behavior of young people. Furthermore, researchers are encouraged to adopt a more thorough and detailed systematic approach when reviewing relevant literature on government social media.

Keywords: government social media, citizens' trust, systematic literature review, bibliometric analysis, content analysis

1. Introduction

Numerous antecedent studies have underscored the paramount significance of cultivating trust among citizens towards the government. The centrality of citizens' trust in the government is underscored as a pivotal factor within the governmental system (Kearns, 2004; Tolbert & Mossberger, 2006). Concurrently, trust in the government stands out as a critical metric indicative of democratic robustness, given its facilitative role in navigating challenges and facilitating policy implementation (Chanley, Rudolph & Rahn, 2000; Levi & Stoker, 2000; Hetherington, 2005; Hetherington & Husser, 2012).

Beyond its role in democratic health, political trust emerges as a foundational element in the effective functioning of a democratic society, serving to encourage citizens' adherence to legal norms and affording the government the latitude to address societal issues, even in scenarios demanding sacrifices from the public (Levi & Stoker, 2000; Hetherington, 2005; Jacobs & Matthews, 2012). Consequently, improving citizens' trust in government has obvious benefits (OECD, 2013).

In the realm of communication studies, a multitude of empirical investigations have been undertaken to probe the correlation between the Internet and citizens' trust in government. The prevailing evidence predominately suggests a negative impact of Internet frequency on citizens' trust in government (Wang, et al., 2023; Im, et al., 2014). Nevertheless, the Internet concurrently serves as a platform for citizens' political participation, yielding a potential positive influence on government trust (Warren, Sulaiman & Jaafar, 2014). Consequently, the involvement of the Internet introduces complexity into the current landscape of political governance.

In this context, in order to further improve government management efficiency with the help of the Internet, the concept
of e-government came into being. Norris and Moon (2005) define e-government as "the government's electronic provision of information and services 24 hours a day, 7 days a week." Existing research has yielded divergent conclusions when examining the relationship between e-government and government trust. While some studies underscore the significance of this relationship (Welch, et al., 2005; Sharoni, 2012), others dissent (Goldfinch, Gauld & Herbison, 2009). Furthermore, certain studies posit that the connection between government social media (GSM) and citizens' government trust lacks significance (West, 2004; Morgeson, et al., 2011).

In order to further explore the relationship between e-government and citizens' trust, scholars have conducted classified research on e-government. In the early phases of e-government, emphasis was placed on establishing websites and online portals for disseminating information and facilitating citizens' access to government services and transactions—an epoch often designated as "E-Government 1.0" (Lips, 2019). With the onset of the Web 2.0 era, while e-government has gained widespread traction in the political governance processes globally, the public sector faces mounting pressure to actively partake in the e-government agenda. Consequently, e-government has progressed into the "E-Government 2.0" phase, marked by increased utilization of interactive and collaborative tools such as social media, mobile applications, and cloud computing. This evolution enables governments to engage citizens and stakeholders more effectively, offering personalized and efficient services (Lips, 2019).

As the discourse transitions into the realm of E-Government 2.0, an expanding body of literature scrutinizes the role of social media in government communication, with government social media accounts progressively becoming a focal point of academic scrutiny. Research underscores distinct advantages associated with government social media, such as enhanced public trust in government-provided information during crises, as opposed to information from private entities (Chang & Kannan, 2011). Moreover, government social media plays a constructive role in enhancing government information transparency and fostering citizen participation (Gunawong, 2015; Song & Lee, 2016).

Within this trajectory, government social media intertwines with citizen attitudes, yet a consensus on their relationship remains elusive. Some scholars posit that heightened transparency and government performance are pivotal for bolstering citizen trust (Bonson et al., 2012). Governments, by prioritizing transparency, accountability, and citizen participation, can play a crucial role in meeting citizen needs and cultivating trust between government and citizens (Tolbert & Mossberger, 2006). Conversely, Banghui, Z. et al. (2020) and Lu, B. et al. (2016) contend that the impact of government social media on citizen trust is either negligible or adverse. This controversial result is not surprising, given the fact that only recently have scholars begun to explicitly link the concepts of GSM and citizen trust.

Geographical differences and differences in national development levels also introduce complexity to understanding the relationship between government social media use and citizen trust in government. Different regions exhibit distinct political systems, cultural norms, and levels of economic development, all of which can significantly influence how government social media is perceived and utilized. For instance, democratic countries might leverage GSM for transparency and engagement, fostering trust, while authoritarian regimes might use GSM for control, leading to mixed trust outcomes. Moreover, the infrastructural and economic challenges faced by developing countries can affect the reach and effectiveness of GSM. By categorizing and analyzing studies based on geographic regions and development levels, this review aims to provide a more nuanced understanding of these dynamics and offer region-specific insights.

The COVID-19 epidemic is unlikely to be the final crisis event for the public. Consequently, trust relationships remain of paramount importance at present. The potential of leveraging media technologies or platforms to enhance trust has raised concerns, and research on this critical topic is evidently insufficient.

This study endeavors to systematically review the relationship between the two by organizing and examining literature from the past decade. Additionally, it aims to establish a conceptual framework incorporating mediating and moderating variables. This framework will be instrumental in disentangling and understanding this intricate puzzle, thereby inspiring new research perspectives. The systematic research review aspires to lay a robust foundation for future academic investigations in this domain.

The specific inquiry guiding this study is: What is the relationship between government social media and citizens' trust in government? In instances of incongruent conclusions, what factors may contribute to such discrepancies?

2. Method

This review article integrates Systematic Literature Review (SLR) with bibliometric and content analysis methods to address the aforementioned research questions. As depicted in Figure 1, the process unfolds in three sequential stages. First, SLR systematically selects articles based on criteria such as keywords, language, and document type to gather pertinent data. Second, quantitative bibliometric analysis is employed to further refine the article selection and elucidate trends within relevant research domains. Third, content analysis of qualitative method is utilized to categorically examine the selected papers.
2.1 Systematic Literature Review

This article employs the research methodology of Systematic Literature Review (SLR). Originally employed in academia, SLR serves as a systematic, transparent, and reproducible method for synthesizing research findings (Cook, Mulrow & Haynes, 1997). This approach offers a comprehensive overview of the existing literature pertinent to a specific research question and effectively presents and synthesizes research outcomes. In contrast to traditional literature reviews, SLR stands out for its objectivity, systematic nature, transparency, and replicability (Mallett et al., 2012).

SLR, as a method, aims to investigate a diverse range of designs and concepts utilizing quantitative, qualitative, or mixed methods (Gucciardi, et al., 2013). Consequently, this methodology is particularly well-suited for delineating the evolutionary process. A scientifically grounded statistical review of this nature can provide a systematic elucidation of the research under consideration. The focal research question of this article revolves around the relationship between the utilization of government social media and citizens’ trust in government.

2.2 Systematic Literature Review Process

Systematic Literature Review (SLR) comprises four distinct steps. First, it necessitates the formulation of clear and specific research questions. Second, the database must be precisely defined through well-structured inquiries. The third step involves a thorough and unbiased search for relevant articles. Finally, all collected samples should undergo examination against predetermined criteria to identify results that are pertinent to the research question (Xiao & Watson, 2019).

In this context, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) stands out as a widely utilized method for conducting SLR across various research fields (Xiao & Watson, 2019). The PRISMA procedure is delineated through four essential steps: identification, screening, qualification, and data extraction and analysis, each of which is detailed below.

**Identification.** The identification process is scheduled for October 2023. During this stage, a meticulous selection process yielded 139 articles from Scopus, 107 articles from ProQuest, 19 articles from the China National Knowledge Infrastructure, and an extensive collection of 999 papers from Google Scholar.

**Screening.** In the screening stage, articles were included or excluded based on preset criteria (Table 1). Eligibility, inclusion, and exclusion criteria were determined to select articles meeting SLR requirements (Figure 2).

**Eligibility.** The eligibility stage is a process in which the authors manually exclude literature based on specific criteria based on specific research questions and research objectives. Under this premise, all articles were carefully reviewed in this study. After manually screening titles, abstracts, keywords, and full texts, a total of 411 duplicate articles and articles unrelated to the research were deleted, and 22 relevant articles were finally selected for quality assessment.

**Data abstraction and analysis.** In the final stage of data extraction and analysis, all articles were assessed, reviewed, and analyzed. We selected 22 articles for this study. The SLR procedures are shown in Figure 2.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication timeline</td>
<td>January 2013–October 2023</td>
<td>2012 and before</td>
</tr>
<tr>
<td>Language</td>
<td>English &amp; Chinese</td>
<td>Other languages</td>
</tr>
<tr>
<td>Document type</td>
<td>Journal (research articles)</td>
<td>Non-peer-reviewed articles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Articles used in initial draft</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conference record</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Paper</td>
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<tr>
<td></td>
<td></td>
<td>Book chapter</td>
</tr>
</tbody>
</table>
2.3 Resources

Four databases were chosen for this study: ProQuest, CNKI, Google Scholar, and Scopus. ProQuest is renowned for its applications and information services for libraries, offering access to theses, e-books, newspapers, journals, historical collections, government archives, cultural archives, and other aggregated databases.

CNKI is a knowledge project of the People's Republic of China, encompassing the China Integrated Knowledge Resources Database. This database includes journals, doctoral and master's theses, conference papers, yearbooks, statistical data, books, standards, patents, and various other resources. The emphasis on including CNKI (China National Knowledge Infrastructure) specifically addresses the need to capture a significant proportion of Chinese studies. This strategic inclusion aims to ensure a diverse representation of political systems and development levels, particularly given China's unique political and social context.

Google Scholar is a free, open search engine that requires no subscription. It can index full text or metadata directly, covering a broad spectrum of publication formats and subject areas. Google Scholar incorporates academic journals, books, conference papers, abstracts, technical reports, preprints, and other literature forms, comprising approximately 318 million documents from around the world.

Scopus covers 36,377 journals and 11,678 publishers globally. It encompasses various document types, including book series, academic journals, and conference proceedings, spanning diverse subject areas. The selection of these four databases for this review is driven by the exploitation of their distinct strengths. Specifically, the inclusion of CNKI is crucial for ensuring the study’s comprehensive coverage, a decision pivotal to the quality of the results.

Figure 2. PRISMA Steps for SLR Studies (Adapted from Page et al., 2021)
3. Data Analysis Strategy

A total of 22 articles meeting the specified criteria were gathered for this study. To conduct a more comprehensive analysis of the research problem, a mixed research method was employed.

Primarily, quantitative research methods were utilized to analyze the collected data. Bibliometric methods were applied to track publication trends, country/regional distribution, and subject distribution of relevant literature over the past ten years. This quantitative approach enabled an examination of the overall developmental trajectory of previous research.

Additionally, this study encompassed a qualitative analysis of the collected literature. Content analysis was employed to scrutinize the research themes, research design, and research samples found in the selected literature. This qualitative dimension contributed to the construction of the conceptual framework in this study concerning the relationship between government social media and citizens' trust in government. In doing so, it provided responses to the central research questions posed in this study.

4. Results

To achieve the current study’s two objectives, we used mixed research method to analysis the collected literature.

4.1 Bibliometric Analysis

Bibliometric analysis is a quantitative method grounded in written documents (McBurney & Novak, 2022). This methodological approach enables overall generalizations to derive descriptive data, with a focus in this study on analysis by year, country, and discipline.

In the context of this study, the application of bibliometric analysis to the collected literature was not a mere trend but a deliberate choice based on its ability to yield high-quality data results.

![Figure 3. Yearly publication trend](image)

Publication year map and trend. Figure 3 illustrates the publication year trend of selected documents over the past ten years, spanning from January 2013 to November 2023. Notably, since 2019, relevant research has exhibited a consistent year-on-year increase, reaching a peak with 5 articles published in 2023. With the exception of 2015, research productivity in preceding years remained relatively average. One plausible explanation for this trend may be the substantial decline in trust experienced by governments worldwide, as indicated by data from the 2014 Edelman Trust Barometer (Edelman, 2014). This decline in trust is also echoed in the literature, where the issue of trust has garnered renewed attention.

Another contributing factor could be the onset of the COVID-19 outbreak in 2019. The early days of the pandemic saw widespread quarantines, prompting individuals to spend considerable time engaging with various media. This phenomenon has sparked academic interest in issues related to social media platforms and citizen trust.

Region map and trend. The figure presented in figure 4 reveals that the majority of relevant literature aligning with this study is concentrated in Asia. Specifically, China contributes 7 articles, South Korea has 5 articles, while Pakistan and Indonesia each has 2 articles, and Jordan has 1 article. Additionally, regions with a concentration of developed countries such as the Americas and Europe have also made contributions, with three articles each. However, studies relevant to Oceania and Africa were either scarce or excluded due to not meeting the screening criteria of this study.
One potential explanation could be related to database coverage limitations. Furthermore, when considered in conjunction with the publication year trend chart, another plausible reason is that the Asian region implemented more conservative and long-term work-from-home measures during the COVID-19 epidemic. This may have prompted researchers to delve into discussions within this field, thereby contributing to the observed concentration of relevant literature in the Asian region.

Simultaneously, a quantitative analysis of the development levels of the countries/regions within the data reveals that out of the 22 countries/regions studied, 9 are classified as developed, while the remaining 13 fall under the category of developing countries/regions (Table 2). In terms of quantity, the overall difference is not deemed significant. This observation underscores the substantive attention devoted to this topic across countries with varying levels of development.

Table 2. Sample type distribution

<table>
<thead>
<tr>
<th>Sample type</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed country</td>
<td>9</td>
</tr>
<tr>
<td>Developing country</td>
<td>13</td>
</tr>
</tbody>
</table>

Furthermore, a quantitative analysis of the 22 documents reveals that the majority of them did not explicitly elucidate the rationale behind the regional selection of the sample. Notably, one article concentrated on the rural context, while another article separately discussed the urban and rural situations (Table 3). Generally, the academic community has not uniformly incorporated urban or rural distinctions as influencing factors in the relationship between Internet usage and audience attitudes. Nevertheless, some researchers have made attempts to explore differences between urban and rural areas through empirical research.

Table 3. Sample type distribution

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cities/ Areas with high broadband access rates</td>
<td>0</td>
</tr>
<tr>
<td>Rural areas/ Areas with low broadband access rates</td>
<td>1</td>
</tr>
<tr>
<td>Both of Cities and Rural areas</td>
<td>1</td>
</tr>
<tr>
<td>Not explicitly stated</td>
<td>20</td>
</tr>
</tbody>
</table>

In the final analysis, when segmenting the research sample, some scholars distinguish between the central government and local government. Quantitative analysis reveals that, among the 22 documents, 19 did not undertake separate research on different government categories (Table 4). Furthermore, one document specifically examined the relationship between local government and audience attitudes. Additionally, two other documents addressed the relationship between the central government and local government in relation to audience attitudes within the study.
Table 4. Sample type distribution

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>National government</td>
<td>0</td>
</tr>
<tr>
<td>Local government</td>
<td>1</td>
</tr>
<tr>
<td>Both of Cities and Rural areas</td>
<td>2</td>
</tr>
<tr>
<td>Not explicitly stated</td>
<td>19</td>
</tr>
</tbody>
</table>

Research discipline map and trend. Among the 22 articles identified in this study, the majority of the research centered on the field of public administration, totaling 15 articles. Following closely is the field of communication, with a total of 6 articles. Additionally, there is 1 article in the commercial field (Table 5).

Table 5. Article distribution by subject area

<table>
<thead>
<tr>
<th>Research Discipline</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial field</td>
<td>1</td>
</tr>
<tr>
<td>Communication field</td>
<td>6</td>
</tr>
<tr>
<td>Public administration field</td>
<td>15</td>
</tr>
</tbody>
</table>

This prevalence in the field of public administration may be attributed to the enduring significance of citizens’ trust in government as a core issue in public administration and public management. Simultaneously, the declining trust profile over the past few decades has raised concerns among public sector leaders (Hartden and Hartden, 2009).

4.2 Content Analysis

To formulate a conceptual framework concerning the relationship between government social media and citizen trust in government, the author conducted a content analysis of the 22 selected documents. This Systematic Literature Review (SLR) categorizes them into three primary themes: (1) research theme, (2) research design, and (3) research sample (Figure 5).

Maps and trends research themes. The literature in this study can be predominantly categorized into three sub-themes: the relationship between social media and citizens’ trust (7 articles), the relationship between government social media and citizens’ trust (14 articles), and the study of the moderating effect of government social media (1 article).

Figure 5. Content analysis procedure

It is noteworthy that although the primary question in this study revolves around the relationship between government social media and citizens’ trust in government, government social media is not explicitly listed as an independent variable in the first category of topics. However, the selected literature within this category involves the examination of government social media, indicating its relevance to this study.

Subsequently, the author conducted further refinement and classification of the conclusions from the first two categories of topics (Table 6). In the first category, all seven documents expressed a pessimistic view regarding the relationship between social media and citizens. In the second category, 10 articles asserted a positive relationship between government social media and citizen trust, while 2 articles partially supported the positive connection and simultaneously acknowledged a partial negative relationship. One article posited that government social media is not
related to citizens’ trust in government. Additionally, one document partly supported the positive correlation between the two and partially supported the insignificance of their relationship. Presently, the overall state of relevant research portrays a complex situation.

Table 6. Category of the research theme

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second</td>
<td>Government Social Media and Citizens’ Trust in Government</td>
<td>Positive: Starke, Marcinkowski, &amp; Wintterlin, 2020 (The results partially support the positive correlation and partially support the insignificant impact.); Negative: Lu, Zhang, &amp; Fan, 2016</td>
</tr>
</tbody>
</table>
| Third    | Moderating Effect of Government Social Media      | Positive: Im et al., 2014; Negative:  

*Maps and trends research design and sample.* Among the 22 selected articles, 3 used qualitative research methods to investigate the relationship between social media or government social media and citizen trust (Samijadi, M., 2017; Munaf, et al., 2023; Lu, Zhang, & Fan, 2016). As research methods, most of these studies use case studies or semi-structured interviews.

In addition, more empirical studies have adopted quantitative research methods, with a total of 17 articles (Porumbescu, G. A., 2017; Xue, T. S., 2023; Porumbescu, G. A., 2016; Hong, H., 2013; Im et al., 2014; Starke, Marcinkowski, & Wintterlin, 2020; Mansoor, M., 2021a; Mansoor, M., 2021b; Wei & Lu, 2023; Xu, Ye & Zhang, 2022; Zhang, Zhu & Kou, 2020; Al-Omoush, Garrido, & Cañero, 2023; Achmad, Ashariana, & Nurkardawati, 2022; Li, et al., 2022; Song & Lee, 2016; Park et al., 2016; Chen & Sun, 2019). Scholars usually conduct empirical research on such issues by conducting content analysis of social media accounts or conducting questionnaire surveys.

Two other papers used mixed research methods when studying this issue (Ceron, A., 2015; Kiratli, O. S., 2023).

The review reveals that the current research on the relationship between government social media (GSM) and citizens’ trust is undergoing a dynamic and evolving exploration process. Many scholars have yet to treat government social media as an independent concept, opting instead for more ambiguous terms like "official media" (Chen & Sun, 2019). Additionally, some scholars mention the government’s use of social media in the context of broader topics such as the Internet, e-government, or social media, but these references often appear as hypotheses or incidental content in their conclusions (Chen & Sun, 2019; Xue, T. S., 2023; Al-Omoush, Garrido, & Cañero, 2023). These situations may contribute to conceptual confusion for future scholars engaging in in-depth research.

5. Discussions

In general, most literature over the past decade suggests a positive correlation between government social media usage and citizens trust in government (Porumbescu, G. A., 2017; Samijadi, M., 2017; Porumbescu, G. A., 2016; Hong, H., 2013; Mansoor, M., 2021a; Mansoor, M., 2021b; Achmad, Ashariana, & Nurkardawati, 2022; Li, et al., 2022; Song & Lee, 2016; Park et al., 2016).

It is noteworthy that in this body of research, the consensus among most scholars is that a mediating variable is necessary for establishing the positive relationship between government social media and citizens’ trust (Mansoor, M.,...
As discussed earlier, there is still global controversy surrounding the relationship between government social media usage and citizens' trust in government.

To delve into the reasons behind this phenomenon, the present study will explore potential influencing factors, considering differences in media usage, variations in the use of conceptual frameworks and variables, distinctions in research fields, and differences in research perspectives.

5.1 Differences in Geographic Areas

The integration of insights from different geographic regions is essential for understanding the nuanced relationship between government social media usage and citizens' trust in government. Through bibliometric analysis, this study draws the following conclusions:

Studies from Asia, particularly China and South Korea, emphasize the role of government social media (GSM) in fostering citizen trust. In China, GSM is often used as a tool for information dissemination and public service delivery, which can enhance trust in government institutions. However, the way Chinese media is managed means that GSM is also used for guidance and control, which can have mixed effects on trust. In South Korea, GSM is primarily used for transparency and citizen engagement, which overall contribute positively to trust in government.

In Europe and the Americas, the use of GSM is generally associated with democratic governance, where transparency and citizen participation are key. Studies from these regions indicate that GSM can significantly enhance trust in government by facilitating open communication and accountability. For instance, in the United States, the interactive features of GSM platforms are leveraged to engage citizens in policy discussions, thereby fostering a sense of inclusion and trust. Similarly, in European countries like the UK and Germany, GSM is used to promote government initiatives and gather citizen feedback, which positively impacts trust.

In developing countries, the role of GSM is often shaped by infrastructural and socio-economic challenges. Studies from Pakistan, Indonesia, and Jordan highlight the potential of GSM to bridge the communication gap between governments and citizens. However, limited internet access and digital literacy can hinder the effectiveness of these platforms. In these contexts, GSM can enhance trust by improving government responsiveness and service delivery, but the impact is often moderated by the level of technological infrastructure and public awareness.

The primary difference observed is between authoritarian and democratic regimes. In authoritarian countries like Iran, GSM is a double-edged sword—enhancing trust through service delivery while simultaneously eroding it through surveillance. In democratic countries, GSM is more straightforwardly associated with transparency and citizen engagement, leading to higher trust. Additionally, developed countries tend to have more sophisticated GSM strategies, leveraging advanced technologies to engage citizens and promote transparency. In contrast, developing countries often face challenges related to internet access and digital literacy, which can limit the effectiveness of GSM.

Despite these differences, there are notable similarities. Across all regions, the use of GSM to promote transparency and open communication is consistently linked to higher levels of trust in government. Citizens value access to information and the ability to interact with government officials online. Furthermore, the interactive features of GSM, which allow for citizen feedback and participation in governance, are universally appreciated. This engagement is crucial for building trust, regardless of the political system or development level.

5.2 Differences in Media Usage

Some scholars contend that differences in audience media usage behavior, influenced by factors such as habits, behaviors, situations, and specific media characteristics, contribute to the controversy (Li Liangrong, 2010; Yu Guoming, 2012).
The attention to social media use by governments has led to the evolution of e-government into the 2.0 era with the integration of social media. Initially, scholars were optimistic about this development, not only due to the interactive qualities of government social media but also because it possesses the authority of government information (Hong, H., 2013; Achmad, Ashariana, & Nurkardawati, 2022). Several empirical studies have indicated a positive relationship between the use of government social media and citizens' trust in government, in contrast to research results on government websites, the primary channel of e-government 1.0, which was considered detrimental to improving citizens' trust (Goldfinch, Gauld & Herbison, 2009).

However, as research deepens, some scholars have gradually presented differing views. They suggest potential threats associated with government social media, such as the possibility that transactional services based on these platforms may diminish citizen trust in government (Zhang, Zhu&Kou, 2020), and that political personalization by government officials could also have a negative impact on citizens’ trust (Starke, Marcinkowski,& Wintterlin, 2020).

In response, scholars have been attempting to establish a consensus regarding the existence of a relationship. Their main focus is to refine the concept of media, progressing from the Internet to social media (Xue, T. S., 2023), from e-government to government websites and government social media (Porumbescu, G. A., 2016), and from government social media to information services and transaction services (Zhang, Zhu&Kou, 2020). However, based on the 22 selected documents, it is evident that this exploratory process is not yet complete, and scholars still grapple with confusion about the definition of media, indicating that the relevant academic research is not fully mature.

5.3 Conceptual Framework and Variables

According to Bordage, G. (2009), different research frameworks emphasize varying variables based on research objectives and questions. In a conceptual framework, a mediating variable transmits the effect of an independent variable on a dependent variable (MacKinnon, Fairchild & Fritz, 2007). Additionally, moderating variables influence the strength of the relationship between two variables in a conceptual framework (Edwards & Lambert, 2007).

Simultaneously, the inclusion of other variables beyond independent and dependent variables reflects the research's responsibility to a certain extent. When analyzing potential influencing factors in the 22 selected documents, most studies employed the method of adding mediating variables for measurement(Figure 3). However, researchers may focus on different topics and perspectives, and the same concept may manifest in the form of different variables in the research framework. For instance, in one article, perceived response is considered the mediating variable (Mansoor, 2021a), while in another article, it is regarded as the moderated variable (Mansoor, 2021b).

This study also reveals that as scholars delve deeper into this topic, they emphasize that the relationship between government social media usage and citizens' trust in government is not a longitudinal causal relationship (Xue, T. S., 2023). Therefore, researchers have developed different conceptual frameworks based on their respective subject areas and topics. Most conceptual frameworks in related studies aim to explore the influencing factors of this relationship. Given these reasons, this study adopts a conceptual framework to summarize and organize the impact of different mediating or moderating factors on the relationship between the two in the literature.

Upon reviewing the relevant literature, it is apparent that currently known mediating and moderating variables play crucial roles. Classifying them, mediating variables can be divided into three main categories based on different subjects: government/organization, government officials, and audience.

When the government/organization serves as the subject of the mediating variable, the intermediary variables mainly include the Quality of Information and Credibility of Governmental Agency-to-citizen Relationship. One study found that the Quality of Information mediates through mediated or unmediated sources of information (Ceron, A., 2015).

Regarding the Credibility of Governmental Agency-to-citizen Relationship, is used as mediating variables when analyzing Twitter users’ government trust (Park et al., 2016).

The subjects of government officials as mediating variables mainly include Interaction and Credibility of Leading Officer-to-citizen Relationship. Starke, Marcinkowski and Wintterlin(2020)studied how interaction affects the relationship between government social media usage and citizens’ government trust, and they found that citizens’ government trust can be increased through interaction. Another study found that the Credibility of Leading Officer-to-citizen Relationship plays a mediating role in the relationship between user use of GSM and citizen trust (Ceron, A., 2015).

Audience experience has received the most attention as a mediating variable. Among the 22 documents selected in this study, the mediating variables with the audience as the subject mainly include Usage Frequency, Perceived Transparency, Perceived Responsiveness, and Perceived Performance. Among them, perceived transparency is the most mentioned mediating variable in studies. Mansoor, M.(2021a) and Song & Lee(2016) reach consistent conclusions on this. Likewise, perceived responses and perceived government performance often occur simultaneously (Mansoor, M.,
In another study, the frequency of use was used as a mediating variable (Porumbescu, G. A., 2016). Based on the classification of mediating variables in this study, the moderating variables are respectively distributed in the process of the influence of government/organization and user experience on trust. Regarding the former, some scholars have analyzed the moderating relationship between Trust in a Specific Governmental Medium and trust in GSM and government trust; the survey results show that the former has an important positive impact on the latter (Park et al., 2016).

Regarding the latter, one study found that the relationship between perceived transparency and citizens’ trust was moderated by Quality Information on Social Media (Mansoor, M., 2021b). Achmad, Ashariana and Nurkardawati (2022) proposed that the impact of perceived government responsiveness and interaction with the government on citizens’ trust is moderated by Perceived Religious Value.

5.4 Distinctions in Research Fields

As mentioned above, a variety of theories and/or models have been used in research on the relationship between government social media usage and trust. The analysis shows that these theories and models mainly come from three disciplines: public management theory, psychology theory, and communication theory.

Public Administration Theory. Mansoor (2021b) used good governance theory in a paper examining trust in government agencies to provide quality information on social media (Mansoor, M., 2021b). She believes that good governance practices can promote public trust through the mechanisms underlying perceptions of government responses to Covid-19. Some scholars have explored the impact of social government principles on gaining the trust of citizen governments in crises (Al-Omoush, Garrido, & Cañero, 2023). The principles of civil government include Transparency, Participation, and Collaboration. Research confirms its positive impact on trust in government (Al-Omoush, Garrido, & Cañero, 2023). There are also studies based on social capital theory to explore the relationship between perceived government response to COVID-19 and public trust in government, and the results are positive (Achmad, Ashariana, &
Social representation theory is another theory that has been used to explore the relationship between the two. Lu, Zhang and Fan (2016) suggest that when studying Chinese government social media, used social representation theory as the main theoretical lens to conclude from the citizens’ perspective that the use of this medium may not have a strong impact on trust.

Psychological theory. Porumbescu, G. A., (2016; 2017) used the concept of psychological distance in two of their papers. They believe that e-government websites can provide detailed information to the audience, which reduces the audience’s sense of psychological distance, thereby stimulating their views on potential problems and risks. However, the lack of detailed information on government social networking sites increases users’ sense of psychological distance. As a result, audiences will perceive it more positively (Porumbescu, G. A., 2016; Porumbescu, G. A., 2017).

In another study, Xue, T. S. (2023) used the theoretical framework of psychological tendencies and situational cognition to conduct an empirical study on the relationship between online media and the audience’s government trust level (Xue, T. S., 2023). The survey shows that psychological motivation factors, such as social individuals’ political attitudes, political efficacy, government trust, etc., play a significant role in exploring why individuals choose to participate online. Internet information and gossip may be one of the reasons for the decline in citizens’ trust in government (Lu, 2013). Therefore, the use of online media will negatively affect the public’s level of government trust.

Communication theory. Xu et al.(2022) mentioned in their article that media discomfort theory and virtuous cycle theory can explain the impact of media use on political trust. These two theories will have different positive or negative impacts on political trust due to positive or negative differences in reported content. Based on this, scholars point out that media types and government types should be classified more carefully when conducting relevant research.

In another study, academics used UTAUT to examine factors that influence technology acceptance. UTAUT is a model used to analyze technology acceptance in multiple research fields (Ibrahim& Jaafar, 2011). Through a qualitative study, scholars pointed out that digital-based public services are necessary to meet social expectations and citizen trust (Munaf, et al., 2023).

5.5 Differences in Research Perspectives

Looking at the research sample, two different research perspectives can be observed in the literature. These two research perspectives are often used as mediating variables to be tested to explore the influencing factors of the relationship between government social media and citizens’ political trust. Among them, one is based on the government perspective (Ceron, A., 2015; Starke, Marcinkowski,& Wintterlin, 2020; Park et al., 2016), and the other is based on the user experience perspective (Porumbescu, G. A., 2016; Mansoor, M., 2021a; Mansoor, M., 2021b; Wei & Lu, 2023; Achmad, Ashariana, & Nurkardawati, 2022; Song & Lee, 2016). Not only that, some scholars further narrowed the types of government social media, dividing them into transaction service accounts and information service accounts, and came to different conclusions (Zhang, Zhu & Kou, 2020).

In addition, many scholars have noticed the differences in the use of government social media in cities and rural areas and conducted empirical research. Some scholars set the sample in rural areas (Wei & Lu, 2023). In other studies, some scholars have conducted comparative studies on urban and rural situations (Kiratli, O. S., 2023). Based on individual differences, the above different perspectives may lead to different conclusions.

6. Implications for Future Research

Based on related research on trust, it is not difficult to find that trust is subjective(Alzahrani, Al-Karaghouli & Weerakkody, 2017). In other words, trust and truth may not be consistent. For example, the audience may not trust a government that is functioning well in reality due to the gap between personal expectations and satisfaction. Therefore, it may be difficult for academics to reach a consensus on how to gain trust and the key factors that influence trust. However, the importance of trust is very clear (Sherchan, Nepal& Paris, 2013; Siegrist, M., 2021; Schilke, Reimann & Cook, 2021). In other words, although it is very difficult to gain the trust of all citizens, it is necessary for the government to improve citizen trust.

Therefore, this review primarily identifies specific research areas within the scope of communication science that require further attention.

First, most of the studies reviewed in this research belong to the field of public administration, which makes the research questions of the relevant literature biased toward public relations. At the same time, the public has realized that the COVID-19 epidemic will not be the last crisis, and government social media has received more attention as an important governance tool(Achmad, Ashariana, & Nurkardawati, 2022; Song & Lee, 2016). Previous research has also emphasized the existence of other mediating variables or moderating variables that have an impact on this relationship. This shows that the study of influencing factors has been the focus of previous research. This provides a conceptual
framework for this study and future research. In future studies, researchers should pay more attention to the laws in the field of communication to fill this research gap.

Not only that, but the academic community has also conducted a number of empirical studies on audience experience as an important mediating factor (Porumbescu, G. A., 2016; Mansoor, M., 2021a; Mansoor, M., 2021b; Wei & Lu, 2023; Achmad, Ashariana, & Nurkardawati, 2022). One of the important reasons is that the audience is not only a participant in government social media but also a subject of government trust. Among them, the mediating role of perceived transparency, perceived performance, and perceived responsiveness has basically reached a general consensus (Mansoor, M., 2021a; Mansoor, M., 2021b; Wei & Lu, 2023; Achmad, Ashariana, & Nurkardawati, 2022; Song & Lee, 2016). In the future, scholars can include audience behavior as a mediating variable and conduct empirical research on the influencing factors of the relationship between government social media and citizen trust by expanding the scope of mediating variables. Furthermore, it enriches the theoretical and conceptual framework of the field.

At the same time, future researchers should also pay special attention to young people. Because empirical research has proven that young and highly educated people may show a declining trend in trust in the government due to their noncompliance attitude (Zhang, Zhu & Kou, 2020). However, at present, academic research on this group is insufficient. More research is needed to supplement this.

Finally, empirical research also proves that although geographical differences and national development differences have brought complexity to the study of this topic, the overall impact is positive. However, researchers in the future we need to pay attention to the fact that although government social media has some obvious benefits, its current usage rate is not high in both developed and developing countries, both in urban and rural areas (Hong, H., 2013). With the outbreak of the COVID-19 epidemic, government social media has received unprecedented attention. Because it can not only disclose epidemic information, but also help reduce people's information anxiety when facing unknown crises (Mansoor, M., 2021b). Therefore, further expansion of the research scope and further subdivision of the research sample are necessary. It can be seen that this study has huge research potential in the future by exploring influencing factors and propagation laws.

7. Conclusion and Final Notes

This study adopted the PRISMA systematic review method and conducted an in-depth analysis of 22 articles through a mixed research method of bibliometrics and content analysis.

Returning to the specific question of this study: What is the relationship between government social media and citizens' trust in government? If there are inconsistent conclusions, what factors might lead to this happening?

To answer the first research question, this study used the quantitative research method of bibliometrics to conduct descriptive statistics on 22 documents. The analysis results show that, although most literature agrees that government social media has a positive relationship with citizens' trust in government, some scholars disagree. Therefore, we conclude that based on the current research, the relationship between the two presents inconsistent conclusions.

To address the second research question, this study employed the qualitative research method of content analysis to further analyze the selected literature. The analysis results show that research in related fields can be mainly divided into three themes. By further breaking down these three themes we conclude that differences in geographic areas, differences in media use, variations in the use of conceptual frameworks and variables, distinctions in research fields, and differences in research perspectives may be potential influencing factors. Therefore, further specific research on this relationship from a communication perspective is necessary.

Trust is of utmost importance because when people's trust in the government is low, policy goals and implementation processes may not be fully understood by people, and the government cannot provide services effectively (Myeong, Kwon & Seo, 2014). Finally, a more complete and systematic approach to reviewing research in this area is needed in the future. In particular, the sample groups in studies involving China should be more carefully stratified to achieve more scientific data empirical analysis.

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