

Systematic Literature Review on Public Engagement via Government Social Media during the COVID-19 Crisis

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Abstract

Public engagement on government social media platforms can boost public trust in government while also improving and speeding up the distribution of health information. The importance of public engagement and its widespread existence have promoted extensive academic research on this channel. The purpose of this systematic literature review is to identify and bridge gaps in theories and conceptual frameworks in studies of public engagement via government social media. Furthermore, the objective of this research is to establish a comprehensive framework for analyzing how the public's engagement on government social media during the COVID-19 pandemic is affected by elements including information quality, source credibility, social media characteristics, and personal trust. The PRISMA method is used to review publications from 2019. After an extensive systematic review procedure that involved searching for relevant publications and utilizing inclusion and exclusion criteria to retrieve those that met the study's purpose, 32 papers were finally selected from the Scopus and Google Scholar databases. Finally, this study's findings shed light on the interactions between the public and the government during COVID-19 and offer recommendations for further research on public engagement, including more diverse social media types, the expansion of public engagement forms on social media, and the adoption of different theory or model. This study provides more evidence for research on public online engagement and offers some practical implications for effective communication between governments and the public.

Keywords: public engagement, government social media, COVID-19 crisis

1. Introduction

A comprehensive and focused literature review is the basis for carrying out practical research. Public engagement is crucial for comprehending public interests and concerns, as well as reducing widespread terror, dread, and anxiety during the COVID-19 crisis (Chen et al., 2020). Research indicates that as a result of COVID-19, individuals all around the world have eased their move to social distance by spending a significant amount of time online. The usage of social media has increased by 61% as individuals use it for searching or share information and stay in touch with families, colleagues, and friends (Nabity-Grover et al., 2020). This led to the emergence of social media as a novel and extensively utilized means of engagement and communication during the COVID-19 pandemic (Islm et al., 2021).

Generally speaking, public engagement refers to the process of including the public in the institutions, agencies, and organizations in charge of creating policies' agendas, decisions, and policy-making processes (Bonsón et al., 2019). Public engagement on social media refers to how individuals respond to and use social media content, as well as a psychologically driven effective condition that results in extra-role actions (Kang, 2014; Smith & Gallicano, 2015). Public engagement on social media represents public attitudes and actions toward digital content, including posting, searching, and liking (Tsai & Men, 2018). It is essentially an interactive process from one-way information exchange to two-way communication between public organizations and the public (Agostino & Arnaboldi, 2015).

Social media has become a significant communication channel for governments and public health departments to rapidly clarify critical situations to the public, provide health information, and make public choices (Yang et al., 2020). Many government established official accounts on social media for crisis communication and management in order to reduce public uncertainty and misunderstanding and also to increase government agencies' capacity to manage crisis information and provide services to the public (Ngai et al., 2023). According to the Sina Weibo Influence Report (2022),

as of December 2022, the number of government microblog certified by the Sina Weibo platform has reached 170,000. Furthermore, by interacting with the public, the government can foster that population's comprehension of government activities and crisis self-recovery (Chatfield & Reddick, 2018).

However, public engagement via government social media is uninspiring and challenging at times of crisis, such as the digital gap, trustworthiness and openness, privacy and security challenges, and information risk (Harrison & Johnson, 2019). Instead of utilizing social media as a tool to promote public engagement, most organizations still see it as an extra route for information distribution (Neely & Collins, 2018). The public's two-way interaction with the government through social media is still superficial, with few comments and little conversation, and there is a need to increase the excitement and motivation of public engagement (Tang et al., 2019). These problems ultimately reduce the public's online engagement (Shah & Wei, 2022). Therefore, there is a need to understand factors to improve public engagement via government social media during the COVID-19 crisis.

This study systematically reviews public engagement through government social media during COVID-19 and identifies factors influencing public engagement via government social media. This will be used to identify and fill gaps in the literature on behavioral measurement for public engagement via social media, theory, and conceptual frameworks, thereby analyzing the relationships between conceptual frameworks proposed in previous studies (Kamri et al., 2019).

This systematic review contributes to a comprehensive understanding of the multiple dimensions of public engagement in the context of government social media use and provides insights for future research agendas, providing a solid foundation for future academic research in this area. This review first identifies the most relevant works in public engagement via government social media during the COVID-19 crisis. Then, classify the selected works by social media and theory. This is how the rest of the paper is structured. The methodology for doing the systematic literature review is presented first, following which the results of the review are analyzed and discussed. Finally, the study summarizes major results and limitations.

2. Research Method

An overview of systematic reviews was carried out to address the research question, and the results were reported in compliance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.

PRISMA is a systematic literature review and meta-analysis methodology that facilitates the collection, screening, and reporting of relevant material. It also establishes eligibility and exclusion criteria for chosen publications. By using PRISMA, a significant number of articles can be reviewed, and authors can accurately find articles that fit the research question based on a process of exclusion and inclusion criteria.

Therefore, this article uses PRISMA to report a systematic literature review of public engagement via government social media during the COVID-19 outbreak. The PRISMA has four stages: Identification, Screening, Eligibility, and Inclusion of relevant articles (Moher et al., 2015).

2.1 Resources

This literature review focuses on two databases, Scopus and Google Scholar, to study the research questions. Scopus was selected for this review because it is one of the most extensively used academic research databases, with over 36,377 journals from around 11,678 publishers, 34,346 of which are peer-reviewed journals in top topic areas. It's simple to do extensive searches for academic research using Google Scholar.

This literature review used Scopus as the primary database for searching relevant articles and Google Scholar as a supplementary database. Initially, publications that satisfied the study selection criteria were reviewed by Scopus. Articles that were deemed similar, relevant, or have already been cited based on the supplied article title were considered for inclusion. Second, more manual Google Scholar searches were carried out in order to increase the scope of the literature study, taking into account the public engagement strategies and processes that were identified.

2.2 Eligibility and Exclusion Criteria

To extract the exact article, this review study applied certain eligibility and exclusion criteria. The purpose and scope of the search led to the establishment of the following selection and exclusion criteria: i) Just articles from journals. because articles that have been published in journals have usually undergone a rigorous screening procedure called anonymous peer review. This review does not cover book reviews, books, book series, or book chapters. ii) published in English. iii) studies targeting the COVID-19 crisis, excluding other crisis events such as natural disasters and public health events. This means that the article was published from 2019 to 2024. IV) Studies focus on the public engagement of organizations on social media, excluding political engagement, offline engagement, and e-government engagement. In line with the objective of this SLR, Countries and regions did not conduct special screening but only excluded the documents that could not be identified, aiming to maximize access to documents related to the subject. The exclusion and inclusion criteria can be understood as in Table1.

Table 1. Inclusion and Exclusion Criteria

Criteria	Inclusion	Exclusion
Article type	Article Journal	Book, Chapter Book, Book Series
Language	English	Other than English Language
Crisis type	COVID-19 crisis	Other crisis events

2.3 Systematic Review Process

Identifying articles is the first procedure that must be completed in a PRISMA declaration. Specific keywords and search strings are used in the identification process. The search query consists of four stages containing multiple keywords designed to scan the titles and abstracts of records. Boolean operators are utilized in this review to structure the search query; the [OR] operator is used to get more coverage between keywords, and the [AND] operator is used to get more specificity. Whenever feasible, we included term plural variations using the Boolean [*] truncation.

According to the thesaurus, literature review and past studies, the related keywords are as follows: 'public engagement' OR 'public participation' OR 'civic engagement' OR 'civic participation' OR 'stakeholder engagement' OR 'stakeholder participation' AND 'social media' OR 'TikTok' OR 'Weibo' OR 'WeChat' OR 'Facebook' OR 'Twitter' OR 'Instagram' OR 'Twitter' AND 'organization*' OR 'government *' OR 'Agency*' AND 'COVID-19'.

After the identification process, the 533 articles went through the following screening process, where the articles were filtered according to the article type and article language. The second stage is screening the literature. In this stage, 413 articles were screened according to their type and language. In the third stage, a total of 48 articles were screened by reviewing the titles and abstracts of these 413 articles. The final stage was the reading of full texts. After a thorough review, a total of 16 articles were excluded because they did not focus on social media public engagement, or did not address factors affecting social media public engagement, or did not discuss the COVID-19 crisis, or did not meet other inclusion criteria. Finally, a total of 32 articles were included in the content analysis process for this study. Figure 1 explains the PRISMA process.

2.4 Data Abstraction and Analysis

At the end of the PRISMA process, there were 32 articles to be analyzed for their content to answer the research questions of this review. A rigorous and in-depth examination of the article's abstracts and conclusions resulted in the factors that affect public engagement via government social media.

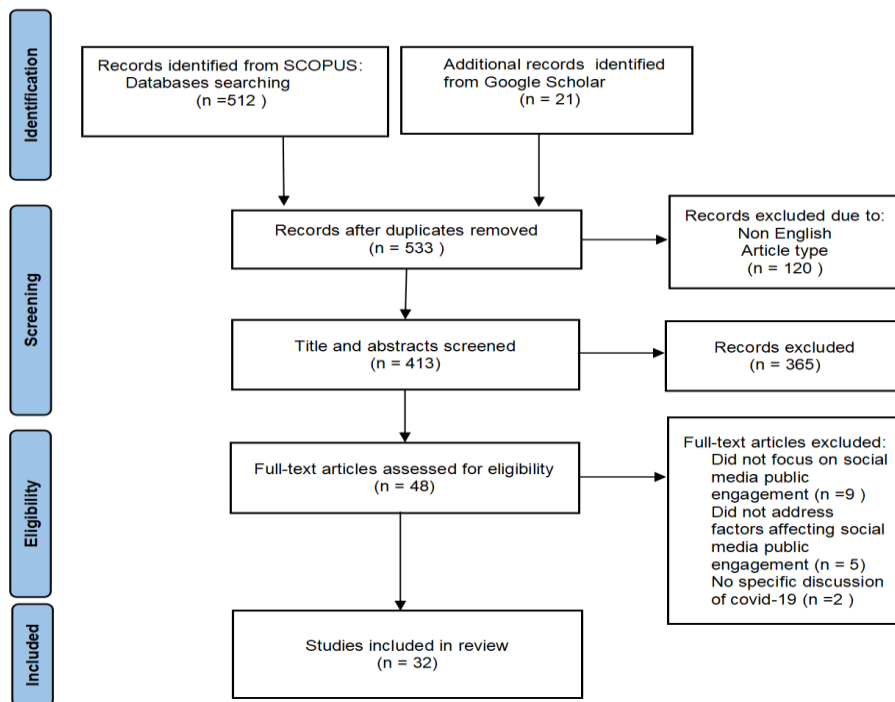


Figure 1. PRISMA Flow Diagram

3. Results

The review found that the majority of authors had chosen to focus on traditional text-based social media platforms, such as Facebook, Twitter, and Sina Weibo. Of the 32 articles reviewed, eight selected Twitter, eight selected Sina Weibo and six selected Facebook. One selected Instagram. In addition, one selected both Facebook and Twitter for a comparative study. Five studies employed social media as their primary study object without selecting a specific kind of social media. However, there are fewer studies on emerging video social media platforms. One selected TikTok, and one selected Bilibili (see Table 2). In contemporary times, short videos have emerged as a novel and significant mode of information dissemination owing to their rapid spread, ease of production, and the richness of the medium (Pan et al., 2022). Especially during the COVID-19 pandemic, several public health organizations turned to TikTok to convey public health messages (Basch et al., 2020). Therefore, further academic research is essential to provide insights into how short-form video mediums such as TikTok can best be utilized to promote public health activities, as well as insights into the dynamics of the emerging social media platform.

Table 2. Social Media Type in Articles Selected for Analysis

Social Media	References	No. of articles
Facebook	Bajouk & Ferré-Pavia, 2024; Amores et al., 2022; Contri et al., 2023; Landi et al., 2021; Yavetz & Aharony, 2023; Pang et al., 2021	6
Twitter	Hoque et al., 2022; MacKay et al., 2022; Bonsón & Bednárová, 2019; Slavik et al., 2021; Tang et al., 2021; Alhassan & AlDossary, 2021; Kim et al., 2022; Paul & Das, 2023	8
Sina Weibo	Zhang et al., 2022; Yang et al., 2021; Liao et al., 2020; Chen et al., 2020; Ngai et al., 2020; Li et al., 2022; Wu et al., 2022; Chen et al., 2021	8
social media	Bali et al., 2023; Shah & Wei, 2022; Ngai et al., 2023; Islm et al., 2021; Azevedo et al., 2022	5
Instagram	Malik et al., 2021	1
TikTok	Chen et al., 2021	1
Bilibili	He et al., 2022	1
WeChat	Cheng & Espanha, 2022	1
Facebook and Twitter	Teichmann et al., 2020	1

The review identifies five key measures of public engagement on social media: retweets, likes, comments, uploads, and follows. Twenty-two articles determine public engagement on social media utilizing significant metrics from social media, such the amount of likes, comments, shares, and retweets. These three factors define all human interactions on social media (Dong & Lian, 2022); hence, they stand for users' subjective desire to share content. Bonsón and Ratkai (2013) initially proposed three dimensions of public engagement including popularity, virality, and commitment, based on public quantitative information provided by Facebook, and have gained a lot of attention. Saxton and Waters (2014) employed three measures to measure how the general public engaged with organizational messages: the quantity of comments, likes, and shares for each message. Men et al. (2018) suggest that public engagement with open and negotiated discussions aimed at reaching a mutual understanding may be inferred from the public's liking, sharing, and commenting on organizations' social media messages. According to several studies, the three elements of social media engagement are comments, likes, and shares, or the total number of shares, comments, and likes is employed to calculate (Brubaker & Wilson, 2018).

Current studies mainly consider public engagement on social media as a unidimensional concept focusing on behavioral dimensions (Chen, 2020). On the other hand, the significant importance of public engagement is not limited to the public's liking, commenting, and sharing behaviors. Many scholars have attempted to expand the forms of public engagement online. Four articles expanded on public engagement in terms of the public actively creating content for organizations on social media. Four articles expand public engagement from the public following the government's official social media accounts. Two articles measured public engagement on social media regarding real-time public reactions and perceived sentiments. Pang et al. (2021) categorized public sentiments into positive and negative

sentiments. Li et al. (2022) used the sum of shares, comments, and likes, as well as sentiments related to public comments and posting content expression, to quantify the breadth and depth of public engagement with social media.

The majority of studies have used media richness and dialog theories to examine the factors influencing public engagement via government social media. Table 3 shows studies using theories or models in the context of COVID-19. It was noted that some of the studies were not based on any theories or models to develop a research model of public engagement via social media in the context of the crisis. In addition, it was also noted that in some studies more than one model was employed.

Table 3. Summary of Theories and Models Employed in Articles Selected for Analysis

Theory	References	No. of articles
Media richness theory (MRT)	Li et al., 2022	1
Dialogic Communication Theory (DCT)	Slavik et al., 2021; Landi et al., 2021	2
MRT and DCT	Amores et al., 2022; Yang et al., 2021; Chen et al., 2020; Paul & Das, 2023	4
Heuristic-Systematic Model	Zhang et al., 2022	1
Elaboration likelihood model	Shah & Wei, 2022; Chen et al., 2021	2
Situational Crisis Communication Theory	Ngai et al., 2023	1
Self-determination theory	Islm et al., 2021	1
Uses and gratifications theory	He et al., 2022	1
Health Belief Model	Tang et al., 2021; Ngai et al., 2020	2
Crisis and Emergency Risk Communication model	Bajouk & Ferré-Pavia, 2024; Malik et al., 2021; Alhassan & AlDossary, 2021	3
Public value theory	Wu et al., 2022	1
No theories applied	Hoque et al., 2022; Contri et al., 2023; MacKay et al., 2022; Bali et al., 2023; Teichmann et al., 2020; Liao et al., 2020; Chen et al., 2021; Bonsón & Bednárová, 2019; Kim et al., 2022; Yavetz & Aharony, 2023; Azevedo et al., 2022; Cheng & Espanha, 2022; Pang et al., 2021	13

4. Discussion

As previously indicated, a variety of theories or models have been used in study on public engagement via government social media. The majority of recent research primarily began with one theory and focused on specific factors in terms of information quality, message styles, content types, and interaction characteristics that may influence public engagement via social media (Shah et al., 2019). But these identified factors are rather limited to explain public engagement behavior through government in crisis contexts from multiple dimensions. Based on this, this study takes into account the theories and supporting factors identified in the literature on public engagement, employing elaboration likelihood model, media richness, and self-determination theory, in an effort to develop a comprehensive framework to investigate the influencing factors affecting public engagement via government social media during a crisis.

According to the elaboration likelihood model (ELM) proposed by Petty and Cacioppo (1981), the elaboration process occurs on a continuum of a person's cognitive functions and is manifested as attitude changes resulting from communication. The range of methods can be divided into two paths: methodical and thoughtful approaches that consider the quality of information. In contrast, peripheral approaches require relatively little cognitive effort because individuals rely on heuristic signals such as a source's credibility, reputation, attractiveness, and popularity to persuade individuals and influence their attitudes and intentions (Kang and Namkung, 2019).

Media richness theory states that different communication media have different abilities to promote understanding (Petty & Cacioppo, 1986). The information richness of a medium refers to the amount of information that the medium may transmit that changes the recipient's understanding over time (Robert & Dennis, 2005). The richness of this

medium has a direct impact on the receiver's ability to understand the message (Petty & Cacioppo, 1986). Researchers have applied this theory to determine how media richness affects public engagement with government social media (Chen et al., 2020). According to the self-determination theory proposed by Edward Deci and Richard Ryan, competence, autonomy, and social interaction (relatedness) are the three main intrinsic requirements for self-determination. These three needs are universal intrinsic needs and psychological needs (Deci & Ryan, 2012). They are seen as stimulating behaviors that are vital to mental health and overall well-being. The theory has been applied to investigate public motivations for engaging in government social media (Islm et al., 2021).

In the context of a public health crisis, the public may have stronger information needs than under normal circumstances. These needs will prompt them to focus on information factors to seek satisfaction and process information (Chen et al., 2021). At the same time, social media content is updated rapidly during the crisis, and the excessive information makes the audience feel that they have no time and energy to carefully examine the details of the post, but focus on source factors such as source credibility (Xu and Zhang, 2018). Therefore, this study proposes a holistic framework to comprehensively understand the influencing factors of public engagement via government social media during COVID-19, and further dividing these factors into four aspects: information factors, source factors, social media characteristics and individual factors as shown in Figure 2.

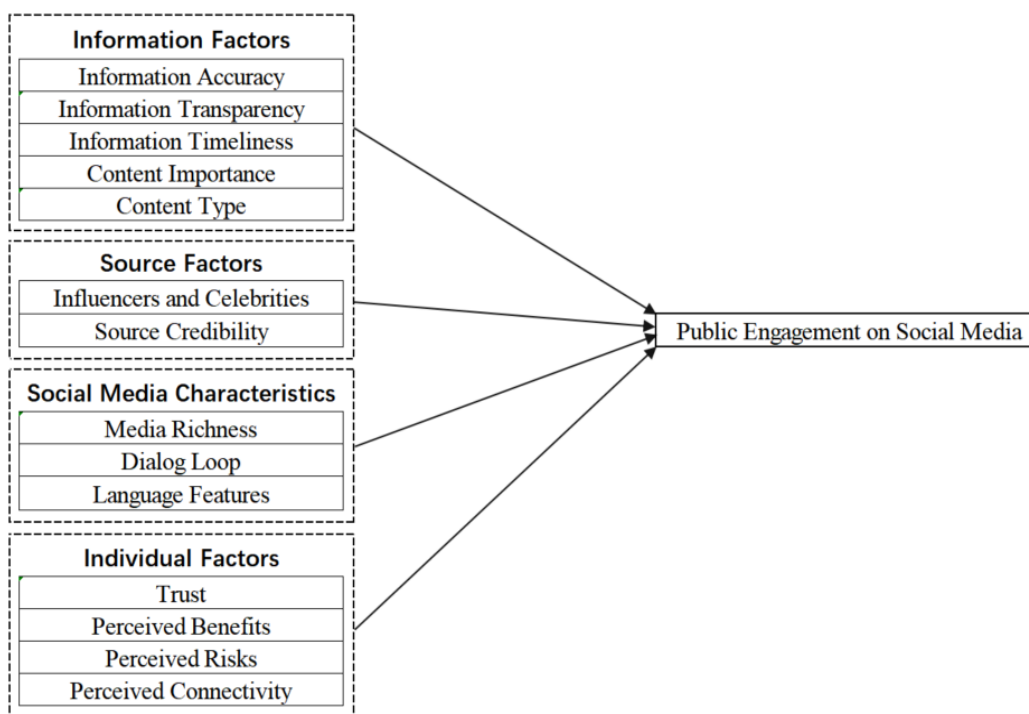


Figure 2. Framework for Research on Public Engagement via Social Media

4.1 Information Factors

The results showed that information quality and content type were the most significant and highly researched factors influencing public engagement via government social media during COVID-19 crisis. According to Bhattacharjee and Sanford (2006), the quality of information is determined by the persuasiveness of the arguments presented in an informative message and influences an individual's ability to understand it (Chang et al., 2020). The components of information arguments include timeliness, accuracy, transparency and importance (Li et al., 2022). In the context of public engagement, information quality refers to the public's assessment of information in the online environment via government social media (Bonsón et al., 2015).

The public's level of trust in an online environment increases with their degree of engagement with high-quality content. Especially during the COVID-19 outbreak, facing the huge amount of information in social media, the public is more willing to accept and disseminate information that can timely and accurately reflect the development of the event (Emerson, 2020). Therefore, disseminating information to audiences quickly and correctly can alleviate public concerns and information uncertainty (Zhang et al., 2021). According to Shah and Wei (2022), during the COVID-19 crisis, risk perceptions may be lowered by providing high-quality information and compelling arguments, thereby increasing public engagement via government social media.

Content type had different effects on public engagement through government social media during COVID-19. Governments have shared a number of kinds of COVID-19 information on social media, such as action, new evidence, reassurance, actionable research, illness prevention, health care services, and uncertainty (Ngai et al., 2020). Given that individuals have varied demands when it comes to COVID-19 information, different topics' fact-checks may also, to varying degrees, satisfy their needs at different times. The issue is that people's attitudes and actions are directly influenced by the level of need fulfillment (Chen et al., 2021). Reposts of videos about COVID-19 that were uploaded by the National Health Commission of China on TikTok were more likely to include guidelines and government initiatives than posts that expressed gratitude for front-line emergency services (Chen et al., 2021).

4.2 Sources Factors

Source credibility refers to the extent to which an information source is credible, competent, and trustworthy (Bhattacharjee & Sanford, 2006). People are turning to internet resources in order to search for or offer crisis information during the COVID-19 pandemic (Shah et al., 2019; Weismueller et al., 2020). Furthermore, false information travels fast and extensively on social media platforms, making it much harder for the general public to extract important lessons from enormous amounts of information (Liu et al., 2020). The public also tends to confirm the worth of social media postings when they believe that the messages originate from highly credible individuals or organizations (Chen et al., 2021). Additionally, when faced with a crisis or tragedy, the public will regard local government sources as references and is more likely to follow direct instructions from official sources (Chen et al., 2021).

The credibility of source is crucial for the public since it indicates the reliability of the individual or organization that is producing the content (Yin & Zhang, 2020). Shah and Wei (2022) conducted a questionnaire survey of 630 SNS and conclude that source credibility is positively correlated with online public engagement.

In order to strengthen their source credibility, governments often use reliable information sources including medical professionals, physicians, professors, and national and international public health experts (Li et al., 2020). This is likely to encourage compliance to preventative measures. For Canadian local, provincial, and federal governments on Facebook and Twitter, utilizing the power of high-audience celebrities and influencers to share information or alternatively include references to popular culture during the first five months of the COVID-19 pandemic could further promote public engagement, highlight the widespread consequences of the virus, and encourage people to take action (Teichmann et al., 2020).

4.3 Social Media Characteristics

The characteristics of social media affect the degree to which citizens are motivated to use government social media. The media richness of content shared on social media may vary from low to high, and it is often shown as plain text, images, or videos (Yue et al. 2019). Social media information releasers often use supplemental resources, including links, mentions, tags, etc., to broaden the content they want to convey because of word limits (Liu et al., 2022). Consequently, the media richness of various social media platforms varies.

The current findings of the study on the connection between media richness and public engagement are highly debatable. For example, Teichmann et al. (2020) found that video and graphics of lower quality can suppress engagement by checking Canadian government accounts on Facebook and Twitter. Similarly, Yavetz and Aharony (2023) argued text-based content, as opposed to videos and images, on Facebook by Israel central government agencies produced higher engagement rates than visual content during the COVID-19 crisis.

However, pictures and videos have the greater ability to stimulate various senses and grab users' attention when compared to plain text, which increases the tendency of individuals to read more information (Chen et al., 2021). According to Amores et al. (2022), there is a positive correlation between Facebook's media richness and a post's capacity for stimulating people to engage in decision-making as well as receiving a lot of likes, shares, and comments. which would encourage public engagement with local government social media. Paul and Das (2023) found that public engagement was favorably benefited by pictures and videos depicting the countermeasures used by Indian government agencies on Twitter during the epidemic.

Media richness theory states that media richness should be employed in a way that matches the specific context and missions, otherwise, negative consequences will occur if the missions are not aligned with the use of high media richness (Chen et al., 2020). As Wu et al. (2022) have shown that higher outcomes are not always associated with richer media. Plain text was more effective when task-based public value content was published, and visual media was more effective when non-task-based public value content was published during the COVID-19 crisis. Therefore, the impact of media richness on public engagement has not yet been fully determined, and further research is needed.

In addition to media richness, another factor is that social media facilitates the dialog loop to some extent. An dynamic

dialogic loop enables members of the public to submit inquiries and obtain responses, as well as post comments and share inquiries (Ngai et al., 2020). Consequently, organizations operating during COVID-19 must pose questions to foster dialogue on social media while additionally offering the public a way to express their opinions. Social media offer a wide variety of interactive functionalities, such as multimedia elements, stay-up-to-date tools such as hashtags as well as content comment sections. And Government links to external resources on social media promote public sharing behavior (Ngai et al., 2020). A Facebook post is more likely to get a lot of likes, shares, and comments if it has more dialogic loop indications (using hashtags, providing surveys or votes for people to express their thoughts, utilizing the @ sign, asking and answering questions) (Amores et al., 2022).

4.4 Individual Factors

Previous research have shown that trust is a critical factor in promoting public engagement and creating a productive public-government relationship on social media (Khan et al., 2021). Public trust created via government social media has been defined as the public's attitude toward a government agency or official, which is decided by their judgment of the predicted effects of the government's use of social media (Arshad & Khurram, 2020). Trust represents the perception of citizens and refers to the extent to which a person feels safe and comfortable relying on information on social media (Komiak & Benbasat, 2006). And confidence that the institution has sufficient expertise to make decisions, act in the best interest of society, and deliver on its commitments (Porumbescu, 2015). Khan et al. (2021) investigated the antecedents of the public's trust for utilizing social media for e-government services and discovered a substantial association between trust and public intention to utilize government social media services. According to Bali et al. (2023), engagement behaviors were encouraged by the majority of the public's faith in the authorities' social media postings concerning COVID-19.

In addition, public engagement on social media during the COVID-19 crisis is significantly positively correlated with perceived benefits such as perceived usefulness, contentment, social capital, and pleasure (Shah & Wei, 2022). Furthermore, engaging in online activities during times of crisis is typically advantageous in terms of enhancing people's awareness, knowledge, connectivity, and happiness (Islm et al., 2021). Perceived connectivity may play a significant role in the process of obtaining various advantages from users' engagement with online communities. Citizens from different parts of the world could share similar concerns and offer prompt support to those in need. According to Islm et al. (2021), the COVID-19 data indicated that everyone's interest in pandemic-related information has caused a sudden rise in the perceived connectivity role. Furthermore, in the settings of both China and Pakistan, perceived connectivity mediated the relationship between information seeking and public engagement behavior on government social media.

5. Conclusion and Limitation

This systematic literature review aims to fill the gaps in the literature and provides an answer to the following question: what are the factors influencing public engagement on government social media during COVID-19? Initially, this study employed the PRISMA systematic review method to provides an in-depth review of 32 articles on the topic of research, types of social media, theories and models employed, and measurements of public engagement on social media, and identifies specific areas of research where further attention is required.

Furthermore, this research aimed to develop a model that identifies the factors influence public engagement online in the context of social media use from multiple dimensions. This research highlights the significance of information quality and source credibility as well as the characteristics and capabilities of social media platforms for public engagement via government social media. It also indicates that previous study has focused on public social media engagement practices during crisis. And tables and figures that summarize the framework are provided as a reference for future research. In addition, this study has practical implications and the findings also help to make a significant contribution to government organizations' understanding of the importance of public engagement and their responsibility to actively engage citizens through social media platforms.

As public engagement on social media is still a relatively new field of study, other researchers can benefit from the findings of this systematic literature review. However, this study still has some limitations. Initially, This systematic review is restricted to utilizing the Scopus and Google Scholar databases, in addition to conducting a scoping review. Applying a systematic review aids in reducing bias that may originate during the identification and inclusion phases. To assess the consistency of the findings, future researchers should make use of more databases. Second, only journal articles were considered for this research, book reviews, commentaries, and conference proceedings were excluded. Future research may include more types of articles into discussions. Finally, because research on social media engagement during public health is still in its early stages, there will probably be more publications released in the future. Thus, more current articles in the topic should be included in future research.

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Authors contributions

Jingjing Guo and Dr. Julia Wirza Mohd Zawawi were responsible for study design and revising. Jingjing Guo and Dr. Syafila Kamarudin was responsible for data collection. Jingjing Guo drafted the manuscript and Dr. Julia Wirza Mohd Zawawi revised it. All authors read and approved the final manuscript. All authors contributed equally to the study.

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Data sharing statement

No additional data are available.

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