



Digital Media And The Transformation Of Public Participation

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ABSTRACT

Digital media has transformed communication and created new opportunities for civic engagement and public participation. This study aimed to assess digital media usage, information sharing and awareness, public participation, and the perceived impact of digital media among adults, examine the relationship between digital media-related domains and public participation, and identify the predictors of public participation. A quantitative cross-sectional questionnaire-based study was conducted among 80 adults using convenience sampling. Data were collected using a structured questionnaire comprising demographic items and 20 Likert-scale questions. Descriptive statistics, independent samples t-test, one-way ANOVA, Pearson correlation, and multiple linear regression analyses were performed. The findings indicated generally positive perceptions across all study domains, with the perceived impact of digital media recording the highest mean score. No significant differences were observed according to gender or educational qualification. Significant positive correlations were found between digital media usage, information sharing and awareness, perceived impact of digital media, and public participation. Regression analysis further demonstrated that these variables significantly predicted public participation, with perceived impact of digital media emerging as the strongest predictor. The findings suggest that digital media plays an important role in enhancing civic engagement by facilitating communication, increasing awareness, and encouraging community participation. Strengthening digital literacy and implementing citizen-centered digital engagement strategies may further promote meaningful public participation and support participatory governance.

Keywords

Digital media; Public participation; Civic engagement; Information sharing;
Digital transformation; Social media

1. Introduction

The advancement of digital media has revolutionized how people interact, receive information, and participate in public affairs. With the growing number of internet users, smartphones, and the development of social networking sites, there is a chance for citizens to interact, voice out their views, and contribute to community programs. Contrary to the traditional communication methods, digital media ensures immediate interaction, wider distribution of information, and accessibility to public dialogue. It makes it a necessary element in the present-day democratic communities. In this regard, the impact of digital media on civic participation has become an important field of research (Suherlan, 2023; Boulianne, 2020). In the context of the ongoing digital transformation of the public sector and social relations, the impact of digital media on civic participation has gained relevance. The adoption of digital technologies by the government and public organizations has provided opportunities for participation of citizens outside the conventional modes of participation. This trend of shifting to citizen-focused digital governance has helped people to actively take part in decision-making activities without any hindrance due to geographical constraints and increasing the convenience of accessing public services. Thus, digitalization has become an important factor of participatory governance and community involvement in both developed and developing nations (Gil et al., 2019; Misra et al., 2018; Harasimiuk & Braun, 2022).

Among other tools of digital media, social media platforms have become the most powerful by allowing communication, exchange of information, and collective action. Using social media, individuals can quickly obtain news, discuss public affairs, mobilize for certain social causes, and participate in civic movements. Modern means of participation go beyond voting and attending civic meetings and embrace online campaigning, digital volunteering, public consultations, and virtual activism. This is driven by the increase in importance of civic participation in the digital era where technologies are not only employed for communication purposes but as ways of enhancing civic participation (Theocharis & Van Deth, 2018; Boulianne & Theocharis, 2020). However, despite the above possibilities, digital participation is subject to various contextual determinants. The effectiveness of digital tools depends not only on the technological capacity but also on the citizens' level of trust in digital technologies, information quality, responsiveness of institutions, and digital competences of users. Such issues as misinformation, unequal access to technology, online polarization, and varying digital literacies levels have continued to create difficulties in participating in the digital public sphere. Habermas (2022) notes that despite the creation of possibilities for public discourse through the use of digital communication, the task of ensuring productive and informed participation remains very relevant. Similarly, Mattila and Nummi (2022) note that in order for digital participation to be successful, it is necessary to have an appropriate institutional context and communication between the government and citizens.

Also, the process of digital transformation has helped in realizing other societal and developmental goals. The incorporation of digital technology in public services promotes accountability, efficiency, and citizen-centric governance while advancing sustainable development goals. The digital transformation process promotes cooperation among governments, societies, and other stakeholders in delivering public services and implementing policies. In addition, technological innovations continue to transform innovation ecosystems through enabling collaboration, entrepreneurship, and knowledge sharing in several industries (ElMassah & Mohieldin, 2020; Nambisan et al., 2019). Besides governance, digital platforms have come to be tools for mobilizing communities within different industries, such as public safety, healthcare, and scientific research. Community engagement supported by technology has facilitated communication between communities and public organizations, facilitated a collaborative approach towards solving problems, and provided more chances for citizen participation in research and decision making. One of the examples of ways how digital media might increase the level of civic engagement beyond the scope of politics through development processes include citizen science projects, community policing using technologies, as well as digital health engagement campaigns (Agostino et al., 2019; Brewster et al., 2018; Goodyear et al., 2019). Moreover, coronavirus pandemic facilitated more utilization of digital media in order to deliver public services and engage citizens in discussions demonstrating the important role of digital transformation in maintaining engagement in disruptive environment (Arnaboldi & Lema, 2021; Demirhan, 2023).

Even though the current body of research does not have any doubts regarding positive association between civic engagement and digital media use, there is still lack of research regarding how different aspects of digital media use influence civic engagement in the context of community. A more holistic approach to this issue can prove useful for policy makers and community organizations that wish to use digital engagement successfully.

Research Objectives

The present study was conducted with three objectives:

1. To assess digital media usage, information sharing and awareness, public participation, and the perceived impact of digital media among adults;
2. To examine the relationship between digital media-related domains and public participation
3. To determine whether digital media usage, information sharing and awareness, and perceived impact of digital media significantly predict public participation.

2. Materials and Methods

2.1 Research Design

The current study made use of quantitative cross-sectional research design to investigate the effects of digital media on

public participation among adults. Primary data was collected using a structured questionnaire from the respondents once in time.

2.2 Study Setting

The research was carried out via offline data collection in selected educational institutions, workplaces and other community settings. Questionnaires were personally distributed to the participants in printed form. None of the digital platforms was used in the process of collecting data.

2.3 Study Population

Study population consisted of adults who were at least 18 years old, actively used digital media platforms and agreed to be involved in the research. Participants having diverse educational and occupational backgrounds were chosen to get comprehensive knowledge about the usage of digital media and public participation.

2.4 Sample Size

A total of 80 respondents was chosen for the research. The sample size was regarded as appropriate for conducting cross-sectional questionnaire based research.

2.5 Sampling Technique

A convenience sampling method was utilized for recruiting participants. People who satisfied the eligibility requirements and volunteered to participate in the study were recruited until the desired sample size of 80 people was obtained.

2.6 Eligibility Criteria

Participants of 18 years and above who frequently used digital media and gave informed consent were included in the study. Persons under 18 years of age, people who rarely used digital media, unwilling individuals, and incomplete questionnaire forms were excluded from the study.

2.7 Study Instrument

The research used a self-administrated questionnaire that was formulated through a review of the existing literature. There were two parts of the questionnaire. In part A, there were five demographic questions regarding age, gender, education, profession, and usage of digital media on daily basis. In part B, there were 20 statements and each was rated on five-point Likert scale (from 1=Strongly Disagree to 5= Strongly Agree) related to four constructs namely; Digital Media Usage (Questions 1-5), Information sharing and Awareness (Questions 6-10), Public Participation (Questions 11-15), and Influence of digital media (Questions 16-20).

2.8 Data Collection Procedure

Prior to administration of the questionnaire, the purpose for conducting the research was explained to the subjects, and they were required to give informed consent. Questionnaires were then distributed to the selected subjects manually, and they filled them in without any external help. Filled-in questionnaires were retrieved immediately and checked for completeness before they were entered in Microsoft Excel for data analysis. Data collected were then coded and entered into Microsoft Excel to form a data set. The data set was then validated to ensure that it is complete and accurate.

2.9 Ethical Considerations

Participants volunteered themselves in the study. Prior to conducting the questionnaire, all participants gave their informed consent to participate in the study. It was ensured that all information obtained was anonymous as confidentiality was promised by the researcher to the participants. Participants were told about their option to withdraw from the study at any stage.

2.10 Statistical Analysis

The collected data were summarized using descriptive statistics, including frequencies, percentages, means, and standard deviations. Differences in public participation scores across demographic characteristics were assessed using the independent samples t-test and one-way analysis of variance (ANOVA), as appropriate. The relationship between digital media use and public participation was examined using Pearson correlation analysis, while multiple linear regression was performed to identify the predictors of public participation. A p-value of less than 0.05 was considered statistically significant.

3. Results

3.1 Demographic Characteristics of the Participants

A total of 80 respondents participated in the study. The demographic characteristics of the participants, including gender, educational qualification, and occupation, are presented in Table 1.

Table 1. Demographic characteristics of the study participants (N = 80)

Variable	Category	Frequency (n)	Percentage (%)
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Gender	Male	38	47.5
	Female	42	52.5
Educational Qualification	High School	16	20.0
	Diploma	14	17.5
	Undergraduate	32	40.0
	Postgraduate	18	22.5
Occupation	Student	24	30.0
	Employed	34	42.5
	Self-employed	13	16.3
	Unemployed	9	11.2

From the demographics of the population, there was a relatively equal number of male and female respondents, with females being more than males. The greatest number of respondents came from the undergraduate level education wise, whereas those who were employed formed the greatest number of respondents occupationally. Generally, the study population consisted of respondents from various levels of education and occupations to be able to analyze their relationship with digital media and citizen participation.

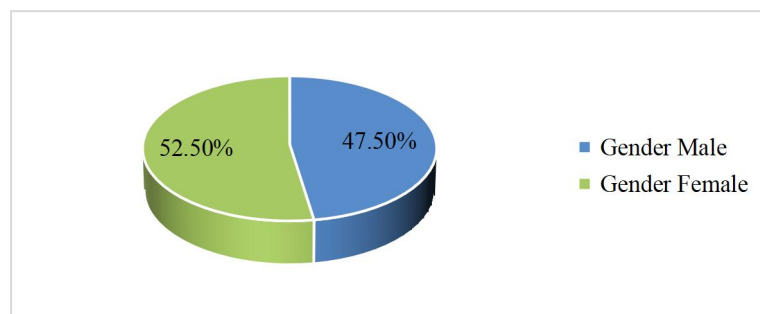


Figure 1. Gender distribution of the study participants

The figure demonstrates a nearly equal gender distribution, with female participants comprising a marginally larger proportion than male participants.

3.2 Digital Media Usage Characteristics

Daily frequency of digital media consumption has been analyzed to determine how much exposure the participants had to digital media platforms. As digital media consumption constitutes the main independent variable in this research, analyzing its frequency becomes crucial for any further interpretations of results. The distribution of respondents based on their average daily consumption of digital media is presented in Figure 2 below.

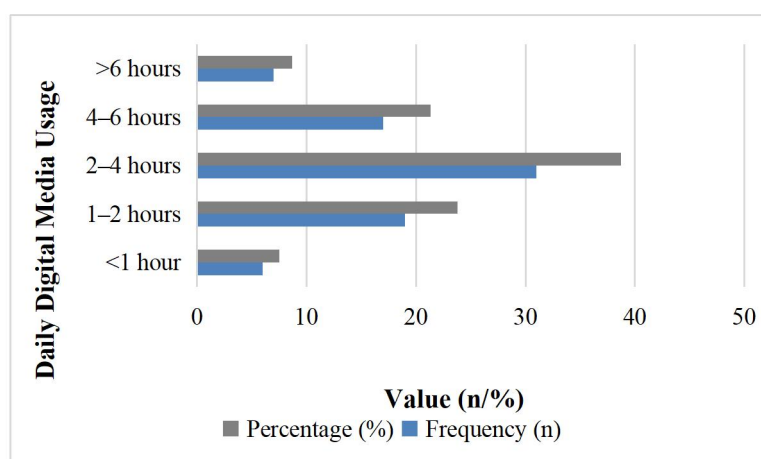


Figure 2. Average daily digital media usage among the study participants (N = 80)

Most of the respondents indicated that they spent 2-4 hours using digital media per day, whereas fewer respondents spent between 1-2 hours and 4-6 hours per day on digital media usage. However, very few participants either spent less than an hour per day on digital media or used it more than six hours daily, suggesting that digital media usage was prevalent amongst the sample group.

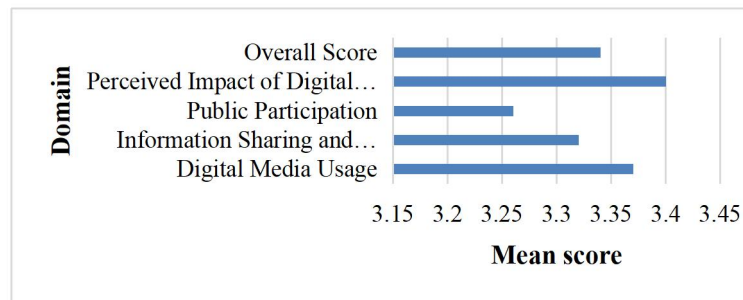
3.3 Descriptive Statistics of Study Domains

To gauge how the participants responded in the four study domains and measure their overall agreement with digital media and public participation, descriptive statistics were computed. Mean scores and standard deviations for each domain have been presented in Table 2 below.

Table 2. Descriptive statistics of the study domains

Domain	Mean $\pm$ SD
Digital Media Usage	3.37 $\pm$ 0.65
Information Sharing and Awareness	3.32 $\pm$ 0.63
Public Participation	3.26 $\pm$ 0.63
Perceived Impact of Digital Media	3.40 $\pm$ 0.53
Overall Score	3.34 $\pm$ 0.54

As observed from the descriptive results, there were mostly positive perceptions in all domains in the study. From the various constructs in the study, the domain that had the highest mean value was the Impact of Digital Media. The Public Participation domain had the lowest mean value among the various domains. However, all the domain mean values were above the midpoint, showing positive perceptions about the use of digital media to improve civic engagement.

**Figure 3.** Mean scores of the study domains

There is little variance among the four domains shown in the figure, and favorable scores were noted throughout the constructs. This indicates positive attitude towards the role of digital media in public engagement.

3.4 Comparison of Overall Scores based on Gender

In order to find out whether there were different perceptions between male and female respondents, independent samples t-test was conducted to see whether gender had any effect on the overall score of the study. The results are shown in Table 3.

Table 4. Independent samples t-test comparing overall scores according to gender

Variable	t-value	p-value
Overall Score	1.165	0.248

Although slight differences in mean scores were observed between male and female respondents, the comparison did not demonstrate a statistically significant difference. These findings suggest that perceptions regarding digital media use and public participation were comparable between the two gender groups.

3.5 Comparison of Overall Scores According to Educational Qualification

One way ANOVA test was carried out to find out if there were any significant differences in perceptions about digital media and civic participation among people with different levels of education. The outcomes of the test are depicted in Table 4.

Table 5. One-way ANOVA

Variable	F-value	p-value
Overall Score	0.144	0.933

It was found that there were no statistically significant differences among overall scores across education levels of qualification. Thus, the education level of respondents did not have any considerable impact on their attitude towards the use of digital media and public participation.

3.6 Association Between Digital Media Domains and Public Participation

The correlation between the selected domains related to the use of digital media and public participation was assessed using Pearson correlation analysis. Knowledge of the association allows to understand whether higher digital media usage is accompanied by higher public participation. The correlation coefficients are given in Table 5.

Table 6. Pearson correlation analysis between study domains and public participation

Variables	Correlation (r)	p-value
Digital Media Usage vs Public Participation	0.722	<0.001
Information Sharing and Awareness vs Public Participation	0.676	<0.001

Perceived Impact of Digital Media vs Public Participation	0.715	<0.001
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The results showed statistically significant positive correlations between all the predictor variables and public participation. Usage of digital media had the highest statistically significant positive correlation with public participation, followed very closely by the perceived impact of digital media. Therefore, high use of digital media and high perceived impact of digital media had statistically significant positive correlations with public participation.

3.7 Multiple Linear Regression Analysis Predicting Public Participation

A multiple linear regression analysis was used to determine how well the predictor variables (usage of digital media, information sharing and awareness, and perceived impact of digital media) predicted public participation. This type of analysis measures the extent to which these predictors accounted for public participation. The regression results are shown in Table 6.

Table 7. Multiple linear regression analysis predicting public participation

Predictor	Regression Coefficient (β)
Digital Media Usage	0.343
Information Sharing and Awareness	0.225
Perceived Impact of Digital Media	0.385
R ²	0.638

The regression model had high explanatory power because the chosen predictor variables explained a significant portion of the variance in public participation. The regression coefficients of all three independent variables were positive, implying that increased digital media usage, more information exchange and awareness, and perception of positive impact of digital media contributed to higher levels of public participation. Perceived Impact of Digital Media was found to have the greatest positive contribution to the regression model among all predictors.

4. Discussion

The current study was conducted to find out the impact of digital media on public participation and revealed that participants' perceptions towards all the four study domains were mostly positive. The use of digital media, information sharing and awareness, public participation, and perceived impact of digital media were at an acceptable level, implying that digital media has been used widely by people as a means of interaction and engagement. These results are in line with the existing body of research which shows that digital media has enhanced the communication and engagement between individuals and society through information exchange and involvement in social and community affairs. Similar conclusions were also drawn by Suherlan (2023) as he mentioned that digital media increases democratic participation by allowing citizens to be more involved, while Liu and Zowghi (2023) argued that digital transformation allows more collaboration and citizen engagement in governance. From the four domains of study, Perceived Impact of Digital Media received the highest average score. The above result indicates that people now view digital media as an effective tool for voicing their opinions, getting informed about the general information, and participating in community issues. Similar results have been found by de Velazco et al. (2024) who illustrated how ICTs help to take part in participatory processes as a means of better communication and involvement in public affairs. Gil et al. (2019) and Kapoor et al. (2018) noticed that digital media tools are essential in smart governance as a means of citizen participation and cooperation.

Public Participation even though scored the relatively lowest mean score among all other study dimensions, it was still higher than the mid-point on the scale which indicates positive civic participation. The above result may be explained by the fact that participation facilitated through digital media tools depends on many other factors besides digital media itself. According to Habermas (2022), digital public sphere provides new possibilities for democratic participation, however, at the same time, poses many challenges to it. In a similar way, it has been argued by Mattila & Nummi (2022) that digital participation is associated not only with access to technology, but also with responsiveness and effective use of communications strategies on the institutional level. The comparison of study scores based on gender did not show any statistically significant differences between males and females. This result demonstrates that the perceptions of digital media and public participation were identical among men and women since there is an accessible digital environment today. Such results have also been obtained by Boulianne & Theocharis (2020) in their meta-analytical review, where it has been found out that digital media fosters civic engagement among diverse demographic segments. The level of educational qualification also had no effect on the scores obtained from the overall study. From the lack of significant differences among different educational categories, it can be concluded that digital media has been made available to everyone regardless of their educational qualification. This has been corroborated by ElMassah & Mohieldin (2020) when they stated that digital transformation activities lead to inclusive public participation through wider access to digital resources. This view was shared by Harasimiuk & Braun (2022) who noted that digital governance in the contemporary era involves technologies that encourage participation of citizens with different educational qualifications and backgrounds. One of the key findings of the current study was the presence of significant positive correlations between digital media use, information exchange and awareness, perception of digital media impact, and public participation. People who engaged more with digital media platforms also participated in civic matters to a greater extent. This is in line with the study of Boulianne (2020), who indicated that digital media has

positive effects on civic and political participation through increased communication and information distribution. In a similar vein, Theocharis & Van Deth (2018) argued that through digital technologies, the traditional forms of citizen participation have been broadened to include online civic participation.

Additionally, from the results of regression analysis, it was clear that digital media use, sharing of information and awareness, and impact of digital media altogether predicted civic participation, with Perceived Impact of Digital Media being the most powerful variable. The result implies that individual's belief about the importance of digital media can be more important for motivating citizens to engage in civic activities than just using them. This conclusion is supported by previous research findings by Smith et al. (2019), who observed that social media boosts individuals' feelings of empowerment and motivates them to participate in civic activities. However, there are a number of limitations that need to be taken into account despite these positive results. First of all, cross-sectional research design does not allow drawing conclusions about causality, and self-reporting may lead to some kind of reporting bias. Moreover, the small size of the sample makes it less representative. Thus, future research should use more representative samples and long-term research designs along with other variables.

5. Conclusion

The study underscores the role played by digital media in being one of the most critical elements that have come to affect public participation through improved communication, information, and civic involvement. It may be seen from the findings of the study that respondents viewed the use of digital media positively and realized the importance of digital media as an easy means of getting information, voicing their views, communicating with others, and participating in civic activities. In light of the increasing advancements in digital technology, people will have additional means to participate in civic and discussion-related activities. It should be noted that among the factors mentioned above such elements as the increased use of digital media, information and awareness sharing, and the positive perception of digital media impact on society have been identified as some of the crucial elements that have a high correlation with public participation. Among all factors mentioned above, the perception of the impact of digital media proved to be the most significant factor influencing public participation since people become more involved in civic activities if they believe that digital media has the ability to influence social interaction and community development. The absence of any variations in the present study among the demographic characteristics such as gender and educational qualifications indicates that digital media is indeed an inclusive medium available for all citizens. Concluding from these research results, it could be said that these research results reveal the growing importance of digital transformation in promoting participatory governance, well-informed citizenship, and civic engagement. This approach will ensure transparency and cooperation between citizens and the government and will provide for responsive and inclusive governance. It is crucial for further research to have a larger sample size, conduct a longitudinal study or use a mixed methodology design and also to test other variables such as digital literacy, institutional trust, socio-economic status, and culture, among others.

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