Online Vs Face-to-Face Research Participation: Which Do Research Respondents Prefer?

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Abstract

Background: Although the role of digital media in research is now gaining attention, many of the studies focus on researchers with less attention to research participants.

Objective: This study aimed to determine respondents' preference for online or face-to-face research participation.

Methodology: The study used a descriptive survey and examined 362 research participants. Data were collected using a structured questionnaire, and results were analysed using percentages and multiple regression analysis. The results were presented in tables and one chart.

Result: The study showed that the online survey yielded 16% higher responses than face-to-face. It was also found that the majority of the participants expressed a preference for digital media platforms as channels for participating in research. However, few participants still indicated face-to-face as their preferred platform for participation in research. The results also show that youth (18-35 years) and older adults (36-50 years) preferred participation through digital media, while the elderly (51 years and above) preferred face-to-face. In education, those with primary education preferred face-to-face participation, while those with primary and tertiary education preferred digital media platforms.

Conclusion: Digital media platforms are now essential for conducting research, and research participants are now expressing a preference for digital media as a venue for their participation.

Keywords: Digital media; face-to-face; participants; research; Nigeria

Introduction

Research participation is an integral aspect of the scientific process that entails the active involvement of people or groups in data gathering, analysis, and interpretation. It is a crucial stage in the research process whereby a researcher has to collect data from the subject to test hypotheses, answer research questions or achieve research goals. It emphasises a brief working relationship between a researcher or team of researchers and the subjects (Mara, 2018). In most cases, researchers are interested in collecting data on issues that affect the participants. For example, a researcher might want to understand the influence of social media political messages on voters' voting behaviour. In such a case, data will be collected from the voters themselves so that the researcher can achieve the objective of the study. Therefore, research

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participation requires a working relationship between an individual (with the required information) and a researcher who needs that information.

Research participation requires engagement with the participants, which can occur at different levels. The level of engagement can be at the community level, where a participant is interested in issues that affect an entire community. An example here could be the increasing cases of insecurity in a community or any other issue that affects the broader community. The second level could be issues that affect individuals, such as radio listening habits and the purchasing of printed newspaper copies, among others. In either case, participation is crucial in gathering the data needed (Asaba & Suárez-Balcázar, 2018; Vaughn & Jacquez, 2020).

Before the advent of digital media platforms, participation in research was strictly on a face-to-face basis. Researchers who needed data from participants had to approach them for such data. Interventions were also delivered to the participants on a face-to-face basis. There was no option other than this. However, with the advent of digital media platforms, researchers now have the option of contacting their subjects through online platforms. According to Okereka et al. (2024), the emergence of digital media platforms has led to changes in data collection in research. This is because researchers now make use of digital media platforms to gather the required data from the participants. Ugwuoke and Akande (2024) conducted a study to determine if data intervention delivered online produces the same effect as that delivered face-to-face. The researchers applied a quasi-experimental design and investigated the impact of online and face-to-face music therapy in reducing depression among women who were trying to conceive. They reported that face-to-face intervention and online-based intervention produced the same results. Also, Asogwa et al. (2024) conducted a study wherein they compared the effectiveness of qualitative analysis done manually and the one done with digital tools. Their results revealed the growing relevance and efficiency of digital tools in data analysis. The studies reviewed above highlight the growing usefulness of digital media in the research process.

New media offered a re-conceptualization of *media audience* and mass communication research. Traditionally, media audience, according to McQuail (2010), is defined first, depending on whether the medium creates the audience or the audience exists before the medium, as a pre-existing group—that is, the population of a people. Alternatively, as created by the medium, it is considered a 'gratification set' for whom media serve their needs. Secondly, audience by channel or content. New media transform media audiences and offer new ways of thinking about participants in research (Napoli, 2008; Martins et al., 2022).

Theoretically, according to Morris and Ogan (1996), one major impact of digital media on research has been theoretical constraints. With the emergence of digital media, which consists of both elements of interpersonal and mass communication, what Castells (2007) calls mass self-communication, that is, self-generated and directed audience content, the division between interpersonal and mass communication is blurred, and that poses a challenge to theories in different aspects of research. Theory is the heart of every research, and each theory is relevant to a given medium, audience, condition, and audience (Baran & Davis, 2012). How relevant and appropriate are the theories of different disciplines in guiding, directing, and providing explanations for research in digital media?

Methodologically, new media have changed the ways of thinking and researching about research participants and data gathering. It modified existing methods and presented new approaches to research (Neuman et al., 2014). New media offer a large, complex dataset for both qualitative and quantitative analyses. Second, the complex nature of new media data requires methodological skills, new technical skills and analytical skills like computational

linguistics, Topic modelling, text mining, and sentiment analysis etc. (Murshed et al., 2022; Omena, 2021; Bordoloi & Biswas, 2023). Therefore, this paper aims to determine study participants' preference in responding to online or face-to-face data collection in research.

Objective of the study

The general aim of this study was to identify the environmental setting that research participants prefer when participating in studies. The specific objectives of the to:

- 1. determine the respondents' preference between online and face-to-face settings in research participation.
- 2. Ascertain the role of gender, age, and educational levels in the preference of either online or face-to-face research participation.

Theoretical Framework

This study is underpinned by the theoretical assumptions of the Medium Theory and the Technology Acceptance Model (TAM1&2). Medium Theory, named by Joshua Meyrowitz in 1985 (Ellis, 2009). The theory, according to Holmes (2005), is a brainchild of Marshal McLuhan, whose major ideas are drawn from the work of Harold Adams Innis. It is a deterministic theory whose central thesis is that the nature and structure of a medium outweigh its content in altering social organisation and thought [and, by extension, media research] (Ellis, 2009). It is preoccupied with understanding how a change in the nature and structure of a medium brings about change in the pattern of social interaction and the social structure in general. The central philosophy is epitomised in the aphorism "The Medium is the Message," which is credited to McLuhan, meaning that the structure and form of a medium determine the trustability and acceptability of a message. He theorised that a medium is more than a tool or channel but a unique psychic and social setting or environment that shapes certain types of communication. Thus, the medium theory is concerned with the complexities of a medium, such as the sensory characteristics, speed, and the directionality of a medium.

TAM, developed in 1989 by Davis, is built on the Theory of Reasoned Action (TRA), which, according to Ma and Liu (2005), holds that beliefs influence attitudes, which lead to intentions and hence generate behaviour. As a corollary, TRA maintains that people would use a particular medium or system if they could see the advantages of doing so. By extension, TAM1 posits that perceived ease of use (PEOU) and perceived usefulness (PU) determine an individual's motivation to use a medium, with the former exerting influence on the latter and both subject to external variables. TAM2 was developed in 2000 to explain the external variable. The external variable was explained in terms of the subjective norm, which, together with PU and PEOU, determined the intention to use a medium or system. The theories used above are relevant to the current study because they have provided a framework for understanding the potential influence of digital media on the participants in studies among respondents.

Methodology

The study employs a descriptive survey research approach. Descriptive survey, according to Wimmer and Dominick (2011:185), as the name suggests, "attempts to describe or document current conditions or attitudes—that is, to explain what exists at the moment". This approach was considered useful because it enabled the researchers to understand research participants' preferences with specific attention to face-to-face and online research participation. The population of this study was all the research participants in Nigeria. The population is indefinite because there is a list of research participants in Nigeria. The sample size was 362 research participants in Nigeria. The researchers conducted a priori power analysis with *G Power version 3.0 to determine the sample size. A questionnaire was used to collect data for the study. The questionnaire collected demographic and psychographic data. The response

format was a combination of multiple choice and a four-point Likert scale. Three experts determined the validity of the instrument. The experts were each from communication, measure and evaluation and psychology, University of Nigeria, Nsukka. A pilot study with 30 participants was conducted using the test-retest approach with a two-week interval, and the results showed a correlation coefficient of .78, meaning that the instrument was reliable. To be included in the sample, a participant must have participated in a study at least once in the last twelve months. Of the 362 copies of the questionnaire, 181 were administered online, and 181 were administered face-to-face. An introductory question sought to ask the participants the last time they took part in a study. The researchers analysed the data using descriptive and influential statistics (multiple regression) while the results were presented in tables.

Results/Discussion

Among the 362 copies of the questionnaire that were administered to the participants, 321 copies, representing 87%, were filed and returned. The sample was 53% males and 47% females. The result of the return rate between the online survey and the face-to-face survey showed that the online survey generated 175 out of 181 copies sent out. On the other hand, face-to-face responses resulted in 146 out of 181 responses. This means that the online survey led to 16% higher responses than face-to-face.

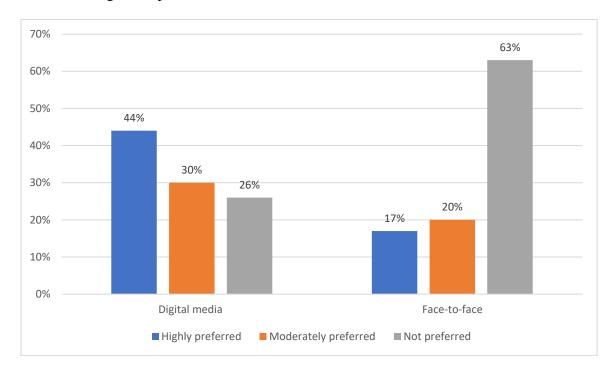


Figure 1: Respondents' preference between online and face-to-face settings in research participation.

The result of the study, as shown in Figure 1, revealed that the majority of the participants expressed a preference for digital media platforms as channels for participating in research. However, few participants still indicated face-to-face as their preferred platform for participation in research. This result has extended that of Gever (2024), who found that researchers preferred to make use of online data collection. However, the study of Gever did not examine the views of research participants.

Table 1: Regression analysis of the predictive power of gender, age, and education level on preference for online or face-to-face research participation.

	Constant	β value	R square	F. value	P. value
Education	2.301	.381	.522	53.520	.001
Gender		.108			.67
Age		.417			.001

In Table 1, the researchers examined the predictive role factors like age, education and gender and the preference for either digital or face-to-face research participation. The result of the overall analysis showed that our model contributes 52.2% in explaining the preference for either digital or online research participation, R^2 =.522, p=0.001, F(4,410) 53.520. The researcher further inspected the result, and the evidence showed that although collectively, the result achieved a statistical significance, age did not predict preference. This result has extended the study of Okereka et al. (2024), who examined the usefulness of digital media in data collection but did not examine this from the perspective of research participants.

Table 2: Detailed analysis of the role of age and education level on preference for either digital or face-to-face research participation

		Digital media	Face-to-face
Age	Youth (18-35 years)	V	
	Older adults (36-50)	$\sqrt{}$	
	Elderly (51 years and above)		√
Educational level	Primary education		V
	Secondary education	V	
	Tertiary education	V	

The study's results, presented in Table 2, show that youth and elder adults preferred participation through digital media while the elderly preferred face-to-face. In the area of education, those with primary education preferred face-to-face participation, while those with primary and tertiary education preferred digital media platforms. This study's results have shown that the study participants' age and level of education should inform the choice of the most appropriate data collection channels. This study has extended that of Ugwuoke and Akande (2024) and Asogwa et al. (2024). For example, while Ugwuoke and Akande examined the usefulness of digital media platforms for administering interventions, they did not seek data on the preferences of the participants. They also did not examine the contributing role of age and level of education. The study of Asogwa et al. also examined the use of digital platforms for data analysis, and they did not examine the contributing role of age and level of education. The current study has filled these gaps.

Conclusion and Recommendations

This study concludes that digital media platforms are now essential in conducting research. Participants in research are now expressing a preference for digital media research. They prefer to participate in studies through digital media platforms instead of face-to-face. Also, questionnaire copies administered through digital media platforms are generating more responses than those administered face-to-face. The researchers also conclude that younger people and older adults prefer digital media, while the elderly prefer face-to-face participation. This study has contributed empirical data that could guide researchers in deciding on their choice of data collection. This study makes three recommendations. First, researchers should deploy digital media in their data collection. Second, the age and education levels of participants should be used as a guide in making decisions on whether to use digital media or not. Finally, further studies should be conducted in other countries for comparison.

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