VOL. 07 NO. 6,
FEBRUARY, 2025
E-ISSN 3027-1401
P-ISSN 3026-9148



African Scholar Publications & Research International
www.africanscholarpub.com

Journal of Arts and Sociological Research (JASR)

Demographic Disparities in Online Support Groups Engagement among Married Nigerians Experiencing Infertility

Adebowale, Aderonke A.; Adekoya, Helen O. (Prof); & Akoja, Mofoluke (Ph.D)
Babcock University, Ilishan Remo, Ogun State, Nigeria.
Corresponding Author: adebowale0415@pg.babcock.edu.ng
DOI: https://doi.org/10.70382/ajasr.v7i6.018

Abstract
Infertility is a significant global public health issue, often associated with psychological distress and social stigma. In Nigeria, infertility remains a neglected concern within the reproductive health discourse, with limited focus on support mechanisms. Online support groups (OSGs) offer a platform for individuals experiencing infertility to seek information, share experiences, and gain emotional support. However, demographic disparities in engagement patterns within these groups remain underexplored. This study examined the factors influencing OSG engagement among married individuals facing infertility in Nigeria and investigated variations based on age, income, and gender. The study is descriptive-analytical. The population consisted of 4007 infertile married individuals who are members of four online infertility support groups. The groups with members from different parts of Nigeria were purposefully chosen. A proportionate stratified sampling method was used to draw a sample size of 843. Eight hundred and three (803) copies of the questionnaire were retrieved and validated, making a 95% response rate. Data were collected using a questionnaire and analysed using descriptive and inferential statistics. The research indicated that perceived value and relevance were the primary factors influencing married individuals' participation in online support groups. The study revealed further that there was a significant difference in the engagement with online support groups among those experiencing infertility by age ($F(3, 799) = 10.44$, $p < 0.05$), income ($F(2, 800) = 9.62$, $p < 0.05$), and gender ($t(596) = -4.85$, $p < 0.05$) in Nigeria. The study recommended that stakeholders, including governments, group administrators, fertility clinic proprietors, and medical professionals, develop tailored communication strategies that can better serve diverse populations,

ultimately improving the emotional and social well-being of individuals navigating infertility challenges.

Keywords: Demographic disparities, Engagement patterns, Infertility in Nigeria, Married individuals, Online support groups

Introduction

Infertility is a condition characterised by "the failure to establish a clinical pregnancy after 12 months of regular, unprotected sexual intercourse" (Zegers-Hoschild et al., 2017). Infertility can be a disheartening personal experience (Grunberg et al., 2018), associated with reduced quality of life (Luk & Loke, 2014) and psychological suffering in both men and women (Grunberg et al., 2018). Infertility is, therefore, a significant global public health issue, affecting a considerable number of individuals worldwide. The condition has been ranked as the fifth most severe disability on a global scale (Dierickx et al., 2019; WHO, 2023). Infertility, despite its profound impact on reproductive health, is a neglected concern within the realm of reproductive health challenges among government agencies and non-governmental organisations and is accorded low priority on the global health agenda. This is particularly evident in Sub-Saharan African nations like Nigeria, where the focus is more on family planning and the prevention of unwanted pregnancies (Gipson et al., 2020). This condition is frequently regarded as a stigmatising yet imperceptible phenomenon (Naab et al., 2019; Sternke & Abrahamson, 2015), which engenders emotions of social inadequacy (Dănilă & Băban, 2018).

Individuals experiencing infertility often desire support, which can be found through online peer-support communities (Steinzer, 2023). Online platforms have been found to offer several benefits over traditional offline support groups, such as validation and normalisation (Gazit et al., 2018). In other words, shared experiences validate the emotions of each patient, fostering a sense of normalcy as they discover other people who genuinely share their feelings. In addition to this, around-the-clock availability, maintaining anonymity, and asynchronous communication are advantages of online platforms (Omosun, 2021).

Online support groups (OSGs) have existed since 1982 and are a significant development brought about by the Internet (Potts, 2005). Potts further claims online networks for those impacted by a shared concern, notably with health or socioeconomic conditions, are called online support groups. OSGs are hugely diverse. Most are established by individuals facing or having faced specific health issues rather than healthcare professionals (HCPs), indicating that users, rather than clinicians, determine their scope and target audience (Omosun, 2021).

The primary benefits of OSGs include their flexibility, specificity, information sharing, anonymity, and lack of reticence. These benefits are similar to those derived from face-to-face groups, which unite individuals with similar experiences, enabling them to exchange information and mutual support. The OSGs can convey practical knowledge that healthcare professionals may neglect (Potts, 2005). Omosun (2021) shows that a

group's commonality or specificity is crucial because it provides relevant information and support. It allows individuals to contextualise their experiences and recognise that others have experienced or are presently experiencing the same things. One distinction between online groups and face-to-face groups is that they have the potential to be more specific due to their global reach. Additionally, OSGs can be more accessible and adaptable once an Internet connection is established, as they are not limited to specific locations or times.

Online communication is also recognised as being unrestrained (Omosun, 2021). Individuals may be less reticent in their online behaviour due to the nature of online communication, the absence of social signals, and perceived intimacy and anonymity. This may be beneficial in a support group, as it enables individuals to address challenging topics and surmount concerns regarding humiliation (Gazit & Amichai-Hamburger, 2021). Nevertheless, this lack of restraint is problematic in numerous online communities when it results in "flaming" (deliberately provocative or insulting postings). Although it appears less prevalent, this can be a concern in OSGs (Gazit & Amichai-Hamburger, 2021). Another issue that numerous virtual communities face is "spamming," which refers to disseminating unsolicited commercial messages. It should be noted that most English-speaking communities are American, and consumers in the United Kingdom may encounter a culture shock.

Bar-llan et al. (2020) highlighted the significance of user involvement as a crucial component of online behaviour. According to Gazit and Amichai-Hamburger (2021), online participation has been found to positively impact social well-being, as it is associated with increased social self-esteem and decreased levels of stress and despair. The existing body of literature delineates various factors influencing individuals' engagement with online social groups. These factors include sex and psychological traits, the significance of offline activities and groups, the level of intimacy within the group, the quality of information exchanged during discussions, the speed and accuracy of responses, and the user's perception of the subject's importance (Amichai-Hamburger et al., 2016; Gazit et al., 2018; Sun et al., 2014).

Gender disparities in infertility are often influenced by their social, interpersonal, and biomedical interaction. Nagorska et al. (2019) affirm the existence of significant gender differences in how men and women are diagnosed, treated or evaluated for infertility. For instance, women were more likely to participate in discussions about the topic. Hence, according to Nagorska et al. (2019), women benefit more from social support networks than men. This is because they talk to their husbands and friends every day. In their view, men's emotional reactions towards infertility examination is an essential matter that requires a broader comprehension. Their emotional condition could provide helpful information about their role and conduct throughout the processes of infertility therapy.

Several options are available to people seeking children, including access to information and support. These include seeking counsel from a qualified medical expert, recourse to online research, or consulting with friends and family (Stephenson et al., 2014). Nonetheless, issues related to pregnancy planning and attempts at conceiving are generally considered matters of personal privacy. Hence, concerned individuals prefer confidential digital sources for knowledge and support, as shown by the rarity of such sources in public discourses (Patel et

al., 2016). Therefore, infertility claims by couples often go hand in hand with feelings of isolation and detachment (Hinton et al., 2010).

The existing research in Nigeria mainly focuses on analysing the frequency, understanding, mental health, methods of dealing with, and therapeutic choices for men and women confronted by infertility. Nevertheless, there has been a significant oversight in the investigation of online platforms and their possible impact on the way married individuals seeking solutions for infertility engage with others and seek support. Furthermore, there is a lack of demographic variety, as research often concentrates exclusively on either males or females. Comprehending this variability is of utmost importance in the development of personalised treatments and support systems aimed at addressing the distinct requirements of individuals facing challenges related to infertility. Thus, the desire to comprehend the differences in online support group engagement of married men and women facing infertility served as the driving force behind this research.

The research questions for this study are:

1. What are the factors influencing engagement with online support groups among married individuals experiencing infertility in Nigeria?
2. What are the demographic variations (age, income, gender) in engagement patterns with online support groups among married individuals experiencing infertility in Nigeria?

Hypotheses

H_0: There are no significant demographic variations (age, income, gender) in engagement patterns with online support groups between married men and women experiencing infertility in Nigeria.

Theoretical Framework: The Uses and Gratification Theory

The idea of uses and gratification theory is applied to examine the justification and effects of using the internet as a source of infertility health information. By analysing media effects, this model explores the factors behind individual and media users' active, critical, and motivated consumption of media platforms. Should one assume that people use media for particular objectives depending on their motivation, it is recommended that they search for information about infertility online and find online support, including a dedicated online support group for the subject. According to the theory of uses and gratifications (UGT), people actively choose media content to meet their specific desires rather than merely consume it.

Omosun (2021) asserts that media users are driven, critical, and engaged consumers of media platforms. Assuming people use media for particular goals motivated by their personal needs, they should logically choose the suitable media depending on their needs before starting an online information search. This finding highlights the need for the UGT to clarify the reasons behind people's choice of particular media outlets or approaches in search of health-related information online.

The UGT provides a thorough framework for examining the reasons behind individuals' involvement in online support groups, particularly in relation to married individuals dealing with infertility. According to this view, people choose various media and routes of

communication to meet particular needs and wants (Ruggiero, 2000). Married individuals who are facing infertility are probably going to use these sites to meet their unique emotional and educational needs.

UGT notes several main reasons that might inspire involvement in online support groups: information search, social engagement, validation, and normalisation. Users might look for empathy and understanding from people who have gone through the same conditions (Wright, 2016). Married infertile individuals may use Internet support groups to find emotional support from others facing similar issues. They could want understanding, empathy, and comfort. This shared experience could help promote social connection and lower feelings of isolation, strengthening the sense of community (Sullivan et al., 2018). By confirming their experiences and normalising their emotions, social interaction can help people acquire the necessary psychological benefits (Horton & Zahrani, 2020).

The theory also emphasises how demographic factors (including age, gender, socioeconomic level, and educational background) affect the reasons behind the choices of online platforms and the motivations for involvement patterns (Bennett & Segerber, 2012; Lin, 2020). For instance, younger people might choose more interactive platforms—such as online infertile groups—while older people might prefer organised meetings or instructional web pages.

Literature Review

Past research has shown that seeking social support is an important coping mechanism amongst those who are actively searching for help concerning infertility-related worries. The problem of social support acquisition when experiencing infertility can effectively be addressed through the use of Internet forums. According to Abubakar et al. (2020), social support is a subjective and objective experience of receiving care, which implies having access to assistance from people and being part of a supportive social group. Providing social support can help ameliorate adverse effects experienced by individuals facing infertility (Abubakar et al., 2020). This is done by coming up with new ideas on how to address challenges, which will enhance the self-esteem of these people affected by infertility and their ability to manage their infertility experience.

Jin and Shefaly (2023) explored online peer support communities' role for people facing fertility issues in their study “The Function of Online Peer Support Communities in Assisting Individuals with Infertility.” Their findings indicated that married individuals in their late twenties to early thirties used these platforms more frequently than other age groups. Initially, these sites were open without moderation rules being placed on them as they mostly were just public forums or widely used social media platforms. They found mutual benefits between those giving and receiving support through peers, where some communities were seen as convenient, secure places with many options available for struggling individuals. However, several individuals felt negative collective emotions and disconnection in the presence of like-minded individuals due to their involvement in online forums. Several also expressed concerns over trustworthiness, privacy, and inaccurate information among online networks.

Grunberg et al. (2018) sought to establish the level of interest among infertility patients to online peer support and identify characteristics linked with this interest and desired elements of an online peer support network. It was shown that there was a significant interest in the use

of online peer assistance, particularly among individuals who had high levels of perceived stress about their infertility problems. The study also revealed a preference for mobile accessibility, supervised peer-to-peer contact and hyperlinks, which provide information to Individuals, especially those experiencing significant stress. Demographic characteristics and perceived tension were associated with the demand for more individualised service alternatives.

In contrast, Covolo et al. (2022) aimed to examine how women with varying health literacy (HL) and healthcare abilities perceive and utilise the Internet for health-related matters. The investigation uncovered inadequate health literacy among the women. Approximately 52% of the sample searched online for a second opinion following their medical examination. There was no significant variation in this behaviour across healthcare workers, students, and non-healthcare workers. However, they discovered that healthcare professionals were more inclined to utilise the Internet to acquire medical knowledge.

Bar-llan et al. (2020) investigated the primary determinants of involvement in closed Facebook groups. Engagement was found to be positively associated with group importance and offline activities. Women and older people tend to participate more actively in conversations within such gatherings.

Another study indicated that beginner support seekers are less likely to receive responses to new threads from seasoned users, hence affecting the level of social support they obtain (Erculj & Ziberna, 2021). The perceived availability and degree of social support received are correlated with the frequency of contacts and time spent online (Rains & Wright, 2016). More involved and proactive members might be expected to receive greater social support, potentially impacting treatment outcomes.

Outlining a partial positive correlation between engagement and extroversion, Gazit et al. (2018) aimed at understanding psychological and environmental factors underlying online engagement among active users and lurkers. Psychologically, characteristics; they discovered that compared with lurkers, those who were more active had higher levels of extraversion and openness but reported feeling less self-efficacy while needing higher levels of pleasure from participation. The environment should also have content that can evoke emotional responses from them besides being relevant to their interests or needs for self-expression on familiar platforms, which may be satisfied through a participatory orientation towards lurking around or becoming an active participant within an online community.

Also, Gazit and Amichia-Harmburger (2021) conducted a study on 191 female participants' level of involvement in closed Facebook groups for women undergoing infertility treatment. They sought to understand whether external factors such as family status, social support system, family support system, group significance, membership duration, extroversion, openness to experience, subjective happiness, and loneliness could determine one's extent of engaging themselves in these groups for online support. The findings show that higher numbers of posts made by somebody can be explained by factors such as having kids, the duration of their membership, the level of support received from family and friends and their perception of the value of the group.

Methods

The study is descriptive-analytical. Data were collected from members of two closed Facebook groups, a WhatsApp group, and one Instagram group using a questionnaire. The questionnaire included two parts: Demographic information, including age, gender, income, educational level, duration of use, frequency of use and number of support groups and engagement themes, including (1) engagement patterns of married individuals experiencing infertility with online groups in Nigeria (8 items) and (2) factors influencing married individuals engagement with online support groups in Nigeria (11 items). The responses were measured on a five-choice Likert scale ranging from 5 (very high extent) to 1 (not at all) and 5 (Strongly Agree) to 1 (Neutral).

The instrument's reliability was rigorously tested through a pilot study. This preliminary testing aimed to assess the validity and reliability of the instrument's content, construct validity, and reliability. The questionnaire's themes were used to calculate the questionnaire's reliability. Therefore, Cronbach's alpha for "engagement patterns of married individuals experiencing infertility with online groups in Nigeria" and "factors influencing married individuals engagement with online support groups in Nigeria" were 0.925 and 0.899, respectively.

Two communication and Media Studies experts and a gynaecologist infertility specialist confirmed the instrument's validity. Construct validity was assessed using exploratory factor analysis (EFA) and Principal Component Analysis (PCA). The results of the construct validity study suggest that the instruments utilised in this study are valid and reliable, with a p-value of < 0.001 for both themes.

Sampling Strategy and Sample Size

The study population consisted of 4007 infertile married individuals who are members of four online infertility support groups: Two groups from Facebook, One group from Instagram and One group from WhatsApp. All the groups have WhatsApp platforms. Group A has 1600 members; Group B has 1200 members; Group C has 407 members; Group D has 800 members. The groups were purposefully chosen and had members from different parts of Nigeria. Eligible participants are individuals—male and female—who have been diagnosed with infertility or indicated that they have had difficulty conceiving after at least one year of actively trying. A proportionate stratified sampling method was used to draw a sample size of 843. The sample consists of 578 women and 262 men: Group A: 337, Group B: 252, Group C: 86, and Group D: 168.

Statistical Analysis

Data were analysed using descriptive statistics (frequency distribution, mean, and standard deviation) and inferential statistics (Pearson Product Moment Correlation analyses, an Independent T-test, and Analyses of Variance (ANOVA).

Ethical Consideration

This research was approved by Babcock University's ethics committee. Moreover, the principles of ethics in research, including informed written consent, anonymity,

confidentiality, and the right of participants to leave the research, were considered. The title and objectives of the study were clearly explained at the beginning of the questionnaire.

Results

Table 1

Demographic Characteristics of Respondents

Variable		Frequency (n)	Percentage (%)
Gender	Male	243	30.3
	Female	560	69.7
	Total	**803**	**100.0**
Age	30 to 34	95	11.8
	35 to 39	154	19.2
	40 to 44	276	34.4
	45 to 49	278	34.6
	Total	**803**	**100.0**
Highest Level of Education	First school leaving certificate	13	1.6
	SSCE	50	6.2
	BSC/HND/NCE	478	59.5
	Postgraduate or professional degree	262	32.6
	Total	**803**	**100.0**
Income Level	Below ₦100,000	80	10.0
	₦ 100,000 to ₦ 200,000	153	19.1
	₦ 301,000 and above	570	71.0
	Total	**803**	**100.0**
Duration of using online infertility support groups	Less than one year	264	32.9
	1 to 3 years	347	43.2
	4 to 6 years	134	16.7
	7 years and above	58	7.2
	Total	**803**	**100.0**

Source: Field Survey 2025

Table 1 indicates that the study was dominated by married females (69.7%) experiencing infertility, while males had a 30.3 per cent representation in the study. Many of the participants were between the ages of 45 to 49 (34.6%), followed by those who were 40 to 44 years of age (34.4%), while the least represented age group was 30 to 34 (11.8%). The study was dominated by married individuals with BSC, HND, or NCE (59.5%) educational qualifications, while the least educated were the fewest with the first school leaving certificates (1.6%). In addition, the

majority of the married individuals who were experiencing infertility had an income that ranged from ₦ 301,000 and above (71%), while those who earned below ₦ 100,000 had the least representation in the study. Finally, many of the participants who were experiencing infertility had been using online infertility support groups between 1 to 3 years (43.2%), followed by those who had been using it for less than one year (32.9%), while fewer had been using online infertility support groups for 7 years and above (7.2%).

Research Question One: What are the factors influencing the level of engagement with online support groups among married individuals experiencing infertility in Nigeria?

This research question was answered: Table 2 indicates the engagement patterns of married individuals experiencing infertility with online support groups, while Table 3 shows the factors influencing married individuals' engagement with online infertility support groups.

Table 2

Engagement Patterns of Married Individuals Experiencing Infertility with Online Support Groups

Statements	**SA Freq. (%)**	**A Freq. (%)**	**D Freq. (%)**	**SD Freq. (%)**	**N Freq. (%)**	**Mean $\bar{x}$**	**Standard Deviation (SD)**
I like, share and rate posts regularly in my online support group	167 (20.8)	94 (11.7)	112 (13.9)	89 (11.1)	341 (42.5)	2.57	1.61
I frequently engage with online support groups by reading messages posted on forums.	150 (18.7)	89 (11.1)	96 (12)	109 (13.6)	359 (44.7)	2.45	1.58
I ask questions in my online support group when I need clarifications or explanations in my fertility journey.	87 (10.8)	113 (14.1)	100 (12.5)	113 (14.1)	390 (48.6)	2.25	1.45
I join interactive sessions with group administrators or medical experts in my online support group	65 (8.1)	123 (15.3)	104 (13.0)	136 (16.9)	375 (46.7)	2.21	1.38
I join Webinars organised online by support groups	42 (5.2)	137 (17.1)	106 (13.2)	125 (15.6)	393 (48.9)	2.14	1.33
I attend seminars organised by my online support groups.	45 (5.6)	107 (13.3)	117 (14.6)	130 (16.2)	404 (50.3)	2.08	1.30
I frequently engage with online support groups by posting messages on forums.	66 (8.2)	91 (11.3)	85 (10.6)	144 (17.9)	417 (51.9)	2.06	1.35
I answer other members' concerns or questions when I can in my online support group	46 (5.7)	67 (8.3)	81 (10.1)	136 (16.9)	473 (58.9)	1.85	1.23
Average Overall Mean						**2.20**	**1.40**

Source: Field Survey 2025; **Freq. = Frequency**

KEY: SA=Strongly Agree, A= Agree, D=Disagree, SD=Strongly Disagree, N = Neutral ***Decision Rule if mean is 1 to 1.79=Neutral; 1.80 to 2.59 = Strongly Disagree; 2.60 to 3.39 = Disagree; 3.40 to 4.19= Agree; 4.20 to 5= Strongly Agree

Table 2 shows that married individuals who experienced infertility strongly disagreed that they generally engaged with online support groups ($\bar{x}$=2.20). Married individuals who experienced infertility did not engage online infertility support groups in the following ways: liking, sharing and rating posts regularly ($\bar{x}$=2.57), frequently reading messages posted on forums ($\bar{x}$=2.45), asking questions when needing clarifications or explanations ($\bar{x}$=2.25), joining interactive sessions with group administrators or medical experts ($\bar{x}$=2.21), joining webinars ($\bar{x}$=2.14), attending seminars ($\bar{x}$=2.08) and answering other members' concerns or questions ($\bar{x}$=1.85).

Table 3

Factors Influencing Married Individuals' Engagement with Online Infertility Support Groups

Statements	**SA Freq. (%)**	**A Freq. (%)**	**D Freq. (%)**	**SD Freq. (%)**	**N Freq. (%)**	**Mean $\bar{x}$**	**Standard Deviation (SD)**
I joined online groups based on perceived value and relevance.	208 (25.9)	408 (50.8)	107 (13.3)	35 (4.4)	45 (5.6)	3.87	1.03
The credibility of the information posted determines my engagement with online groups.	189 (23.5)	431 (53.7)	98 (12.2)	35 (4.4)	50 (6.2)	3.84	1.03
I joined because of the content or relevance of the group to my type of infertility challenge	163 (20.3)	400 (49.8)	135 (16.8)	48 (6.0)	57 (7.1)	3.70	1.08
I engaged with the group because of my desire for emotional support	187 (23.3)	360 (44.8)	141 (17.6)	46 (5.7)	69 (8.6)	3.68	1.15
The need for peer support and social interaction on my infertility journey motivated my engagement with online groups.	175 (21.8)	362 (45.1)	157 (19.6)	38 (4.7)	71 (8.8)	3.66	1.13
I joined because of encouragement and motivation from other group members.	155 (19.3)	367 (45.7)	182 (22.7)	42 (5.2)	57 (7.1)	3.65	1.07
Prompt feedback on posts and individual concerns motivated my engagement in group interactions.	154 (19.2)	379 (47.2)	149 (18.6)	43 (5.4)	78 (9.7)	3.61	1.15
I joined because of support and recommendation from my healthcare provider	138 (17.2)	363 (45.1)	189 (23.5)	51 (6.4)	63 (7.8)	3.57	1.09
Community norms and culture of the group motivated my engagement with the group.	153 (19.1)	311 (38.7)	213 (26.5)	39 (4.9)	87 (10.8)	3.50	1.18
Personalisation and Customisation (i.e. tailoring content and interaction to individual preferences and needs) encouraged my engagement.	142 (17.7)	336 (41.8)	193 (24)	40 (5.0)	92 (11.5)	3.49	1.18
I joined because my spouse and family encouraged me to do so	128 (15.9)	297 (37)	239 (29.8)	67 (8.3)	72 (9.0)	3.43	1.13
Average Overall Mean						**3.64**	**1.11**

Source: Field Survey 2025; **Freq. = Frequency**

KEY: SA=Strongly Agree, A= Agree, D=Disagree, SD=Strongly Disagree, N = Neutral ***Decision Rule if mean is 1 to 1.79=Neutral; 1.80 to 2.59 = Strongly Disagree; 2.60 to 3.39 = Disagree; 3.40 to 4.19= Agree; 4.20 to 5= Strongly Agree

Table 3 depicts that married individuals who experienced infertility agreed that there were factors influencing their engagement with online support groups ($\bar{x}$=3.64). The factors linked with engagement with online support groups were perceived value and relevance ($\bar{x}$=3.87), credibility of the information posted ($\bar{x}$=3.84), relevance of the group to married individuals, type of infertility challenge ($\bar{x}$=3.70), desire for emotional support ($\bar{x}$=3.68), encouragement and motivation from other group members ($\bar{x}$=3.65) and prompt feedback on posts and individual concerns ($\bar{x}$=3.61).

Research Question 2

Test of Hypotheses

Decision Rule

The following rules guided this study's application of Pearson Product Moment Correlation analyses, an Independent T-test, and Multiple Analyses of Variance. If the probability value (p-value) was less than or equal to 0.05, the null hypothesis was rejected; if the p-value was greater than 0.05, the null hypothesis was accepted.

H_{05}: There are no significant variations in engagement patterns with online support groups among those experiencing infertility in Nigeria based on demographic factors (age, income, gender).

Table 4

Analysis of Difference in Engagement with Infertility Online Support Groups by Age

Tests of Between-Subjects Effects					
Dependent Variable: Engagement with Online Support Groups					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3032.493[a]	3	1010.831	10.439	.000
Intercept	220700.712	1	220700.712	2279.292	.000
Age	3032.493	3	1010.831	10.439	.000
Error	77366.057	799	96.829		
Total	329495.000	803			
Corrected Total	80398.550	802			
a. R Squared = .038 (Adjusted R Squared = .034)					

Source: Field Survey 2025

Table 4 shows that there was a significant difference in the engagement with online support groups among those experiencing infertility by age in Nigeria (F (3, 799) = 10.44, p< 0.05).

Consequently, the null hypothesis was rejected. The eta square value shows that the differences in age explained 3.8% in engagement with online support groups among those experiencing infertility. This suggests that those experiencing infertility had different levels of engagement with online support groups as a result of their age. Consequently, Levene's tests of equality of variance suggest that non-parametric analysis should be carried out for further details, as shown in Table 3b.

Table 5

Post Hoc Analysis of Variance in Engagement with Infertility Online Support Groups by Age

Dependent Variable: Engagement with Online Support Groups						
Tamhane						
(I) Age	(J) Age	MD (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
30 to 34	35 to 39	**5.8196***	**1.16593**	**.000**	2.7234	8.9158
	40 to 44	**6.3127***	**1.07043**	**.000**	3.4669	9.1585
	45 to 49	**4.3674***	**1.06917**	**.000**	1.5248	7.2099
35 to 39	30 to 34	**-5.8196***	**1.16593**	**.000**	-8.9158	-2.7234
	40 to 44	.4931	.97847	.997	-2.0967	3.0828
	45 to 49	-1.4523	.97709	.590	-4.0384	1.1338
40 to 44	30 to 34	**-6.3127***	**1.07043**	**.000**	-9.1585	-3.4669
	35 to 39	-.4931	.97847	.997	-3.0828	2.0967
	45 to 49	-1.9453	.86089	.137	-4.2185	.3278
45 to 49	30 to 34	**-4.3674***	**1.06917**	**.000**	-7.2099	-1.5248
	35 to 39	1.4523	.97709	.590	-1.1338	4.0384
	40 to 44	1.9453	.86089	.137	-.3278	4.2185

Source: Field Survey 2025; MD= Mean Difference

Table 5 depicts that those experiencing infertility who were between the ages of 30 to 34 had higher engagement with online support groups than those who were 35 to 39 years (*MD*= 5.82, $p< 0.05$), 40 to 44 years (*MD*= 6.31, $p< 0.05$) and those who were 45 to 49 years of age (*MD*= 4.37, $p< 0.05$). The implication of this analysis is that younger people who were experiencing infertility in Nigeria, especially between the ages of 30 and 34, had higher levels of engagement with online support groups than those who were older.

Table 6

Analysis of Difference in Engagement with Infertility Online Support Groups by Income

Tests of Between-Subjects Effects					
Dependent Variable: Engagement with Online Support Groups					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1888.038[a]	2	944.019	9.619	.000
Intercept	118695.962	1	118695.962	1209.478	.000
Income	1888.038	2	944.019	9.619	.000
Error	78510.512	800	98.138		
Total	329495.000	803			
Corrected Total	80398.550	802			
a. R Squared = .023 (Adjusted R Squared = .021)					

Source: Field Survey 2025

Table 6 shows that there was a significant difference in the engagement with online support groups among those experiencing infertility by income in Nigeria ($F(2, 800) = 9.62$, $p < 0.05$). Consequently, the null hypothesis was rejected. The eta square value shows that the differences in income explained 2.3% in engagement with online support groups among those experiencing infertility. This suggests that those experiencing infertility had different levels of engagement with online support groups as a result of their income. Consequently, Levene's tests of equality of variance suggest that non-parametric analysis should be carried out for further details, as shown in Table 4b.

Table 7

Post Hoc Analysis of Variance in Engagement with Infertility Online Support Groups by Income

Dependent Variable: Engagement with Online Support Groups						
Tamhane						
(I) Income Level (Monthly)	(J) Income Level (Monthly)	MD (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Below ₦100,000	₦100,000 to ₦200,000	1.6299	1.35088	.543	-1.6327	4.8926
	N301,000 and above	-2.1811	1.20620	.205	-5.1092	.7469
₦100,000 to ₦200,000	Below N100,000	-1.6299	1.35088	.543	-4.8926	1.6327
	N301,000 and above	**-3.8110***	**.85192**	**.000**	-5.8584	-1.7637
₦301,000 and above	Below N100,000	2.1811	1.20620	.205	-.7469	5.1092
	N100,000 to N200,000	**3.8110***	**.85192**	**.000**	1.7637	5.8584

Source: Field Survey 2025; MD= Mean Difference

Table 7 indicates that those experiencing infertility who earned ₦301,000 and above monthly had higher engagement with online support groups than those who earned ₦100,000 to ₦200,000 monthly ($MD = 3.81$, $p < 0.05$) in Nigeria. The implication of this analysis is that people who were experiencing infertility and earned ₦301,000 and above monthly had higher levels of engagement with online support groups than those who earned less monthly.

Table 8

Analysis of Difference in Engagement Patterns with Infertility Online Support Groups by Gender

Gender	N	Df	Mean	Standard Deviation	Mean Difference	T	P	Remark
Male	243	596	15.30	8.06	-3.32	-4.85	**0.000**	Significant
Female	560		18.62	10.60				

Source: Field Survey 2025

Table 8 indicates that there was a significant difference in the engagement with online support groups among those experiencing infertility by gender in Nigeria ($t(596) = -4.85$, $p < 0.05$).

Therefore, the null hypothesis was rejected. It should be noted that the data points violated the assumption of the equality of variance as tested by Levene's test of equality; hence, appropriate statistics were cited. Furthermore, the mean difference was -3.32, implying that married females who were experiencing infertility had higher engagement with online support groups than married males who were experiencing infertility.

Discussion

The data indicates that most participants were married females (560) with infertility, whereas males (243) were less represented in the study. Married individuals facing infertility were predominantly in the menopausal stage, whereas younger individuals experiencing infertility constituted the smallest group in the study. The majority of married individuals facing infertility were educated.

Moreover, the majority of married individuals with infertility possessed higher income levels, specifically N 301,000 and above, whereas those with the lowest income levels had the least representation in the survey. Finally, a significant number of individuals experiencing infertility had utilised online support groups for a duration of one to three years, followed by those who had engaged with such groups for less than one year, while a smaller fraction had been involved for seven years or more.

The research further indicates that married individuals in Nigeria with infertility hardly participate in activities in their online support groups. The married individuals did not actively participate in online infertility support groups by liking, sharing, or rating posts consistently, frequently reading forum messages, asking questions for clarification, engaging in interactive sessions with group administrators or medical professionals, attending webinars, participating in seminars, or addressing other members' enquiries. This aligns with Omosun (2021), who discovered that users' objectives were intricately linked to the level of engagement of infertile individuals in OSG's activities, indicating that such points were deliberately established. Consequently, these individuals possessed specific intentions in their utilisation. The research indicates that perceived value and relevance were the primary factors influencing married individuals' participation in online support groups. The subsequent factors include the credibility of the material shared, the group's relevance to married individuals, the nature of the infertility difficulty, the need for emotional support, encouragement, and motivation from fellow members, and timely replies to posts and personal concerns.

The study shows that individuals with infertility had varying levels of participation in online support groups based on their age. Younger infertile individuals in Nigeria, particularly those aged 30 to 34 facing infertility, had greater participation in online support groups compared to their older counterparts. This supports the findings of Jin and Shefaly (2023), which indicated that persons in their late twenties to early thirties utilised these platforms more often than other age demographics.

The study corroborated the findings of Brochu et al. (2019) and Karami et al. (2023), indicating that individuals facing infertility exhibited varying degrees of engagement with online support groups contingent upon their income levels. The study also showed that married women with infertility participated more actively in online support groups compared to married men in similar circumstances.

The test of hypotheses showed that there was a significant difference in the awareness of online platforms for seeking information related to infertility between men and women in Nigeria. Further details indicated that married females who were experiencing infertility had a higher awareness of online platforms for seeking information related to infertility than married males who were experiencing infertility. This study demonstrated that there was a significant difference in the knowledge derived from online support groups available for dealing with infertility in Nigeria by gender. The study revealed that married females who were experiencing infertility derived more knowledge from online support groups available for coping with infertility than married males who were experiencing infertility. In addition, this study showed that there was a significant difference in online health information-seeking behaviour of men and women who were experiencing infertility in Nigeria, which implies that married females who were experiencing infertility had better online health information-seeking behaviour than married males who were experiencing infertility. This study also found that there was a significant difference in the engagement with online support groups among those experiencing infertility by gender; hence, married females who were experiencing infertility had higher engagement with online support groups than married males who were experiencing infertility. These results contradict that of Gharegouzloei et al. (2020), where it was found that there were no significant differences in terms of demographic factors such as marital status, educational level achievement, or economic status level regarding variations in searching for health information.

Limitation

One limitation of this study is the researchers' lack of direct access to the participants due to the sensitive nature of the research. They had to rely on the information supplied by the group's administrators. Furthermore, they relied on them to disseminate the Google form of the survey instrument via their group's WhatsApp platform. At the same time, the majority declined to grant the researchers direct access to ensure members' privacy.

Conclusion and Recommendations

This study examined the engagement patterns in online support groups, focusing on demographic disparities among married individuals with infertility in Nigeria. The research revealed that individuals in these groups tend to be more passive observers than active participants and that variables such as age, gender, and income significantly influence participation patterns. The researchers recommend that stakeholders, including governments, group administrators, fertility clinic proprietors, and medical professionals, develop tailored communication strategies for each demographic depending on age, income, and gender.

References

Abubakar, R., Yohanna, S., & Zubairu, H. D. (2020). Impact of family social support on psychological well-being of infertile women attending Yusuf Dantsoho Memorial Hospital, Kaduna, Nigeria. *Annals of African Medical Research, 3*(1). https://doi.org/10.4081/aamr.2020.1

Amichai-Hamburger, Y., Gazit, T., Bar-Ilan, J., Perez, O., Aharony, N., Bronstein, J., & Dyne, T. S. (2016). Psychological factors behind the lack of participation. *Computers in Human Behavior, 55*(1), 268-277. https://doi.org/10.1016/j.chb.2015.09.009

Bar-Ilan, J., Gazit, T., & Amichai-Hamburger, Y. (2020). Leading factors that explain engagement in closed Facebook groups. *Information Research, 25*(3), 866. http://InformationR.net/ir/25-3/paper866.html

Bennett, L. W., & Segerberg, A. (2012). The logic of connective action: Digital media and personalisation of contentious politics. *Information, Communication & Society, 15*(5), 739-768. https://doi.org/10.1080/1369118X.2012.670661

Covolo, L., Guana, M., Bonaccorsi, G., Brunelli, L., Castaldi, S., De Donno, A., Mereu, A., Verani, M., & Gelatti, U. (2022). Exploring the online health information-seeking behavior in a sample of Italian women: The "SEI Donna" study. *International Journal of Environmental Research and Public Health, 19*, 4745. https://doi.org/10.3390/ijerph19084745

Danila, I., & Baban, A. (2018). Representations of infertility as reflected in online discussion forums in Romania. *Cognition, Brain, Behaviour: An Interdisciplinary Journal, 22*(2), 85–98. https://doi.org/10.24193/cbb.2018.22.06

Dierickx, S., Balen, J., Longman, C., Rahbari, L., Clarke, E., Jarju, B., et al. (2019). "We are always desperate and will try anything to conceive": The convoluted and dynamic process of health seeking among women with infertility in the West Coast Region of The Gambia. *PLoS ONE, 14*(1), e0211634. https://doi.org/10.1371/journal.pone.0211634

Erculj, V. I., & Ziberna, A. (2021). The role of online social support in patients undergoing infertility treatment: A comparison of pregnant and non-pregnant members. *Health Communication, 37*(14), 1724–1730. https://doi.org/10.1080/10410236.2021.1915517

Gazit, T., Bronstein, J., Amichai-Hamburger, Y., Aharony, N., Bar-Ilan, J., & Perez, O. (2018). Active participants and lurkers in online discussion groups: A qualitative analysis of focus groups. *Information Research, 23*(2), paper 791. http://www.informationr.net/ir/23-2/paper791.html

Gazit, T., & Amichai-Hamburger, Y. (2021). Factors underlying engagement in Facebook support groups of female infertility patients. *Psychological Reports, 124*(3), 1150–1173. https://doi.org/10.1177/0033294120934703

Gipson, J. D., Bornstein, M. J., & Hindin, M. J. (2020). Infertility: A continually neglected component of sexual and reproductive health and rights. *Bulletin of the World Health Organization, 98*(7), 505–506. https://doi.org/10.2471/BLT.20.252049

Grunberg, P. H., Dennis, C., DaCosta, D., & Zelkowitz, P. (2018). Infertility patients' need and preferences for online support. *Reproductive BioMedicine Online, 15*(6), 80–89.

Hinton, L., Kurinczuk, J. J., & Ziebland, S. (2010). Infertility, isolation, and the Internet: A qualitative interview study. *Patient Education and Counseling, 81*(3), 436–441. https://doi.org/10.1016/j.pec.2010.03.027

Horton, J. S., & Al Zahrani, A. (2020). The role of online support groups in coping with infertility: A systematic review. *Journal of Fertility and Reproductive Health, 8*(1), 45–52. https://doi.org/10.5296/jfrh.v8il.17451

Jin, W. L., & Shefaly, S. (2023). Online peer support communities in the infertility journey: A systematic mixed-studies review. *International Journal of Nursing Studies, 140*, 104454. https://doi.org/10.1016/j.ijnurstu.2023.104454

Lin, C. A. (2020). Age differences in motives for using media and its relationship to social support. *New Media & Society, 22*(9), 1463–1482. https://doi.org/10.1177/1461444819868256

Luk, B., & Loke, A. Y. (2014). The impact of infertility on the psychological well-being, marital relationships, and quality of life of couples: A systematic review. *Journal of Sex & Marital Therapy, 41*(6), 610–625. https://doi.org/10.1080/0092623X.2014.958789

Naab, F., Lawali, Y., & Donkor, E. S. (2019). "My mother-in-law forced my husband to divorce me": Experiences of women with infertility in Zamfara State of Nigeria. *PLoS ONE, 14*(12), e0221602. https://doi.org/10.1371/journal.pone.0221602

Nagórska, M., Bartosiewicz, A., Obrzut, B., & Darmochwał-Kolarz, D. (2019). Gender differences in the experience of infertility concerning Polish couples: Preliminary research. *International Journal of Environmental Research and Public Health, 16*(13), 2337. https://doi.org/10.3390/ijerph16132337

Omosun, F. (2021). Investigating the uses of infertility online support groups (Doctoral dissertation, Kent State University). OhioLINK Electronic Theses and Dissertations Center. http://rave.ohiolink.edu/etdc/view?acc_num=kent1627643451308908

Patel, M. (2016). The socioeconomic impact of infertility on women in developing countries. *Issues in Obstetrics, Gynecology and Reproductive Health, 8*(1), 59–61.

Potts, H. W. (2005). Online support groups: An overlooked resource for patients. *Health Information on the Internet, 44*(1), 6–8.

Rains, S. A., & Wright, K. B. (2016). Social support and computer-mediated communication: A state-of-the-art review and agenda for future research. *Annals of the International Communication Association, 40*(1), 175–211. https://doi.org/10.1080/23808985.2015.11735260

Sternke, E. A., & Abrahamson, K. (2015). Perceptions of women with infertility on stigma and disability. *Sexuality and Disability, 33*(1), 3–17. https://doi.org/10.1007/s11195-015-9425-5

Stephenson, J., Patel, D., Barrett, G., Howden, B., Copas, A., Ojukwu, O., Pandya, P., & Shawe, J. (2014). How do women prepare for pregnancy? Preconception experiences of women attending antenatal services and views of health professionals. *PLoS ONE, 9*, e103085. https://doi.org/10.1371/journal.pone.0103085

Sullivan, K., Gill, L. A., Peters, L. C., & Dwyer, M. O. (2018). Investigating the role of social media in supporting young people experiencing mental health issues. *Journal of Social Media in Society, 7*(1), 197–215.

Sun, N., Rau, P. P. L., & Ma, L. (2014). Understanding lurkers in online communities: A literature review. *Computers in Human Behavior, 38*, 110–117. https://doi.org/10.1016/j.chb.2014.05.022

Wright, K. B. (2016). Social support and health: Media use and the need for social interaction. *Computers in Human Behavior, 57*, 397–406. https://doi.org/10.1016/j.chb.2015.12.022

Zegers-Hochschild, F., et al. (2017). The international glossary on infertility and fertility care, 2017. *Human Reproduction, 32*(9), 1786–1801. https://doi.org/10.1093/humrep/dex234