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Impact of Online Church Worship on Pentecostal Members in the Post-Covid-19 Pandemic in Kaduna, State, Nigeria

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Abstract

With the outbreak of the COVID-19 pandemic, the world has witnessed unprecedented disruptions in religious meetings, especially in the traditional pattern of Christian worship that heavily depends on physical fellowship. Due to the limited movement and gathering of people, most Pentecostal churches quickly shifted to online platforms to continue Church operations. Although this change guaranteed continuity, it also brought up questions about its future effects on the spiritual life of the believers, their involvement, and their shared life. This study, titled “Impact of Online Church worship on Pentecostal Members in the Post-COVID-19 Pandemic in Kaduna State, Nigeria,” examined how online church services have impacted Pentecostal believers’ worship after the pandemic. The research design was a descriptive survey research design that was a combination of quantitative and qualitative research methods. Questionnaires and interviews were used to collect data from Pentecostal members and clergy in selected urban and suburban areas. Of the number of questionnaires sent out, 1,152 (1,138 of which were returned as valid). Descriptive and inferential statistics were used to analyse quantitative data, and thematic analysis of qualitative data. The results of the study showed that online church worship greatly increased accessibility and involvement of the Pentecostal members in the post-pandemic era. The respondents confirmed that online worship services offered them the chance to engage in spiritual activities wherever they are, without limitations on physical health or distance. Nonetheless, the annoyance of social media messages, technical problems, and lack of physical community fellowship were noted to be obstacles hindering experiences of deeper communal worship. This research came up with the conclusion that online church worship is a significant complement to traditional church worship and not a substitute. It recommended that Pentecostal churches must work towards harmonising the online and physical worship experiences by promoting hybrid services that integrate the convenience of online services with the fellowship and spiritual richness of face-to-face services. This will aid in maintaining involvement and building interpersonal and community relationships.

Keywords: Pentecostal churches, online worship, post-COVID-19, Christian education, discipleship, Nigeria

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Introduction

The internet has emerged as one of the most informative inventions of the twenty-first century and has transformed the trends of human interaction and institutional involvement in the world. It has greatly improved geographical boundaries, real-time communication, and social, educational, and economic inclusion platforms. The internet has changed into a need and not a luxury in modern society, affecting the way people create identity, develop relationships and open opportunities. Current research confirms the internet as a social space where culture and community are being constantly created and re-created, not as a means of communication but as a social space (Castells, 2023). As a result, people are becoming more and more dependent on online platforms to work, study, and stay socially active.

As a result of these trends, online activities have found their way to the core of virtually every sector of human activity. There have been drastic changes in commerce, education, entertainment, government, and healthcare systems towards online interactions. People have become accustomed to carrying out transactions, engaging in learning processes, and socialising on the Internet (Lindgren, 2022). Religious activity has not been left behind in this changing situation. The growth of social media and web-based communication tools has offered new opportunities to churches and faith-based organisations to reach beyond their physical congregations. Religious messages have been able to cross geographical borders thanks to platforms like Facebook, YouTube, Zoom, and WhatsApp. The current literature emphasises the fact that online religion is now a significant field whereby traditional worship styles are transformed to meet the contemporary technological conditions (Campbell and Tsuria, 2022).

The importance of online religious activity was revealed to be even more pronounced by the COVID-19 pandemic, which arose in late 2019 and was proclaimed a global health crisis by the World Health Organisation in March 2020. The pandemic has brought universal changes to social life, and most countries were subjected to movement limitations and physical assembly (Nicola et al., 2022). These measures in Nigeria impacted religious institutions as well as other sectors and led to changes in the organisation and management of religious activities. To Christian communities, especially Pentecostal churches, which have always favoured the physical assembly of people to worship and fellowship, this was a change from other forms of interaction.

As a reaction, most churches turned to online platforms to support religious activities like Sunday service, Bible studies, and prayer groups. This change was indicative of the flexibility of institutions of religion in ensuring continuity during periods of turmoil. Research shows that the utilisation of online platforms helped congregations to stay interconnected as well as provide them with possibilities to participate in broader contexts than before (Campbell, 2022). The use of technology in churches in Nigeria enabled the congregants to conduct worship remotely, which helped to perpetuate the life of religion throughout the period of the pandemic.

In the Nigerian context, technological innovation and socio-economic factors have influenced the adoption of online church services. Nigeria has one of the most significant Christian communities in Africa, with a wide variety of manifestations of the faith and a rich worship culture. However, access to online worship experiences has varied across regions due to differences in internet connectivity, cost of data, and levels of digital literacy (Adedibu, 2022). In cities like Lagos, Abuja and Kaduna, there has been increased engagement with online platforms, whereas the rural areas have recorded low participation. These differences are indicative of larger trends of internet access in the nation and how technological aspects can affect religious attendance.

These developments have greatly affected Pentecostalism, which is one of the most rapidly spreading forms of Christianity in Nigeria. The Pentecostal churches are characterised by their lively style of worship, focus on spiritual experiences, and community (Ukah, 2022). The integration of online platforms into the Pentecostal practice has brought new aspects of worship, such as virtual prayer sessions, online evangelism, and interacting with global audiences. Meanwhile, these events demonstrate the changing face of religious expression, with the churches embracing physical and online forms of worship due to the changing conditions in society.

Research Methodology

The research was a mixed methodology, a combination of quantitative and qualitative methods, which were used to investigate the effects of online church teaching on the members of the Pentecostal church in Kaduna State following the COVID-19 pandemic. Data was collected through a cross-sectional survey design, where data were collected at one time, and this allowed for assessing the perceptions and experiences of the members.

The population was composed of all members of the Pentecostal church who are at the age of 18 years and above in the 23 Local Government Areas of Kaduna State, with a registered population of 1,461,078. The sample was determined as 1,152 respondents based on a combination of purposive, stratified random and proportionate sampling to be large enough to provide sufficient representation across senatorial zones, denominations and demographics. The sampled churches were Deeper Life Bible Church, Living Faith Church and the Redeemed Christian Church of God.

Questionnaires and structured interviews were used to collect data. The questionnaire included 11 Likert-scale questions that included the diverse aspects of the church activities, and interviews with 18 pastors were conducted offering in-depth qualitative information. The instruments were checked with experts and supervisors, and a pilot test with 50 respondents was conducted. The reliability test based on the Alpha of Cronbach gave a coefficient of 0.796, which is an acceptable internal consistency.

In the collection of data, the church authorities granted permission and the distribution and retrieval of questionnaires was assisted by the trained research assistants, and the researcher conducted the interviews himself. Hypotheses were tested using data through descriptive statistics (frequencies, percentages, means and standard deviations) and inferential statistics (t-test at a level of significance of 0.05). Interpreted qualitative data from interviews were transcribed and thematically analysed to add to the quantitative result.

Results and Discussion

The study is based on data obtained from 1,138 respondents, representing a response rate of 98.8% from the total of 1,152 questionnaires distributed. Demographic information was analysed using frequency counts and percentages, while the research questions were answered through the application of mean and standard deviation, ensuring alignment with the study's objective.

Demographic Information of Respondents

The study analysed demographic variables such as church role, gender, marital status, location, age, and educational level, selected for their direct relevance to the research objectives. These variables were categorised and presented in Tables 2 through 7, with frequency distributions and percentages used for analysis.

Table 1 presents the distribution of respondents by their role in the church. The results reveal that 883 respondents, representing 77.6%, were congregants, while 255 respondents, accounting for 22.4%, were clergy. This distribution shows that the majority of participants were lay members, providing insights into the experiences of the general congregation. The inclusion of clergy respondents ensures leadership perspectives were also captured, enriching the overall understanding of online church engagement after the COVID-19 pandemic.

Table 2 shows the gender distribution among respondents. The data indicate that 785 respondents (69.0%) were male, while 353 respondents (31.0%) were female. This distribution demonstrates a notable gender imbalance, with a higher representation of males. This reflects participation trends within Pentecostal churches in Kaduna State, where men often assume active roles in both physical and online church activities. Nevertheless, the presence of female respondents provides balance and allows for gender-based comparative insights in the study.

Table 3 presents the marital status of respondents. The findings show that 628 respondents (55.2%) were single, while 510 respondents (44.8%) were married. The predominance of single respondents suggests that younger and possibly more technologically adept individuals were more engaged in online church platforms. However, the significant proportion of married respondents indicates that virtual participation also appeals to family-oriented church members who value the convenience and accessibility of online worship.

Table 4 presents the respondents' residential distribution. The results show that 824 respondents (72.4%) resided in urban areas, while 314 respondents (27.6%) lived in suburban locations. This indicates that most respondents came from urban centres, where internet connectivity and access to digital devices are more reliable. The high urban representation also reflects the greater concentration of Pentecostal churches with online streaming capacities in metropolitan areas compared to suburban congregations.

Table 5 shows the distribution of respondents by age. The data reveal that 628 respondents (55.2%) were younger, while 510 respondents (44.8%) were elderly. This indicates that the study sample was slightly dominated by younger participants, though a substantial proportion of elderly respondents was also represented. This balance suggests that the study captured perspectives across both age groups, allowing for meaningful comparison. The higher proportion of younger respondents also implies a greater influence of youthful perspectives, particularly in areas such as adaptability and engagement with online church services.

Table 6 shows the distribution of respondents by educational level. The data reveal that 982 respondents (86.2%) were graduates, while 156 respondents (13.8%) were non-graduates. This demonstrates that the study sample was predominantly well-educated, which has positively impacted their ability to adapt to and engage with online church platforms. The finding aligns with previous research suggesting that higher educational attainment often correlates with greater technological literacy and willingness to adopt digital innovations in religious contexts.

Responses to Research Question

The results of the data from the questionnaire are presented below, following the analysis of the respondents' responses.

What is the impact of online church worship on Pentecostal church members in the post-COVID-19 Pandemic in Kaduna State, Nigeria?

The opinions of respondents on the impact of online church worship on Pentecostal church members in Kaduna State after the COVID-19 pandemic were presented in Table 7. The data reveal that a majority of respondents strongly agreed or agreed that online church services have helped maintain regular Sunday worship among congregants (512 and 416 respectively), yielding a mean of 3.20 and a standard deviation of 0.89. Similarly, 486 and 438 respondents agreed that online worship experiences remain spiritually impactful, with a mean score of 3.18. In Item 3, 498 and 422 participants agreed that online platforms have improved participation in midweek and special prayer meetings, showing a mean score of 3.19 and a standard deviation of 0.90.

Equally, Item 4 indicates that 332 and 370 respondents agreed that the absence of physical gatherings affects the depth of engagement in worship, while 288 and 148 disagreed, resulting in a mean of 2.63. In Item 5, 465 and 392 respondents agreed that diverse worship expressions are effectively conveyed through online platforms, with a mean of 3.08. Item 6 demonstrates that sacred elements like hymns and scripture readings are thoughtfully incorporated in online worship (mean = 3.04). In Item 7, 544 and 392 respondents agreed that home worship practices have been strengthened by online church, yielding a mean of 3.24. Similarly, Item 8 shows that 518 and 410 respondents perceived spiritual growth and renewed commitment through online participation (mean = 3.21).

Furthermore, Items 9 and 11 indicate that audio-visual quality and the complementary nature of online worship positively influence engagement, both with mean scores above 3.10. However, Item 10 records the lowest mean (2.56), implying that online worship may not have reduced distractions as effectively as anticipated. With an overall mean of 3.06 (above the 2.50 decision threshold) and a standard deviation of 0.93, the findings suggest that online church worship has had a significant positive impact on Pentecostal church members in the post-COVID-19 era. Respondents affirmed that online services enhanced accessibility, encouraged family devotion, and sustained spiritual commitment, though limitations such as reduced physical interaction and occasional distractions persist.

The results of the study showed that online church worship had a significant positive impact on accessibility and participation of the Pentecostal members in the post-pandemic period. The respondents confirmed that online worship services offered them a chance to worship anywhere, where members could join the services regardless of physical health or distance factors. Nonetheless, interruptions caused by social media alerts, technical problems, and a lack of physical community were also found to be obstacles to having deeper communal worship experiences.

Discussion of Results

Data analysis of data gathered on the study reveals that online church worship has significantly affected the members of the Pentecostal in Kaduna State, even after the COVID-19 pandemic.

The results demonstrate that the advent of internet worship has transformed the way Christians participate, interact and engage in religious practices. Online church services, which were first implemented as an emergency measure during the pandemic, have become a long-lasting form of worship that is still determining the spirituality, communication, and community life of believers. The overwhelming response of the respondents was that online church services have created greater flexibility and ease of access to worship, where members can access services wherever they are and at any time. This has facilitated spiritual continuity and engagement even to those who are limited by distance or career demands. These findings are also supported by the interview data, with various participants (Interviewees 2, 5, 7, 9, 11, and 15) noting that they liked the convenience and inclusivity of online worship and how it helped them to keep in touch with the spiritual rhythm of the church, regardless of the busy time.

Nonetheless, although the advantages of online worship are apparent, the research also revealed some problems that undermine its spirituality. The respondents reported that online distractions like advertisements, pop-up messages and unreliable internet connections tend to lower the levels of attention during online services. This is in line with the claim of Olagunju (2021), who discovered that online worship, even though it increases reach, does not have the same sense of immersion and sacred experience of physical gatherings. In the same spirit, Uka and Nwachukwu (2023) argue that online worship can lead to individualistic spirituality and undermine fellowship and corporate unity by making it a solo affair. Despite these shortcomings, the results show that online platforms have still maintained Pentecostal continuity of worship, even extending access to members both in the diaspora and in remote areas. This dichotomy resembles the transformation of the global church towards hybrid forms of worship (George, 2022).

Conclusion and Recommendations

The findings of this study indicate that online church worship significantly improved the accessibility and participation of Pentecostal church members during the post-pandemic era. The study concludes that online worship serves as an important complement to, rather than a replacement for, traditional in-person worship. While digital platforms have expanded opportunities for worship and increased participation, physical gatherings remain essential for fostering fellowship, spiritual growth, and a strong sense of community among believers.

Based on these findings, the study recommends that Pentecostal churches adopt a balanced hybrid worship model that effectively integrates both online and physical services. Such an approach enables churches to retain the accessibility and convenience of online worship while preserving the interpersonal relationships, communal fellowship, and spiritual enrichment associated with face-to-face gatherings. Additionally, church leaders should continue investing in digital ministry, provide training for effective online engagement, and encourage active participation across both worship formats to ensure inclusive and sustainable ministry in the post-pandemic era.

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Table

Table 1: Distribution of Respondents by Church Role

S/N	Variables	Frequency	Percent
1	Congregant	883	77.6
2	Clergy	255	22.4
Total		1,138	100

Table 2: Distribution of Respondents by Gender

S/N	Gender	Frequency	Percent
1	Male	785	69.0
2	Female	353	31.0
Total		1,138	100

Table 3: Distribution of Respondents by Marital Status

S/N	Gender	Frequency	Percent
1	Single	628	55.2
2	Married	510	44.8
Total		1,138	100

Table 4: Distribution of Respondents by Location

S/N	Location	Frequency	Percent
1	Urban	824	72.4
2	Suburban	314	27.6
Total		1,138	100

Table 5: Distribution of Respondents by Age

S/N	Age	Frequency	Percent
1	Younger	628	55.2
2	elderly	510	44.8
Total		1,138	100

Table 6: Distribution of Respondents by Educational Level

S/N	Education	Frequency	Percent
1	Graduate	982	86.2
2	Non-graduate	156	13.8
Total		1,138	100

Table 7: Opinions of Respondents on the Impact of Online Church Worship on Pentecostal Church Members

S/N	Items	AS	A	D	SD	MEAN	STD
1	Online church services have helped maintain regular Sunday worship among congregants after the pandemic.	512	416	142	68	3.20	0.89
2	Worship experiences during online services have remained spiritually impactful for church members.	486	438	150	64	3.18	0.87
3	Online platforms have increased participation in midweek and special prayer meetings.	498	422	144	74	3.19	0.90
4	The absence of physical gatherings has affected the depth of congregants' engagement in worship.	332	370	288	148	2.63	1.03
5	Diverse worship expressions, such as praise, testimonies, and spontaneous prayers, have been effectively conveyed through online platforms.	465	392	178	103	3.08	0.96
6	Sacred elements such as hymns, scripture readings, and liturgical structures have been thoughtfully incorporated into online worship.	428	420	193	97	3.04	0.92
7	The transition to online worship in the post-pandemic era has encouraged families to establish home worship practices.	544	392	136	66	3.24	0.85
8	Pentecostal churches have experienced spiritual growth and renewed commitment through consistent online services.	518	410	142	68	3.21	0.88
9	The audio-visual quality of online services has significantly influenced participation and attentiveness.	482	401	162	93	3.11	0.91
10	Online services have reduced some distractions typically encountered in physical gatherings.	298	336	320	184	2.56	1.09
11	For many members, online worship has become a complementary or alternative model of gathering since the COVID-19 pandemic.	504	418	146	70	3.19	0.88
Cumulative						3.06	0.93

Decision mean = 2.50