Bolstering Worship Behavior of Nigerians through the Engagement of Information Communication Technology (ICT) in Pre and Post Covid-19 Pandemic

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#### Abstract:

This study investigates the role of Information Communication Technology in worship behaviour, spiritual connectivity and development pre and post Covid-19 Lockdown. The study examined the opinion of 568 Nigerian respondents, using a questionnaire. Whilst noting through results that most religious people had to depend on the use of several Information Communication Technology devices and available applications to engage in worship of their God, this new art of worship, during the Covid-19 lockdown, has made the art of worshipping their God not only more convenient but provides a new and interesting way of engaging in religious activities. Consequently, respondents strongly believe that Information Communication Technology has helped improve their spirituality and provided understanding that their God can be presented anywhere, as worshippers only need to be connected with their hearts. The result emphasized the irrelevance of hypocrisy and the need for creativity in the use of Information Communication Technology.

Keywords: Covid-19 pandemic, ICT, Spiritual development; Worship behavior, Worship Engagement

# INTRODUCTION

The introduction of Information Communication Technology into the circle of worship during the Covid-19 pandemic in Nigeria has further emphasized the relevance and indispensability of communication devices and applications that continue to enhance communication and interaction among members of religious communities. However, it has been noted by several research reports that Information Communication Technology (ICT) could have negative implications for different categories of people in society, as it could be used in the promotion of fraud, pornography, e-fraud, hacking, dissemination of offensive images by foreign and local media, job displacements leading to unemployment, cyber-fostered crime, etc. (Ogbuabor, Agu & Ugbor 2017). As a result of this, Ogu and Oyerinde (2014, p. 5629) emphasized that "the disadvantages of the existence and possession of these ICT devices would begin to outweigh and effectively cancel out the advantages". However, religious bodies and organisations are making maximum use of opportunities to engage in the use of these devices and create new applications that focus on ensuring spiritual growth for members alike. Such engagement was most evident during the nationwide lockdown during the

COVID-19 pandemic from March 2020 to early 2021. Considering that Nigerians recorded a high usage of ICT to engage in diverse forms of worship, religious people have used one form of ICT or the other to facilitate their spiritual lives such as having soft copies of the Koran and Bible to facilitate mobile study. Also, religious applications now exist on Google and the like giving people the opportunity to be closer and more knowledgeable about their God, thereby making religious activities more diverse, interesting, and attractive.

These engagements and many more were most prominent during the COVID-19 lock-down. However, restrictions on movement and gatherings have long been removed as people are now free to hold public gatherings at liberty. With the restrictions lifted, many have become comfortable with the idea of engaging in service with their God through ICT devices and applications, as they believe or are beginning to believe it might be unnecessary to engage in regular physical gatherings, accustomed to the African culture. There is a possibility that the African Religious Culture is debased. Church pastors might appear empty or non-functional, because of the lack or reduced congregation.

Religion in the African context "is inextricably linked to culture and a means by which God as a spirit and man's essential self-communicate (isn't it to be God IS a spirit), and also as the result of humanity's spontaneous awareness of a living power, whilst searching for a relationship with the supernatural' (Bayer 2010). Religion in Africa is seen as a quest for a relationship with the supernatural. The existence of ICT facilitates is a significant role in the religious improvement, empowerment, and development of members. The investigation and examination of the role ICT plays in the lives of Nigerian worshippers could help inform religious leaders and individuals on how they can understand the implication of ICT to make informed decisions for their followers and how ICT can be engaged in religious activities in the future.

Considering previous studies in religion and ICT, studies have focused on investigating the role of ICT in religious education, how people's culture and religion affect their engagement with ICT, how a specific technology could be adopted in a church to facilitate communication with God, the effect of ICT in teaching religion, and the role of religion in dealing with thematic stress experienced by people during the COVID-19 Pandemic etc., (Wyche, 2010; Albugami & Ahmed 2016; Szałachowski & Tuszyńska-Bogucka 2021). This study avails the authors the opportunity to understand better the role of ICT in the worship behavior pre and post a devastating pandemic such as, which threatened many lives. This forced us to ask, can a massive pandemic separate worshipper from their engagements with their God? and how did ICT play a role in the worship behaviour of worshipers now and then? The specific aim of this study is to:

- assess the ICT Devices and Applications used to fellowship pre and post Covid-19 lockdown
- II. investigate the level of spiritual connectivity and development with the use of ICT Pre and Post Covid-19 Lockdown
- III. examine how ICT engagement has influenced the worship behaviour of Nigerians during and after Covid-19 Lockdown

#### LITERATURE REVIEW

## The Concept of Worship Behaviour in Nigeria

If you are reading this article, I suppose you already have a working knowledge of the term "Worship" According to White (2012), worship is a human response to the perceived presence of the divine, a presence which transcends normal human activity and is holy. Just as a crying child is dear to the heart of his mother so are the beliefs that surround the worship culture in Nigeria dear to the hearts of Nigerians. It goes as far as sanctioning those that do not walk in line with the existing beliefs and religious practices. However, this strict nature of the Nigerian worship culture only applies to some religions, as Nigeria has diverse religions such as; Islam, Christianity (Pentecostal, catholic), Hinduism, Bahai, Judaism, traditional worshipping, etc. (Kitause & Achunike 2013).

To understand the concept of "Worship Behaviour in Nigeria" is to understand that "Worship Behaviour" as a concept, refers

to every human activity associated with their religious beliefs and their responses to "Worship" of a divine presence that is holy, and transcends normal human understanding (White, 2012). Worship is defined by (Batubara & Galingging, 2020) as the use of pop songs (called Indonesian worship pop) to respond to the emotion and behavioural needs of church congregations. Malaysia and Yende (2021) explains "Worship" as the singing and understanding of (traditional Zulu) hymns, which means that, for the most part, human beings are naturally inclined towards singing the praises of a supernatural being or several deities. This natural tendency to sing the praises of an all-power thing is encapsulated in the concept of "Worship Behaviour".

In Nigeria, however, Elnathan John, in one of his articles on the Daily Post, observed that "Worship Behaviour in Nigeria" goes beyond the activities of the usually very loud singing, dancing, incantations and making of sacraments in a physical worship location such as a church, mosque or shrine, to include the constant need to offer prayers at the beginning and end of every work meeting regardless of what the meeting is about. These prayers (oftentimes carried out by Christian worshippers) are tagged 'Opening' and 'Closing' prayers in written meeting agendas. Nigerians' "Worship Behaviour" is also in the expectation that every success, regardless of the means by which it is obtained, is ascribed to the goodness, mercy, and provisions of 'the Nigerian god'; it is in the use of the phrase 'by God's grace' or 'God willing' when a trip or expedition is about to be made regardless of the purpose of the journey or means by which the journey is to be made (Elnathan, 2012). Perhaps Elnathan's satiric description of "Worship Behaviour in Nigeria" is born out of the observable hypocrisy in the way "Worship" is carried out by most Nigerians.

Contrary to his submissions, one of the many ways Nigerian (Christian) worshippers have adapted periodic *non-hypocritical* worship into their daily routine, is the one-hour mid-night time of praise, worship, and mostly prayers of thanksgiving organised by Nigerian gospel singer, Nathaniel Bassey's via his Instagram social media platform with the hashtag #HalleluyahChallenge. Even though there was an unlikely and unideal setting for worship, when it began in June 2017, many Nigerian (Torera Idowu and Stephanie Busari of CNN penned it at over 60,000) worshippers as of 15<sup>th</sup> June 2017 joined the live stream. This was a live stream that started about three years before the COVID-19 pandemic and subsequent lockdown of activities.

When it comes to "Worship Behaviour during the Pandemic", researchers like Moon (2021), whose study focused on Korean Presbyterians, however, found that "Worship Behaviour" was adversely and positively affected during the COVID-19 pandemic because of the need to transition from public worshipping space to a new method of the sacrament in the form of online worshipping via the use of impersonal devices and virtual interaction. According to Moon, many of the cognitively challenged worshipers in Korea can, through the virtual mode of worship, be more inclusive in church activities

and worship. This reality was no different for many Nigerians during the pandemic lockdown period.

Whilst traditional worshippers in Nigeria would rather privately relate with their gods through a mediator, Nigerian Christians are very keen on fellowshipping with their God in large numbers on a weekly basis in a building called "Church". In many Nigerian Christian homes, it is nonnegotiable' and without the weekly dose of church-going, many believe will disconnect from their God. Although worship to Christians involves a lot of community fellowshipping and learning in Nigeria, it also includes giving and reaching out to the less privileged, as Christians live with the mentality that just as their God provided for them through other people, it is necessary to provide for others as a form of service and gratitude to the One they are serving. (Manala, 2018). There is also a personal relationship Christians believe they have with their God and a lot of intentionality is put into the growth of that relationship through personal study of what can be likened to a guide - the Bible. Christians frequent communication with their God through words, songs and even dance, as well as making a conscious effort to tell the world about their God in order to draw many hearts to him.

This culture is also similar to that of Muslims as they are also keen on gathering together in a building called "Mosque"; they also partake in the giving of alms to those that are in need and they value communication with their God frequently through strict scheduled prayer times. However, a difference lies in their method of communicating as Muslims have specific times in which they pray, and they relate with their god through a prophet and not directly. Despite all the differences, all religions in Nigeria have certain rules and expectations that are to guide the behaviour of all worshippers in order to secure sincere worship and reverence to their God. This has been the norm for many Nigerians and has been the only way to truly worship, as ICT came into the picture, especially with the coronavirus pandemic in 2019.

During the heat of the pandemic, physical gatherings of any kind were against the law (Orijinmo, 2020) and ICT became a haven many worshippers ran to, so as to keep their faith stirred up and their minds at rest. Worship has now gone beyond the conventional way of worship where the connection with God is mainly defined by physical gatherings for the purpose of services. ICT devices and applications are now used for fellowship with God, which is termed worship. For instance, religious guides to living holy lives such as Bibles, Qurans, Book of Mormon, etc. can be accessed through ICT applications and software. These applications provide messages to worshippers in the form of audio, audio-visuals, and texts. Also, people engage in worship as they listen to podcasts and live broadcasts of sermons on radio stations, YouTube, or websites specifically designed for fellowshipping with their God. Another example lies in the existence of applications that keep worshippers in sync spiritually such as prayer applications that provide praying guides and prompters for prayer, applications that send daily reminders of the significance of their faith, and even those that read out religious stories to ensure swift sleep. This has become the major source of worship in Nigeria, however, its effect on worshippers differs.

## **Worship Behavior and ICT Engagement**

The infrastructure and components that enable modern computing are referred to as ICT (information and communications technology) which encompasses all digital devices, networking components, applications, and systems that allow individuals and businesses to interact in the digital world. ICT refers to the second and third generations of information technology, which are created by combining computer and telecommunications technologies (Church-Hill, 2021).

ICT has and still is impacting aspects of our lives. These changes and future changes are notable in social, financial and lifestyle. Changes that are fast before our eyes, even difficult to catch up with (Asogwa, et al. 2023). Furthermore, ICT continues to alter all aspects of human life, as computers and robots now perform many of the duties previously undertaken by humans including fellowship with God as experienced by both Christian and Muslim Faithful during the Covid-19 pandemic across the globe. The extraordinary advancements in information and communication technologies are having a huge impact on all aspects of human life within the cultural and religious context for instance, religious organizations like churches developed software applications for worshippers as well as members to connect with spiritual activities during the Pandemic. In addition, ICT has had a significant impact on our lives in terms of economics, politics, social issues, education, communication, and other sectors as "information is the fundamental resource to human existence and survival" (Adesina, Omojola, Imhonopi, Adeyeye, Ben-Enukora and Anake, 2021, p. 386; Owolabi, et al, 2023). As a result, because churches are members of the information community, ICT has been used in worship and fellowship, and it has the potential to affect worship behaviour (Ossai-Ugbah, 2011). Christianity now has a global voice due to technological advancement. On many occasions, the church has been among the first to accept or profit from technological advancements. According to Ossai-Ugbah (2011), worship, fellowship, pastoral care, education, mission and community outreach, evangelism, and communications have all benefited from the introduction of the computer and its accompanying technology, such as the Internet. In addition, Peters (2017) also highlights the numerous relevance of the Internet in several spheres of life. It is then appropriate for the ministry to consider these many benefits that serve many advantages. Rather than just a broadcast message or sermon on Sundays, digital communication or information communication technology can strengthen the presence of the fellowship in people's everyday life throughout the week.

The use of ICTs has been criticized, with claims that technology dilutes the experience by mediating it. Nonetheless, churches have continued to employ ICTs despite these issues. With the advent of digital technology and modern worship in evangelical churches, the worship experience is evolving. Thus, to be relevant to the rest of the world means

being open to the usage of technology. It is critical for the worshippers and the church as well to acknowledge that there was a cultural shift, rather than dismissing the fact that it occurred. Through the utilization of Web 2.0 technology, religion's reach has grown significantly. The time that we are in, necessitates a particular level of relevancy, and one method for worshippers to keep current is to investigate the instruments available to them, such as the use of information communication technologies. Web 2.0 is built on social media platforms with the purpose of forming social communities within the internet's framework. Facebook, Twitter, Instagram, Snapchat, and a slew of other popular online media platforms fall into this category.

Religious institutions can use social networking programs to build an online community for people to join and become active members of the community by establishing events and activities via the Internet. The Information does not have to be transmitted and disseminated solely through word of mouth. Religious institutions are already social networks, therefore online social networking is the logical next step (Janzen, 2019)

#### Effect of ICT Engagement on Worship Behaviour

Due to the recent global COVID-19 pandemic outbreak which restricted movement, physical worship was put to an inevitable halt. The outbreak did not entirely stop worship but only changed the medium of worship. Worship went digital as worshippers adopted various forms of Information Communication Technology (Pew, 2020). Several online platforms became invigorated i.e. Twitter, YouTube live, Instagram live broadcast, Television via satellite, and the likes (Wobodo, 2020).

As some respondents grew more relaxed in their worship, majority improved due to certain factors spearheaded by convenience and availability of time, though this improvement was not very significant (Sambu, Kweingoti, Cherotich & Abdalla 2021). This culminated in the boost of individual relationships with God. Churches became fervent in their outreach to members and the general public since social media has an extremely wide coverage. In addition, churches have been able to successfully instill faith and hope through their various broadcast means, made possible via social media.

There is no doubt that when it comes to ICT usage, the pitfalls outnumber the pros. One of the major threats to online worship is distractions induced by social media. The attention of worshippers is easily diverted by online pop-ups and advertisements, and before they are aware of this, they would have spent excessive hours scrolling on other websites (González-Padilla & Tortolero-Blanco, 2020). There are several factors that constitute distractions such psychological factors which include unwillingness to sing along to worship tunes as a result of overfamiliarity with this tune or even distractions that come with work-related issues such as deadlines; environmental factors such as noise from surroundings, phone ringing, cars honking, etc. External factors for instance, in the case of a person who is engaging with worship materials online via television and there is a sudden power outage; this worshipper instantly becomes

disconnected, emotional factors such as depression, faithlessness, or generally, the feeling of disconnect from God and the likes.

#### THEORETICAL FRAMEWORK

The impact of the use of ICT plays a significant role in audience reaction to information disseminated through any of Information Communication Technology (Applications or devices). In light of this understanding, the use of ICT has been demonstrated to enhance motivation, which implies that there are fewer discipline problems when ICT is used". That is the use of ICT by worshippers to engage with their God during the COVID-19 lockdown seems to have motivated their engagement with religious content, thereby leading to audience closeness to their God. Chukwu (2018) explained that the Information Diffusion theory explains the power of ICT media in motivating people to learn when compared to the face-toface traditional method of learning. Such learning justifies the findings from this research which states that with the increased online religious activities, as more sophisticated gadgets and devices are produced, purchase will increase thereby drawing users even further into exploring technology, in essence, benefit is increased with spiritual satisfaction.

The technological determinant theory explains that technology determines how we do things in the future and how we develop in relation to culture. Such diffusion of innovation with technology has brought about a new way in the Nigerian religious culture. The engagement of ICT has changed the way people engage and worship their God. Religious establishments, communities, and leaders are now using ICT applications and devices to engage with their audiences to impact some form of change. They are beginning to see the importance, significance, and maximum relevance of ICT in the social development of their religious standing. As Wang and Wang (2010) also posit that performance expectancy, effort expectancy, social influence, and facilitating conditions are determinants of worshippers' use behaviour, experience, and voluntariness of use which have moderating effects on the acceptance of information technology (IT). These factors are identified to inform the use of Information Communication technology.

Technology Acceptance Model explain the ability of people to accept technological innovations and devices useful and able to meet their needs. Thus, the acceptance of technology becomes inevitable. The Technology Acceptance Model was propounded by Davis in 1989. Considering the unpleasant situation that the problem of the Covid-19 pandemic incurred drastic changes the world had to embrace, people have come to accept and use technology for the purpose of worship and communicating with their God as highlighted by the technology Acceptance Model. Such a situation means that people have to begin to adapt to the avid use of ICT devices and applications as a channel to connect with their God for spiritual satisfaction because of the Covid-19 pandemic.

## MATERIALS AND METHODS

The study adopted the quantitative survey research design which involves the use of a numerical data set. To this end, the survey method was applied with the use of the questionnaire as the instrument for data collection. The cross-sectional survey was used because, according to Mathers, Fox and Hunn (2009) 'they usually take a descriptive or exploratory form that simply sets out to describe behaviour or attitudes, which is what this study is about; to study worship behaviour. The questionnaire was divided into 4 sections. Section A addressed demographic data of respondents considered for the study, B consisted a set of questions which focused on the ICT devices and Applications used by respondents for worship pre and post covid-19, section C examined how respondents used ICT to engage in worship for spiritual development, and section D focused on the disadvantages and advantages ICT contributes to spiritual development during Covid-19 lockdown. A sample of 568 Nigerians from Lagos participated. The sample of respondents was randomly selected from a population of 9,113,606 residents in Lagos state. Samples were selected from Lagos State because Lagos is seen as the most inclined in the use of ICT (Gillwald, Odufuwa, & Mothobi, 2018). This assertion by Gillwald, Odufuwa and Mothobi suggests that devices that enhance worship behavior and engagements are constantly evolving and sold to be distributed from Lagos State amongst others. A consent form was attached to each copy of the questionnaire administered to each respondent; which was duly signed by participants before filling o their

individual copies of the questionnaire. Respondents have agreed to participate in the research process by signing the consent form attached. Numerical data gathered was organized and analyzed using the Statistical Package for Social Sciences (IBM SPSS Statistics 20). The Nigerian National Code for Health Research Ethics approved the experiment after the submission of necessary documents for examination. All rules and regulations were confirmed during the investigation as provided by the Ethical Committee. The Investigation complies with all regulations and confirmation that informed consent was obtained. After the analysis, tables were used to present the organized data and interpreted based on the research objectives stated earlier in the study. The Data set as input in the software package (SPSS) is available online at figshare - credit for all your research will be provided during the review. Data derived from qualitative and quantitative methods were presented using tables. The tables used to address the third research question present both numeric and content data.

#### **RESULTS**

This section presents the results derived from the SPSS application used to process the quantitative data gathered through a survey using a questionnaire. Results are presented using tables and further given interpretation and conclusions drawn accordingly. Table 3 presents the quantitative data supported by respondents' responses to the open-ended question.

3.1 Result of the use of ICT devices and Applications for fellowship

Table 1: ICT Devices and Applications used to fellowship pre and post Covid-19 lockdown

	PRE-COVID	POST COVID-19		PRE-COVID 19	POST COVID 19
	19	LOCKDOWN		(BEFORE)	LOCKDOWN
	(BEFORE)	(AFTER)			(AFTER)
ICT DEVICES	Use of ICT	Use of ICT	ICT	Use of ICT	Use of ICT
	Device (%)	Devices (%)	APPLICATIO	<b>Applications</b>	<b>Applications (%)</b>
			NS	(%)	
Phone	45	44.7	Zoom	9	10
Laptop	10	12.7	Social media	44	35
Personal computer	2	4	WebEx	0.4	1
Television	15	15	Webinar	0.6	2
Radio	8	11	Church App	16	13
Tablet	4	2	Church website	15	12
Used no ICT Device	16	8	Podcast	2	3
n =568	100%	100%	Livestream	3	16
			Used no ICT Application	10	8
			n =568	100%	100%

As the use of ICT devices is struggling for attention with the new devices that have new features continuing to emerge, many are trying to catch up with the fast-growing pace of ICT inventions. Growth such as this persuade people to begin to

spend more to acquire newly invented gadgets to meet up with current societal status, meet more pressing needs or be more in tune with current innovation to be able to find recent technology useful. Whilst respondents are naturally used to the Applications, it is obvious that respondents stuck to the use of the same ICT gadget and applications pre and post-COVID-19 lockdown. However, the use of ICT devices and Applications for worship was reduced after the lockdowns considering the lift of the ban on religious gatherings. considering that Nigerian people are known to be very religious and see the physical social gathering as an ultimate way of true worship and connection to God.

Phones remain one of the most used gadgets as the newest technology now manufactures new phone brands that can also be used not just in making calls but also perform the major functions that personal computers and laptops cannot be used for. In light of this, phones also can accommodate several Applications (social media) that operate effectively as a device. Research also shows that most Nigerians are not very familiar with, or yet to actively engage in the use of Webex, Webinar, and podcasting.

The use of ICT devices and Applications such as phones, laptops, social media, church apps, and church websites for worship still remains constant with little or no significant changes. This implies that no matter the situation people are

ICT of devices and surrounded by, they still remain comfortable using the devices or applications they are most comfortable with. This is why Crain (2007, p.8) highlights that "change is inevitable, and everybody resists change. Little can be done to avoid these reactions. They are natural, emotional, and inevitable. This innate resistance to change occurs because most people like things to be comfortable and familiar." Respondents are likely to be concerned about the consequences of having to learn new ways of using other ICT gadgets and applications familiar with. Therefore, Renjith (2017, p. 73) quickly warns that "as Post-modern society witnessed enormous changes in technology and innovation, relevant information became a nightmare."

Despite these reactions, and with the fast transformations to online worship according to Moon (2021) during Covid-19 pandemic, results still shows the relevance and active use and engagement of the ICT space for the purpose of worship. Roso (2023, p. 10) notes that "a number of technologies are now available to congregations to help enhance their worship. Electronic projection systems that displays song lyrics, relevant video clips, or supplementary sermon materials, can make worship more appealing to congregants."

3.2 Result on the level of spiritual connectivity and development with the use of ICT Pre and Post Covid-19 Lockdown
Table 2: Level of spiritual connectivity and development with the use of ICT Pre and Post Covid-19 Lockdown

	PRE-COVID	POST COVID	-	PRE-COVID 19	POST COVID 19
	19	19		(BEFORE) (%)	LOCKDOWN
	(BEFORE)	LOCKDOWN			(AFTER) (%)
		(AFTER)			
Level of Spiritual	(%)	(%)	Level of Spiritual	(%)	(%)
connectivity with			development with		
the use of ICT			the use of ICT		
100%	12	12	100%+	11	11
90%+	18	25	90%+	21	23
80%+	20	21	80%+	22	23
70%+	19	17	70%+	19	18
60%+	13	11	60%+	11	11
50%+	10	9	50%+	10	9
Less than 50 % of	8	5	Less than 50 % of	6	5
the time			the time		
n =568	100%	100%	n =568	100%	100%

General from the result, it can be deduced that the ability of respondents to connect spiritually with the use of ICT devices results also in spiritual development. This means that there is a strong relationship between spiritual connectivity online and the spiritual development of respondents as the result clearly shows that there are no significant differences between respondents' use of ICT devices for spiritual connectivity and spiritual development through the use of the same ICT devices pre and post covid-19 lockdown. In essence, the use of these ICT devices during the pre-COVID-19 lockdown did not affect their engagements, spiritual connection, and spiritual development negatively after the COVID-19 lockdown. In this

case, Nigerian is seen as a society that holds culture, and values in high esteem according to Idang, (2015) who strongly asserts that the problem of cultural and value change in Nigeria and Africa is difficult and almost unachievable. Onaiyekan (2012, p. 12–14) states that "Nigerians take their religion seriously", which Akah, Ajah, and Meissner (2020) say this seems to be validated by the way Nigerian Christians, Muslims, and adherents of tribal religions appear to go about their religiosity. In conclusion, the pandemic or the use of ICT devices or technology played no significant role in their worship engagement and spiritual development. However, as worship has now gone away from the conventional way of

worship during Covid-19, such habit of using ICT platforms Increased as more churches are streaming their services, live on Youtube and Instagram. In addition, more churches are opening website to reach more people faster. Worship behavior has changed and finally worshipping online is fast

becoming an acceptable culture. Asogwu et al (2023) confirms that this stage of changes in the evolving of ICT is fast and could be difficult to catch up with.

3.3 Result on the Influence of the use of ICT Engagement in worship behavior after Covid-19

Table 3: ICT engagement and respondents' worship behavior after COVID-19

Influence	(%)	Major Specific Influence	Major Specific Influence
Positively	65	Makes me closer to God and religious.	Makes worshipping easier and convenient bringing families together.
Negatively	20	Encourage laziness, distractions, and loss of concentration.	Not as effective as physical fellowship
No significant impact	15		
n= 568	100%		

Though it could be expensive to adopt the use of ICT devices or applications in engaging with their God, most respondents believe the use of ICT devices and applications during and after lockdown has influenced their worship behaviour more positively in several ways. Consequently, they believe it has brought them closer to their God by exposing them to more variety of religious content that they can learn and gain from to improve their worship, prayer, and word study life-giving religious Nigerians access to more worship experiences. They claim they get access to more messages and other spiritual content with the opportunity they had to serve through ICT. This discovery emphasizes the fact that human beings always crave something different and new just as the online experience offers through diverse platforms and different forms of content presentation. A few others also believe engaging online to worship has helped them positively emphasize the convenience, comfort, and the fact that it serves as a means of ensuring closeness among families whilst making them see religious gatherings beyond physical gatherings. In addition, they stated that they have come to the understanding that their God is present anywhere contrary to the general African cultural belief that emphasizes the act of going to physical worship places to connect with God. The few percentages of respondents who believe the use of ICT to engage in some form of worship of their God stressed that the physical absence these ICT gadgets provide, makes them feel disconnected, could encourage laziness, and continue to support the significance of people of different religion coming together and gathering to serve their God.

## DISCUSSION

During the Covid-19 pandemic, Nigerians and several countries of the world did see the need for many to stay at home and avoid large gatherings mainly identified with religious bodies among others. George and Amusan, (2012, p. 309) stressed that "religion is acknowledged as a powerful force that has a strong influence on social behaviour and human interaction; it is deeply entrenched in the culture of the

Nigerian people, and this is largely reflected in the various religious practices." This statement validates the extensive use of ICT devices and applications available to engage in the act of worship in Nigeria as people were forced to stay indoors because of the impact of the pandemic. A lot of Nigerians had the opportunity to discover other ICT devices and applications that were specifically designed to help users gain access to more content that addresses their several religions to help improve their understanding and further connection with God. Although this period was also a time of fear for people considering the nature of how the disease spreads, religious Nigerians saw the urgent need to engage with their God. Based on the result of this study, online interactions with these religious contents were just the easy way out. On the other hand, in the process of discovering other spiritual channels online, manufacturers and inventors of these applications, blogs, and diverse sites, creatively introduced more features that could engage people of different religions without making them bored.

More religious people felt a greater connection with their supreme and began to learn the culture of using ICT for a more spiritual purpose than entertainment. Such discovery has also made most religious establishments seek out ways to engage in the use of available online facilities or tools to reach more people with the ideology of their religious beliefs. Essentially, these religious communities connect easily to their members and also use these platforms to win more followers. Whilst most studies done in the area of religion continue to identify the impact of religion and culture in technology the development of Nigeria as a strong ideology in the decisionmaking process of Nigerians, others that focus on the Covid-19 pandemic highlighted the impact of the COVID-19 outbreak on religious practices of a specific religion in Nigeria (Chukwuma, 2021; Sulkowski & Ignatowski, 2020), and the use of ICT as a coping strategy by churches amidst Covid-19 pandemic (Church-Hill, 2021). Knowing that worshippers highlighted the convenience and variety that engaging online with spiritual activities provide them, it is likely that families

will begin to consider the option of staying at home to connect with religious gathering rather than considering physical gathering as a mode of worship. This means more people will connect online and the increased use of ICT will be recorded as more developers seek out new ways to meet more needs whilst making more money using the online platforms to promote religiosity. Also, more religious communities will transfer their activities and operations online making most of the traditional media (mainstream media) more redundant as time goes by. Such redundancy does not necessarily mean they will not be used, but used for the purpose of connecting with God will become minimal as religious people begin to adopt more devices, and explore newly invented applications

## REFERENCES

- Adesina, E., Omojola, O., Imhonopi, D. Adeyeye, B. Ben-Enukora, C. and Anake, S. (2021), Information Sources, Knowledge and Practice Towards HIV/ Hepatitis B Co-Infection in Lagos, Nigeria. International Journal of Biology and Biomedical Engineering, 15(34), 285-297
- Akah, J., Ajah, A., and Meissner, R. (2020) (Reviewing editor) (2020) The changing impact of religiosity on agentic political engagement in Nigeria, *Cogent Social Sciences*, 6(1), DOI: 10.1080/23311886.2020.1722053
- Albugami, S. and Ahmed, V. (2016). Effects of Culture and Religion on the Use of ICT in the Saudi Education System. Paper presented at Proceedings of *The IRES 25th International Conference, Istanbul, Turkey*, 24th January 2016, ISBN: 978-81-925751-3-
- Asogwa, C., Oyesomi, K, Olijo, I. Igboke, A. Onah, O. and Gever, V. C. (2023). Impact of Internet- based media on food supply chain among Ukrainian farmers following Russian Invasion. *Journal of Agribusiness in Developing and Emerging Economies*. DIO:10.1108/JADEE-05-2023-0115
- Batubara, J. and Galingging, K. (2020). The role of Indonesian worship songs at rise up generation (RG) ministry church in Tanjong Malim-Malaysia. In: The proceedings of the First Nommensen *International Conference on Creativity & Technology*, NICCT, 20-21 September 2019, Medan, North Sumatera, Indonesia. *European Union Digital Library*. Retrieved from [https://eudl.eu/doi/10.4108/eai.20-9-2019.2296590] (Accessed March 10, 2023).
- Bayers, J. (2010). 'What is religion? An African understanding', HTS Teologiese Studies/Theological Studies 66(1). DOI: 10.4102/htsv66i1.341
- Chukwu, J. (2018), The Role of Information Communications Technology (ICTs) in Mass Media

and online platforms to increase their engagement with their God anywhere considering the current existence of portable devices and gadget that makes communication and interactions easy on the go. For the Religious leaders, it is necessary for church unit members to be properly trained on the new evolving ICT domain so to enable the church take advantage of the new development occurring for future need of the church. Although, this research scope addressed the general public's opinion on the subject addressed, it is necessary for further research to reach actively engaging church members and leader to get an in-depth data on the factors that informs their usage of ICT, purpose and future engagement with ICT for worship.

Organizations: Study of the Leadership Newspaper. *EBSU Journal of Social Science and Humanities*, 8(1).

- Chukwuma, O. (2021). 'The impact of the COVID-19 outbreak on religious practices of churches in Nigeria', HTS Teologiese Studies/Theological Studies 77(4), 1-18
- Church-Hill, A. (2021), ICT: A Coping Strategy by Nigerian Churches amidst Covid-19 Pandemic. *Research of Journal of Humanities and Cultural Studies*, 7(1), 13-18. E-ISSN 2579-0528 P-ISSN 2695-2467
- Craine, K. (2007). Managing the Cycle of Change. *Information Management Journal*. 41 (5): 44-49
- Elnathan, J. (2021, August 12). How to worship the Nigerian god. [Opinion] The Daily Post. Retrieved from [https://dailypost.ng/2012/08/21/elnathan-john-how-worship-nigerian-god/] (Accessed January 23, 2023).
- George, T. and Amusan, T. (2012), Religion and Act of
  Worship Amongst the Nigerian people: Implication
  for Department and National Unity in people and
  culture of Nigeria. Department of Sociology,
  University of Ibadan 2012. Religion and Acts of
  Worship. ISBN 978-978-929-644-6
- González-Padilla and Tortolero-Blanco (2020). Social media influence in the COVID-19 pandemic. *International Journal of the Brazilian Society of Urology (Int Braz J Urol)*, 46(1), 120-124. PMID: 32550706 PMCID: PMC7719982 DOI: 10.1590/S1677-5538. IBJU. 2020. S121
- Idang, G. (2015). Africa culture and values. *Phronimon*, 16(2), 97-111 DOI: 10.25159/2413-3086/3820
- Idowu, T. and Busari, S. (2017 August, 30). How Nathaniel Bassey started a praise and worship movement on Instagram. [News Edition] CNN. Retrieved from: (<a href="https://edition.cnn.com/2017/06/15/africa/nathaniel-bassey-praise-challenge/index.html">https://edition.cnn.com/2017/06/15/africa/nathaniel-bassey-praise-challenge/index.html</a>.) (Accessed August 30, 2023).

- Janzen, A. (2019). Technological advancement in the church: its effectiveness in improving ownership and church functions. Selected Honors Theses 123. *Southeastern University*. https://firescholars.seu.edu/honors/
- Kayode-Adedeji, T. (2022), "Worship Behaviour of Nigerians, pre and post Covid-19, engaging ICT", Mendeley Data, V1, DOI: 10.17632/mvpt99jdpp.1 http://data.mendeley.com/drafts/mvpt99jdpp
- Kitause, R. and Achunike. H. (2021). Religion in Nigeria from 1900 2013. *Research on Humanities and Social Sciences*, *3*(18), 45-56
- Matsobane J. Manala, 2018. 'Gratitude as a Christian lifestyle:

  An Afro-reformed theological perspective', HTS

  Teologiese Studies/Theological Studies 74(4),
- Moon, H. (2021). Worship for people with cognitive challenges in the pandemic era: A Korean Presbyterian perspective. ORCID Korea Theological Seminary, Cheonan 31071, Korea. (Ed. Edward Foley) Religions, 12(8), 587; https://doi.org/10.3390/rel12080587
- Ogbuabor, J. E, Agu. M, Kalu, and Ugbor. (2017). The Social Impacts of Information and Communication Technology in Nigeria. *International Journal of Economics and Financial Issues*, 7(2), 524-529.
- Ogu, E. and Oyerinde, O. (2014). ICT and National Security in Developing and Underdeveloped Countries The Good, The Bad and The Ugly: A Case Study of Nigeria's Cyberspace. *International Journal of Computer Science and Information Technologies*, 5 (4), 5625-5633
- Onaiyekan, J. (2012), Religion in Nigeria: A Test Case for the World. A Speech Delivered at the Opening Plenary Session of the 10th Anniversary, Rhodes Forum on October 4, 2012. Viewed 17 July, 2023, wpfd.org/society/1998\_religion\_in\_Nigeria.
- Orijinmo, N. (2020). Coronavirus: Nigeria's mega-churches adjust to empty auditoriums. [News] BBC. Retrieved from: [https://www.bbc.com/news/world-africa-52189785] (Accessed May 4 2023).
- Ossai-Ugbah, N. B. (2011). The use of information and communication technologies in Nigerian Baptist churches. *International Journal of Science and Technology Education Research*, 2(3), 49-57.
- A. Owolabi, A. A., Adedeji, A. O., Aderounmu, B., Obako, A. O., Obako, A. O. and Ogunbiyi (2023). Do Information and Communications Technology (ICT) and financial development contribute to economic

- diversification? Evidence from sub-Saharan Africa. Journal of Economic Structures. 12(1)
- Pershina, Y. (2015). Punishments for crimes against religion and the Christian church in the roman criminal law. *Modern European Research*. 7, 86-91. <a href="https://nbnresolving.org/urn:nbn:de:0168-ssoar-49489-8">https://nbnresolving.org/urn:nbn:de:0168-ssoar-49489-8</a>
- Peter, W. (2012). *Developing a Theology of Worship for Today*. Retrieved on 11 March 2023 from <a href="http://ir.csuc.edu.gh:8080/xmlui/bitstream/handle/123456789/311/WhiteP01.pdf?sequence=1">http://ir.csuc.edu.gh:8080/xmlui/bitstream/handle/123456789/311/WhiteP01.pdf?sequence=1</a>
- Peter, A. (2017). Cyber resilience preparedness of Africa's top-12 emerging economies,

  International Journal of Critical Infrastructure

  Protection,17, Retrieved 11 March 2023 from https://doi.org/10.1016/j.ijcip.2017.03.002
- PEW Research Center (2020). Attending and watching religious services in the age of the coronavirus. Retrieved 11 March 2023 from:

  <a href="https://www.pewforum.org/2020/08/07/attending-and-watching-religious-services-in-the-age-of-the-coronavirus">https://www.pewforum.org/2020/08/07/attending-and-watching-religious-services-in-the-age-of-the-coronavirus</a>
- Renjith, R. N., (2017). The Effect of Information Overload in Digital Media News Content. *Communication and Media Studies*. 6(1), 73 85
- Sambu, A, Reuben, K., Gabriel, C. and Salimin, A. (2021). Effects of Covid-19 Pandemic on Religious Activities and Faith of Worshippers in Kenya. *Journal of Studies in Social Science*. 20(1),
- Roso, J. (2023), The use of Technology in the twenty-first century congregational worship: A report from the congregations Worship. *Taylor and Frances*, 38(4), 3-10
- Sulkowski, L.and Ignatowski, G., (2020). Impact of COVID-1 9 Pandemic on Organization of Religious Behaviour in Different Christian Denominations in Poland. *Religions* 11, 254. https://doi.org/10.3390/rel11050254
- Szałachowski, R. and Tuszyńska-Bogucka, R. (2021). "Dies Irae?" The Role of Religiosity in Dealing with Psychological Problems Caused by the COVID-19 Pandemic—Studies on a Polish Sample. *Religions*, 12, 267. https://doi.org/10.3390/rel12040267
- Wang, H. and Wang, S. (2010). User Acceptance of Mobile Internet Based on the Unified Theory of Acceptance and Use of Technology: Investigating the Determinants and Gender Differences. *Social. Behaviour and Personality*. 38(3), 415. DOI 10.2224/sbp.2010.38.3.415

- Wobodo, J. J. (2020). The church utility of ICTs in Nigeria amid COVID-19 global pandemic. *Sapientia Global Journal of Arts, Humanities and Development Studies* (*SGOJAHDS*), 3(3). 279-287 ISSN: 2695-2327 (Online)
- Wyche, S. (2010). Investigating Religion and Computing: A Case for Using Standpoint Theory in Technology Evaluation Studies. *Degree Doctor of Philosophy in Human-Centred Computing, Georgia Institution of*
- *Technology, Thesis.* Retrieved 11 March 2023 from <a href="https://smartech.gatech.edu/bitstream/handle/1853/37">https://smartech.gatech.edu/bitstream/handle/1853/37</a> 317/wyche susan p 201008 phd.pdf
- Yende, S. J. (2021). The importance of understanding and making sense of Zulu traditional hymns as a symbol of expressing worship: Cognitive hermeneutics and hermeneutics of hymnody theories. *HTS Teologiese Studies/Theological Studies*, 77(4) |a7038 | DOI: https://doi.org/10.4102/hts.v77i4.7038