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Digitalizing Religion in the Age of COVID-19: A Uses and Gratifications Perspective

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Abstract

The current COVID-19 pandemic has impacted people's religious behavior around the world. Due to the coronavirus outbreak, most in-person religious services have shifted to virtual platforms. The online religious transition amidst the outbreak has alleviated many issues for worshippers as it provided them with a sanctuary space to connect with their faith and community. According to a 2020 Pew Research analysis, the pandemic has made many Americans change their religious habits by watching religious content online instead of physically engaging with their local religious institution. This dissertation provides a preliminary examination of this phenomenon by exploring the role of digital media in connecting people with their religion during the COVID-19 pandemic. A mixed-method analysis was implied in this study, starting with in-depth interviews among a small group of Muslims (N=20) between 2021 and 2022. The interview data revealed many aspects of Muslims' religious digital media uses and gratifications during the outbreak. Several key themes have emerged from the qualitative data reflecting on the individual relationship with their faith in the digital world while also analyzing the long-term impacts and the aftermath of the pandemic in the digitalization of religion. Qualitative findings were then tested in a larger and more diverse sample through an online survey on Amazon MTurk (N=489). The survey results further illustrate other characteristics that can shape digital religion practices. These factors were related to the individual level of religiosity, attitudes toward technology, sense of belonging, and digital media religious consumption.

Keywords: Digital Religion, COVID-19, New Media, Technology, Faith, Uses and Gratifications theory.

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by

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Chapter I: Introduction

Modern technology is an indulgence that has become widely ubiquitous around the globe. Every day, billions of people engage with various digital media platforms seeking connection with the rest of the world. According to 2020 digital reports, there are 3.8 billion social media users worldwide, while 4.5 billion people use the internet daily (Kemp, 2020). Technological accessibility and advancement have revolutionized how humankind communicates in the contemporary world. People have embraced the online space to connect and engage with different content, and religion is one element that has been widely emerging within cyberspace. Over the last century, industrial and technological modernization has drastically changed the norms of traditional religious practices. Faith seekers can now effortlessly immerse themselves in the digital world to engage and connect with their spirituality. Every day, people from different cultures and religions across the globe utilize various digital tools for faith activities like rituals, reading sacred textual books, meditation, fasting, prayers, and many others. However, it is important to note that online faith engagement is not a new concept. Religious entities have been implementing different media platforms (e.g., Radio, Blogs, TV, podcasts, live streams, etc.) to communicate with a vast audience for decades. These old media platforms have changed the trajectory of faith and ritual practices as they advocated for new strategies for people to connect with their faith outside the worship place. And with new media platforms emerging at a rapid pace, it has become more accessible for people to experience new ways to engage with their beliefs online.

Over the last four decades, researchers have shown an increased interest in exploring how spiritual engagement is infused into the digital world. Although the digital religious transformation was established decades ago, it perhaps became more noticeable in 2020 due to

the coronavirus lockdown restrictions and rules. Brien (2020) believes that the pandemic has accelerated the pre-existing development of online faith practices rather than introducing something new. The rise of engagement with religious practices during the early waves of the pandemic might be due to several factors. For instance, in 2020, many governments worldwide started to ban any personal gatherings and enforce a stay-in-home order. Consequently, places of worship shut down, and adherents were prohibited from visiting or attending a congregation. To face these challenges, many religious institutions started innovating and arranging new ways for people to practice their weekly rituals. For example, in Iran, drive-in prayer ceremonies were held for people to attend a religious event while sitting in their car (AFP TV, 2020). Similarly, churches in the U.S. that had resisted the lockdown rule started to offer drive-in services for their community. The service attendees were asked to sit in their cars with their windows rolled up while listening to the pastor through their car's radio. Despite the overwhelming response, the service was later banned in many states like Kentucky and Mississippi, as it violated local health guidelines (Brown, 2020).

As worshippers struggled to find new ways to connect with their faith, many religious organizations worldwide started to cope with the health and safety guidelines by shifting all their in-person services to digital platforms. Religious institutions have increased their reliance on online platforms, such as social media and live streaming, and started to produce worship services online for their community (Akmaliah & Burhani, 2021; Newport, 2020). According to Pew Research, due to the coronavirus outbreak, many Christians in the United States replaced church attendance with online activities, with 57% reporting having watched religious services online or on TV instead of attending in person (Pew Research, 2020). The increase of hybrid practices during the pandemic has also influenced many religious organizations to be

technologically equipped to face any challenges that might disrupt their communication with their community. The coronavirus outbreak forced many religious leaders to accommodate themselves and become content creators by focusing more on social media users and their online engagement (Heilweil, 2020). Subsequently, many churches and mosques started utilizing the latest popular video conferencing apps, such as Zoom and YouTube live, to support and engage with their communities during the lockdown (Wiederhold, 2020). This has increased the demand and usage of these apps, especially among Muslims in the U.S., who have started streaming Friday prayers on their websites (Abdullah, 2020).

In 2020, the need and reliance on new technology among religious communities in the United States was noticeable during the early waves of the outbreak. The pandemic has undoubtedly bolstered virtual faith practices; however, it is noteworthy to mention that digital religious engagement has declined in the U.S as the pandemic restrictions started to ease, and most houses of worship are returning to normal operations (Pew Research, 2021). Recent data shows that 21% of Americans are substituting virtual attendance for in-person gatherings. Meanwhile, 31% reported not watching services digitally and only attending religious services in person (Nortey, 2022). These new data indicate that the fluctuation in COVID-19 cases and the constant changes in social distancing rules will reflect on people's religious behaviors in the online and offline world. Therefore, researchers need to conduct more studies that can help capture the implication of COVID-19 on the shift towards the digitalization of religion.

Statement of the problem

The coronavirus outbreak has unequivocally compelled new challenges for many religious people worldwide. Observing how worshippers adapt during this phase to connect with their rituals is enthralling. This era represents an imperative time for researchers in this field to

explore how online and offline religious behaviors are evolving in the modern world. At this moment, understanding the pandemic effects on the digitalization of religion can be difficult as we still live in COVID-19 time. More studies are needed in the coming years to provide a better analysis of the pandemic's evolvement and its impact on religion. This study initiates an earlier approach that examines the intersection of religion and digital media in the age of COVID-19. The aim is to provide a preliminary investigation of the current situation by providing more perspective on the pandemic and its role in the shift towards digitalizing religion in the 21st century. Although the study analysis is mainly circulated around the coronavirus outbreak, the outcomes in this research purposed to provide significant insights into the aftermath of COVID-19 in digital religion practices.

Nonetheless, comprehensively analyzing the effect of new media on human behaviors can be a difficult task for many researchers. The constant changes in the latest technology can generate many challenges for scholars to sustain a definitive understanding of how religion is being exploited in the digital environment. Therefore, researchers in this field argue for more prevalent studies that can help capture the developments in technology and their impact on how people practice their faith in the contemporary world (Contractor & Shakkour, 2016, p. 21). Accordingly, this dissertation reflects upon the technological revolution by highlighting its impact on digital religious practices during the pandemic through the uses and gratifications theoretical perspective (UGT). This thematic approach allows more focus on understanding the different types of motives and needs behind media usage and its potential gratifications among the users.

Chapter II: Literature Review

COVID-19 Impacts on Digital Religion Practices

The COVID-19 pandemic has unequivocally compelled new challenges for faith practices worldwide. Most religious rituals require a large gathering in a confined place, yet many religious institutions have had to ban or limit their congregation's size to minimize the virus spreading risks. For instance, in 2020, millions of Muslims were not able to travel to Mecca to practice the Hajj (an annual Islamic pilgrimage that all Muslims are mandated to do once in their life in Mecca and happens during the last month of the Islamic calendar), as the virus has forced the Saudi government to cancel the event for the first time since the 1800s (Hubbard & Walsh, 2020). Other houses of worship (e.g., churches, mosques, temples, synagogues, etc.) have also suffered from the outbreak and were forced to close their doors for visitors in a bid to contain the spread of coronavirus. These difficulties during the early waves of the pandemic have led many individuals and religious organizations to imply different strategies by utilizing virtual spaces to communicate with their people beyond the traditional ways. In the United States, many churches have merged their indoor activities, like Sunday gatherings, into their digital websites by offering online recorded video services and live streaming events (Conger et al., 2020). As a result, religious people in America have started embracing and adapting the new technology to connect with their faith and community. According to Pew Research (2020), many Americans have indicated that their religious habits have changed drastically during the coronavirus outbreak as they started to pray more and watch religious services online. Similarly, another study in Poland found that due to the pandemic, people's religious habit has increased as they felt that faith and spirituality would save them from the coronavirus infection (Kowalczyk et al., 2020).

The pandemic might have also increased the need for religious app consumption, especially among Muslim communities around the world. Nowadays, Islamic apps are becoming an effective and beneficial tool for many Muslims, with many apps developed for reading textual books (e.g., Quran, Hadith), finding prayer locations, and many other services (Bunt, 2010). Such features, like in the Qur'anic apps, enhance individuals' engagement with their faith by allowing users to access the holy scripture anytime and anywhere they like. Although studies before the pandemic have found substantial effects of these apps on Muslim religious practices (e.g., Alzouma, 2017; Rinker et al., 2016), Quranic apps became more desirable during the pandemic. For instance, due to COVID-19, many Islamic countries like Saudi Arabia and the United Arab Emirates have removed all holy books, like the Quran, from worship places (Batrawy, 2020). The decision was made to limit the risk of spreading the virus as people share these books in the Masjid. Subsequently, worshipers who visited the mosque were advised to bring their own Quran or use their phones to read the holy book while attending the Masjid.

As people become more technologically dependent during the coronavirus outbreak, the consumption of religious content online will also continue to increase. The significance of virtual spaces in religious and cultural spaces is becoming more distinguishable during this time. However, it is also important to note that transitioning all religious rituals and services online in 2020 has deprived many people of attending in-person gatherings and meeting other worshippers. The lockdown has displayed considerable challenges for religious individuals, especially those who prefer to practice their rituals in a congregation and be active community members. Thus, some churches in America had initially refused to obey government lockdown rules and instead started moving the congregation meetings to a drive-in service (Dein et al., 2020). The event allowed participants to assemble while complying with the social distancing

rule as they remained in their cars throughout the service (Villa, 2020). Inversely, most religious organizations that adhered to the lockdown law have adapted to the social changes brought by COVID-19 by merging their offline activities with their existing online platforms (Singarimbun, 2021). For many religious institutions, transitioning to the digital world appeared uncomplicated, as they had previously established a strong online presence on social media platforms (e.g., Twitter, Facebook, and YouTube) before the pandemic. Although most religious accounts on social media do not have many followers, they tend to have more engaged followers (Hafiz, 2015), and for many religious organizations, relying on digital tools has proven to be a great strategy for promoting faith and connecting people with their religious affiliation (Burroughs, 2013; Campbell, 2010).

The ramifications of COVID-19 show how establishing a digital identity and constructing a faith dialogue online have become highly important for those seeking spiritual guidance. As hybrid practices are becoming increasingly integrated into mundane life, more individuals will use virtual platforms to fulfill their needs and desires for connection. According to Pew Research, most Americans, especially young adults, who used religious services online during the outbreak have expressed their satisfaction with the services (Cooperman, 2020). This acquaintance and contentment with the online services in the younger people suggest that religious digital adaptation might continue to increase in the future. Therefore, digital religion scholars need to comprehend the different elements in this area by studying the various aspects that can influence the foundational framework of this topic. Researchers in this field must also look into the literature and comprehend the evolution of new technology and how it has shaped religious culture and practices through the years. Examining earlier approaches in the literature can bring great insight into the different perspectives implemented by scholars in this field.

Digital Media and Religion History

The pandemic embodies a crucial period and a significant element for digital media and religion studies. Over the last two years, online religious practices have become more transparent and accessible to people around the world. While virtual religious engagement continues to escalate, researchers might find various themes and topics that analyze the consequences of this phenomenon. Baker et al. (2020) believe that the coronavirus outbreak presents new directions for research in this field. According to them, "This unprecedented time prompts scholars of religion to reflect on how to strategically approach the study of religion in the time of "social distancing," as well as moving forward" (Baker et al., 2020, p. 357). Analyzing how the outbreak has impacted people's relationship with their faith can provide many interesting results that can further contribute to this topic. Nevertheless, researchers must first understand that online religious services emerged decades ago, and numerous studies have examined their impact on society.

Looking at the literature, scholars have used different terms and frameworks to describe religious engagement within cyberspace. According to Campbell (2013), an early concept that was used widely by many researchers (e.g., Brasher, 2001; Dawson, 2000; Hojsgaard, 2005) in the mid to late 1990s was "cyber-religion." The term provided a new way to understand religion in a technological and cultural context by looking at religious organizations and activities in cyberspace. Despite being extensively used by many scholars, the frame received several criticisms due to its broad conception. Later, another conceptual framing established by Helland (2000) provided a system of classification and distinction between "online religion," which refers to religious activities that occur in the online world, and "religion online," which describes how the medium is being used to facilitate religious practices in the offline world. The framework was implemented heavily in many religion and internet studies; however, Helland

debunked his own model as it has become increasingly difficult to separate between religion online and offline religion (Helland, 2007).

Most online practices nowadays cannot be easily disembodied from offline contexts, as we live in a networked society where most offline practices guide online behaviors, and religious practices are not an exception. Therefore, dichotomizing life online versus life offline in a research model can be inefficient (Campbell, 2012). Subsequently, Campbell introduced a newer concept called “digital religion” (Campbell, 2013). Digital religion is a concept that is not only confined to understanding how devotion performs online but also focuses on how religious communities have engaged, adapted, and responded to the digital culture. The concept of digital religion portrays a new way of practicing spirituality in the modern world by reflecting on the changes in traditional religious practices and the shift towards the digital spheres. Since its introduction, many researchers have extensively used the digital religion framework in their works over the past few years (e.g., Cheong et al., 2012; Siuda, 2021; Zaid et al., 2022). Although the framework shares many similarities with the term cyber-religion, digital religion looks more into what constitutes religion through the lenses of digital media and cultures. The term also suggests a different understanding of online and offline religion by reflecting on how the two spheres have become integrated and connected with each other. Ultimately, digital religion can be described as the bridge that connects online religious practices and offline religious contexts and vice versa (Campbell, 2012).

The different terminologies used in the literature highlights researchers' inclinations and interest that guided the essence of their work. Over the past decades, scholars have increased their desire to understand and examine religion in online and digital contexts (Campbell, 2012). Campbell and Vitullo (2016) provided a “four waves of scholarship” analysis that describes and

characterizes the progressive changes taken by many scholars in the last three decades (e.g., Campbell & Lovheim, 2011; Hojsgaard & Warburg, 2005). In their study, they describe the first stage as the “descriptive stage,” in which researchers focused more on documenting how online religious communities have identified themselves and how they have evolved in compliance with technological advancement (Campbell, 2005). Most of the study’s methods were developed from an earlier approach in computer science–computer-mediation communications and human-computer interactions–with scholars from various fields, like religious studies, media studies, political science, sociology, psychology, and theology (Contractor & Shakkour, 2016, P 37). In stage two (early '80s), religious communities in the virtual sphere gradually increased as the internet became a new domain for religious discussion and community interactions. Thus, researchers focused on determining and understanding how online communities function and perform online (Campbell, 2005).

In the third stage, researchers started to draw more attention to offline religious communities, as many members started implementing new technology in their offline work. At this stage, religious members were motivated to make their religious voices heard by establishing a robust online presence. Subsequently, many religious and social networking sites emerged (e.g., GodTube.com and Millatfacebook.com) to captivate spiritual content seekers. Lastly, the current stage, "stage four," draws more attention to the intersection of offline and online practices by deploying Campbell’s digital religion framework (Campbell & Vitullo, 2016). This current stage of research seeks to understand the implications of online religious practices on the construction of culture, identity, and authority in the offline community. Much of this stage's research is conducted through quantitative analysis as researchers started to focus on broader data sets to investigate their claims (Contractor & Shakkour, 2016, pp 47-49).

Campbell and Vitullo's (2016) summary of the different frameworks and phases in this field is an excellent outline for understanding scholars' different viewpoints and early approaches. Meanwhile, the trends toward virtual practices are escalating widely around the globe; hence researchers need to keep on with it by conducting more studies highlighting the effects of new media on various religious groups and communities. This dissertation further contributes to this mission by utilizing the digital religion framework to investigate how different religious communities have coped and responded to the new changes caused by the pandemic. In the first method, the researcher uses in-depth interviews to examine a small group of Muslims in Northern New York. The main goal of this method was to provide a profound understanding of a confined group based on their personal experience with different digital media platforms and how they adapted to the changes brought by COVID-19 while navigating their spirituality. As a Muslim and community member, the researcher focused only on this group in the first method. This has helped enhance the data collection process by allowing a deep connection between the researcher and the subjects, thus providing this study with a valuable examination of how digital cultures are evolving during the pandemic.

Muslims and Digital Media Usage

Muslims adhere to the fact that human connection with God (Allah) was established at the beginning of time. Following the religion of Islam, Muslim believers act on what Allah commanded based on the Quran and prophet Muhammed's (Peace and blessings be upon him) Sunnah (his lifestyle and everything he said and approved). Islam's religious beliefs and practices are based on what is known as the "Five Pillars." This includes 1- the Shahada (declaration that there is no god but Allah, and Muhammad is his prophet), 2- Salah (five daily obligatory prayers), 3- Giving Zakat (Muslims are obligated to pay Alms tax, which is 2.5% of their wealth, every year to the less fortunate and the poor people), 4- Pilgrimage to Mecca "Haji"

(All abled Muslims are mandated once in their lifetime to make the pilgrimage to Mecca during the 12th month of the Islamic calendar), 5- Fasting Ramadan (Muslims must abstain from eating and drinking from dawn to dusk during the holy month of Ramadan, which is the ninth month in the Islamic calendar).

Like Christianity, Islam is a proselytizing religion, which means Muslims believe it is their duty to promote and share their religion to invite others to their faith. Nowadays, according to Pew Research, Islam is the fastest-growing religion in the world (Lipka & Hackett, 2017). The Muslim population has steadily increased over the last two centuries, comprising around 26% of the world population (Kettani, 2010). Muslims worldwide also have the highest fertility rates compared to other religious affiliations (Pew Research, 2017). If the current trends continue, it is expected that the number of Muslims will nearly equal the number of Christian in 2050 (Pew Research, 2015). For many Muslims, embracing and utilizing the different media platforms has become a necessity for religious needs fulfillment. The abundance of new digital devices (e.g., smartphones, tablets, smartwatches, etc.) in today's world enables religious people to engage with their faith easily. Previous studies have found that Muslims continuously and purposely use the new media platforms for spiritual reasons related to prayer times, fasting, religious holidays, Islamic lecture, prayer direction, and more (Bunt, 2009; Shareefi, 2012; Mishra & Semaan, 2010). Digital tools also benefit Muslims for other purposes besides faith-related quests. For example, a study in the U.S. found that social media platforms provide a valuable source for Muslims in America as they seek to find Halal food products (e.g., food that adheres to Islamic law according to the Quran) and other services that conform to their religious expectations (Kamarulzaman et al., 2016).

Researchers in this field have also investigated the impact of emerging technologies, like apps, on Muslims' online and offline religious practices (e.g., Campbell et al., 2014; Fakhruroji, 2019; Rinker et al., 2016). One study looked into Hajj apps by capturing people's feedback and needs when using Hajj apps during the Pilgrimage. The researchers found that participants remarked with delight about some Hajj apps that they used to look for maps, find prayer times, read the Quran, and locate the Qibla direction. Conversely, they complained about some apps that did not function properly (Majrashi & Borsci, 2018). Overall, religious apps are becoming widely prolific as smart devices have made this platform accessible for worshippers worldwide. Nowadays, there are plenty of Islamic apps available on iTunes or Google Play tailored to serve and provide Muslims connection with their faith, and users can easily download these apps from their smartphones or tablets. The rise in popularity of these platforms necessitates further research to focus on studying the different types of apps and their impacts on human religious behaviors.

Muslim Life in the U.S.

In the United States, recent Pew data shows that about 3.45 million Muslims live in the States, representing 1.1% of the total U.S. population (Mohamed, 2018). Despite being a minority, the number of Muslims in the U.S. continues to grow, and Pew Research estimates that by 2050, Muslims will become the second-largest religious group in the U.S. after Christians (Mohamed, 2016). While more Muslims are migrating to the United States, this group continues to thrive in a country where people share different perceptions of them (Al Wekhian, 2016). Discrimination against Islam and Muslims has escalated widely due to unavoidable circumstances such as the 9/11 incident and the 2017 Muslim banning rule by Donald Trump (Kaufman, 2019). As a result, many people have started associating Islam with terrorism as more

aggressive viewpoints arise toward Muslims and immigrants from other religious fundamentalists (Sherkat & Lehman, 2018).

Living in America as a minority can also complicate ritual practices for many practicing Muslims. For instance, Islam obligates Muslims to pray five times a day; however, a national survey of American Muslims found that many Muslims in the States face many barriers as they struggle to find time to pray (Padela et al., 2016). The latter finding might be due to many reasons, like the conflict in prayer and work time (Sacirbey, 2011) and the lower numbers of mosques and Islamic institutions in the U.S. compared to a Muslim-majority country. However, it is also important to note that the number of Masjids in the U.S. is climbing. According to a comprehensive statistical study of U.S. Mosques, Masjid numbers in the U.S. have increased by 31% between 2010 and 2020. The report shows that in 2020, there were 2769 mosques counted in the States, with 37% of these mosques purposely built and constructed as mosques. On the other hand, the data also shows that more than one-quarter of the built Masjids during that time faced resistance and disapproval to development from the surrounding city and neighborhood (U.S. Mosque Survey, 2020). Over the past years, several oppositions have been registered against constructing Islamic worship places in the U.S. (Pew Forum on Religion & Public Life, 2013). Bowe and Makki (2015) conducted a framing analysis on five U.S. newspapers between 2010 and 2013 to examine the news coverage of mosque construction project debates. They found several thematic frames related to Islamophobia, in which stories framed Islam and Muslim neighbors as a threat to the community. Thus, claiming Islam's negative images and stereotypes in the western media can exacerbate the challenges facing Muslims who want to fit into society.

Despite these challenges, Muslim migration to the U.S. has grown significantly in the last decade. In addition to immigration, many data also show that the number of American Muslims is increasing in the States compared to other ethnicities. Overall, American Muslims tend to have more children than Americans of different religious faiths (Pew Research, 2017). This rapid increase in the population of Muslims in the U.S. has encouraged many Muslims to establish a more prominent role in American society (Williams, 2017). Hence, researchers across different fields need to conduct further studies on this population, as many Muslims in America work to solidify their identity and presence in American society.

In the first method of this research, the researcher interacted through in-depth interviews with 20 Muslims in the Northern New York area. The collected data from this sample is beneficial as it brings more insights into this understudied population. However, it is important to note that navigating participants from this sample can be problematic as Muslims comprise a widely diverse group in the United States. According to Pew Research (2018), of the Muslim population in the States, 42 % are American Muslims born in the U.S., and the rest come from other places such as Europe, the Middle East, North Africa, and South Asia. Due to the extensive ethnic diversity of this population, this study classified participants based on two groups: American Muslims (born in the United States) and Immigrant Muslims (born outside the United States). This categorization provides a better assessment of both groups by exploring how individual identity reflects their perceptions of new technology and religion. For instance, Pew Research data indicate that American Muslim adults born in the United States share the same level of religious engagement (e.g., praying, going to a mosque, etc.) as immigrant Muslims; however, the two groups differ in other aspects, where foreign-born Muslims perceive life more positively in the U.S., as they secure better jobs and attain higher education than American-born

Muslims (Pew Research, 2018). In contrast, no precise data show a distinction between the two groups when using digital platforms to communicate with their faith. For example, some Muslims perceive social media can empower their identity by allowing them to share their faith with others (Bahfen, 2018; Nurdin, 2020). In contrast, other Muslims perceive the internet and the new media platforms to threaten Muslims' lifestyles as their thoughts can be corrupted while exposing them to different opinions that contradict Islamic law (Al-Kandari & Dashti, 2014; Islam, 2019). These findings convey the different perceptions of digital media, which can be subjective and vary tremendously based on several factors.

Chapter III: Theoretical Perspective - Uses and gratification theory (UGT)

Theory History and Origin

According to Blumler (1979), the uses and gratifications approach became more prominent in the late 1950s and early 1960s. During that time, communication scholars devoted more time to understand the short-term effects of mass media exposure on people's behavior. Despite their efforts, researchers found it easier to focus more on understanding audience involvement with the media through users' experiences and perspectives (Blumler, 1979). However, it is noteworthy to mention that the interest in analyzing public media uses and gratification has been explored since the beginning of empirical mass communication research (e.g., Lazarsfeld & Stanton collections, 1942-1943; Hollonquist & Suchman, 1942); yet these early studies were based solely on qualitative experiments that have failed to provide an in-depth analysis of media functions and their gratifications. Therefore, a group of researchers from different countries (e.g., the U.K., Finland, Japan, and Sweden) have started conducting more empirical investigations of audience use and gratification with the media. Although their works and perspectives varied, the convergence of their ideas has identified a seemingly standard approach to the uses and gratifications theory (UGT). Among the most well-known contributors to this theory were Katz, Blumler, and Gurevitch. In their early revision of UGT research (Katz, Blumler, and Gurevitch 1973-1974), they described the operationalization of uses and gratifications to be concentrated with these logical steps:

> (1) the social and psychological origins of (2) needs, which generate (3) expectations of (4) the mass media or other sources, which lead to (5) differential patterns of media exposure (or engagement in other activities), resulting in (6) need gratifications and (7) other consequences, perhaps mostly unintended ones. (Katz, Blumler, and Gurevitch

1973-1974, p. 510)

Katz, Blumler, and Gurevitch (1974) further extended their conceptualization of UGT by focusing more on the media and audience relationships. Accordingly, they came up with five basic assumptions for UGT. The first assumption is "*Active audience*," which focuses on the audience and how they bring their own activity and ideas to the media. Then the second assumption, "*Audience Choice*," points to audience members' choices when using the media to their advantage. As active members, people's choice dictates the type of media they consume based on their needs and gratifications. The third assumption, "*competitive market*," indicates how the media must compete with other sources of satisfaction, like face-to-face communication, to fulfill audience needs. The fourth assumption claims that people are self-aware of their motives and media uses, and they are capable of explaining and self-reporting it if required. Lastly, the fifth assumption, "*Suspend value judgment*," advises researchers to detach their personal judgment when analyzing audience activities. Only an audience member can acquire and evaluate the value of the media content they have consumed.

The earlier approach to UGT indicates how mass communication researchers were keen to understand audience involvement with the media. Katz, Blumler, and Gurevitch provided valuable contributions and frameworks that have embodied a shift in communications in the field. Their work has succeeded in shaping the foundation of UGT in literature for the following decades. The foundational framework of UGT incorporates and synthesizes the understanding of audiences' perception, not just as a passive receiver but as an active influencer of the message that can choose, evaluate, and examine the media content to accomplish specific outcomes (Wang et al., 2008).

Criticisms of Uses and Gratifications Framework

The UGT has been criticized widely in academia since its inception. Criticisms were mainly around the conceptual framework of the theory. McQuail (1984) summarizes some of the notable objections raised by many scholars (e.g., Chaney, 1972; Elliot, 1974; Swanson, 1977) regarding UGT into three primary sources of attacks or dislikes. 1- related to its theoretical underpinnings and associated method, 2- related to social and political objections, and 3- the cultural objections of the theory (McQuail, 1984, pp. 181- 182). In his review of these criticisms, McQuail (1984) points out that researchers' main theoretical charge was around UGT essentially "*Lacking in theory*." Despite Katz, Blumler, and Gurevitch's (1974) effort to give explicit concepts and meanings to the theory, many studies found that the uses and gratifications model lacks cohesion, and this has brought many challenges and difficulties in academia. Scholars struggled to find any valid distinction between UGT conceptual status, and many started to test the framework in different settings (e.g., Palmgreen & Rayburn, 1979). Subsequently, researchers who adopted the framework were more concentrated on its labeled concepts (such as "Use," "need," "gratification," "motivation," "satisfaction," etc.) without contextualizing each variable's meaning (McQuail, 1984).

This deficiency has introduced many issues and complications for theorists and researchers in the field. For instance, in his analysis of television uses and gratification, Rubin (1983) found that UGT's tendency to isolate "motivations" from the "Uses" can be disputable as it can be difficult to distinguish between the two concepts. Therefore, in his criticisms of the UGT approach, the author challenged and debunked the flow of the theory that portrays how: A- a motivational behavior, B- must lead to particular media use, and C- ends with a specific gratification (Rubin, 1983).

McQuail (1984) further discusses his concern about the continuous misuse of the UGT empirical method and how it is steering researchers into a conservative model. Hence, he suggested that the use of the theory has become more limited towards representing all media content as a positive tool that ought to help individuals adjust, disregarding all other factors that might intervene. This identification of possible flaws might worry many UGT researchers who continue to argue for a more comprehensive theoretical grounding. Yet, the ongoing disapproval of the theory might endanger and threaten its foundational framework by making it more predictive and explanatory (McQuail, 1984).

To face these criticisms, researchers continued to refine the different aspects of the theory. Several attempts emerged to clarify the approach, as scholars argued that researchers should look at the theory's basic root and foundation (McQuail, 1984). For new researchers, it is vital to comprehend UGT and how it might be dismantled and investigated in their work. The uses and gratifications approach circulates around the "*active audience"* and their engagement with the different media types to fulfill a particular purpose (Rubin, 1984). This process can be conceptualized through a mechanism described by Rugresoo (2000). According to him, the uses and gratification elevate first when users start to develop needs. To fulfill them, they start engaging themselves with different media platforms. Those users' engagement with the media will continue as long as they still search for what gratifies their needs (gratifications can be positive or negative). Once users' needs are fulfilled and satisfied, it generates an impact on society where those feelings start to flow and redirect into a new environment where new needs are established, and another cycle begins (Lang, 2016; Rugresoo, 2000).

Rugresoo's (2000) model provides a modern and in-depth comprehension of the uses and gratifications framework. However, the constant effort by scholars to refine and advance UGT

might not hinder the criticisms against it. Many researchers in the field still perceive UGT as a strategy that facilitates data collection rather than a theoretical framework (McQuail, 1994). Conversely, several studies are being constructed based on the uses and gratifications framework. It is indisputable that UGT consists of many useful theoretical agendas that can enable researchers to understand how people accustom media content to their daily routine. Additionally, the emergence of new technology, like the internet and social media, has also provided an opportunity for uses and gratifications researchers to expand their focus and experiment with the theory at a new level. Ruggiero (2000) believes that the advent of new media platforms and electronic devices represented a new era for UGT. In his analysis, "uses and gratification theory in the 21st century," he explains how new technology has transformed the perception of UGT in this century. According to him, the significance of uses and gratifications has been "*revived*" with the evolution of computer-mediated communication and the emergence of Web 2.0 (which refers to the current status of the internet). These technological revolutions have provided people with more media choices and researchers with profound information that can efficiently analyze audience interaction in the digital sphere.

Uses and gratifications researchers can now benefit from the digital domain as it provides extraordinary opportunities for new media researchers. For instance, due to the technological revolution, human data can easily be traceable, and researchers can easily explore and examine individual behaviors and activities online. Nonetheless, as the latest technology continues to alter human interaction with the media, it creates more challenges for researchers to investigate the new context of media use and interactivity. For uses and gratifications scholars, the theoretical lens remains the same: to understand why people engage with different media platforms and what gratifications do they seek. Therefore, Ruggiero (2000) recommends that researchers

continue using the traditional uses and gratifications approach and adjust it to be "*modernized*" with the new technological changes.

Following Ruggiero's (2000) guidelines, communication scholars kept attentive to ever-changing technology while adapting UGT as a strategy to understand human interaction with different media types. The increasing rise of new mediums has drastically altered how people communicate with the media. Unlike traditional mass media (TV, radio, newspapers), new media (internet, social media, and apps) has impacted people's level of engagement by allowing for more interactivity between the users and the medium. Over the last four decades, UGT studies were constructed based on audience involvement with different mediums, from TV and radio (e.g., Rubin 1981) to the internet (e.g., Papacharissi & Rubin, 2000), and then social media (e.g., Whiting & Williams, 2013). In most of these studies, researchers continue to find valid and strong measures between UGT and emerging media platforms.

The new forms of communication (text, pictures, video, voice, and others) have empowered and reinforced the fundamental conception of the UGT, which is the "*active audience.*" However, researchers need to be alert and avoid misusing or misinterpreting the concept of audience activity in the digital domain. Due to technological advancement, audience researchers in the twenty-first century have debunked the conceptualization of the "*active audience*" and advocated human researchers to be mindful of the audience's engagement level before making any assumptions. According to Livingstone (2012), media users are no longer predictable, and communication scholars have begun to move from conceptualizing audiences as "*active audiences*" to "*participatory audiences*." This framework suggests that the rapid transformations in the digital landscape can result in more diverse modes of audiences and researchers need to be wary not to intersect the two definitions. In the UGT, this means more

disputation, as fewer studies tried to develop a new model and measure for UGT (e.g., Kaye, 2010); yet, in most studies, the use of traditional uses and gratification measures were dominant. This supports earlier studies (e.g., Kuehn, 1994; Morris & Ogan, 1996) that found the traditional UGT framework to yield a valuable instrument for media researchers due to its productive method. The traditional uses and gratifications approach continues to help researchers structurally examine media use and effect and can enhance the analysis of different modes of audience activity level, thus supporting Ruggiero's (2000) claim about the credibility of the traditional uses and gratifications model in today's world.

Uses and Gratifications in Modern Research

Many UGT researchers follow a similar pattern and strategy in their study, which start by focusing on digital media use, motives, and lastly, gratifications (e.g., Shariffadeen & Manaf, 2017). However, as mentioned earlier, one of the main flaws of UGT is that researchers were not consistent in how they conceptualized the framework model in their studies. Different approaches were taken to measure the various aspects of UGT, such as “uses,” “motives,” and “gratifications.” The overlap between the three concepts led to misconceptions and refutation of the theoretical framework. For example, while some researchers relied on the traditional model to systemize and cement their inquiry, other scholars believe that measuring all aspects of the theory might not be feasible or favorable (Sundar & Limperos, 2013). Additionally, the expansion of new media and its advanced features has provided users with more ways of communication, thus generating more needs and gratifications to be sought, and making it difficult for researchers to capture it all. As such, many recent studies have modified the UGT by adjusting its framework focusing on one aspect. For instance, Chen, 2011 and Coursaris et al., 2010 studies investigated media usage while excluding other elements like motives and

gratifications, while Brubaker and Haigh (2017) primarily looked into the motivation aspect of the theory. This has led to the establishment of different adaptations of the UGT framework based on researchers' goals and interests in understanding the public relationship with media content.

The literature seems to suggest that UGT is still desirable in communication studies, and the new media emergence might have significantly strengthened the core of UGT. Communication scholars' interest in understanding how the new media affects our lives continues to grow. This eagerness to learn the potential capability of these new high-tech devices and platforms enables researchers to explore new things while providing more prospects for the uses and gratifications framework in academia. In this dissertation, UGT was implemented in qualitative and qualitative analysis to test its adequacy and contribution to this field. UGT has proven to provide a reliable framework that can help researchers understand the relationships between religion and technology in the modern world. The main objectives of this research are to examine the new media effect through understanding how people use the different types of digital media to gratify their religious needs while also identifying the consequences that follow from these needs and uses. The foundational premise of UGT offers a great perspective to answer these questions, as it highlights and focuses on the main themes surrounding the impact of media on religious behaviors during this transitional period driven by the pandemic.

UGT in Digital Religion Studies

In digital religion studies, many scholars have taken advantage of the uses and gratifications framework and measures while examining the new technology's effect on religious behavior. Brubaker and Haigh (2017) looked at Facebook's primary motivations and uses for religious purposes among Christians in the United States. In their research, they utilized an

online survey methodology by adapting the uses and gratification measurements from previous studies (e.g., Papacharissi & Rubin, 2000) to test individuals' motivation when engaging with religious content on Facebook. According to them, four factors were established based on users' religious uses and motives. These factors were: 1- ministering, "reaching out to others by helping those who have lost their faith"; 2- spiritual enlightenment, "accessing content that enlightens and uplifts the user"; 3- religious information, "Accessing or seeking faith-based information"; and 4- relaxing and entertainment, "to unwind, relax, and be entertained."

Another study by Ratcliff et al. (2017) utilized a similar approach to explore new media's impact on people's religious practices through UGT. The authors argued that quantitative researchers' applications of the uses and gratification differ as different scales were developed to test the theory's validity. Over the years, several UGT measurements evolved as new technology and innovations forced researchers to modify and develop new scales. For example, to examine television viewing motivations, Rubin (1981) developed a new scale called "*television viewing motives scale*" (TVMS). The scale is among the most widely used measures of viewing motivation (Rubin et al., 2020). It was adapted from Greenberg (1974) and Rubin (1979) and consisted of 27 items asking respondents to provide open-ended statements about why they watch Television. The measurements were created to test respondents' motivations for watching Television based on their age, program preferences, viewing levels, and television attitudes. After recurring more than 600 participants, Rubin found nine motivations for Television viewing: companionship, to pass time, content, arousal, information, relaxation, social interaction, escape, and entertainment. Since then, TVMS has been successfully modified and utilized to explore different technology constructs like the internet and social media. Ratcliff et al. (2017) were among those scholars who used and adapted Rubin's (1981) television viewing

scale to investigate the needs respondents sought to fill via religion and new media. The modified scale has yielded a high level of reliability, and the study findings identified three thematically constructs addressing how religion can fulfill needs related to learning, time, and the pursuit of self.

Research Questions and Hypotheses

This research seeks to understand the role of digital media platforms in connecting people with their faith during COVID-19. The UGT framework was utilized in this paper to help demonstrate the initial impression of online religious engagement during the coronavirus outbreak based on individual needs, motives, and gratifications. A mixed-method research design was adopted in this project to explore four research questions and test three hypotheses. Figure 1 demonstrates the research model explaining the different variables in the study with the study research questions and hypotheses.

Research Questions

RQ1: How have Muslims used digital media platforms during the pandemic?

RQ2: How has online religious engagement affected Muslim relationships with their faith during COVID-19?

RQ3: What are the pandemic's long-term impacts on Muslims' transition towards virtual religion practices and the digitalization of Islam?

RQ4: How do religiosity and demographic factors predict individuals' attitudes toward technology?

Hypotheses:

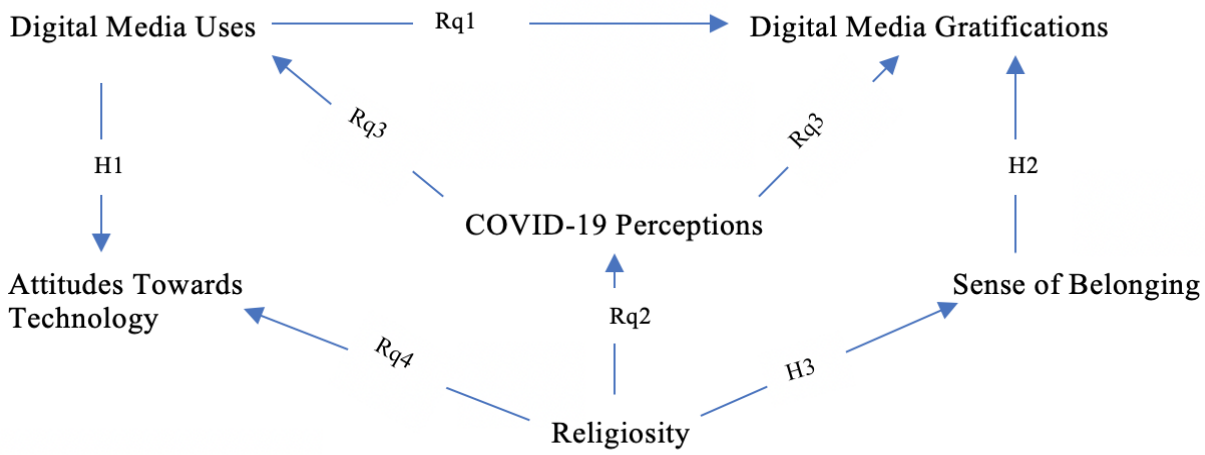
H1: Religious digital media use will correlate positively with the positive attitudes toward technology and negatively with the negative attitudes toward technology.

H2: Religious digital media gratifications will be positively associated with a sense of belonging.

H3: Respondents with a higher level of religiosity will exhibit a higher level of belonging to their community than those with a low level of religiosity.

Figure 1

Research Model



Chapter IV: Qualitative Method

The first method of this study consisted of a semi-structured online in-depth interview to investigate the study's first three research questions. Qualitative scholars indicate that in-depth interviews can help researchers gain a profound insight into their investigation by enabling more meaningful interaction between the moderator and the individual (Seidman, 2006, p.12). In-depth interviews provide more detailed information about participants' behaviors and thoughts than other data collection methods (Boyce & Neale, 2006). In digital religion studies, in-depth interviews can effectively help researchers understand religious meaning and narratives in the virtual space. One study by Aupers et al. 2018 found many benefits when using this methodology to understand the relationship between religion and digital gaming. According to them, in-depth interviews methodology can provide researchers in this field with valuable strategies to 1- analyze individual experiences and motivation in empirical detail, 2- construct concepts based on individuals' stories, similarities, and differences, and 3- build a grounded theory about shared meaning in a particular group or subculture. This dissertation further illustrates these points and demonstrates the value of this method by conducting an in-depth examination of a small group of Muslims in Northern New York. The overarching goal was to gain insight into the studied population by enabling the researcher to better understand participants' personal experiences with various media platforms and how they facilitated their connection with their faith during COVID-19. The interview procedures in this research were guided by Kvale's (1996) *Seven stages of interviews*. Brennen (2021) described these seven steps as follows:

(1) conceptualizing a research question and outlining the theoretical framework guiding the research; (2) designing the research study; (3) conducting the interviews; (4) transcribing the interviews; (5) analyzing the information obtained from the interviews; (6) verifying the

information from the interviews; and (7) writing up the findings of the study. (Brennen, 2021. p. 31).

Accordingly, a total of 20 semi-structured, open-ended interviews were conducted between 2021 and 2022. The interviews were completed via Zoom and recorded in audio and video format to allow for transcription. Piela (2017) found that conducting interviews with Muslims, especially women, through a video conferencing platform (Skype, Zoom) is highly beneficial as it offers a relaxed atmosphere and provides more interactivity between the researcher and the interviewees. In this study, most of the interviews lasted from 35 minutes to one hour and were guided through a set of interview questions (see Appendix B) designed to explore participants' relationship with their faith in the digital world during the coronavirus outbreak.

Reflexivity

Studying the inside view of a particular group or culture can be a challenging task (Hammersley, 2006). Qualitative researchers need first to understand their positionality and how it can influence their narration of the story. Researchers' personal reflexivity, such as their beliefs, experiences, and interests, can have an effect on their data interpretation (King et al., 2018). Thus, acknowledging and addressing these positionalities in a qualitative study is significant as it can enhance the readers' understanding of the study's methodological approach and the researcher's perspective (Canagarajah, 2012). It is also recommended that qualitative scholars navigate and embrace their own cultural biases while developing a cultural understanding of the studied group. However, it is also essential to comprehend that we live in a community that shares some degree of membership, and the cultural lens will vary based on how researchers position their identities from the studied groups or subjects. In this study, the researcher identifies as a male Muslim born and raised in an Islamic country. This self-

positionality has helped the researcher develop a deep knowledge of Islamic law and rules. Additionally, living in the United States for more than five years and being a member of ISCNY and MSA's diverse racial and ethnic groups have given the researcher more insights into American society and how Muslims cope in this environment. Although these factors and the researcher's subjectivity might affect the findings of this paper to some extent, the interviews were designed and conducted to encourage participants to express their own experiences and understanding of the topic.

Sample and Recruitment

Qualitative studies do not seek generalizability, unlike quantitative research; instead, researchers pursue a sample where they can find participants that fulfill a variety of positions related to their research topic (Mason, 2017). Accordingly, a purposive sampling strategy was employed in this research to recruit participants that fit the study's criteria. The researchers also used a snowball sampling strategy by seeking interviewees' recommendations for other potential participants. Previous studies found that the snowball sampling technique in qualitative research can help reduce data bias by allowing the researcher to find participants with different characteristics (Turley et al., 2017). To recruit participants in this study, the researcher developed and distributed a poster (see figure 1) that described the study's topic, the interview procedure, the duration, and the incentives (10 dollars per participant). The recruitment criteria included Muslims with digital media experiences. Participants were recruited from two prominent Islamic institutions: (1) the Muslim Students Association and (2) the Islamic Society of Central New York (also known as ISCNY).

Figure 2

Recruitment Poster

Muslim Students Association

For young adults, college life can create a stressful environment and psychological challenges. These difficulties can ultimately jeopardize students' academic achievements and present mental and health issues (Ahmed et al., 2009). On a personal level, many Muslims studying in Muslim-minority countries might face more problems adjusting to campus life than

their local peers (Duru & Poyrazli, 2011). For instance, Chen et al. (2019) found that minority Muslim students in China can face many issues during their campus life due to the differences in their cultural and social lives. According to them, these issues and challenges can arise from many reasons related to (1) lack of accommodation for religious prayers: Muslims struggle to find free spaces to practice their daily prayers at a specific time and location; (2) alcohol consumption: In Islam, alcohol consumption is prohibited, so many Muslim students might feel lonely as they avoid joining campus events that serve alcohol; (3) food restrictions: many Muslims who adhere to the Halal food laws (food permissible to eat according to Islamic rules) might find it difficult to find Halal food services on campus; (4) religious dressing: Muslim women who adhere to the Islamic dress code by covering their head (with a scarf or veil) and most of their bodies often experience discrimination (Villa, 2020); and (5) religious holidays: Muslims have two annual Islamic holidays, Eid al-Fitr and Eid al-Adha. However, in most non-Islamic countries, including the United States, universities do not recognize these holidays (Chen et al., 2019).

Despite all the obstacles, international Muslim students have been able to reinforce their presence across the globe. In the U.S., Muslim students' migration began to increase in 1963 when a group of students from the University of Illinois at Urbana-Champaign established the first Muslim Students Association, known as MSA. The association was formed to serve and support Muslim students through social events and religious activities in the United States. Over the decades, the organization continued to expand on many campuses. Nowadays, MSA has become the blueprint for other major large Islamic organizations in the United States. According to the MSA National site, there are more than 600 MSA chapters across the U.S. and Canada. Comparably, the number of international Muslim students in the United States has grown

considerably in recent years. For example, in the 2014–2015 academic year, more than 250,000 student visas were issued to students from Muslim countries to study in the United States, an 18.1% increase from the previous year (Anderson, 2020). In this study, the researcher recruits 11 participants through the Muslim Students Association in Northern New York.

The Islamic Society of Central New York (ISCNY)

The Islamic Society of CNY, known as ISCNY, was founded in 1981 and is located in the heart of the city of Syracuse. The center is designated to serve a diverse community of over 15000 members across the region. ISCNY's mission is to change the many misconceptions about Islam by promoting the values and teaching of Islam from the Quran and Sunnah. The center provides guidance and necessary resources for its community while also advocating for interfaith dialogue with other religious institutions. Due to its diverse and dynamic role in the Muslim community in the region, ISCNY represented an ideal place to find participants that fit the study's criteria. In this study, a total of nine participants were recruited for this study with the center's help.

Figure 3.

The Islamic Society of Central New York

Data Analysis

The study sample consists of diverse racial and ethnic groups, comprising six American Muslims and 14 international Muslims living in the U.S. (i.e., Arab= 4, African= 1, South Asian= 8, European= 1). Participants' genders were also representative in this study, with a total of eight female participants and 12 male participants. In this study, the researcher will refer to the participants based on the number of the interview that they have participated in, i.e., Participant 1, Participant 2, etc. The interviews were conducted on Zoom, and the researcher recorded all interviews in both audio and video format, with approximately 1000 minutes of recorded data. The data was then manually transcribed and imported into Nvivo (a software program for

qualitative analysis) for coding. The coding was conducted following Saldana's (2015) *the coding manual for qualitative researchers*. Saldana (2015) divides data coding into two main stages: The First Cycle and the Second Cycle. In the First Cycle, the author provides 25 different coding strategies, each with a different function and purpose. The "In Vivo coding" method was used in this study, which utilizes participants' own language and phrases as codes. The coding procedures were conducted through an open coding scheme with a detailed line-by-line coding procedure. Once the First Cycle was completed, the Second Cycle was implemented, which refers to the analytic transitions by categorizing codes from the First Cycle into smaller concepts and themes. Accordingly, around 50 codes were constructed from the data analysis, which was then merged into eight major themes and two sub-themes. The themes highlight and answer the inquiries raised in this dissertation's first three research questions.

The emerged themes were described as follows: (1) the use of live streaming platforms & Islamic apps has increased during the pandemic, (2) promoting faith and building a community, (3) being a minority has increased the reliance on new technology, (4) the pandemic made people want to connect more with their faith, (5) practicing Islam in the U.S. can exert more challenges on the individual (two sub-themes: 1- identity crisis, 2- faith practicing & cultural adapting), (6) engaging with religion in the digital world can raise skepticism about the source’s credibility, (7) COVID-19 has accelerated digital religion practices, and (8) in-person religious services are indispensable.

Results

The digital space constantly influences and reshapes Muslims’ connection with their faith worldwide. In this method, the researcher examined the impact of COVID-19 on religious

behaviors among Muslims in the United States. This section provides a descriptive explanation of the emerging themes and answers the study's first three research questions.

Rq1: How have Muslims used digital media platforms during the pandemic?

The use of Live Streaming Platforms & Islamic apps has Increased during The Pandemic

Most of the study's participants expressed engaging with one or two media platforms (e.g., Snapchat, Instagram, Twitter, apps, blogs, etc.) at least once a day to engage with their faith. However, it should be noted that certain Islamic rituals (e.g., congregational prayers, Haji, etc.) cannot be performed remotely according to Islamic laws. Therefore, transitioning online during the coronavirus outbreak has yielded unique and beneficial outcomes for Muslims in many other aspects. Accordingly, the interview data suggest that the reliance on live streaming platforms (e.g., Zoom, YouTube, and Facebook Live) and phone apps have increased immensely during the early stages of COVID-19. One participant shared how the pandemic has forced her to engage more with the live streaming platforms to watch religious services like the Friday prayer "I don't think I was actively watching any live streams. Suddenly, I was watching live streams, like I was watching a Khutbah as it was happening" (Participant 3). This finding might not be surprising, as most religious organizations in the U.S. opted to use live-streaming services during the lockdown to share their religious activities with their communities (Heilweil, 2020). Participant 2 in this study is the Imam of a mosque in Northern New York (the Imam is the person who leads Muslim worshippers in prayers) has further emphasized how his center has started using Facebook live to host religious events online during the pandemic:

> We started Facebook live, we had an audience. You could see the difference, some videos during the pandemic, you could have the khutbah for example 700-800 viewers...

that was actually a blessing being able to connect to the community on Facebook live with the pandemic, that was a blessing. (Participant 2)

Video-conferencing services have tremendously increased due to the coronavirus outbreak (Pandey, 2020). People were forced to rely on the internet more to interact and communicate with others. One participant expressed using different live streaming platforms for her school and other religious events:

> Because of COVID, and we can't have big events at our school. We do a lot of stuff on Zoom and on Instagram Live and stuff like that…On Facebook, I watch a lot of the must-do, like virtual Jummah. They do Halaqas. So I always get notifications when that's going on; I'll tune in. Also on Instagram, most of my friends are in MSA so they always post their Zoom meetings if they're going to have some sort of religious event online. I'm also the president of the Muslim Student Association. So I myself, I'm in charge of the MSA page. So I post a lot of Zoom meetings and we do Halaqas with Shuyukh and scholars. So I use that. (Participant 4)

Religious apps were another medium that most interviewees expressed using during the outbreak. Scholars in this field have looked thoroughly at this new media platform and its impact on users' spirituality (e.g., Bellar, 2012; Campbell et al., 2014; 2016; Majrashi, 2018). However, research on the effect of these apps is still emerging, and more studies should be conducted to examine their potential impact on religious practices. In this research, many participants expressed their increased usage of Quranic apps and portrayed it as "*helpful*" and more "*convenient*" than reading the physical copy of the Quran.

> I don't read from the actual book because it's in my phone. The app is in my phone. I can get to it, always plus it saves, where I stopped. If for example, I face some sentence and

> some words that I cannot pronounce or I cannot read, I just used the reading features which I cannot have in the book. So, I'm more comfortable with the app. (Participant 20)

Digitalizing the Quran has brought many substantial benefits for many Muslims in this research. Participant 5 expressed how useful these apps are to him as they help him connect with his faith outside the worship place:

> You cannot be in the mosque 24/7, but with the phone, you kind of are. I think that is what I enjoy from all these apps… I am using it for multiple things, but at the same time, this is beneficial or accepted that this is what I want to use it for…like the Quran apps…I would just turn airplane mode on and then just read the Quran because it is so much easier, and the bookmarks are there. (Participant 5)

Another participant has also expressed his inclination towards reading the Quran digitally from his phone as it provides him with more comfort and convenience:

> I think you're sort of getting used to reading a certain type of text, right? There's some predictability in the font size and the type of the font and so on. So, I'm used to the one on my phone, and then I also put bookmarks on the phone. (Participant 6)

The interview data also suggest that the Quranic apps can be necessary for some circumstances. For instance, Participant 7, a woman and a newly converted Muslim expressed how using the Quran app on her phone helped her get access to the holy book during her menstrual cycle: "Muslim Pro is usually what I use the most…It has the Quran for women obviously, like, during the menses period, it is very good because you cannot touch the Quran, so that's been helpful." *(*Participant 7*).* Following Islamic law, it is not permissible for women to touch the holy book during menstruation (Syed, 2019); in contrast, reading the Quran from a digital copy is permitted by some Muslim scholars.

Promoting Faith and Building a Community

The second theme suggests that participants were motivated to use and endorse the various digital platforms during COVID-19 as they were keen to connect with their community. Muslims represent a small group in the U.S., and as a minority, most U.S. mosques function differently than mosques in a country where Muslims are the majority. For instance, Masjids are mainly designated for prayers in most Islamic countries, while in the U.S., most mosques advocate for community bonding, as they aim to provide a vibrant environment that can comfort and attenuate any obstacles facing their members (Lotfi, 2001). The Imam has shared how his Islamic center normally operated before COVID-19 "The mosque here is everything. People pray people have education, people share coffee, and have some social time. People come seeking help. People offer help. People come to marriages, divorces, counseling, funerals…" (Participant 2).

Most Islamic organizations in the U.S follow a rigorous plan and objectives to achieve their missions by building a community that supports and promotes Islam in the States. Accordingly, participants in this study all expressed gratitude to their local Islamic center, as it helped them attain a better relationship with their community. Participant 20 notes:

> …I really like, I really like, it's totally different from the way in my country…that this is what supposed to be in the Masjid. To build a community, to help the needy people, to support each other. It's not only to do the prayer. It's to support each other to discuss any problem to have a laugh… (Participant 20)

The prominent role of Islamic centers in American society has also provided a better opportunity for female Muslims to establish a significant role in society.

> I'm also from a Muslim majority country, and over there, we don't really have these public spaces for women… there weren't many opportunities where you could interact with your religious community. Everybody around me was a Muslim… Here "I was the principal of an Islamic school, that school was attached to a Masjid also. So, I had to do a lot of duties for the Masjid people as well… I also arranged…funeral which I had never done in Pakistan or anywhere…I feel more connected to my faith here than I did when I was living in Pakistan. (Participant 14)

Muslims' perception and conceptualization of mosques in the States as social institutions rather than just a place of worship have deepened their connection with these organizations. This amicable atmosphere has encouraged and inspired some individuals to interact with the other Muslims who visit the center.

> I was not able to make a new friendship from the Masjid there in India… But here, that was not the case…I met so many people. They came and talked to me, and they made friendship with me and I became close to them…Sometimes, I used to feel so guilty. My god, I'm just going to mosque to meet my friends. I'm so sorry, truly. I admitted it. (Participant 9)

Living in the U.S. has given this group of people more motivation and reasons to affiliate with their local Islamic center. Therefore, unsurprisingly, for some participants, attending an event in the mosque can be more appealing than watching the same service online.

> When you will be with the group and especially those people who are worshiping in the same way… especially in this country, so you feel more connected with those people, and you have more common things…I think that is a good motive for me to go to the mosque

more than just at home and just see the video. It is like you are watching YouTube. (Participant 1)

This theme showcases the significance of U.S. Islamic institutions in Muslim life, as they facilitate and enhance their connection with their faith and community. Therefore, when the pandemic struck and the lockdown rules were in effect, many Muslims who could not visit the mosque felt detached from their community: "I definitely missed the Masjid just because you build a community around, people ask about you, you ask people, what's going on…" (Participant 10). The early stage of the pandemic in 2020 also suspended gatherings with friends and family during religious ceremonies: "…not being able to see other family members during Ramadan and Eid was like a big change" (Participant 17). As a result, the new technology became a salvation for many individuals as the pandemic deprived them of visiting their local mosques or connecting with their families. Additionally, the increasing reliance on technology has encouraged and influenced religious leaders and Islamic institutions to establish a strong presence across different media platforms. The Imam expressed how his center and himself have started to advance their technological skills to adapt and communicate with their people:

> People reach out to me all the time whether to ask about their faith or to have an interview or to have a question…they communicate in every way possible - email, texting, WhatsApp - sending to the mosque Facebook.… I started a YouTube channel…we even updated our website, and we had a link to all the materials, the videos and all that… (Participant 2)

Participant 11, the chaplain of a Muslim Students' Association, has also explained how the online transition was a "*blessing*" for many international students who wanted to "*stay connected"* with their university's MSA:

> Recently, I had inquiries from students who used to attend on Fridays here and listen to Friday sermons… we have usually Muslim students from around 20 countries in the world. And then you graduate…But there is a connection…. that's why You can be in touch. Even if you are not there in person, you know what is happening. Once you come back or have reunions, you can build on those shared moments or feelings. (Participant 11)

The interview data suggest that Islamic organizations will continue to obtain an indispensable role for many Muslims in America, especially those committing to their beliefs and communities. Furthermore, emerging technologies have provided Islamic institutions with new ways to spread and promote their ideology outside their workplace. This result has further emphasized and strengthened Campbell's digital religion framework, showcasing the interconnection between online and offline religious activities. This theme also aligns with an earlier study that predicted that religious communities in the United States will start to adapt and embrace the latest technology more in the future to fulfill their sacred mission and growth (Kluver & Cheong, 2005). In this study, the researcher has found that participants' online spiritual practices often interceded with their offline affairs. For example, one study informant described how he uses social media platforms to find or engage in offline activities, like searching for a nearby Islamic center or other religious ceremonies:

> When I came to Newhouse for my master's, I had to find a mosque, right? I had to find a mosque to pray, and I also needed a place to stay. And so, after all the Muslim

> Community helps a lot. So, I reached out on Facebook… if you go on Facebook, you can find the mosque address on the mosque page. And also, if you want to find an individual, you can find it through Facebook. (Participant 10)

Being a Minority Has Increased the Reliance on New Technology

This theme suggests that Muslims living in a Muslim-minority country might feel the need to use more technology to connect with their faith. Accordingly, three main reasons were found during the coding process, indicating how Muslims in the U.S. consume religious content extensively on their digital devices. First, international Muslims in this study have all concurred that in-person religious services in the U.S. are limited compared to their hometown: "When I was back home, I would go with my dad to the mosque. I felt like access to a mosque was very easy to get back home so I would go out, I would pray" (Participant 15). Another participant addresses how technology is helping him to connect with his faith in situations where in-person religious services are lacking:

> …back home, when it's time for prayer, I just listen to the adhan outside and I know when it's time to pray. While here, it's more difficult. So, I'm kind of by default forced to interact more with the internet. So, I use it more here... I need to have that reassurance and that convenience. (Participant 17)

Secondly, being a Muslim minority in the U.S. has forced some individuals to exploit the various digital platforms (e.g., social media, Websites, blogs) as they strive to solidify their faith identity and establish a strong online presence with their community.

> I was born in the U.S., but I moved to Saudi Arabia when I was in third grade… I think in the U.S., I was looking more for a Muslim Community. So, I wanted to be a part of the MSA…I was joining WhatsApp groups and groups like Muslim groups like that so that I

> stay connected with them and what they were doing and their activities. Whereas in Saudi it was mostly just looking for the prayer times or looking for the Qibla if I'm outside, and stuff like that. (Participant 18)

Another participant has also demonstrated how social networking sites have provided her with a better opportunity to educate people about her religious identity:

> … I may have a lot of people from my school that are non-Muslim who follow me and when I post daily, like I posted today about Ramadan. It's the start of Ramadan and like a post that teaches people about what this month is to us and stuff like that… (Participant 4)

Lastly, the interview data shows that minority Muslims in the States who cannot speak Arabic rely more on online sources to connect with their faith than those who are fluent in Arabic. According to Pew Research, Arabic is considered the fastest growing language in America, with a 29% increase in Arabic speakers between 2010 and 2014 (Brown, 2016). Understanding Arabic can be vital for Muslims as it has been considered the language of Islam ever since the Quran (Islam's primary source teachings) came to the Arabian Peninsula 14 centuries ago. The holy book, since its revelation, was presented, transmitted, and preserved in Arabic to serve all humankind, regardless of their language and religious affiliation. The Quran was later translated (most translations serve as scripture interpretation because the Quran is considered non-translatable, as it cannot be isolated from its original written form) to different languages as Islam spread to non-Arabic lands, and many non-Arab people became Muslims (Rafiq, 2014). Nowadays, Pew Research estimates that around 80% of the Muslim population live in a non-Arabic speaking country, while Muslims in the Middle East and North Africa (where Arabic is the first language) represent roughly 20% of the Muslim world population

(Desilver & Masci, 2017). Although learning Arabic is not obligatory in Islam, Arabic proficiency can enhance the worship experiences. For example, some Islamic rituals like Quran oral recitation and the performance of ritual prayers (Salaah) must be performed in Arabic. Therefore, Muslims who know how to read and speak Arabic can find understanding the Quran's textual meaning more fulfilling than those who cannot understand Arabic (Rafiq, 2014). Nonetheless, non-Arabic-speaking Muslims are encouraged to fulfill their needs through their spirituality.

The language and ethnic diversity in this study sample have displayed some unique distinctions between the subjects. For instance, participants who were not native Arabic speakers' (N=16) expressed different motives and needs for using religious virtual platforms than Arab participants (N=4). One participant who cannot speak Arabic described some obstacles facing him as he tries to find accessible and affordable Islamic sources in the U.S.:

> …many of the books are in Arabic. I'm not Arabic speaker… it's hard. As a non-Arabic speaker, it is easier to engage with your faith online, than… from other books because it's very hard to find…And on top of that, the books that are in English they're kind of expensive because they're shipping from England. (Participant 16)

Another non-Arabic speaker believes that engaging in an Islamic ritual like reciting the Quran can necessitate more effort from her, as she relies heavily on digital apps that offer English translation of the holy book:

> …in our faith that Quran must be recited in Arabic. So, once we learn to recite Quran in Arabic, we have to learn its meaning.… I was not understanding anything. So, I had to depend upon a translation, English translation… I wanted a kind of app for learning the meaning…one of my friends just told me that one app called Quran Hive. So, it has

meaning of each word. So, I just downloaded that app. And I was just using it to recite Quran and to learn the meanings and all those. (Participant 9)

The language barriers facing non-Arabic speaker Muslims might have escalated their need for external resources. However, as smart devices become widely ubiquitous in the modern world, users can find consolation through various software and programs. Evidently, participants who cannot read or understand Arabic have shown a greater inclination towards using translation software and religious apps, as they facilitate and advance understanding of the scripture:

> …I have 5 Qurans and they are all different, not different in the origin but the interpretation… and I have like 4 translation apps that I go through… It is easier sometimes when I'm reading the app, then I can just hard press the word and copy it and then take it to the translators and then I will get 3 different words and well I think out of all of that, it means this word… (Participant 7)

Rq2: How has online religious engagement affected Muslim relationships with their faith during COVID-19?

The Pandemic Made People Want to Connect More with Their Faith

The pandemic crisis immensely changed people's relationships with their faith. Amid the pandemic catastrophe in March 2020, the search for prayers on google has increased rapidly as many people sought the internet to confront their fears (Bentzen, 2020). Religion can improve people's mental health by giving them hope during disasters (Roberto et al., 2020). Psychologists' studies have also shown that religion can help individuals cope with stressful moments during COVID-19 (Goodman, 2020; Thomas & Barbato, 2020). In times of crisis, faith and beliefs can provide security and optimism, especially among those who want to restore their relationship with their faith when exposed to a threat. According to a 2020 Pew analysis, due to COVID-19, many Americans changed their religious habits by praying more or attending

religious services online. Comparably, some participants in this study also said that the coronavirus outbreak had reinforced their connection with their spirituality: “I was more in touch with my faith, especially in the beginning of COVID-19 seemed ominous to the end of times and days of judgment” (Participant 18). The early stages of the pandemic and the lockdown experience also affected individuals’ religiosity as it gave them more time to reconnect with their faith: “…So I was home all day. It gave me the chance to really read a lot, to listen, to pray on time, and to do everything. I had the best Ramadan, last Ramadan” (Participant 4). Another participant has also shared similar emotions as he was encouraged to seek more spiritual consolidation during the quarantine:

> You know, you don't know what's going to happen. So, at a certain point, I got even closer to my Din after a couple of weeks of quarantine, and I start taking it more serious… So, that's when you start you start reading. You have to rely on the digital media at this point because you have no other option. So, at this point, I'm trying my best to learn more, gain more knowledge. (Participant 16)

On the contrary, these feelings were not mutual for Participant 8, who felt “*disconnected”* from his faith as the quarantine had deprived him of going to the mosque or visiting his community center. As for the newly converted Muslim, it was challenging for her to learn about her new faith during the lockdown: *“...*I was doing, like I said, a lot on myself. I didn’t understand all the rules of Ramadan and it was very difficult… What is breakfast? And what is that happening?” However, she felt *“the value of technology*” during this time, stating, “I do feel like the internet has helped me learn my prayers better. I would definitely watch YouTube or go to language sites just to be able to read and understand for the most part and try to memorize things...” (Participant 7).

Practicing Islam in the U.S. can Exert more Challenges on The Individuals

To explore the pandemic's effects on religious practices, participants were asked to share their experiences as Muslims living in the States during the pandemic. Unsurprisingly, most of the interviewees (both American and non-American Muslims) found that practicing Islam as a minority can be challenging for many reasons. Accordingly, the coding process has yielded two sub-themes: 1- identity crisis, and 2- Faith practicing & Cultural adapting.

Identity crisis. Over the last two decades, the Muslim population in the U.S. has been growing steadily; however, recent data indicates that more than 50% of Americans say they don't know anything about Islam or know any Muslims (Mohamed, 2021). In this study, qualitative data suggest that the lack of knowledge about Islam in this country can have a negative impact on Muslims' life and place in society:

> I would be in school, for example, fasting in Ramadan during school. I would tell them what it is and a lot of times, the principal did not even know that I was Muslim. He does not know what Islam is. (Participant 5)

Consequently, the continued marginalization of Islam in the 21st century can result in a faith and identity crisis for many Muslims living in the States (Uddin, 2006). The University chaplain emphasized this issue as well, as he had noticed many students shied away from joining the Muslim Students Association out of fear "*that somebody will judge them*." Thus, some students prefer to avoid associating with activities that might stigmatize them and ruin their college experience.

> They come with those pre-assumption that somebody will judge them. If they don't pray, then somebody will judge them. If they don't do something or if they do something and they don't want to be judged because this is their comfort zone. They want to enjoy their

> student experience. They want to enjoy college. And then sometimes, intentionally, they just stay away. Unfortunately, we do have sometimes very judgmental approach, especially in some mosques. And the younger generation sometimes are afraid that they will be judged for certain things that they're doing… (Participant 11)

Similarly, Participant 14, a retired educator, shared her experience working with students in Pakistan and the United States. According to her, students' lifestyles varied tremendously in both countries. She has noticed that life can be more difficult for Muslim students in the U.S. as they represent "*the defensive side*," thus destabilizing their attachment to their faith and identity. "When I go to public schools, I see that girls who are wearing hijab, they'll just hide in a corner, or they'll take off their hijabs. They're embarrassed to wear hijabs." In contrast, students in Muslim-majority countries like Pakistan can be more comfortable with their identity because "…in Islamic schools, when they see their teachers and everybody wearing the Islamic attire, they feel proud of it and they're more confident about it" (Participant 14).

American Muslims in this study also expressed their share of concerns as they believe that being a Muslim minority, regardless of your nationality, can bring many "*obstacles*" as they try to embrace their identity in society:

> Even though I am American… I am a minority and I wear the hijab so definitely everyone that sees me knows I'm a Muslim. So sometimes it is hard to be like in a room full of people where you're the only Muslim looking person or whatever it may be… (Participant 4)

For another participant, racism can be insuperable, as he tries to coexist in a harmonious environment to achieve his goals in life:

> It is like any minority group… Regardless of their ethnicity or whether they are Arab or non-Arab, you kind of have to watch yourself… for me to be Muslim... I just want to live the same way that you want to, right? I have my version of the American dream as well. (Participant 5)

These findings revealed some significant similarities between U.S.-born Muslims and foreign-born Muslims. The former has shown some indistinguishable thoughts and concerns from the latter as they both endeavor to achieve their goals and solidify their presence in society.

Faith practicing & Cultural adapting. The second sub-theme was related to the difficulties in *faith practice* and *cultural adapting* facing Muslims as they embark on the American way of living. According to Pew Research, American Muslims who have been born in the States and blended with the American lifestyle see no conflict between modernity and practicing Islam, as they hold and embrace their "American" and "Muslim" parts of their identity in tandem (Pew Research, 2017). Conversely, for foreign-born Muslims, engaging in religious practices can be more challenging in the U.S as compared to their hometown. The Imam further addresses some of the difficulties that might face foreign-born Muslims in his community:

> …most important prayer is Friday prayer. In the Muslim world, Friday is a day off. People just wake up in the morning, take their, showers, wear the best clothes, and go to the mosque. Back there, any mosque can be a two or three-minute walk from wherever you are. Here, you need sometimes to drive for half-hour to get to a mosque or even more… (Participant 2)

The interview data also shows that these challenges might be aggravated for those who belong to a minority group within Islam. There are two main subgroups of Muslims in contemporary Islam, Sunni and Shia. Only two participants identified as Shia in this study, while

the rest were Sunni Muslims. The lack of Shia Muslim participants in this project might be due to the global Muslim population differences between Sunni and Shia Muslims. Data estimate that the Shias (also known as Shi'a-t-Ali) represent only around 10-13% of the Muslim world population, while Sunni Muslims (Muslims who follow the "Sunna," the traditional practices of prophet Muhammad) represent the majority (87 to 90% estimate) of Muslims population worldwide (Pew Research, 2011). However, in America, Islam's ancient schism is not often discussed in Muslim society, as early generation immigrants were keener toward establishing a community that could serve the Muslim minority in general (Sacirbey, 2012). Accordingly, the ramification of this proposition has shaped the foundation and purpose of Islamic organizations in the United States to accommodate and serve all Muslims regardless of their religious belief (Barreto & Dana, 2009). Nonetheless, due to the sizable differences in the population between Sunni and Shia, most Islamic centers in America tend to be Sunni in practice. This has encouraged the Shia to establish their own Islamic institutions in the U.S. as the number of American Muslim Shia grew over the past two decades (Huda, 2006). As a result, sectarian mosques have emerged more in the United States. According to the 2020 U.S. Mosque survey, there are around 2769 mosques in the U.S. in 2020; among those, 6.5% were identified as Shia Masjids, including the current largest mosque in North America, the Islamic Center of America (known as the "heart of Shiism") in Dearborn, Michigan (Bagby, 2021).

Contractor (2011) found that Shia and Sunni in the United States share similar views in many aspects of life. According to him, being Sunni or Shia does not significantly affect individuals' religious identity and how they perceive themselves in American society. Generally, some Islamic teachings and ritual practices in the Sunni and Shia communities are very alike.

However, one Shia participant in this study shared his feelings of isolation and loneliness when visiting his local Sunni Masjid:

> …being a Shia, it has been very hard for me since I came from Pakistan because we don't have any mosques here… I have to rely on social media at times, but it just doesn't feel the same… I need that physical aspect, like I need to be part of a community. I can't live in virtual reality. And I really look forward to finishing my Ph.D. and going to a bigger city so that I can be part of my community… (Participant 15)

Engaging with Religion Online Can Raise Skepticism about the Source's Credibility

Religion can represent a sensitive matter for many people who feel that it is incumbent on them to have some level of skepticism to avoid undesirable information. For most participants, engaging with religious content online can occasionally make them feel concerned and skeptical about the authenticity of the source. However, individual responses varied tremendously, and several factors stimulated how Muslims trust digital platforms. For instance, the study's oldest participant expressed more concerns about trusting the new media:

> As I grew older, I feel that I need to verify everything… I will not just pick up random information. I usually go to very authentic people, or if somebody I don't know has put up some information, then I like to verify... I feel I need to listen to somebody who's really studied it, researched it to verify information…. (Participant 14)

On the other hand, a 20-year-old college student shows fewer concerns about the same issue, "…I think there's a lot of good and a lot of credible stuff. So, I think if you search a little bit extra to make sure what you're doing, what you're searching is credible" (Participant 4).

Besides age, the interview data revealed that the media platform can also influence how people trust the content. For example, when using computer-generated software like apps, most

of the study subjects reiterated their concerns about downloading Islamic apps that provide inaccurate information regarding prayer times and fasting. Researchers have previously found that many Islamic apps contain non-credible sources that can ultimately disrupt the users' digital faith experience (AlQuwayfili et al., 2013; Hameed et al., 2019). The spread of un-credible information on these apps might be the reason behind the increased distrust among many Muslims who use these platforms. One participant expressed his concern about this matter:

> …I am also hesitant. I do not trust a lot of things that are out there because I do not know who necessarily is developing them… you just want to be really wary of what you download and what you are consuming…. (Participant 3)

For another participant, such issues might be alarming, but they seemed to worry less "You cannot trust it 100% but at the same time, you put your faith in Allah. You cannot worship the way he is ought to be worshipped but you can come close enough" (Participant 5).

Nonetheless, it is highly inevitable for many practicing Muslims to find accurate information about ritual-based activities, like daily prayers and fasting during the month of Ramadan. Therefore, following Islamic law and culture, many Muslim-majority countries have the call of prayers (Adhan) performed out loud to alert people about the time of prayer and the fast-breaking times. Additionally, some Islamic countries follow an old tradition of firing a cannon during the fast-breaking time in Ramadan to help Muslims end their fasting (Saydulloevich, 2022). In contrast, Muslims in the U.S. must rely more on new technology to connect with these rituals. In this study, most of the study subjects expressed using apps like Muslim Pro on their digital devices to find information about ritual practices. The app accommodates its users (more than 100 million downloads) with various features based on their

geographical location. However, fewer participants expressed their concerns about the accuracy of the app:

> But in one occasion, there are a couple of people who start together before breaking fasting, and they have different cellphones at different times to break fasting, so that's kind of a little different surprise. Why is there a difference? In different cellphones, they have different apps, probably and they have one or two-minute difference… (Participant 8)

Conversely, one participant felt more comfortable using and trusting the prayer times on the app "…I'm very relaxed about it. But I feel like the timings are usually correct and I believe they're usually correct because when it comes to the timings, there aren't that many discrepancies between links in there" (Participant 17).

On the other hand, participants described more significant concerns regarding exposure to unverified information on the internet or social media platforms. Determining the authenticity of the retrieved source from these platforms can be challenging. For example, searching for an Islamic fatwa (legal ruling or interpretation based on Islamic law and given by a qualified scholar) on the web or social media can expose surfers to different thoughts and answers. "We Google stuff all the time, but you are constantly wary of where you are getting your information from, too…even YouTube, I will watch a couple of videos on there, but I am careful about who I listen to…" (Participant 3). Finding the most accurate sources online is essential in Islam, and Muslims are recommended to acquire the right information. The Imam described how he continues to emphasize this point while he preaches to other Muslims "…that is why I keep telling people, 'Do not to get answers from anywhere. Find authentic at least something that belongs to a ministry of religion in some Muslim countries or under the name of a well-known,

credible scholar" (Participant 2). The vast range of resources and information on the internet and social media platforms has allowed individuals to find their preferred sources effortlessly as they try to answer their faith-related inquiries:

> …when I came to America. So, if I had to look for a fatwa, I would go online… There's also on YouTube, Ghamidi…he is a very progressive Muslim scholar…I really like his videos. I look at the videos or something. If I have a question in mind, and I want to see what the scholar has to say about it. (Participant 15)

Overall, religious surfing and online faith practices can bring uncertainty and doubts to the mind of many Muslims. According to Islamic law, Muslims must attain the most accredited sources and refrain from getting inaccurate information. However, most participants concurred that such concerns can be avoided with precautions and carefulness while pursuing the right information. Additionally, the technological advancement in the last decade has authorized users with more control over the content as they can search and verify the authenticity of the different types of sources: "… there's a lot of good and a lot of credible stuff. So, I think if you search a little bit extra to make sure what you're doing, what you're searching is credible…" (Participant 4).

Rq3: What are the pandemic's long-term impacts on Muslims' transition towards virtual religion practices and the digitalization of Islam?

COVID-19 has Accelerated Digital Religion Practices

Due to the coronavirus outbreak**,** many individuals in this study have expressed using various live streaming platforms (e.g., Zoom, Snapchat, YouTube, etc.) to attend live religious events like Friday prayers, Islamic lectures, and Tafsir Classes. Participants' motivations to engage in these live activities were driven by their need for spiritual guidance, as religious assemblies were restricted due to the spread of COVID-19. Participant 4 explained, "…before

COVID, I never really watched stuff online like Islamic lectures or anything. I always just went to the Masjid or whatever it may be, but definitely, after COVID, I started to listen to a lot of lectures online.". The pandemic has undoubtedly accelerated the adaptation of online religious practices as emerging technologies continue to evolve and facilitate new ways for religious interactivity. Although most of the study subjects expressed their participation in online faith activities before the outbreak; for some individuals, the pandemic experience has boosted their acquaintance with religious virtual spaces:

> …it was a hard time, definitely. But there's honestly, I feel like it opens someone's eyes and there's also many best blessings… I've definitely witnessed that there was a greater increase in the social media and these platforms, especially after the COVID-19. (Participant 16)

The increased use and demand on these platforms have also forced many religious institutions to proliferate their online services:

> …you will find all the videos; they go all the way back until when the COVID started. And so, I would say we have done, in two weeks of COVID, not a whole year, just in two weeks of COVID videos of what we have done in 30 years… we had an audience. You could see the difference, some videos during the pandemic, you could have the khutbah for example 700-800 viewers… (Participant 2)

Most participants in the study showed sincere gratitude towards the online religious transition, and many predicted further adaptations in the post-COVID-19 era: "I have seen Imam live-stream his Friday speech. It's really reaches the people who don't even go to the mosque… I think that's really interesting, happening during COVID-time and I think it might continue even

after COVID time" (Participant 8). MSA's Chaplin also foresees more reliance on virtual spaces in the future:

> So during Covid, it changed a little bit…we would post live Friday Reflection from time to time. So when it's time for Friday prayer, we don't have anything person but we would do live Friday Reflection and then share that with our audience…now as we are slowly, hopefully exiting Covid, I think realization is that even when things get back in normal, that Zoom is really something that can be useful to attract more people. (Participant 11)

According to these findings, the digital transition in 2020 will emerge to be a decisive moment in digital religious practices. As of 2022, in-person religious gatherings have resumed in the United States; however, one interviewee indicated his continuous involvement with online religious events even when his local mosque returned to normal operation:

> We can go to the mosque again. But it's still happening through Zoom because it's more convenient for everyone… Other than prayer, everything else is probably going to go towards technology. More people are going to start using technology for that… it's probably going to be a little bit more dominant than what it was in 2020 before COVID (Participant 13)

In-person Religious Services are Indispensable

Participants in this study showed an overwhelming favorableness towards digital religious practices. The pandemic reinforced the importance of the new technology; nonetheless, the interview data has also revealed that traditional religious practices will continue to play a pivotal role in Muslim life. The significance of in-person religious gathering is substantial for Muslims in the States, as it facilitates ritual practices and promotes community bonding: "…seeing each other in person is very productive and gives more of a good feeling that you are

connected to others and your religion… (Participant 7). Another participant also believes that visiting the Masjid allows him to connect deeply with his fellow Muslim friends:

> There is nothing like that face-to-face… the feeling you get when you see someone's face-to-face, praying foot-to-foot or shoulder-to-shoulder…I miss my brother. I miss my friends. I miss the people. When I see them, I am happy that I came to the Masjid... (Participant 5)

In addition to community meetings, one participant believes that engaging physically in some religious rituals, like donation, yields better spiritual gratification than practicing the same activity in the digital space:

> I see a couple of website where you can donate, let's say $1 a month or $1 a day… You can connect your credit card, and they will deduct $1 a day with you only sitting on that day… you are not physically doing anything. It does not feel like giving money to the needy people… (Participant 20)

Another participant also expressed her resentment towards certain online ritual practices, like reading the Quran from the phone, as she believes it disrupts the spiritual connection:

> …I think it's also in the sense that it's a sort of respect when reading the Quran that you read it appropriately. I feel like on the phone, you're doing so many things on it, you're reading it. But also, you're getting notifications, and then I just prefer not to… (Participant 18)

Many online users are susceptible to receiving digital distractions (e.g., notifications, ads, etc.), which can impact their communication with the content. As Participant 12 explains:

> … they're always like digital distractions. Even if I'm just watching a reel video, you know, it's so short. It would just move on to the next video, and that video could be or

> could not be about what I want to hear. I think nothing can really replicate the kind of understanding you get when you meet a person face-to-face because there's different forms of communication… I feel more connected when it happens outside of the digital space.

Participant 19 also feels that virtual engagement can be "*artificial*" and "*unnatural*" compared to in-person practices: "It would be harder virtually because … you feel isolated and you really have to be very dedicated to engaging on Zoom because after an hour at max, logically, your mind is not ready to engage more…". However, not every participant felt this way. Participant 13 perceived online religious engagement to be less distracting than some in-person gatherings:

> When you go to the Masjid, you feel more spiritual; But sometimes, after a while in the mosque, while you're sitting down, you can get off-topic. That can happen for a long Khutbah. But if you are actually on Facebook or something, one thing different is I'm only clicking on that. Notification is there. I'm only clicking on it when I actually have available time to focus on that. So, sometimes it's better.

Understanding how participants conceptualize their relationship with their faith based on their online and offline activities is significant in this field of study. Campbell (2011) believes that examining what constructs offline and online religious activities can provide researchers with a better comprehension of the cultural and social changes of the studied group. Accordingly, this theme suggests that, despite the fast transition toward online religious practices in the last couple of years, the significance of in-person religious services will continue to be essential for many Muslims in the States, even in post-pandemic times. For one participant, engaging with religion online is only desirable when it is needed "I'd much rather go in person…To be

surrounded by Muslims is it's very different than just seeing them on your screen … I think I'll only do it on my screen if I have to" (Participant 4). Similarly, 2020 data reported that around 42% of U.S. adults said that once the coronavirus outbreak is over, they will resume going to their houses of worship as they did before the pandemic (Cooperman, 2020). Nonetheless, the Imam shared a different thought, as he fears that the online transition might generate a more considerable effect on traditional religious practices and the number of people visiting his mosque: "My fear is people are used to be remote, and they relax about that, and they just will go on this way" (Participant 2).

The effect of new technologies on traditional religious practices has been examined thoroughly by many researchers in the past (e.g., Campbell, 2005; Williams, 2008). Digital practices can transform religion to be more of an individualistic experience that decreases the interactivity between communities (Rinker et al., 2016). One study by Mullin (2011) found that people who have used the online church that offers 24-hour services like prayer rooms and consulting did feel more comfortable as they preferred attending the Sunday meetings sitting in their houses, wearing their pajamas, instead of dressing up and going to church. At this stage, it is hard to anticipate and foresee the pandemic's effects on the degree to which virtual spaces will overtake traditional religious practices. Qualitative data in this study shows that the pandemic has accelerated the shifts toward more virtual practices, but in-person services will continue to be necessary for many individuals. Moreover, the Imam, despite his fear, believes that Islam as a religion cannot be fully digitalized as it represents more meanings for its followers:

> For us Muslims, you know that we have, it is a lifestyle, it is a way of life… so you cannot digitalize that… I do not think people will ever, in general, will ever give up the

in-person in favor of virtual because our coming together is vital, especially for the prayers. (Participant 2)

Conclusion

The ongoing coronavirus phenomenon represents an imperative time in digital religion studies. This research method provides an excellent assessment and evaluation of the immediate effect of COVID-19 on digital religious behaviors among Muslims in the United States. After conducting 20 in depth-interviews with Muslims from Northern New York between 2021 and 2022, several key themes have emerged from this study showcasing the ramifications of COVID-19 on online religious practices. The qualitative data reveals that religious digital media consumption spiked immensely due to the coronavirus outbreak. For many individuals and religious leaders, the transition to online religious practice was satisfactory because they had established a robust digital presence before the pandemic. However, many participants in this study indicated that their religious media engagements did increase during the outbreak, as in-person religious meetings became inaccessible outside their home space. The pandemic also inspired the need and motivation for new digital faith activities. For instance, the use of live streaming platforms like Zoom and YouTube became prevalent among many individuals who sought to attend live religious events when their local mosque was shut down during the quarantine. Therefore, the new technology has evolved to be a great moderator for people and their religion, as the pandemic crisis reinforced faith connection among many individuals who began seeking more online spiritual guidance.

Another significant element emerging from this study was individuals' identity as minority Muslims in the United States. The study subjects reflected on their identity by demonstrating how being a minority has stimulated their needs and reliance on new technology.

Accordingly, the negative image associated with Islam and Islamophobia has resulted in an identity crisis for many participants who feel that these stereotypes might hinder their progress in life. Therefore, many individuals expressed using the various digital media platforms as a form of escapism to promote Islam and fight discrimination. Additionally, many individuals also noted that in the U.S., religious services can be limited compared to other Muslim-majority countries, thus forcing them to utilize more of the new technology to connect with their faith and community.

Overall, the qualitative data suggest more positive attitudes toward digital platforms as they facilitate Muslim life in many aspects. However, many participants expressed concerns and worries about exposure to unreliable sources online due to the abundance of inaccurate information on the internet. Concerns were raised regarding two main things: the use of Islamic apps that contain inaccurate details about fasting and prayer times and the exposure to unverified information on the internet and social media platforms. Although these issues might negatively impact the individual's spiritual experience in the virtual world, the research data indicates that the indulgence and comfort of the new technology have prompted many Muslims to continue engaging with digital platforms while being attentive and selective of their choices.

Lastly, the interview data demonstrates that the COVID-19 pandemic has accelerated digital religious adaptation among Muslims in the United States. Foreseeing the pandemic's effects on religion at this stage can be challenging, and researchers need to conduct more studies and analyses to comprehend the full impact of COVID-19 on digital religion. This research contributes to the field by showcasing and predicting that online religious practices will continue to escalate, thus reinforcing and accelerating the trend towards the digitalization of religion. On the other hand, the interview data also revealed that practicing an Islamic ritual in person

conveys more profound meanings and values for many Muslim worshippers. Therefore, attending religious services in person is irreplaceable because it yields a better spiritual connection and can enhance individual social experiences with their faith and community.

The findings in this qualitative study provide rich data to this field by showing new insights into the pandemic and its impacts on digital religious practices through the lens of Muslims in the States. Future research could further extend this research in many ways. For instance, researchers could apply the same methodology from this study and test it on other cultures or religious affiliations. Examining the impact of COVID-19 on different societies and ethnicities can help advance this investigation and provide a broader understanding and contribution to this topic.

Chapter V: Quantitative Method

The second method in this dissertation consisted of an online survey that was designed and distributed once the in-depth interviews were completed. Online research methods have developed rapidly in recent years. Researchers across disciplines have adopted various digital platforms as traditional research tools to collect data. The flexibility of these methods has provided researchers with many advantages, as they facilitate a more convenient strategy to assemble large data effortlessly and rapidly (Madge, 2006). However, online methods face many criticisms regarding the reliability and validity of the data and sample. A previous study has found that when testing the accuracy of survey measurements of online data collected through probability and nonprobability samples, there were less accurate results on the nonprobability sampling than the probability sampling data (MacInnis et al., 2018). Therefore, researchers using online methods are recommended to acknowledge any critical and ethical awareness that might jeopardize the reliability of their study findings. This can help attenuate any sampling and recruitment difficulties while yielding the most valuable data that fit the study purpose (Hooley & Weller, 2016). Nonetheless, despite the limitations of this method, online surveys remain a useful tool in this field, as numerous studies in recent years have emerged using this methodology (e.g., Brubaker & Haigh, 2017; Mullins, 2011; Ratcliff, 2017). In this dissertation, a cross-sectional survey questionnaire was designed to test three hypotheses and provide additional insight into research question four. The researcher developed several variables and measurements in this quantitative method by reflecting on the qualitative results.

Survey Design and Distribution

First, a survey was designed through Qualtrics (see appendix B), a well-known professional survey company with a high standard of security and privacy that offers many services like survey designing for commercial or academic purposes. The survey was then

distributed through Amazon MTurk (an online platform developed by Amazon to recruit people from different parts of the world who are willing to complete tasks for a fixed amount of money) to find respondents that fit the research sample criteria. Research exploring samples has found that MTurk samples yield better-quality data than other traditional methods (Paolacci et al., 2010). MTurk also provided a smooth process of data collection, boasting more than 100,000 users, which offers a more demographically diverse audience compared to the other internet samples (Buhrmester et al., 2016).

In this study, participants who agreed to participate were directed to the questionnaire (see Appendix D); however, only the responses that matched the recruitment criteria (the subject must be residing in the U.S, identify as a religious person, and consume religious content on their digital devices at least once in the last week) were included in the sample. The survey took between 15–20 minutes to complete, and all participants who accessed the questionnaire link were paid a nominal amount. The final retrieved data from MTruk consisted of 545 respondents, and after excluding the non-valid responses, the final sample included 489 respondents.

Sample

This study includes more males than the national average (usually 51% female and 49%), as respondents were composed of 301 males (61%) and 188 females (39%). The age distribution in this study also lacked the number of younger adults, with respondents' ages ranging from 35 to 83 (M = 50, SD = 10.6). Amazon MTurk workers tend to be younger than the general population (Pew Research, 2016); however, it is understandable to have more older adults in this research as recruitment was based solely on religious people. According to many studies, younger people are less religious than older people, especially in Europe and the United States (Kramer & Fahmy, 2018). Consequently, young workers on Mechanical Turk seemed less

interested in joining this study. The survey also targeted those affiliated with any religious group; however, due to the dominant religious tradition in the United States (Christianity is the majority religion according to Pew 2014 census: 90.2% Christians, 1.2% Muslims, 2.4% Jewish, .09% Hindu), this study consisted of similar religious distribution: 89% of the respondents in this research identified as Christian, followed by Jewish (4.3%), Hindu (3.7%), Muslim (1.8%), and others (.8%). The sample also included more White people (85.5%) than other ethnicities like Asian (6.3%) and African Americans (3.5%). The ethnic representation in this sample is similar to the 2020 U.S. Census (White 61.6%, African Americans 12.4%, Asian 5.8%), and it's also aligned with a previous study that found MTurk samples generally tend to consist of smaller percentages of non-White groups (Levay et al., 2016). Lastly, the greatest number of participants in this study were noted to be highly educated, with the majority being college graduates (69.9%), followed by post-graduate (15.7%), and only a few with no college degree (14.3%). Table 1 (below) provides the demographic composition of this study sample.

Table 1

Demographic characteristics

Sample characteristics	%
Gender	
Male	61%
Female	38%
Age	
35-45	44.4%
46-56	29.8%
57-69	18.4%
70+	7.4%
Ethnicity	
White	85.5%
Asian	6.3%
African Americans	3.5%
Others	4.8%
Religion	
Christianity	89.4%

Judaism	4.3%
Islam	1.8%
Hinduism	3.7%
Other	0.8%
Education	
Below high school	2.2%
High school graduate	12.1%
College degree or more	69.9%
Post-graduate	15.7%

Note. N =489.

Scales & Measurements

Combining qualitative and quantitative approaches at different stages in a project can yield several benefits in scientific research. Barbour (1999) found that applying mix-methods analysis at different stages in a project can yield many benefits. For example, qualitative findings can significantly contribute to quantitative analysis. According to her, qualitative data can help researchers (1) explore relevant variables to their study, (2) generate new hypotheses and research questions, and (3) provide an additional explanation for unexpected results from the first method. Therefore, this dissertation used the qualitative findings from the first method as a lens to construct new variables and measures for the quantitative approach. Accordingly, five variables were developed in this research to test three hypotheses and answer one research question. These variables were defined as follows: (1) religious digital media consumption, (2) digital media uses and gratifications, (3) attitudes toward technology, (4) sense of belonging, and (5) religiosity. The study adapted several scales and measurements from the literature to measure these concepts.

Religious Digital Media Consumption

As discussed in the theory chapter, the uses and gratifications theory is highly centralized around the active audience and their interaction with the media. Therefore, UGT researchers must always establish their study sample on individuals with a medium to a high media

engagement level. In this study, individual media engagement was measured based on their religious digital media consumption. Respondents were asked to note the number of days (ranging from 0 to 7) in the past week that they had used three digital platforms on their devices for religious purposes. The platforms were: The internet (M=6.74, SD= 1.5), social media (M=6.28, SD= 1.8) and apps (M=6.27, SD= 1.8).

Digital Media Uses and Gratifications

Many UGT researchers in this field have used online survey methodology in their studies (e.g., Armfield & Holbert, 2003; Brubaker & Haigh, 2017; Pennington, 2015). The measurement in these studies varied a lot as scholars did not provide a unified scale in their research. Alternatively, most measures were developed based on how researchers conceptualized the UGT framework (Ruggerio, 2000). In this study, a modified five-point Likert scale was used from Brubaker and Haigh (2017) and Pennington (2015), consisting of eight items that are designed to determine, first, the uses and motives behind online religious engagement (e.g., To encourage/assist those who are in need of spiritual support, To facilitate my spiritual connection with God/Allah/deity, etc., To access information about religious services, activities, or events, To relax and unwind) (α= .69), and second, the gratifications obtained from these practices (e.g., Digital Media raises my spiritual connection with my faith and others, Digital Media enlighten my spirituality, Digital Media help me find religious information, Digital Media help me relax and unwind) (α= .63). An explanatory principal components analysis (PCA) was used on these items to determine the scale consistency and factorability (see Table 2). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .709, and Bartlett's Test of Sphericity showed a statistically significant result at $p < 0.001$. Items that cross-loaded were then formed into two main factors that highlight respondents' religious digital media uses and gratifications: 1-

Spiritual connections and 2- Information seeking.

Table 2

Factor Analysis of religious digital media Uses & Gratifications

	Factor Loadings
Uses	
F1: Spiritual connections:	
To encourage/ assist those who are in need of spiritual support	.79
To facilitate my spiritual connection with God	.74
F2: Information seeking:	
To access information about religious services, activities, or events	.67
To relax and unwind	.65
Gratifications	
F1: Spiritual connections	
Digital Media raises my spiritual connection with my faith and others	.73
Digital Media enlighten my spirituality	.76
F2: Information seeking	
Digital Media help me find religious information	.61
Digital Media help me relax and unwind	.68

Attitudes Toward Technology

Many researchers in this field have examined religious people's attitudes toward technology. Although studies have found a connection between the two variables, most of the findings were conflicted on how religion shapes people's perception of technology. For instance,

Ratcliff et al. (2017) have found that the positive attitudes toward technology decreased as the level of religiosity increased, thus aligning with previous studies' findings (e.g., Mullin, 2011; Miller, 2013), which had predicted that highly religious people see technology interfering with nature and can be a threat to the traditional faith practices. These collective findings manifest a negative correlation between individuals' level of religiosity and their attitudes toward technology. On the other hand, several studies have found a positive link between technology usage and faith practices by displaying how digital platforms like the internet and social media have enhanced people's spiritual experience and strengthened their religiosity (Dawson, 2000; Kluver & Cheong, 2007). Thus, the first hypothesis in this study reflects on this concept by speculating a positive correlation between the attitudes toward technology and religious digital media usage:

H1: Religious digital media use will correlate positively with the positive attitudes toward technology and negatively with the negative attitudes toward technology.

On the other hand, predicting the relationship between people's attitudes toward technology and their level of religiosity can be more complex, and qualitative data did not provide enough evidence regarding this concern. Instead, the mixed results indicate that several factors can influence religious people's perception of the new technology. Therefore, to further understand the correlation between religion and attitudes toward technology, a research question (Rq4) was raised to explore how religiosity, along with other factors (e.g., age, gender, religious affiliation, and religious digital media consumption), predict the individual's attitudes toward technology.

Rq4: How do religiosity and demographic factors predict individuals' attitudes toward technology?

Respondents' attitudes toward technology were measured using a scale developed by Rosen et al. (2013). The scale includes 16 items with four subscales (technology positive attitudes, technology negative attitudes, technology anxiety dependence, and technology task switching) and measures how people feel about technology. In this study, only six items were adapted to measure the positive attitudes (e.g., I feel it is important to be able to find any information whenever I want online, I feel it is important to be able to access the Internet any time I want, I think it is important to keep up with the latest trends in technology.) and the negative attitudes respondents might have toward technology (e.g., New technology makes people waste too much time, New technology makes life more complicated, New technology makes people more isolated.). Using Cronbach's alpha test, the scale test has indicated an acceptable reliability score of .74.

Sense of Belonging

According to Maslow (1954), developing a high sense of belonging is one of the most fundamental human needs. Over the years, researchers have examined the role of belonging across different aspects of life. Many religious studies have found that faith can contribute positively to the individual’s need for belongingness, as most religious rituals involve activities that enhance community bonding (Gebauer & Maio, 2012). For example, in many religious beliefs, congregations are perceived to yield better spiritual benefits and reinforce feelings of social participation among worshippers (Mathras et al., 2016; Pargament et al., 1983). As a result, individuals might experience a high level of belonging to their congregation when they are active community members.

Developing a high sense of belonging can also inspire those people to participate more in activities related to their faith and religious institution (Carrier, 1965). The findings in the qualitative data suggested that religious individuals are becoming keener to engage with their

faith and community in the digital world as their local religious institutions have started offering services online. This might indicate that people who develop a high sense of belonging can feel more gratified using digital platforms for religious purposes than those who are less affiliated with their religious community. Therefore, to further elaborate on this point, this research hypnotizes a positive correlation between a sense of belonging and religious digital media gratifications.

H2: Religious digital media gratifications will be positively associated with a sense of belonging.

Measuring the individual level of belonging with one's faith has been examined extensively over the years. In this field, researchers studying the intersection of belonging and religion have also examined other variables, like physical health status (Krause & Wulff, 2005), product evaluations (Minton & Liu, 2020), and elderly health (Krause & Bastida, 2011). As a result, researchers used different measures and perspectives while studying the subjects' sense of belonging. In this study, respondents' sense of belonging was conceptualized and measured based on their connections with their religious congregation. The measurement used was adapted from Krause and Bastida's (2011) framework and was designed to test the extent to which the study subjects feel they belong in the place where they worship (e.g., I feel like I really belong in my congregation. Being a member of my congregation is an important part of who I am. I feel welcomed in my congregation. I feel I am accepted by the people in my congregation) (α= .71).

Religiosity

Qualitative data revealed that people's religiosity could play an integral role in this topic. Therefore, to further examine the effect of this variable, the researcher used the brief version of *the Santa Clara Strength of Religious Faith Questionnaire* to measure respondents' level of

religiosity. Due to its cohesive measurement, many researchers from different fields have adapted and used this scale in their studies (e.g., Sherman et al., 2011; Brubaker & Haigh, 2017). The scale was developed by Plante et al. (2002) to measure people's relationships with their faith and rituals based on a five-point Likert scale (e.g., I pray daily. I look to my faith as providing meaning and purpose in my life. I consider myself active in my faith or community. I enjoy being around others who share my faith. My faith impacts many of my decisions) (α= .48). Accordingly, this study raises a hypothesis (H3) to measure the relationship between respondents' level of religiosity and their sense of belonging to their community. The third hypothesis was developed based on the qualitative findings, which suggest that a higher level of religiosity can have substantial effects and implications on community bonding, thus speculating a positive association between the two variables.

H3: Respondents with a higher level of religiosity will exhibit a higher level of belonging to their community than those with a low level of religiosity.

Results

This research further examines the impact of digital religious practice behaviors across different variables. All data were imported and analyzed through statistical analysis software using SPSS. Table 3 (below) provides a descriptive statistic (mean, standard deviation, skewness, and kurtosis) and an item-by-item analysis of the study's variables and measurements. Skewness and kurtosis are statistical parameters that give insights into the shape of the distribution and how it compares to a normal distribution. Skewness is essentially used to measure the symmetry of the distribution, while kurtosis shows the peakedness or flatness of a distribution. Table 3 shows that the distribution in the first two subscales (religious digital media uses and gratifications) was outside the range of normality, as most numbers were greater than ± 1.0. Meanwhile, the

skewness and kurtosis of the attitudes toward technology and sense of belonging were near normal distribution, with most numbers close to zero. All variables, except for religiosity, have a negative skewness, meaning that the distribution of scores in these items is left-skewed. In contrast, the kurtosis values in all five indices were positive, and some were greater than 1. This indicates that the distributions are too peaked (leptokurtic) than a normally distributed variable.

Table 3

Descriptive Statistics for the analyzed indices

Subscales	Items	Mean	SD	Skew	Kurtosis	Alpha if Item deleted
Religious Digital Media Uses	To encourage/ assist those who are in need of spiritual support	4.02	.84	-1.30	2.60	.55
	To facilitate my spiritual connection with God/ Allah/ deity, etc.	4.15	.86	-1.01	.88	.59
	To access information about religious services, activities, or events	4.12	.79	-.87	1.04	.64
	To relax and unwind	4.20	.87	-1.26	2.09	.65
	Cronbach's Alpha = .69					
Religious Digital Media Gratifications	Digital Media raises my spiritual connection with my faith and others	4.04	.74	-.80	1.19	.54
	Digital Media enlighten my spirituality	4.16	.87	-1.03	.96	.53
	Digital Media help me find religious information	4.23	.74	-.94	1.39	.61
	Digital Media help me relax and unwind	4.20	.88	-1.26	1.80	.57

	Cronbach's Alpha = .63					
Attitudes toward Technology	I feel it is important to be able to find any information whenever I want online	4.11	.74	-.90	1.74	.73
	I feel it is important to be able to access the Internet any time I want	4.27	.802	-.89	.128	.74
	I think it is important to keep up with the latest trends in technology	4.22	.785	-1.19	2.29	.73
	New technology makes people waste too much time	3.86	.98	-1.03	.90	.65
	New technology makes life more complicated	3.93	1.10	-.95	.21	.69
	New technology makes people more isolated	3.40	1.03	-1.19	1.13	.67
	Cronbach's Alpha = .74					
Sense of Belonging	I feel like I really belong in my congregation	4.10	.78	-1.06	2.04	.60
	Being a member of my congregation is an important part of who I am	4.10	.906	-.92	.70	.66
	I feel welcomed in my congregation	4.24	.79	-1.16	1.89	.65
	I feel I am accepted by the people in my congregation	4.24	.80	-.98	.97	.67
	Cronbach's Alpha = .71					
Religiosity	I pray daily	3.71	1.51	1.97	3.43	.40
	I look to my faith as providing meaning and purpose in my life	3.92	1.56	1.80	2.31	.50

I consider myself active in my faith or community	3.90	1.66	1.70	1.96	.40
I enjoy being around others who share my faith	4.02	1.67	1.61	1.56	.47
My faith impacts many of my decisions	3.80	1.50	1.93	3.32	.38
Cronbach's Alpha = .48					

Note. Contribution to Cronbach's Alpha (Item by Item Analysis) is also included in this index.

To test the three hypotheses, first, a hierarchical multiple regression was utilized to answer a research question (Rq4) on the factors that can predict respondents' attitudes toward technology. A Pearson product-moment correlation coefficient was then employed to test H1 & H2, which assessed the relationship between the positive and negative attitudes toward technology, sense of belonging, religious digital media uses, and gratifications. Lastly, H3 was tested using a one-way between-groups analysis of variance (ANOVA) to understand how people's level of religiosity is associated with their feeling of belonging in their community.

The regression analysis in Table 4 explains in three models how the dependent variable, attitudes toward technology, varies by the different independent variables in this study. The first regression equation (Model 1) investigated respondents' demographic factors (age, gender, and religious affiliation), and, in model 2, religious digital media consumption on social media, apps, and the internet were measured. Lastly, religiosity was inserted solely in model 3 after taking into account all the confounding variables. Overall, in this regression analysis, a comparison of the model's R-square values reveals that 51.6% of the variance in the attitudes toward technology is explained by the dependent variables in table 4.

Observing models 1 and 2, which show the effect of respondents' demographic factors without controlling for their level of religiosity, both Models indicate that there is no effect of the

demographic factors in this analysis. This shows that participants' age, gender, and religious affiliation are not associated with their attitudes toward technology. Nonetheless, when controlling for all the variables in model 3, there was a statistically significant effect on those who identified as Jewish. This finding indicates that being Jewish can significantly influence attitudes toward technology when controlling for age, gender, religious digital media consumption, and level of religiosity. However, due to the small sample size of this group (4.3%), this finding can't be considered reliable nor representative.

Looking at the individual religious digital media consumption on the internet, social media, and apps, both model 2 and model 3 show a significant association between these variables with attitudes toward technology. The regression analysis in model 2 shows that each day's increase in religious consumption on social media is significantly associated with a .340 increase in attitudes toward technology. In addition, more frequent consumption of religious apps and the internet is significantly associated with a .407 and .419 increase in attitudes toward technology, respectively. Turning to Model 3, in which respondents' level of religiosity is included, the religious digital media consumption coefficient remains significant across all the platforms. However, when comparing Model 3 to Model 2, the coefficient in the social media and internet dropped to $p < .05$, and the beta score decreased to .267 for social media and .359 for the internet. On the contrary, the app's coefficient was not reduced after adding a new indicator; instead, the coefficient in Model 3 increased to $p<.001$, with a beta score of .485. This means that higher consumption of religious apps can be an indicator of the attitudes toward technology when controlling for demographic factors and religiosity.

Lastly, the relationship between attitudes toward technology and religiosity was examined in Model 3. Table 4 shows a strong negative association (-.158) between the two

variables, as the religiosity coefficient was highly significant at p<.001. This finding indicates that religiosity indeed plays a role in how people perceive technology. However, the reason behind the negative association between the two variables might be due to the sample age distribution in this study, which consisted of more elderly adults and fewer young people. This result supports previous studies that found older adults tend to develop a less positive attitude toward technology as they face many difficulties adapting to it than young adults (Vaportzis et al., 2017). Nonetheless, this research could not support this argument as the quantitative data did not yield significant results based on respondents' age.

Table 4

Multiple regression analysis predicting the attitudes toward technology

	Model 1	Model 2	Model 3
	B (s.e)	B (s.e)	B (s.e)
Constant	24.325***	16.695***	20.080***
Age	-.028	-.012	-.018
Gender (Male)	-.303	-.328	-.337
Christians	.788	.438	.603
Muslims	1.88	2.51	2.92
Jewish	1.24	.987	1.13*
Hindus	.314	-.040	.086
Social Media		.340**	.267*
Apps		.407**	.485***
Internet		.419**	.359*
Religiosity			-.158***

Note. N= 489, *p< .05, **p<.01, ***p<.001; unstandardized coefficients shown.

To test H1 and H2, a Pearson product-moment correlation coefficient was computed (see Table 5) to assess the relationship between positive attitudes toward technology, negative attitudes toward technology, sense of belonging, religious digital media uses and gratifications (spiritual connections and information seeking). The first hypothesis proposes a positive correlation between religious digital media usage and positive attitudes toward technology; and a negative correlation with the negative attitudes toward technology. Table 5 shows that there was a moderate positive relationship between the positive attitudes and digital media uses for spiritual connection ($r = .564$, $p < .005$), and information seeking ($r = .529$, $p < .005$). This finding indicates that the positive perception of technology can influence how people use their digital devices for religious purposes, thus supporting the first part of the hypothesis. However, the negative attitudes toward technology were not negatively associated with religious digital media use. As indicated in table 5, there was a weak but positive relationship between the negative attitudes toward technology and the digital media use for spiritual connections ($r = .454$, $p < .005$) and information seeking ($r = .356$, $p < .001$). Therefore, hypothesis 1 was partially supported.

The second hypothesis proposed a positive relationship between digital media gratifications and sense of belonging. There was a moderate, positive correlation between the two variables: spiritual connections gratification ($r = .548$), Information seeking ($r = .590$); however, the relationship was highly significant at $p < .001$ (see Table 5). This association supports hypothesis 2 by showing that religious gratifications in digital media can positively affect the feeling of belonging in the community.

Table 5

Pearson product-moment correlation results for H1 and H2.

Variable	1	2	3	4	5	6	
Technology positive attitudes	|						
Technology negative attitudes	.33** (.000)	|					
Spiritual Connection (Uses)	.56** (.000)	.454 ** (.000)	|				
Information Seeking (Uses)	.53** (.000)	.36** (.000)	.48** (.000)	|			
Spiritual Connections (Gratifications)	.59** (.000)	.44** (.000)	.70** (.000)	.49** (.000)	|		
Information Seeking (Gratifications)	.63** (.000)	.39** (.000)	.48** (.000)	.61** (.000)	.45** (.000)	|	
Sense of belonging	.67** (.000)	.41** (.000)	.54** (.000)	.59** (.000)	.55** (.000)	.59** (.000)	|

Note. **. Correlation is significant at the 0.01 level (2-tailed).

Hypothesis 3 analyzed how people's perception of their level of religiosity is associated with their feeling of belonging in their community. To test this hypothesis, a one-way between-groups analysis of variance (ANOVA) was used to explore this relationship. First, based on "*the Santa Clara Strength of Religious Faith scale,*" respondents' religiosity was divided into three categories: low (40%), moderate (29%), and high (29%) level of religiosity. The descriptive statistic in Table 6 shows that the low and moderate levels of religiosity were associated with the numerically highest mean level. In contrast, the high level of religiosity was associated with the

smallest mean level across all the variables (all scale measurements were re-coded as lower numbers indicate a positive score, and higher numbers reflect the negative score). To further evaluate the nature of the differences between the independent and dependent variables, a post-hoc Tukey HSD test was used to analyze the differences between the groups. Table 6 shows that there is a statistically significant difference at $p<.001$ between people's sense of belonging and their level of religiosity. For instance, there was a significant difference between those who indicated low ($M = 4.10$, $SD = .692$) and high ($M = 3.64$, $SD = .769$) levels of religiosity ($F(2, 486) = 64.35$, $p = .000$) on the feelings of belonging in a congregation.

A one-way ANOVA also revealed a statistically significant difference between the other variables. For instance, a post-hoc comparisons found that the mean value of feeling welcomed in a congregation was significantly different between low ($M = 4.25$, $SD = .667$) and high ($M = 3.39$, $SD = .899$) level of religiosity ($p = .000$, 95% C.I.= [.13, .52]); however, the moderate level of religiosity ($M = 4.53$, $SD = .716$) did not significantly differ from the low level of religiosity. Overall, these results suggest that the independent between-groups ANOVA yielded a statistically significant difference, and the null hypothesis of no difference between the means was rejected. Therefore, we can assume that people with a high level of religiosity can develop a different feeling of belonging to their community than those with a moderate or low level of religiosity, thus supporting hypothesis 3.

Table 6

One way ANOVA results for H3

	Low		Moderate		High			
Variable	M	SD	M	SD	M	SD	F	P
I feel like I really belong in my congregation.	4.10	.692	4.56	.621	3.64	.769	64.35	.000
Being a member of my congregation is an important part of who I am.	4.24	.851	4.31	.818	3.69	.936	22.86	.000
I feel welcomed in my congregation	4.25	.667	4.53	.716	3.39	.899	23.15	.000
I feel I am accepted by the people in my congregation	4.32	.688	4.51	.754	3.86	.855	29.11	.000

Note. Confidence interval is at 95%

Conclusion

This study conducted an online survey among religious people in the United States. The goal was to examine digital religious behaviors in 2022, as the pandemic is still an ongoing concern. Online survey responses were collected through Amazon MTurk (N= 489) to test one research question and three hypotheses related to religious digital media uses and gratifications, religiosity, attitudes toward technology, and sense of belonging. The findings revealed that respondents' attitudes toward technology can be predicted based on religious digital media consumption on social media, the internet, and apps. The analysis has indicated that frequently engaging with these mediums for religious purposes might affect how individuals perceive technology. This means that more engagement with religious content online can substantially affect how people feel about technology. On the other hand, surprisingly, there was no significant relationship between the attitudes toward technology and respondents' age, gender,

and religious affiliation (except for Judaism). This result, however, did not support the qualitative data findings and previous studies, which show a strong association between people's demographic, such as age, and the perception of technology (Vaportzis et al., 2017). Since this result contrasts with previous studies, more research is encouraged to understand the extensive impact of peoples' demographics on their attitudes toward technology.

The analysis also shows a strong negative association between religiosity and feelings toward technology. Although this result does not clearly indicate the main reasons behind the negative association between the two variables, the finding is consistent with other earlier studies predicting that technological transformation can be negatively associated with religion (Ratcliff et al., 2017; Mullin, 2011). The data also indicate that religious digital media usage can positively correlate to positive and negative attitudes toward technology. This would mean that negative feelings about technology will not affect how people use their devices to connect with their faith. In other words, individuals motivated to consume faith-based content online will continue to do so, regardless of their feelings toward technology. This result reflects the imperative role of technology in religious communications as it provides an outlet where spiritual needs and desires can be met in the virtual space.

The study also found a positive correlation between individual sense of belonging and religious digital media uses and gratifications. This insight suggests that engaging with faith online might heighten personal feelings of belonging within a religious community. Such implications corresponded strongly with the digital religion framework by showcasing the importance of online activities in offline religious behaviors. Nonetheless, future research could provide a more in-depth analysis to identify how religious digital media uses and gratifications play a role in people's sense of belonging. For instance, researchers can explore the different

characteristics and types of digital media religious usage and detect its impact on the individual feeling of belonging.

Finally, the individual sense of belonging was also measured based on their level of religiosity. As predicted, people who showed a high level of religiosity were more inclined to have a higher sense of belonging than those with a low level of religiosity. Although this research found no significant distinction between low and moderate level of religiosity, the positive effect of religiosity on the sense of belonging support previous findings indicating that religious lifestyles are expected to increase the feeling of belongingness (Minton & Liu, 2019).

Discussion

This dissertation provides an overview of the study of digital religion during COVID-19. After conducting a mix-method analysis consisting of in-depth interviews and online surveys, this paper reveals and highlights some interesting outcomes from the two methods. First, both qualitative and quantitative data reflect on the significance of modern technology in religious practices as the positive perception of technology dominated most responses in this study. Furthermore, this study shows how influential the new technology has become in religious communications by manifesting how people's spiritual needs and desires are being fulfilled in virtual spaces. The data in this study also found a strong connection between peoples' religious digital media uses and their sense of belonging to their community. During the in-depth interviews, most participants expressed their motives for using the various digital platforms to connect with their religious institutions and community. Similarly, the online survey results showed that engaging with faith online can positively affect individuals' feelings of belonging to their religious community. These findings corresponded strongly with digital religion studies by showcasing the pivotal role of online religious activities in traditional offline religious behaviors.

Lastly, this research found few dissimilarities and contradictory results between the two methods. For instance, qualitative data reveal that people's demographic factors, such as age, can influence how they perceive online faith practices. Accordingly, the study found that older participants are more concerned about trusting the new technology and using it for religious purposes compared to younger people. In contrast, this result was not supported in the quantitative research as no significant associations were found between the attitudes toward technology and respondents' age, gender, and religious affiliation. The differences in results in both data might be due to several factors related to sample and methodology; hence, future research could further study what constitutes people's attitudes toward technology from their demographic characteristics and religious affiliation.

Limitations

This study has potential limitations in the quantitative method. First, one of the limitations is that the study survey was collected through an online panel on Amazon Turk. The site allows researchers to collect larger samples quickly and at a low cost. However, MTurk samples are usually less representative and generalizable than population-based samples (Berinsk, 2012). It is also hard to assume that the results in this research reflect real-world opinions because online surveys rely on self-reported data, which might have restrained data quality in this research. Additionally, due to the nature of the cross-sectional data, it is difficult to assess the causality of the variables (Wang & Cheng, 2020). Therefore, to improve the credibility of the data, future research can replicate this study's measurements and extend to a more representative national sample.

Second, the most noticeable shortcoming in this study was the study sample which mainly consisted of white Christian people. Different results might be found if other ethnicities

and religious affiliations were represented in more significant numbers. The sample also did not include younger adults below age 35, which could provide different insights into the study results. Therefore, to improve the findings' external validity and generalizability, future research should explore a more diverse population and test if there is any difference among people's age, ethnicities, and religious affiliations. In addition, while this study demonstrated the impact of digital religion behaviors in the United States, more research is needed to explore digital religion behaviors among other cultures and countries. Examining this topic by focusing on specific cultures or demographic factors like age, gender, religion, and ethnicity can yield some interesting findings in this field of study.

Lastly, this study uses different measurements and scales to test the hypothesis. For H1 & H2, the study relied on the U&G framework to explore respondents' religious digital media uses and gratifications. The measurement in this study thoroughly examined respondents' religious digital uses and gratifications, yielding two main factors described as spiritual connection and information seeking. Nevertheless, researchers could improve this approach by exploring other factors that might play a role in religious communications on digital media platforms. For instance, researchers could benefit from analyzing each media platform specifically (social media platforms, apps, blogs, etc.) instead of just comparing the religious consumption in each medium. This can help the readers understand the distinct features of each platform and its function in a religious context. As for H3, this study used *the brief version of the Santa Clara Strength of Religious Faith Questionnaire* to measure respondents' levels of religiosity. The scale was used extensively in many studies across multiple countries and has been proven to provide a valid and reliable measure of religious faith strength (Plante, 2010). However, the measurement was unreliable in this paper as the reported alpha score was at .477. Thus, future

research can explore the scale further by using the extended version of the scale (10 items) and test its impact on different settings and demographic populations compared to the short version used in this study.

Overall, even with these limitations, the contribution of this study is noteworthy to this area of research. The findings in this paper generate greater interest in the field as it builds on previous work seeking to understand the impact of the new technology on religion. Moreover, this research not only assesses the relationship between religion and technology but also identifies other variables (religiosity, sense of belonging) that might mediate the relationship between these two concepts. This can help extend researchers' focus to conceptualize new themes and include broader topics that might have a significant role in this area. The results in this work can also help advance the literature forward, as it points to the need to study the implications of online behaviors and religious practices. The number of studies examining these constructs is still limited (Campbell, 2012), and researchers need to conduct more research that can add considerable depth and insight into this phenomenon and its impact on society. Despite the shortcomings, this research presents valuable evidence highlighting the intersection of religion and technology during COVID-19. As discussed in the qualitative chapter, understanding the effect of technology on people's religious attitudes is imperative during this era. Such time draws more attention to analyzing the consequences of technology on human behaviors, and in this field, it provides rich documentation and inquiries for understanding how digital cultures are evolving in the contemporary world.

Appendix A

Informed Consent (In-depth interview)

My name is Abdulaziz Mohammad Shahin Altawil, and I am a doctoral student at Syracuse University. I am interested in learning more about the pandemic's impact on religion and the shift towards the digitalization of religion. You are part of a selected sample in the United States, and your task will be to engage in an in-depth interview to discuss your opinions about digital religion during the pandemic. This will take approximately 35- 60 minutes of your time. The meeting is being recorded in both audio and video formats for transcription purposes. To protect your privacy, I will not be using your real name when analyzing the data; instead, I will come up with a different name. Involvement in the study is voluntary. You are free to answer any or all of the questions, and if you feel uncomfortable with the process, you can leave the session, and you will still get your incentive. Your confidentiality will be maintained to the degree permitted by the technology being used. You need to understand that no guarantees can be made regarding the interception of data sent via the internet by third parties. If you have any questions, concerns, or complaints about the research, please contact the principal investigator, Dr. Dennis Kinsey at dfKinsey@syr.edu, researcher, Abdulaziz Mohammad Shahin Altawil at Amaltawi@syr.edu, and Syracuse University Office of Research Integrity and Protections at 3154433013.

Appendix B

Interview Questions

1- In the U.S., more than 85% of adults own a smartphone, and they use them for different reasons, like reading books, finding jobs, or doing online shopping. Religion has become an important element that has emerged on digital platforms. People from other faiths (Muslim, Christian, Jewish, Buddhism) use digital media tools to navigate their spirituality. As a Muslim, how these digital platforms affect your relationship with their faith?

2- For decades, many religious entities have used different media types (blogs, podcasts, live streams...etc.) to communicate with a vast audience. Did you use any kind of media to connect with other Muslims? How is that impacting your/their level of religiosity? The more religious you are, the more you will use the technology, and vice versa. Do you agree?

3- According to 2018 estimates, there are about 3.45 million Muslims living in the United States. It is expected that this number will double by 2050, and Muslims will become the second-largest religious group in the U.S. after Christians. However, practicing religious prayer in a non-Islamic country can be challenging compared to living in an Islamic country. (Do you agree?)

4- The current COVID-19 crisis has impacted people's religious behavior in many ways. Most religious services worldwide have shifted from in-person to online worship. In the U.S, 57% of Americans reported that they had watched religious services on TV or online instead of attending in person". How did you adapt/connect with your faith during the lockdown?

5- Worshippers start innovating with their religious practice during the pandemic. Many churches and mosques started utilizing a wide range of technology like zoom and YouTube videos to support and engage with their communities. (Ex: live streaming Friday prayers &

drive-in service) How do you feel about this new form of practice? Is it people's desire or organization?

6- In March 2020, the search for prayers on google increased rapidly as a response to COVID - 19. According to Goodman (2020), In the time of crisis, faith and beliefs can help individuals cope with stressful moments. Religion can give people hope and security when exposed to a threat. How did your level of religiosity change during the pandemic?

7- The pandemic crises might have increased people's relationship with their faith, but in general, religion and beliefs, in general, are declining. What role can the new technology play in connecting people with their faith (less believers)?

8- What about the side effects? Ex. In 2013, a study investigated the credibility of Islamic phone applications. After analyzing 79 apps, they found that many Quranic apps were not accurate and contained non-credible information?

9- The need for technology has increased during the outbreak. What is the role the pandemic might have in the transition towards virtual religious practices?

10 - For many individuals, the motive for In-person gathering is essential, and it is part of the spiritual experience and social identity that cannot be replaced in the online world. How do you see the future of modern religion? Will COVID-19/ new technology transforms modern religion and replace in-person interactions in the future?

Appendix C

Informed Consent (Online Survey)

Dear Respondent: Thank you for considering taking this survey as part of an important study about Digital media and Religion. This research explores how people who live in the United States use digital media platforms (e.g., social media, apps, and internet) for religious purposes and the gratifications behind that usage. You are one of about 500 people randomly selected throughout the United States. This online survey should take about 15-20 minutes to complete. Please be assured that your responses will remain completely confidential. Your participation in this research is voluntary. You have the right to withdraw at any point during the survey, for any reason, and without any prejudice. For questions about the study, please contact the researcher at Amaltawi@syr.edu. Whenever one works with e-mail or the internet, there is always the risk of compromising privacy, confidentiality, and/or anonymity. Your confidentiality will be maintained to the degree permitted by the technology used. You need to understand that no guarantees can be made regarding the interception of data sent via the internet by third parties. By clicking the button below, you acknowledge that your participation in the study is voluntary, you are at least 18 years of age, and you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Abdulaziz Altawil

Doctoral candidate, Syracuse University.

Appendix D

Amazon Mechanical Turk Instructions

This research explores how religious people who live in the United States use digital media platforms (e.g., social media, apps, and the internet) for religious purposes and the gratifications behind that usage. We are conducting an academic survey about the impact of Digital Media on religious behaviors. If you self-identified as a PERSON with a Religion, please Select the link below to complete the survey.

Survey link: https://syracuseuniversity.qualtrics.com/jfe/form/SV_1ZUiNOp4KZxD7OS

Appendix E

Survey Questions

Thank you for considering taking this survey as part of an important study about the impact of COVID-19 on the digitalization of religion in the United States. Please press continue to go to the survey, and if you are not willing to participate, please exit the survey.

- ○ Continue
- ○ Exit

Q1 What is your gender identity?

- ○ Male
- ○ Female
- ○ Other

Q2 In what year were you born?

Q3 What is your present religion, if any?

- ○ Islam
- ○ Christianity
- ○ Judaism
- ○ Hinduism
- ○ Buddhism
- ○ Other _____

Q4 How many days in the past week did you use the following digital media platforms for RELIGIOUS PURPOSES?

	0	1	2	3	4	5	6	7
Social Media	○	○	○	○	○	○	○	○
Apps	○	○	○	○	○	○	○	○
Internet	○	○	○	○	○	○	○	○

Q5 Thinking of how you use digital media, please indicate how much these reasons are like your own reasons for engaging with your faith online.

	Strongly disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
To encourage/ assist those who are in need of spiritual support	○	○	○	○	○
To facilitate my spiritual connection with God/ Allah/ deity, etc.	○	○	○	○	○
To access information about religious services, activities, or events	○	○	○	○	○

To relax and unwind	○	○	○	○	○

Q6 Now, here is a list of some things an individual might get out of Digital Media when engaging with their Faith online. Based on your own experience, please indicate how much you agree or disagree with the following statements:

	Strongly disagree	Disagree	Neither Agree nor disagree	Agree	Strongly agree
Digital Media raises my spiritual connection with my faith and others	○	○	○	○	○
Digital Media enlighten my spirituality	○	○	○	○	○
Digital Media help me find religious information	○	○	○	○	○
Digital Media help me relax and unwind	○	○	○	○	○

Q7 Please tell us how much you agree or disagree with the following statements:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I feel it is important to be able to find any information whenever I want online	○	○	○	○	○

I feel it is important to be able to access the Internet any time I want	○	○	○	○	○
I think it is important to keep up with the latest trends in technology.	○	○	○	○	○

Q8 And how much you agree or disagree with the following statements:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
New technology makes people waste too much time.	○	○	○	○	○
New technology makes life more complicated.	○	○	○	○	○
New technology makes people more isolated.	○	○	○	○	○

Q9 Please answer the following questions about religious faith using the scale below. Indicate the level of agreement (or disagreement) for each statement.

	Strongly disagree	Disagree	Neither Agree nor disagree	Agree	Strongly agree
I pray daily	○	○	○	○	○
I look to my faith as providing meaning and purpose in my life	○	○	○	○	○
I consider myself active in my faith or community	○	○	○	○	○
I enjoy being around others who share my faith	○	○	○	○	○
My faith impacts many of my decisions	○	○	○	○	○

Q10 Please tell us how much you agree or disagree with the following statements about your feelings towards your local religious congregation.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I feel like I really belong in my congregation	○	○	○	○	○

Being a member of my congregation is an important part of who I am.	○	○	○	○	○
I feel welcomed in my congregation.	○	○	○	○	○
I feel I am accepted by the people in my congregation.	○	○	○	○	○

This next set of questions focuses on COVID-19 and its impact on your faith.

Q11 As a result of the coronavirus outbreak, has your religious faith become:

- ○ Stronger
- ○ Has not changed much
- ○ Weaker
- ○ Not applicable- I am not a religious person and this hasn’t changed

Q12 In the last month, did you attend religious services in person at a church, synagogue, mosque or other house of worship?

- ○ Yes
- ○ No
- ○ I don't Know

Q13 In the last month, have you watched religious services online or on TV?

- ○ Yes
- ○ No
- ○ I don't Know

Q14 Is the house of worship you most often attend streaming or recording its services so that people can watch them online or on TV?

- ○ Yes
- ○ No
- ○ I don’t know
- ○ I don’t attend

Q15 Which of the following best describes the current operating status of the house of worship you attend most often?

- ○ It is open and holding religious services in the same way that it did before the pandemic
- ○ It is open, but has made changes as a result of the pandemic
- ○ It is NOT open to the public
- ○ Not sure

Q16 How often do you pray to God outside of religious services?

- ○ Often
- ○ Sometimes
- ○ Hardly ever

- ○ Only in times of crisis
- ○ Never

Q17 Compared to before the outbreak, when the COVID-19 pandemic is over, will you watch religious services online or on TV:

- ○ More often
- ○ Less often
- ○ About as often
- ○ Have not watched services online/ on TV

Q18 Compared to before the outbreak, when the COVID-19 pandemic is over, will you attend religious service in person:

- ○ More often
- ○ Less often
- ○ About as often
- ○ Have not attend services in person before outbreak and will not attend when the outbreak is over

Q19 How important, if at all, has the digital platforms (Internet, Social media, Apps) been for YOU PERSONALLY during the coronavirus outbreak?

- ○ Essential
- ○ Important, but not essential
- ○ Not too important

- ○ Not at all important

Q20 How important, if at all, has the digital platforms (Internet, Social media, Apps) been for YOUR FAITH CONNECTION during the coronavirus outbreak?

- ○ Essential
- ○ Important, but not essential
- ○ Not too important
- ○ Not at all important

The following questions are asked for statistical purposes only.

Q21 What is the last grade or class that you completed in school?

- ○ Grade 1-8
- ○ High school incomplete
- ○ High school graduate
- ○ Technical, trade, or vocational school after high school
- ○ Some college
- ○ College graduate
- ○ Post-graduate training or professional schooling after college
- ○ Don't know

Q22 In which one of the following racial groups would you place yourself?

- ○ White (Caucasian)

- ○ Black or African-American
- ○ Asian or Asian-American
- ○ American Indian or Alaska Native
- ○ Pacific Islander
- ○ More than one
- ○ Other, please specify _____
- ○ Don't know

Q23 Are you now employed full-time, part-time or not employed?

- ○ Full-time
- ○ Part-time
- ○ Not employed
- ○ Retired
- ○ Don't know

Q24 Which of the following best describes the place where you now live?

- ○ A large city
- ○ A suburb near a large city
- ○ A small city or town
- ○ A rural area

○ Don't know

Q25 In which state do you currently reside?

▼ Alabama ...

Q26 Finally, we'd like to ask you some financial information. The information you provide will be treated in strict confidence. Would you please tell us what your total household income last year?

▼ Less than $15,000 …

Thanks for your participation in this survey.

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