

LIBERTY UNIVERSITY  
JOHN W. RAWLINGS SCHOOL OF DIVINITY

DIGITAL TECHNOLOGY USE AND INFLUENCE ON THE MISSION AND MINISTRY OF  
THE LUTHERAN CHURCH MISSOURI SYNOD CHURCH COMMUNITY IN THE  
UNITED STATES RESULTING FROM THE COVID -19 PANDEMIC:  
A QUANTITATIVE STUDY

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

by

Phillip Steven Woodruff

Liberty University, Lynchburg, VA

2024

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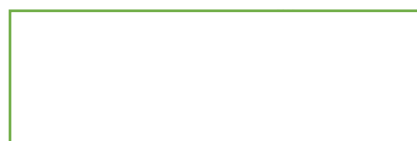
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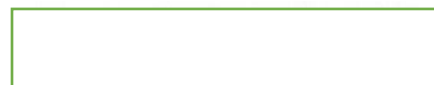
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## ABSTRACT

Digital technology use within the church has received mixed responses from both the church leadership and members of the congregation. Some believe that using digital technology, such as social media, is a way of expanding the church's mission and ministry. Other people believe that using these methods are costly, secular, or evil, and have no place in church ministry. The COVID-19 pandemic caused churches to rethink how they connected to their members since in-person worship services were canceled. The purpose of this quantitative study was to explore the relationship between the use of digital technology among the smaller churches within the Lutheran Church Missouri Synod (LCMS) during the COVID-19 pandemic and its impact upon membership retention, spiritual formation, as well as the expansion of the church's mission and ministry. Current research has had limited investigation with regard to the results of using digital technology by the smaller church during the pandemic and its effect upon the church membership. A biblical, historical perspective of technology and the church was balanced with the practical theology and churches' experience of using digital technology during the pandemic.

*Keywords: Digital technology, COVID-19 pandemic, Spiritual formation, Small church, Lutheran Church-Missouri Synod.*

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### **Dedication**

This paper is dedicated to the Glory of God – God the Father, God the Son, God the Holy Spirit. Amen.

## ACKNOWLEDGMENTS

I give thanks and Praise to God for all that He has given me...now and forever.

My most heartfelt thanks to my dear wife Mary, for her constant love and support as we journey together in our spiritual formation to become more like Christ.

My sincere gratitude to the dedicated faculty of the School of Divinity at Liberty University who model the image of Christ and mold spiritual formation. Special acknowledgment and appreciation must be given to Dr. James A. “Andy” Wood, who served as Chair of my Dissertation Committee. A man of God. A mentor with mission, meaning, and focus. Grateful appreciation is expressed to Dr. Alvin Dockett who provided extraordinary analysis and recommendations as Dissertation Second Reader. I benefitted immensely from the wisdom of Dr. Thomas Davis, a superior committee member. Special thanks to Mark Hamilton, Research and Scholarly Communications and all JFL Librarians prominent in this work.

The Lutheran Church – Missouri Synod (LCMS) as a community has been an essential element in this research and study. I was blessed beyond measure with great support from Rev. Dr. William Harmon, President of the Southeastern District LCMS. At LCMS headquarters, Rev. Dr. John Sias, LCMS Secretary, granted permission for use of LCMS figures. LCMS Senior Research Analyst Ryan Curnett provided early statistical data that contributed to the foundation of the research. Dr. Steve Song, of Concordia University Chicago provided statistical analysis and consultation, along with Dr. Hollie Jones of New York.

Finally, and foremost, this study would not exist at all without the many LCMS pastors and church leaders who took the time and interest to respond to the research survey.

Thank you! Thank you! Thank you!

***“The Lord bless you and keep you; The Lord make his face shine on you and be gracious to you; The Lord turn his face toward you and give you peace.”*** †

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**List of Abbreviations**

Lutheran Church Missouri Synod (LCMS)

## CHAPTER ONE: RESEARCH CONCERN

### Introduction

Martin Luther believed that oral communication formed the basis of human community and of individual human identity. He accentuated the necessity of the oral delivery of the biblical message—and none other—to his hearers (Kolb, 2016). St. Paul writes, “For just as each of us has one body with many members, and these members do not all have the same function, so in Christ we, though many, form one body, and each member belongs to all the others” (*New International Version*, Rom. 12:4-5)<sup>1</sup>.

How churches were able to continue the oral delivery of God’s Word in person to the community of believers was severely disrupted due to the COVID-19 pandemic. Holding church services and sharing God’s Word with the members in person could not take place. Unlike mega churches or larger churches in the community, small churches often did not use digital technology, or if they did, they used it minimally or in-house (Pardes, 2021). This caused a major challenge to the small church in keeping its ministry in sharing God’s Word with its congregation and keeping the community and communion of Saints active (Pardes).

### Background to the Problem

Many small churches pre-COVID did not have any social media presence (Gravelly, 2022). Before the pandemic, familiarity with digital technology may have only involved Facebook and perhaps a webpage that they may or may not have kept current. While there is research concerning churches using digital technology in marketing and evangelism, currently there is minimal research on how digital technology affected small churches positively or negatively, that were technology deficient before the pandemic. Lines noted that when social

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<sup>1</sup> Unless otherwise noted, all quotations from the Bible are from the New International Version, Concordia Self-Study Bible (1984).



media is used intentionally, it is the greatest tool that the church has ever had to fulfill the Great Commission (Lines, 2021). This study examined (a) how small churches within the Lutheran Church Missouri Synod (LCMS) used digital technology before, during, and after the pandemic and the problems encountered; (b) benefits from using the digital technology, and (c) ways the church was able to expand spiritual formation with this technology.

### **Theological Context**

**Communion of Saints.** The theological discussion starts with a discussion on the communion of saints, or Christian community, and what it means in the context of sharing God's Word with believers and non-believers. As it is written, "And let us consider how we may spur one another on toward love and good deeds, not giving up meeting together, as some are in the habit of doing, but encouraging one another—and all the more as you see the Day approaching" (Heb. 10:24-25). Paul adds in his letter to the Ephesians:

You are no longer foreigners and aliens, but fellow citizens with God's people and members of God's household, built on the foundation of the apostles and prophets, with Christ Jesus Himself as the chief cornerstone. In Him the whole building is joined together and rises to become a holy temple in the Lord. And in Him you too are being built together to become a dwelling in which God lives by His Spirit (Eph. 2:19-22).

The importance of gathering in worship is that in the community believers praise God with other believers, in-person and throughout the world. Shockley (2019, para. 1). explains that within the faith community and as a believer, you belong to the communion of saints.

In Paul's letter to the Romans, he addresses the people there "To all in Rome who are loved by God and called to be his holy people" (Rom. 1:7). Later in Romans, Paul reminded the people that we all belong to one body and that we belong to all others in the body of Christ, "so in Christ we, though many, form one body, and each member belongs to all the others" (Rom. 12:5). In Ephesians, Paul writes, "With all wisdom and understanding, he made known to us the

mystery of his will according to his good pleasure, which he purposed in Christ, to be put into effect when the times reach their fulfillment—to bring unity to all things in heaven and on earth under Christ” (Eph. 1:8-10). Throughout his writings, Paul emphasized the importance of community in sharing God’s Word and the gift of the Holy Spirit. Based upon Paul’s writings and the Lord’s Great Commission, this study focused on how the smaller congregations could maintain community while using digital technology in their ministry.

**Discipleship.** A person who is a disciple of Jesus is “someone called to live in Christ, be equipped to live like Christ, and sent to live for Christ. Our calling includes salvation and abiding in Christ (John 8:31-32), but the church equips the saints in their spiritual formation and growth into Christ-likeness (2nd Timothy 3:16–17)” (Wellman, 2017, para. 1). Further it is observed that within the Gospels, Jesus called his disciples in pairs. In Mark, it is noted, “Calling the Twelve to him, he began to send them out two by two” (Mark 6:7). Jesus knew the importance of community, and this was important among the disciples, especially as they witnessed to others about Christ Jesus.

### **Historical Context**

Technology changes daily. While Martin Luther knew the importance of the oral communication of God’s Word, Luther also is an example of using the newest technology – the printing press – in getting God’s Word into the hands of the common people and in their own language, so they could share God’s message with others. The use of technology in churches has changed throughout the years. Some churches have used large screens so all people can see; churches use Facebook, while others have websites. There are even churches that have ATM machines in the church building for easier access for giving. However, there are still more

conservative churches that struggle with using technology. They are challenged by not only how to use it but with valid concerns about the dangers of technology.

The question of technology's role in worship has been with us from the beginning. For technology simply names artifacts, objects of human making, and their usage in liturgy has always been a live question for Christians. The codex, instruments, icons, musical notation, vestments, altars and chalices and monstrances: what is necessary or edifying, permissible or prohibited in the assembly of God's people is never answered in advance. It is a matter of perennial missionary and cultural discernment (East, 2020, p. 1).

Other examples of technology used include electricity, lighting, sound control, television and radio. Then came the advent of the world wide web as well as wireless and mobile technology (Emily, 2017, para. 10). All these forms of technology can be used for the good of the church if used properly and with the consensus of the church leaders and members.

### **Sociological Context**

In the beginning, men began "to call upon the name of the Lord" (Gen. 4:26). We often hear many persons say they do not need to worship God in church or in fellowship with other Christian believers. They believe their relationship with Christ is sufficient and they do not need to attend a church service. Yet worship is integral to our spiritual formation (Pettit, 2008, p. 63). Pentecost is a prime example. The Holy Spirit descended upon the disciples and the disciples went out preaching the Word to everyone in their language. They were active participants and as a result, many were saved. (Acts 2: 4-8; 41).

Lowe (2018) observed that as humans, people exist and interact within defined groups where they feel connection (p. 15). Throughout creation, we see community and relationships. Birds flock together, swarms of insects, trees, grasses, and plants grow together – the entire ecosystem co-exists and thrives off each other. Jesus tells us that we are part of His vine as the

branches and without Him, we can do nothing. We must be nourished by God in order to grow and bear fruit – fruit that will last. (John 15:5, 16; Lowe).

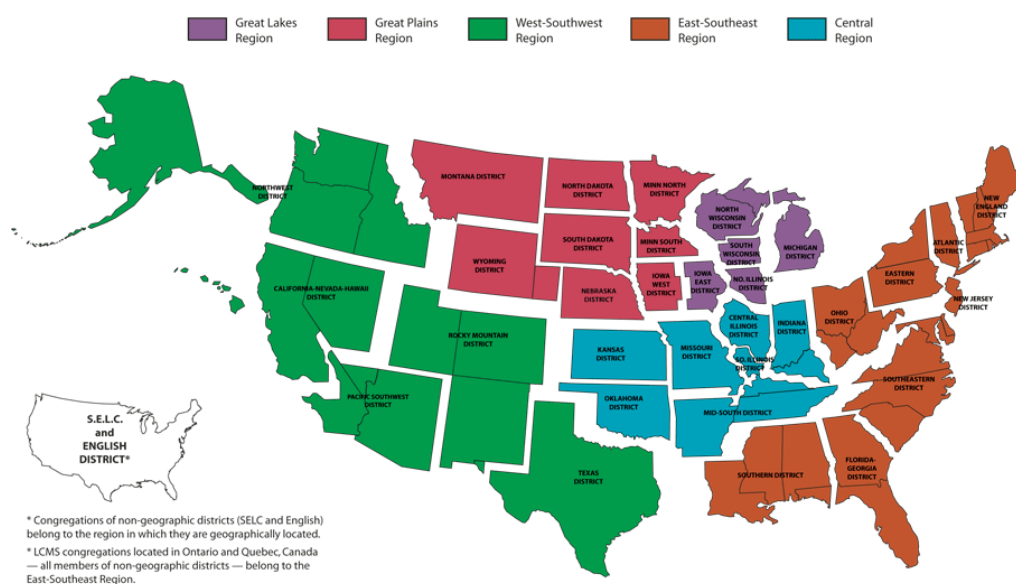
The Christian community is the place of our continuing conversion. Its goal is that, individually and together, we should become mature (Macy, 2011, para. 4). God wants us to use our gifts and our talents within this community to build each other up in the body of Christ Jesus and become mature in our faith to become like Christ.

### The Lutheran Church— Missouri Synod (LCMS)

The Lutheran Church— Missouri Synod (LCMS) was founded on April 26, 1847, by Saxon and other German immigrants seeking religious freedom in America and to follow confessional Lutheranism (lcms.org). In the beginning, there were fourteen congregations from Illinois, Indiana, Missouri, Michigan, New York, and Ohio. The name changed from The German Evangelical Lutheran Synod of Missouri, Ohio, and Other States to The Lutheran Church – Missouri Synod in 1947, the 100<sup>th</sup> anniversary of the Synod (lcms.org).

**Figure 1**

*Map of the 35 LCMS Districts within the United States of America (lcms.org).*



*Note:* Map of the 35 Districts within the Lutheran Church Missouri Synod. Copyright © The Lutheran Church – Missouri Synod, 2013. Published with permission.

Currently, the LCMS has nearly two million baptized members with more than 6,000 congregations and 9,000 pastors divided between 35 Districts in the United States (see Figure 1). 33 of the districts are defined along geographic lines with each district having a president (bishop) who oversees the congregations in his district (Lueker, 2000). The LCMS is headquartered in St. Louis, Missouri where the synod president, staff, a seminary, publishing house, and mission related organizations are located.

### **Statement of the Problem**

The effects of the COVID-19 pandemic continue. There is very little published research on the subject as to how smaller churches handled the sudden move from in-person worship services to all services held via Zoom or other form of digital technology exclusively. Some churches have returned to either complete in-person church services or a hybrid mix of in-person and Zoom or by using other digital technology. There are still a number of churches that continue to use Zoom as their members do not feel comfortable attending in person even as the pandemic numbers wind down (Wang, 2022, para. 3). Additionally, there are very few studies showing the effect of using digital technology on small church membership, spirituality, and the church's mission and ministry (Johnston, 2021, para. 4; Wang, 2022, para. 3; Wingfield, 2021, para. 4). How did the smaller church leaders deal with the sudden impact of closed doors? How did the use of digital technology affect the congregational members, especially those with limited or no online or digital technology experience? What avenues did the church leaders use to reach those members who were technologically challenged? How did the church leaders deal with technology burnout among members?

## **Purpose Statement**

This quantitative study researched how small churches used digital technology during the pandemic to enhance their worship service, and whether the small church was successful in retaining membership as well as keeping the Communion of Saints active in the ministry with the use of the digital technology resources available. The researcher surveyed 107 small churches within the Lutheran Church Missouri Synod to determine the membership of the churches between 2019 and 2023, and what digital technology resources were used.

## **Research Questions**

**RQ1.** How did the small Lutheran church address the use of digital technology platforms before, during, and post-pandemic?

**RQ2.** How did the small Lutheran church's use of digital technology affect the church members' overall worship experience individually and with other believers?

**RQ3.** What relationship, if any, was there in retention or expansion of membership and the use of digital technology?

## **Research Hypotheses**

**HO3.** There was no significant change in membership retention or expansion of membership as a result of using digital technology.

**HA3.** There was a significant change in membership retention or expansion of membership as a result of using digital technology.

## **Assumptions and Delimitations**

### **Research Assumptions**

Prior to COVID-19 many smaller churches had limited to no digital technology experience. These churches had to quickly learn the basics of holding church services online and minister to their congregation's spiritual needs using digital technology. The researcher assumed that ministering to the older population within their membership was more challenging than the

younger generation due to the varied experiences of using digital technology. Older adults often found themselves without the digital technology skills needed to participate effectively (Hill, 2015, p. 415). The researcher also assumed that the smaller church would continue to use digital technology as part of its ministry in some manner and even expand its use to reach congregational members of all ages. Using this technology provided knowledge and opportunity to engage in new ways of building and provided the ability to make connections that previously were not even imagined (Campbell, 2021, para. 21). If the small church did not embrace digital technology in its worship and ministry, it could lose the opportunity to connect to the Millennials, Gen Z, and other generations. A combination of in-person worship and digital technology could emerge as the biggest change for these churches.

### **Delimitations of the Research Design**

The study involved small churches – LCMS (Lutheran Church Missouri Synod) (membership of up to fifty voting members) who had never or only minimally before used a digital technology platform or communication medium in their worship service and Bible studies pre-pandemic. These churches may be familiar with Facebook, and they may or may not have had a webpage, or used digital technologies including Google, YouTube, Vimeo, Live Stream, Zoom, Twitter, etc. This study did not involve larger churches or churches that used digital technology for their services, Bible studies, or meetings more than once a month pre-pandemic.

A total of 107 small churches, whose Sunday church attendance is less than 50 voting members per week, were selected for this study, with an appropriate representation by district to include every state. The sample size was meaningful because the churches chosen were from the following districts: English District, Atlantic District, California/Nevada/Hawaii District, Central Illinois District, Eastern District, Florida-Georgia District, Indiana District, Iowa Districts West

and East, Kansas District, Michigan District, Mid-South District, Minnesota Districts – North and South, Montana District, Missouri District, Nebraska District, New England District, New Jersey District, North Dakota District, North Wisconsin District, Northern Illinois District, Northwest District, Pacific Northwest District, Ohio District, Oklahoma District, Rocky Mountain District, S.E.L.C. District, South Dakota District, South Wisconsin District, Southeastern District, Southern District, Southern Illinois District and Texas District, and Wyoming District.

The churches chosen had not used any significant form of digital technology for their services or Bible studies before the pandemic. The researcher calculated a representative sample size based on a population of 2734 LCMS churches representing congregations with a weekly attendance of fifty or less. For a margin of error of 5% and a confidence level of 80%, a 20% response to the survey was required (Checkmarket.com). Surveysystem.com was used to validate the sample for confidence interval and level. The actual population was adjusted after the researcher validated the attendance records with official LCMS records for LCMS churches, and recalculation of the statistical sample analysis. Additional studies could be performed to include small churches within LCMS that have used the digital technology at least once a month to see how these churches compare in retention of members and gaining new members or visitors pre- and post-pandemic.

### **Definitions of Terms**

*Baptized members:* Baptized members of this congregation are all persons who have been baptized in the name of the Triune God and are under its spiritual care.

*Christian spiritual formation:* The process where the will of a person takes on the characteristic of Christ's will, through the work of the Holy Spirit, and continuing through to life-long sanctification.

*Communication medium:* A medium in communication is a system or channel through which a speaker or writer addresses their audience.



*Communion of Saints:* Refers to the whole community of faithful followers of Christ.

*Confirmed members:* Confirmed members are all baptized persons within the congregation who have completed a course of instruction in Christian doctrine that meets with the approval of the congregation's officers.

*Digital platform:* A digital platform is a technology enabled business model that facilitates exchanges between multiple groups.

*Discipleship:* Is teaching biblical precepts, while modeling and guiding others toward living righteously as followers of Jesus Christ.

*The Lutheran Church-Missouri Synod:* Also known as the Missouri Synod, or LCMS, is a traditional, confessional Lutheran denomination in the United States. With over 1.8 million members, it is the second largest Lutheran body in the United States.

*Voting members:* Voting Members are confirmed members who have reached the age of majority, request membership by attending a voters meeting of the congregation and sign the constitution of the congregation. The total number of voting members constitutes the voters' assembly of the congregation.

### **Significance of the Study**

The COVID-19 pandemic began in the United States in early 2020. It hit the United States churches by surprise. Not since the pandemic in 1918 had the government demanded that churches close. Only now are studies being done to determine the effects of the pandemic on churches. There was a limited study on the effect the pandemic had on the small church.

This study was to research the effect of digital technology on small churches that had never used this type of technology before the pandemic. The churches studied are small churches within LCMS only, i.e., churches with a maximum of fifty voting members. The findings in this study applied to larger churches (more than fifty voting members), or small churches that used digital technology regularly before the pandemic.

This study can be beneficial to not only small churches within LCMS, but any small church within the United States. The church leaders will be more aware of how using digital

technology can become a positive method for the mission and ministry of their church in bringing more people together to worship in different ways without taking away from in-person services. The study provided the church leaders awareness of the importance of learning the latest technology and how to use it to enhance their ministry, without taking away from the importance of community and spiritual formation of its members and church. It was the goal of the researcher to show how churches, particularly small churches that may not have used digital technology extensively, dealt with the pandemic using digital technology and what benefits and problems the church encountered while using the technology.

### **Summary of the Design**

The researcher used a quantitative correlation method for the research through the use of a non-experimental survey. No intervention or treatment was applied to the research (Creswell, 2018). This type of research attempts to explain, describe, and predict relationships by testing objective theories and by studying their relationships (Creswell). The data was collected from small LCMS churches out of the 35 districts that met the criteria for attendance. A background question was created using Qualtrics to obtain pre-background questions related to the churches' digital technology experience before the pandemic (Creswell). Following the background questions an online survey was used to determine how the participants felt about using digital technology and the effect the use of digital technology had on the ministry. The participants and churches remained anonymous. SPSS was used to document the data and Qualtrics was used to present the data obtained.

Using a questionnaire for the survey gave the researcher the ability to reach a larger audience and obtain a larger representation of the churches. Often participants using a questionnaire will provide more truthful answers to the questions (Leedy, 2016). The quantitative

survey has its benefits and drawbacks. By using the questionnaire, the researcher was limited to the questions asked, and the person completing the questionnaire may misunderstand the questions. The researcher was aware that some of the questions asked could annoy the participants. The researcher was also aware of biases that could be created from the questions (Leedy).

### **Conclusion**

As a result of the COVID-19 pandemic, churches had to regroup and learn how to minister to their congregations in a sudden and new way. While Zoom launched in 2011, it took 9 years for it to be accepted and many people were unhappy with the video conferencing tools on the market (Kelly, 2020, para. 2). Then the pandemic hit that forced millions into their homes and Zoom became the go to for schools, churches, businesses, etc. (Kelly, 2020, para. 2). Even with the advent of this technology, many churches lacked basic access to digital technology and internet connectivity. Before the pandemic, few parishioners or church leaders knew about Zoom. Further, the churches had to deal with the lack of digital literacy, generational differences, and continued reluctance to use digital technology (Campbell, 2023, p. 37).

Digital technology usage and knowledge in the small church is the focus of this study. The following chapters will investigate how digital technology affected the small church community; how the small church worked through worship and ministry using digital technology; and the effect of the generational gap on worship and ministry while using digital technology. Using a quantitative study, the researcher explored these questions and developed the research using small churches within the Lutheran Church Missouri Synod (LCMS). While this research is limited to LCMS, the researcher's findings may help small churches of any denomination as they develop their mission and ministry using digital technology.

## **CHAPTER TWO: LITERATURE REVIEW**

### **Description of the Problem**

The Christian community is essential in sharing God's Word and building each other up together in Christ. Keeping the church viable and active during the COVID-19 pandemic was challenging, especially for churches that were not familiar or comfortable with using digital technology. The church had to rethink and relearn corporate ministry, working together in a different environment, and building community as people worshipped via Zoom or through other sources of digital technology.

### **Theological Framework for the Study**

How churches were able to continue the oral delivery of God's Word in person to the community of believers was severely disrupted almost immediately after the December 2019 report of COVID-19 in China, followed by cases the next month in the United States that sparked the global pandemic (CDC, 2023). Beginning in early 2020, churches reverted from in-person services to Zoom services or uses of other technology. Unlike mega churches or larger churches in the community, before the pandemic small churches often did not use digital technology, or if they did, they used it minimally or in-house. The aftermath of the pandemic continues to affect churches and ministries today and many smaller churches continue to provide services entirely through Zoom or other technology. How do these churches work to continue the communion of saints without in-person services? What impact has digital technology had on the small church worship experience and building community and spiritual formation within? Studying the small church and the use and effect of digital technology during the COVID-19 era involved a discussion and understanding of the church, corporate worship, oral communication, communion of saints, discipleship, and Christian spiritual formation.

## **The Lutheran Church – Missouri Synod Doctrine**

The Lutheran Church – Missouri Synod is mission-oriented and Bible-based confessing the historic, orthodox Christian faith – a faith built “on the foundation of the apostles and prophets, Christ Jesus himself being the cornerstone” (Eph. 2:20, [lcms.org](http://lcms.org)). The LMCS doctrine is from the teachings of Dr. Martin Luther and is summarized in *The Book of Concord: The Confessions of the Evangelical Lutheran Church* ([lcms.org](http://lcms.org)). The Book of Concord was published in 1580 and set forth what the LMCS “believe, teach, and confess” (Nafzger, 2001, p. 6). The LCMS “accepts without reservation the Scriptures of the Old and New Testament as the written Word of God and the only rule and norm of faith and practice...and all writings of the Book of Concord as a true and unadulterated statement and exposition of the Word of God” (Nafzger). Adding, Lutherans<sup>12</sup> consider themselves catholic (small “c”), meaning universal and “evangelical” because it is “the Gospel, the Good News of the death and resurrection of Jesus Christ for the sins of the world – that lies at the heart and core of everything...” (p. 7). Sola Gratia, Sola Fide, Sola Scriptura - Grace Alone, Faith Alone, Scripture Alone - The Lutherans believe that sinners are justified through God through grace alone, through faith alone, and on the basis of Scripture alone. “To share this message with the world is the mission of the Church and the reason for its existence” (Nafzger, 2001, p. 15).

Lutherans believe that God instituted the pastoral office for the preaching of the Gospel and administration of Sacraments. Ranking and distinctions among those in this office are of human and not divine origin (Nafzger, 2001, p. 12). Congregations, pastors, teachers, and other professional church workers, who have signed the constitution of the Synod, are the official members of the LCMS. Congregational members sign the constitution of their local church when

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<sup>2</sup> The use of the term Lutheran in this paper refers to The Lutheran Church – Missouri Synod (LCMS).

joining. Congregations call their pastors – those men who are certified for ministry on the pastoral roster of the LCMS and who will honor and uphold the doctrinal position of the Synod (Nafzger).

## **Church**

What is the church? Jesus first used the term church when he spoke to Peter and announced that He would build the church on Peter, the rock (Matt. 16:18). Apostle Paul greets the Corinthians as “the church of God...to those sanctified in Christ Jesus and called to be his holy people” (1 Corin. 1:2). Paul later describes the Corinth church as those who are members in the body of Christ as the church (1. Corin. 12:27). But even in the Old Testament, it was important for the people of God to gather together. “Gather the people, consecrate the assembly; bring together the elders, gather the children, those nursing at the breast. Let the bridegroom leave his room and the bride her chamber” (Joel 2:16).

The Roman Catholics believe the church to be led by the Pope in Rome. Reformer Martin Luther provided seven characteristics of a church: The Word of God; Baptism; The Lord’s Supper; Discipline; Biblical Offices; Worship; and Suffering (Luther’s Works, 1955). Luther returns to God’s Word as the forefront for the church. Luther recognized Baptism – a holy sacrament as a part of the church. Further, the sacrament of Holy Communion is a public sign of faith and Christianity in the church. Using Matthew 18, Luther believed that the real church disciplined its members when needed. The church is recognized also in that it calls/consecrates its ministers. Worship is also central to the church – singing, praying, praising, and praying the Lord’s Prayer in public. Of note, Luther added suffering to what makes a church – that the people endure suffering and trials (Luther Works, 1955). Not only is the Christian church identified by what is performed inside the church building, but also through the gifts of the Holy

Spirit (Luther Works, 1955). Even a little child could see what the Church was, “namely, the holy believers and lambs who hear the voice of their Shepherd” (Book of Concord, Smallcald Articles (Part 111, Art. XII).

As Adolf Hitler came to power, Dietrich Bonhoeffer struggled with the meaning of the church in a world where the church was being closed in and condemned by Hitler and the Nazis. Churches, parochial schools, and seminaries were being shuttered. Bonhoeffer (1930) in his dissertation *Sanctorum Communio* provided a theological study of the sociology of the church. Bonhoeffer describes the church as “God’s new will and purpose for humanity...God’s will must become visible and comprehensible...and must be revealed” (pp. 144-145). Bonhoeffer reminded his readers that the Church was established in and through Christ (Bonhoeffer, 1930). Today, the term “church” is referred to as the “universal church” – the Christian believers around the world, or the “local church” – believers who worship within a community or certain area (Leeman, 2023, para. 24).

### **Corporate Worship**

In the beginning, men began “to call upon the name of the Lord (Gen. 4:26). Worship is integral to our spiritual formation (Pettit, 2008, p. 63). Pentecost is a prime example. The Holy Spirit descended upon the disciples and the disciples went out preaching the Word to everyone in their own language. They were active participants and as a result many were saved. “And it shall come to pass that everyone who calls upon the name of the Lord shall be saved” (Acts 2:21). As Morrow (2008) notes, “authentic worship is the bringing of one’s life and concerns to God so that they might be set before him and worked through *in his presence*” (emphasis added) (p. 59).

Corporate worship is the gathering of God’s people by His grace, for His glory, for their good and worshipping God because He is God (Kennebrew, 2012, para. 4). It is important that

Christians continue to gather together to hear God's Word. Members, meeting together, worshipping, receiving the sacraments and hearing God's Word makes up the church. The writer of Hebrews reminds Christians that it is important not to neglect meeting together – but also encouraging one another (Heb. 10:24-25). Corporate worship is defined as the gathering of God's people by His grace, for His glory, for their good and worshiping God because He is God (para. 4).

Regular corporate worship dramatically changed in early 2020 due to COVID-19. Churches, businesses, and schools were ordered closed. Churches had to find a new way to hold the worship service with their congregants switching to digital technologies such as Zoom and YouTube to carry on the oral delivery of God's Word. However, the COVID-19 pandemic is not the first time in history that the church has been ordered closed. Hitler closed the Confessional, Lutheran, and Catholic churches in Germany, as well as seminaries and parochial schools (Cochrane, 1976). The church has been shut down in principle in China, Russia, and several other countries. However, not since the "Spanish Flu" in 1918 has the church within the United States been shut down by the government. The way people worshipped changed almost immediately. The COVID-19 pandemic caused in-person corporate worship to cease in March 2020.

To understand corporate worship in the church, Gregg Allison highlighted three approaches to ecclesiology: 1). Functional: one seeks to define and discuss the church in terms of its activities, roles, or ministries; 2). Teleological: understanding of the church is driven by its purpose or goal; and 3). Ontological: whereby the church is understood in terms of its attributes or characteristics (Allison advocates this approach) (Allison, 2012). Chan (2006) noted the church's "basic identity is to be found not in what it does but in what it is" (p. 42).



Corporate worship is one of the primary means of making disciples through the ritual formation of spiritual virtue. A disciple is formed not only through transmission of doctrine, but also through cultivating the heart's inclinations (Aniol, 2017, p. 93). Rev. Katie Shockley explains, "When we gather in worship, we praise God with believers... We experience the communion of saints, the community of believers — living and dead. We believe that the church is the communion of saints, and as a believer, you belong to the communion of saints" (Shockley, 2019, para. 2.). Aniol (2017) adds that corporate worship is "more than a Christian's expression of authentic devotion toward God – it is formative and repetition is necessary for formation" (p. 101). Abernathy, et al (2015) determined that Christian formation is enhanced by an individual's spiritual practice, corporate worship, and edification; adding that prayer, preaching, praise, confession, ministry and sacraments were important in the traditional western church corporate worship. (p. 267).

The church body in-person provides intimacy that cannot be had only online. Paul explained there is "one body and one Spirit" (Eph. 4:3-4). Joshua Janke (2018) expounded on Paul's writing that the Holy Spirit creates the communion through Christ and in doing so we all belong to one body, in "intimate communion with one another" (para. 7).

Through Christ, Christians have the capacity to "have access to one another, joy in one another, and fellowship with one another" (Bonhoeffer, 1939, p. 47). Bonhoeffer, in his book *Discipleship* (also published as *Cost of Discipleship*), continues to address the characteristics of a church that Martin Luther described. But Bonhoeffer goes into further detail about its importance to the community of worship. Bonhoeffer (1939) addressed this as the "visible church-community" (p. 225). Bonhoeffer added that the church-community is of divine origin (p. 230).

He reminded people that Jesus' community with his disciples was "all encompassing" through every aspect of the disciples' lives and was a living witness to God's Word (p. 232).

### **Communication**

A church community becomes visible by hearing the preaching of God's Word. Preaching can also be referred to as teaching. Bonhoeffer (1930) described the teaching of the apostles who were chosen by God to be witnesses to the revelation and facts of Jesus Christ (Bonhoeffer, 1939, p. 225). The apostles and the prophets are "the foundation of the church whose cornerstone is Jesus Christ" (Eph. 2:20).

Martin Luther believed that oral communication formed the basis of human community and of individual human identity. Luther accentuated "the necessity of the oral delivery of the biblical message—and none other! —to his hearers" (Kolb, 2016, p. 51). Stewart (2002) reported that whether a person uses a written or spoken form of communication verbal or nonverbal, face-to-face or digital communication – these processes involve people "making meaning together" (p. 17).

Laughlin (2012) noted that God's Word was written to be heard and shared aloud with all of God's people. Much of the biblical world was illiterate and therefore depended upon the oral delivery of God's Word. The readings would be done out loud so all the community could hear. (Wilburn 2020) added that we communicate through the words we sing or say. In the Psalms, we read how the psalms were often sung and instruments accompanied the reading or singing. Wilburn also noted that a worship leader needs to be a good communicator and that corporate worship is communication. Further, be it by word, music, or presence, as a worship leader, how we sing, speak, or present matters just as much as what we are saying.

In addition to the oral delivery of God's Word, early on we see the written Word, i.e., The Ten Commandments, the writings of the Old Testament, the Psalms, the Gospel writers, Paul's letters, as well as other Apostles' writings. Paul's letters were written to specific congregations or persons, and the letters were shared among the people for whom he wrote. These he wrote within an eighteen-year period while he was on his missionary journeys. Paul wrote thirteen letters during an eighteen-year period while on his missionary journeys (Cendana, 2016).

We are to glorify God when we come together in worship. Music and song have long been used to communicate God's word. The people of God singing; the role of music in worship is biblical (Kartsawidjaja, 2021). Apostle Paul urged the Colossians that "with gratitude in your hearts sing psalms, hymns, and spiritual songs to God. And whatever you do, in word or deed, do everything in the name of the Lord Jesus, giving thanks to God the Father through him" (Col. 3: 16-17). Kartsawidjaja, a former musician turned pastor, did a study of Martin Luther and music. Kartawidjaja (2021) noted that Martin Luther used music to share God's message (p. 26). For Luther, theology, and music were not only a matter of principle but of also proclaiming God's truth (Kartawidjaja, p. 207). He further reported that Luther believed that music was closest to theology – a connection between theology and music which were at the service of the Word. And Luther believed that music had a very important role in praising God. Music was a gift of God – not a human invention (207).

### **Communion of Saints**

People need other people. Most people need community and thrive on relationships with others. Bonhoeffer (1939) stated that within the church, the physical presence of other Christians provides "incomparable joy and strength" (p. 29). Paul prayed daily for the opportunity to see the Thessalonians face to face (1 Thess. 3:20). The apostle John knew he would feel joy when he

could see people face-to-face instead of writing (2 John 12). Bonhoeffer added that the Christian community is a gift of God (p. 38).

The terminology “communion of saints” was found early on in the church (Donovan, 1998, p. 12). Early writers also spoke of the communion of saints – Justin Martyr wrote about the “prayers offered up at the eucharist included the faithful present, the newly baptized, and all humanity” (Donovan, 1998, p. 29; Kirsch, 1911, p. 7). The *koinonia* was understood by the early church to not only include the eucharist, but also a community participating together (Donovan, p. 10). The Reformation churches did not abandon the terminology of communion of saints. Kohl (1972) noted that for Martin Luther emphasis should be placed on the individual importance of communion of saints and the unity of the faithful (p. 149).

Many Christians recite the Apostles Creed wherein members profess that they believe in the communion of saints. But what does this mean and how is this important when discussing digital technology? When Adam and Eve fell in the Garden of Eden, Adam and Eve lost that personal connection with God. Lowe (2018) responded that our “reconnection to God through Christ is union with Christ in which God credits all the work of Christ to our account.” (p. 140). As a part of the body of Christ, we are connected to Christ and with each other. Christ is the vine; we are the branches. We are now complete – *télion*. We are reconciled through Christ. Paul in his writings uses the word *syn*, meaning “together with” or “jointly with” in relation to close association (p. 138).

In the Book of Acts Luke shows the power of the community of believers in action:

All the believers were one in heart and mind. No one claimed that any of their possessions was their own, but they shared everything they had...And God’s grace was so powerfully at work in them all that there were no needy persons among them. For from time to time those who owned land or houses sold them, brought the money from the sales and put it at the apostles’ feet, and it was distributed to anyone who had need (Acts 4:32-37).

These believers worked together to build each other up. They gave of themselves for the community of believers. In Hebrews, the new Christians are reminded, “Let us think of ways to motivate one another to acts of love and good works. And let us not neglect our meeting together...but encourage one another...” (Heb. 10:24-25). Bonhoeffer (1939) adds:

Let those who until now have had the privilege of living a Christian life together with other Christians praise God’s grace from the bottom of their hearts. Let them thank God on their knees and realize: it is grace, nothing but grace, that we are still permitted to live in the community of Christians today (p. 50).

Community is not optional; it is a necessity for spiritual formation (Morrow, 2008).

Bonhoeffer (1939) wrote that Christian community is a community through Jesus Christ and in Jesus Christ. This bond of Christian love is further “deepened and enriched when a wide variety of God’s children walk together” (Hielema, 2010, p. 16). Johnston (2008) explains how community worship is integral to our spiritual formation as Christians: community provides wisdom, sharpening, accountability, and support (pp. 83-85). Joshua Janke (2018) writes, “[L]et us cherish this communion that the Holy Spirit has created among us through Christ... because we all belong to one body, and whatever happens to one of us affects us all... The Holy Spirit has gathered us into the body of Christ, into intimate communion with one another” (np).

Through Christ, Christians have the capacity to “have access to one another, joy in one another, and fellowship with one another” (Bonhoeffer, 1939, p. 47). Zweke (2015) described Luther’s teaching on communion in that “[t]he self-giving of Christ is the deepest expression of God’s love...creates a community of love and care” (p. 119). Lowe (2018) added that “when we collaborate with (*synkoinōnos*) others in any ministry effort (i.e., teaching, preaching, witnessing, serving, leading or worshiping) as connected members of the body of Christ, there is mutual spiritual benefit conveyed between partners” (p. 156). Lowe further described a person’s personal faith and relationship as an “ecology” of faith within the community of believers” (p.

199). We see “how the body of Christ beginning with the critical role of the Holy Spirit, is the unifying glue that creates unity in the midst of ecological diversity of the body” (p. 197).

Ruth Barton compared the growth of spiritual maturity and formation to a child growing up in a family. The child has the safety and structure for growing through the family, and without a healthy family structure the child’s growth is stunted (Barton, 2015). Comparing this to a Christian, Ms. Barton elaborated that a Christian may continue without a spiritual family, however, any growth spiritually and developmentally not grow. She stressed that the church’s role in spiritual formation to guide a safe and loving place for all Christians of every age, as they grow and develop in God’s family. Withdrawing from a Christian community is compared to coal burning in a fire – it remains hot, however once pulled out of the fire, it loses its fire. Why is community important? Bonhoeffer (1939) wrote that God’s Word seeks out community and exists in the community, it moves within the community. “As God’s Word moves throughout and lives within the community, Christ becomes visible in the church community as they gather around word and sacrament visible in the church-community that gathers around word and sacrament” (pp. 227-229).

### **Discipleship**

Bonhoeffer (1937) described discipleship as joy. Jesus calls people to discipleship. A person who is a disciple of Jesus is “someone called to live ‘in’ Christ, be equipped to live ‘like’ Christ, and sent to live ‘for’ Christ. Our calling includes salvation and abiding in Christ (John 8:31-32), but the church equips the saints in their spiritual formation and growth into Christ-likeness (2 Timothy 3:16–17; Wellman, 2017, para. 1). We further see in the Gospels that Jesus called his disciples in pairs. As reported in the Gospel of Mark, “Calling the Twelve to him, he began to send them out two by two” (Mark 6:7). Jesus knew the importance of community, and this was important among the disciples, especially as they witnessed to others about Christ Jesus.

Also important in this discipleship is that it looks like what Christ commanded – disciples will have certain characteristics and behaviors (Aniol, 2017, p. 93). As observed in the calling of Matthew, the tax collector, in Mark 2:14 – Jesus simply says, “Follow Me”, and Matthew follows Jesus. Bonhoeffer (1937) expounded on this that when one is called, there is no hesitation but only obedience and they follow (p. 57). “The disciple’s answer is not a spoken confession of faith in Jesus. Instead, it is the obedient deed” (p. 18). Most importantly, “the call to discipleship is a commitment solely to the person of Jesus Christ...it is a gracious call, a gracious commandment” (p. 57). Jesus calls people as disciples because he is the Christ – nothing is needed but the obedience of following Him. Jesus’ command is not difficult if one accepts it (p. 57).

### **Christian Spiritual Formation**

Christian spiritual formation is defined as the process through which the “embodied/reflective will takes on the character of Christ’s will” (Willard, 2002, p. 45). Christian formation continues to develop as persons grow in their relationship with God, conforming to Christ through the work of the Holy Spirit (Wilhoit, 2008). This process is intentional where Christ is transformed in the believer as the believer matures in his faith. (Gangel and Wilhoit, 1994). The Holy Spirit equips the believer in spiritual formation restoring a believer to a life of obedience and relationships with God and others. As a result of this maturing and growth, the Christian will “consistently produce the fruits of the Spirit, which are love, joy, peace, patience, kindness, goodness, faithfulness, gentleness, and self-control” (Galatians 5:22-23; Sironen, 2020, p. 33).

Sironen (2020) and Reymond (1998) noted four ways God has provided His church to grow spiritually: reading and preaching of the Word of God; receiving and attendance of the

sacraments of the church; prayers of adoration, confession, thanksgiving, and supplication; and fellowship of the saints in the gathered assembly. Worship is an essential part of spiritual growth and is something that believers must do in their daily walk with God (Averback, 2008). As to the prayer element, Dr. Charles Arnold, Jr. described in his book, *Pray Believing*, “[w]hen embraced the Christian prayer is empowered with the awesome, humbling gift of service to God, to one's neighbors, and to one's self” (Arnold, 2019, p. 45).

In developing a believer's spiritual formation, the church should provide a place where one feels love, safety, structure, and guidance for all Christians at any stage of their spiritual development in Christ (Barton, 2015). Angela Reed described the spiritual formation community as “a call to one another” (Tang, 2013). Reed (2010) explains further that “one anothering” invites people to encourage one another, as well as instruct one another, speak to one another, admonish one another and spur each other toward love and good deeds. Tang (2013) adds that spiritual formation is not an individual process of development but “one anothering” is needed to foster spiritual growth.

Spiritual formation is not measured by the size of a church, how much it receives in tithes, but rather by the spiritual health of its members – the members in a healthy church are progressing in their spiritual maturity (Blackaby & Blackaby, 2011; Warren, 1995; Sironen, 2020). Spiritual formation is essential to the church because it is integral to the mission Christ gave her. Christ's great commission to churches was to “make disciples” (Matt 28:19-20). Churches accomplish this mission by proclaiming the gospel, through “baptizing them in the name of the Father and of the Son and of the Holy Spirit,” and through “teaching them to observe all that I have commanded” (Aniol, 2017, p. 93). Spiritual formation is integral to the community of believers through worship, mission, and education. (Howard, 2018). Howard



(2018) also describes Christian spiritual formation “as believers, led by the Holy Spirit, mature in their relationship with the Holy Trinity – God the Father, God the Son, and God the Holy Spirit” (Howard, 2018, p. 203).

### **Conclusion**

God’s Word is paramount within the church. While there may be many methods to deliver this message, it is important to remember that the church is witnessing Jesus Christ and that it is the message that is key – not necessarily how it is delivered. We see the numerous ways that God’s Word can be shared. The spiritual formation of the congregants and the church leaders relies upon the community, the family of believers, to build and grow their faith. We are all God’s disciples. We are all a part of the communion of saints.

In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. Through him all things were made; without him nothing was made that has been made. In him was life, and that life was the light of all mankind. The light shines in the darkness, and the darkness has not overcome it (John 1:1-5).

### **Theoretical Framework for the Study**

Keeping the church viable and active during COVID was challenging, especially for churches that were not familiar with or comfortable with using digital technology. The church had to rethink and relearn team ministry, working together in a different environment, and building community as people worshipped via Zoom or through other sources of digital technology. The Christian community is essential in sharing God’s Word and building each other up together in Christ. To continue to keep the communion of saints and the team dynamics of ministry during the COVID pandemic, small churches needed to embrace digital technology and relearn team ministry using digital platforms, such as Zoom, as well as a new way of working together in teams during this new dynamic of worship and community caused by the pandemic.

The literature review assisted this writer, and others, in ways Christian leaders to address the continued use of digital technology since the COVID-19 pandemic. The review addressed the Diffusion of Innovation Theory, digital technology historical viewpoints, and Christian leaders' viewpoints. The churches involved were small congregations within the Lutheran Church Missouri Synod. Each section addressed the importance of the study and concludes with a summary.

### **Digital technology**

Digital technology has changed the world in many ways, including how people communicate. Most everyone in the church world has heard of the Gutenberg Press and how Martin Luther used this technology over five hundred years ago to share God's Word – The Holy Bible – with the common people in Germany, in their own language. Luther understood how to combine the new technology of book printing with a new form of expression, thus achieving a mass impact hitherto unknown. The use of the printing press was revolutionary.

The digital age (or information age) is defined as a time when large amounts of information are widely available to many people, largely through computer technology (Bruderer, 2021). The Digital Revolution began between the late 1950s and 1970's. It is defined as the development of technology from mechanical and analog to digital. During this time, digital computers and digital record keeping became the norm. The digital age, also called the information age, is defined as the time period starting in the 1970s with the introduction of the personal computer with subsequent technology introduced providing the ability to transfer information freely and quickly (Bruderer).

Digital technology encompasses all the systems and devices that encode and use the binary system to represent data (Berman, 2021). Devices include digital watches, televisions,

cutting-edge robotics, and artificial intelligence (Berman). Digital technology, including its omnipresent connectedness and its powerful artificial intelligence, is the most recent long wave of humanity's socioeconomic evolution. The Stone, Bronze, and Iron Ages are thought of as the first technological revolution. The second era was the Industrial Revolution. Currently, the metaparadigm focuses on the transformation of information (Hilbert, 2020, p. 18). Less than 1% of the world's technology stored information in digital format in the late 1980s, surpassing more than 99% by 2012 (Hilbert).

In the 19<sup>th</sup> century, there were numerous technological communication inventions such as the telephone, the typewriter, practical photography, and even the first computer – all transforming how people saw each other and had access to knowledge throughout the world. Instead of obtaining information days or months after an occurrence, information was gained immediately (Dorling, n.d.). Early in the computer age, people signed on to their computers for information – news, sports, the latest trends, etc.

However, that changed, and it was found that people turned on their computers for community (Driscoll, 2022, p. 134). The 20<sup>th</sup> century brought the advent of digital technology. The personal computer was born, as well as the radio and television – and the cell phone. We learned about the World Wide Web, the Internet (Dorling).

Before Twitter and Facebook, there was the Morse Code (Rosenwald, 2017) - the invention of the telegraph was in 1844. The modern origins of today's internet and social media occurred in 1969 and later in 1987 with the Advanced Research Projects Agency Network – ARPANET, and the NSFNET launched the National Science Foundation Network. In 1997, the true social media platform was formed (Ayyappan, 2022). The social platform continues to expand with LinkedIn, MySpace, Twitter, Facebook, Instagram, Snapchat, Google, etc.

(Ayyappan). Modern technology has played much more than just a role in worship and faith (Ocampo, 2014). From the day the first evangelist testified over the radio waves, to the modern web broadcasts and television networks devoted to faith, technology will continue to influence the way parishioners participate in church functions and how the churches stay connected with their congregations (Ocampo). Campbell (2016) writes that churches that use the Internet provide new opportunities to connect to their members and others inside and outside of the church through ministry, evangelism, and even worship. Additionally, churches that use this technology do not offer it as a substitute but use it to supplement relationships and communication offline in unique ways (Campbell).

### **Rogers' Diffusion of Innovation Theory**

The process of adopting new innovations has been studied for over 30 years, and one of the most popular adoption models is described by Rogers (2003) in his book, *Diffusion of Innovations*. Sahin (2006), along with others, notes that Rogers' Diffusion of Innovations theory is the most appropriate method for investigating the adoption of technology in higher education and educational environments (Sahin). This theory originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system (Singer, 2019). The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product, i.e., doing something differently than what they had previously (Singer). The key to adoption is that the person must perceive the idea, behavior, or product as new or innovative (Singer).

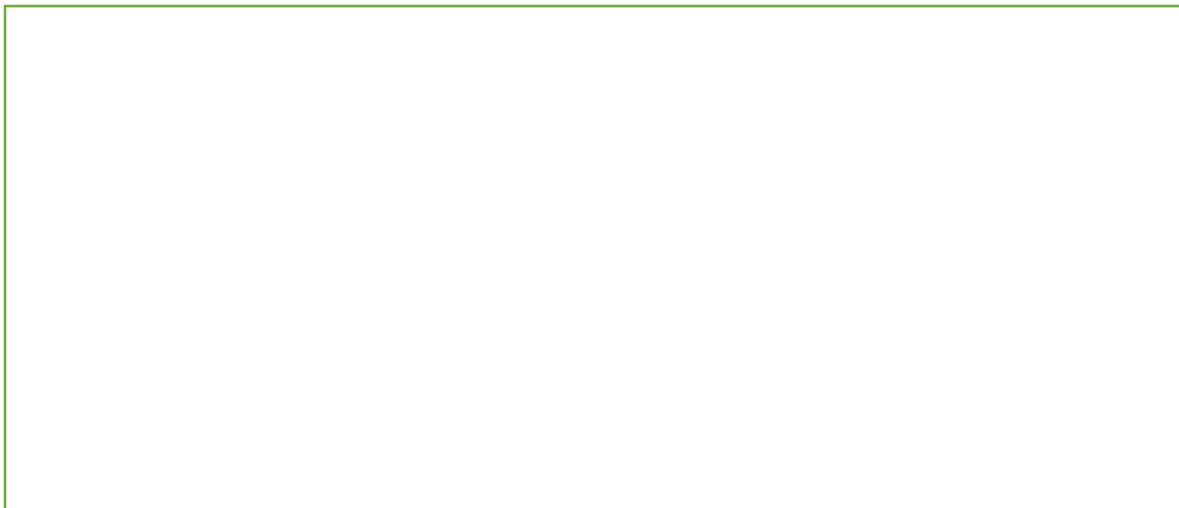
The four main elements of Rogers' diffusion theory include: 1). innovation, 2). communication channels, 3). time, and 4). social system (Rogers, 2003). An innovation is described as an idea, practice, or object that is perceived as new (Singer, 2016). Communication

channels are the way messages get from one person to the next. Diffusion is a process that unfolds over time, and social system is defined “as a set of interrelated units that are engaged in joint problem solving to accomplish a common goal” (Singer).

Rogers found that adopting a new idea, behavior, or product, i.e., innovation, did not happen automatically in a social system (Singer, 2016). Rogers (2003) described the innovation-decision process as “an information-seeking and information-processing activity, where an individual is motivated to reduce uncertainty about the advantages and disadvantages of an innovation” (p. 172). For Rogers (2003), the innovation-decision process involves five steps: (1) knowledge, (2) persuasion, (3) decision, (4) implementation, and (5) confirmation. These stages typically follow each other in a time-ordered manner (Rogers, 2003), as observed in Figure 2.

**Figure 2**

*The Five Stages in the Innovation-Decision Process*



*Note:* A Model of Five Stages in the Innovation-Decision Process (Source: Diffusion of Innovations, Fifth Edition by Everett M. Rogers. Copyright (c) 2003 by The Free Press). Removed to comply with copyright.

Rogers further noted that people who adopt these innovative ideas, etc., have different characteristics. Rogers noted five “adopter” categories (Singer, 2016). Understanding the

characteristics of the audience can help in how they will or will not adopt an innovation (Singer).

The five categories are described below:

1. Innovators who are people who want to be first, are venturesome and are interested in new ideas. They are very willing to take risks (Maeli, 2016).

2. Early Adopters –people who enjoy leadership roles and embrace change opportunities. They are aware of the need to change and are comfortable adopting new ideas (Singer).

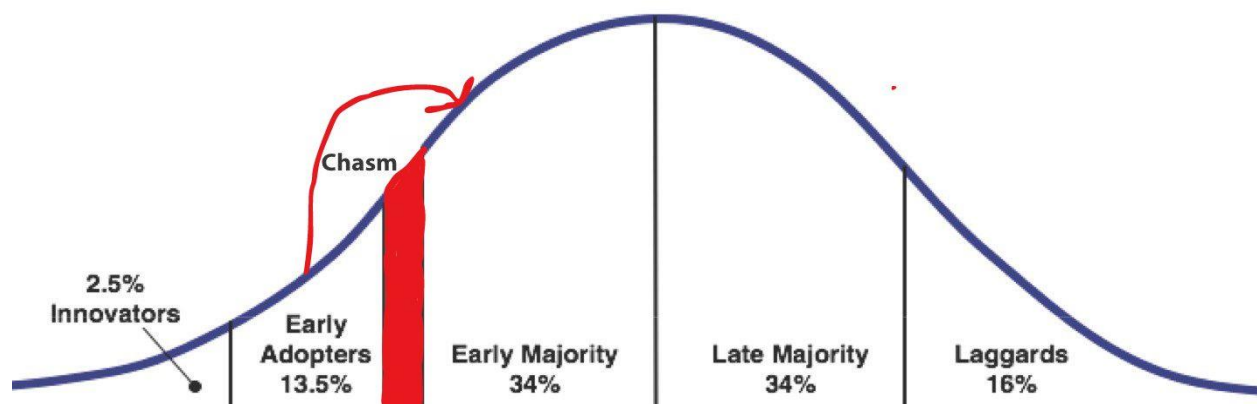
3. Early Majority – Rarely leaders, they do adopt new ideas before the average person. They are not afraid of change, but do not go after it. They typically need to see evidence (Maeli; Singer).

4. Late Majority – These individuals are skeptical of change and will only adopt an innovation after it has been tried by the majority (Singer).

5. Laggards – Very conservative and bound by tradition. Very skeptical of change and are the hardest group to bring on board (Singer).

**Figure 3**

*Diffusion of Innovation Theory*



*Note:* Adapted from Diffusion Research Institute, Chasm Theory Development: The Complete History, December 18, 2023.

Figure 3 shows how change happens over time, moving from one subgroup to the next as each group influences the next group (Mathers, 2018). The chasm represents the hurdle to overcome to make change happen and this chasm is large between the early adopters and the early majority. However, once this chasm is crossed, it is generally accepted that the innovation is accepted and will take off. Should the innovation fail to cross the chasm, the innovation will end (Mathers).

Numerous studies have been completed using Rogers' Diffusion of Innovation Theory to determine how various parties accept technology into their field, especially as it relates to education (Sahin, 2006). This study examines how accepting the church leaders and congregational members were to adopting digital technology for church services, Bible studies, and church meetings, and means of adapting to the various congregational members' needs.

### **Social Media**

Many people claim to be the first to use the term social media (Ahimah, 2018). Tina Sharkey, a former employee of AOL registered the term "social media" (URL) in 1999. Ted Leonsis, an AOL executive, states he used the term social media in the early 1990s, and Darrell Berry said he initiated the term in 1994 (Persuit, 2013). Because of social media, people in the world today can see, read, or listen to what is occurring around the world in an instant. Many social media "are designed to facilitate social interaction and engagement between people and groups" (Roth, 2016). Szabo (2014) reports that social media has changed how people "communicate with one another, view the world, hear, and even exchange goods and services" (Szabo, 2014). Social media has been shown to influence people to change in political participation and beliefs (Boulianne, 2015; Skoric, et al, 2016). Organizations use social media to engage many more people as well as an inexpensive way to "create, communicate, and

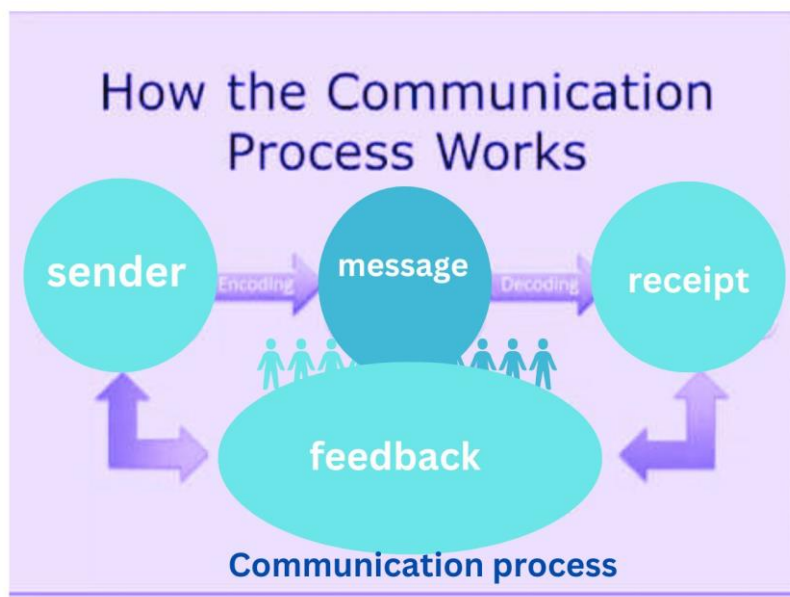
promote...and the ability to reach a larger audience than traditional means alone” (Aseidu, 2019; Verma, 2013). Today, this is very apparent as the world sees through social media the war in Ukraine almost immediately, as well as other current events.

People communicate on many and various levels. These include social groups, interpersonal, institutional, and intrapersonal (Dzekoe, 2017). Numerous theories exist providing different ideas as to the origin, nature, processes, and purpose of communication (Dzekoe). The theories range from evolutionary explanation and the need for cooperation and survival, to the origin of communication and focus on the purpose and processes involved (Harrub, 2003).

James Carey (1989), in his book *Communications as Culture: Essays on Media and Society*, identifies two categories of communication theories: transmission and ritual. Carey reports that Lasswell (1948) and Waples (1942) are the theorists behind the transmission theory (sender-receiver).

**Figure 4**

*How the Communication Process Works*



*Note:* Adapted from the Alanis Business Academy video on How the Communication Process Works, 2015.



The transmission model of communication, as noted in Figure 4, describes communication as a *linear, one-way process*, in which a sender intentionally transmits a message to a receiver (Ellis & McClintock, 2009). This model focuses on the sender and message within a communication encounter (Gavi, 2013). Francis (2020) writes that a ritual view of communication does not just pass on information but is a way to connect with others and maintain community. McFarland and Ployhart (2015) concluded that social media has changed the dynamic in that people do not need to be physically present to be involved and active within an organization. Adding to that, social media provides a way of sharing and delivering content and information and involving others more effectively and efficiently (Webb, 2012).

Studies examining the role information and communication technology play in religious practices show that technology plays a significant role in religion (English, 2021). Ogunsola and Raji (2019) wanted to find out how using social media, i.e., WhatsApp, would impact the church community. A study they performed in Nigeria indicated that meetings through social media were favored. Participating churches determined that cyber churches would provide people with the Christian community (Ogunsola and Raji). Studies by Bourgeois (2019) indicate that one of the most significant advantages of social media over traditional media is defining and targeting a specific group of people with certain characteristics. Further, demographics revealed that most organizations were classified as small ministries with little resources to devote to digital technology (Bourgeois).

### **Conclusion**

We see in Matthew the importance of communication.

You are the light of the world. A town built on a hill cannot be hidden. Neither do people light a lamp and put it under a bowl. Instead, they put it on its stand, and it gives light to everyone in the house. In the same way, let your light shine before others, that they may see your good deeds and glorify your Father in heaven (Matt 5:14-16).

Digital technology has been around for a long time. Add to that social media which is relatively recent. Some churches are very familiar with using digital technology and social media – through Facebook, YouTube, websites, Instagram, etc. But many smaller congregations either do not have the resources for technology or a church may not believe that digital technology is suitable for worship. These Churches could choose to become interactive as a church or choose to fade further into the cultural background (Wise, 2014).

COVID-19 took the choice of using technology out of the equation. In order to survive, small churches had to embrace technology and social media. Zoom became the word of the day and Zoom services, Bible studies, break-out sessions became the norm. Small churches had to learn quickly how to keep their congregation together using digital technology for worship. In the midst of the ongoing pandemic, technology and religious practice can no longer be detached. The church must use technology to survive in this constantly changing environment (Grant and Sturgill, 2019).

Religious communities were affected by the pandemic and meeting the needs of the congregation spiritually was challenging, especially the smaller church with a smaller budget (Fulton, 2018; Modell and Kardia, 2020). This study showed how the small churches handled these challenges. For this particular study, this writer used Rogers' Diffusion of Innovation Theory along with the two communication theories of ritual and transmission in studying how the small churches used digital technology and social media throughout the COVID-19 pandemic and the ways the church leadership worked through the challenges they faced with the smaller membership. The writer's goal with this study was to show how small churches took up the challenge of digital technology and social media during the COVID-19 pandemic, how digital technology and social media impacted the worship and community of the church, lessons

learned, and how the church uses the digital technology and social media today to carry out its mission.

### **Related Literature**

The Christian community is essential in sharing God’s Word and building each other up together in Christ. Keeping the church viable and active during the COVID-19 pandemic has been challenging, especially for churches that were not familiar or comfortable with using digital technology. The church had to rethink and relearn corporate ministry, working together in a different environment, and building community as people worshipped via Zoom or through other sources of digital technology.

The purpose of this section of the literature review was to provide the reader with a critical review of the various subtopics directly related and relevant to the subject matter of this writer’s research. The organization of this part involved this writer’s in-depth survey of relevant aspects of the study that framed and informed the research. This part of the literature review was divided into three sections: 1) Pandemics and the Church; 2) The Effect of Digital Technology on Community Worship; and 3) Digital Technology and the Church.

#### **Pandemics and the Church**

The COVID-19 pandemic is not the first, nor will it be the last. Plagues have affected the world and the church for centuries. Martin Luther lived in the midst of one of the worst plagues – the Black Death. In a letter about the plague, Luther’s advice was that a Christian never stops serving Christ (Gazal, 2020). Even in the midst of the plague, Luther and his wife, Katherine, continued to serve God and the community. Not only did [they] open their home to those infected, but Luther “recognized the opportunity to preach Christ” (Gazal).

Early on Christians were called upon to follow Christ’s example, i.e., “do to others what you would have them do to you” (Matt. 7:12) and “a new command I give you; Love one

another. As I have loved you, so you must love one another” (John13:34). During the Antoine Plague of the second century, early Christians cared for the sick, providing food, water, and other assistance. As a result, many pagans became believers in Christ (Brodie, 2020). Christians’ good will was also seen during the Plague of Cyprian one hundred years later – Christianity spread as a result of their witness to those sick and dying (Brodie). Emperor Julian “complained bitterly how the Galileans would care for even non-Christian sick people” (Stone, 2020). Church historian Pontianus noted how “Christians ensured that good was done to all men, not merely to the household of faith” (Stone). Sociologist and religious demographer Rodney Stark reports that “death rates in cities with Christian communities may have been just half that of other cities (Stone).

The Christian church in the United States was tested during the pandemic of 1918-1919. Worship services and other public gatherings were banned. Pastors and church leaders were concerned about the church community and its ability to gather and hear God’s Word. Several churches ignored the ban and continued worship, either indoors or moving outdoors (Gehrz, 2020). Pastors questioned why churches were ordered closed when saloons, markets, and other businesses were permitted to remain open (Gehrz, 2020). Even so, the 1918-1919 pandemic brought much introspection within the church. The Christian Reformed Church magazine, *The Banner* suggested notes that lessons learned include valuing church privileges, including the value of fellowship with God’s people, the communion of saints, appreciation of the church literature, and a renewal of devotion (Witvilet, 2020).

The COVID-19 pandemic placed the church world in a difficult position. People feel that a church is a place to go during challenging times. New regulations and mandates were in place. The Episcopal Church reminded its members to “combat fear with knowledge in order to

encourage preparedness and decrease stigma, maintain operational continuity and continue worship life in the case of potential quarantine and disruption, and show God's compassion and care to those in our communities who are affected" (Faith-based Response to Epidemics & Pandemics, n.d.). It was clear that the church's view of worship pre-pandemic changed significantly as a result of the COVID-19 pandemic. Tryggstead reports that a benefit of the pandemic is that it made Christians think about the meaning of the word church. And, that it was potentially a good thing that the church did not return to the status quo. (Tryggstead, 2021).

Peluso-Verdand (2022) reported that many churches were already experiencing waves of historic-level crises prior to the pandemic. Peluso further described "going to church as a 16<sup>th</sup> century innovation within a Christendom mentality (Peluso-Verdand). Regardless, Peluso found several strong positives about the frequent attendance model for church and society. Peluso (2022) remarked that the church congregation was for providing volunteers for times of crises and providing spaces of beauty for public gatherings. He also commented that the church provided skills necessary for public life such as public speaking, working out differences, group decisions, etc. Of note, he made no mention of spiritual formation, discipleship, or sharing God's Word.

Unfortunately, the pandemic caused most churches to cancel in-person services, and several closed permanently. Pastor Hayes, of Friendship-West Baptist Church in Dallas, Texas, has been a Pastor for 38 years and described a "fresh appreciation and a higher value on relationships. I have a fresh appreciation and I highly value when the congregation comes together for worship and fellowship" (Briggs, 2021). Hayes adds that when recording a sermon or live streaming a service "without exception I feel this emptiness...I feel real hollow...I don't get the interaction" (Briggs).

Despite the pandemic, a survey conducted by Rev. Richard Houseal, Ed.D., research director for the Church of the Nazarene Global Ministry Center, found that approximately 84% of pastors agreed that “their church will emerge stronger from the pandemic,” and a similar percentage agreed with the statement. Roberts found, “personally, the pandemic has given my ministry new significance” (Spicer, 2021). Pastor Randal Lyles reported, "This crisis has actually caused us to do a better job of picking up the phone and checking on our members" (Gjelten, 2020). Lyles added, "It's made me refocus on connecting individually with people. I have our staff checking on every elderly person in the congregation every couple of weeks to see what they need and how we can serve them." So, some connections are probably stronger now than they were before (Gjelten).

### **Digital Technology and Community of Worship**

The apostles knew that teaching and preaching in-person was the preferred method to share God’s Word. Apostle Paul often wrote that he wanted to be with them in person. John also wrote, “I have much to write to you, but I do not want to use paper and ink. Instead, I hope to visit you and talk with you face to face, so that our joy may be complete” (2 John 2:12).

At the start of the COVID-19 pandemic, The World Health Organization (2020) “encouraged faith leaders to use email, church websites, phone trees, newsletters, social media, faith publications, and other broadcast media to stay in touch with their congregation” (English, 2021). Pastors and church leaders asked how to worship when you can no longer participate in person. This was especially challenging for churches that traditionally met in person. As a result of the pandemic, pastors and church leaders could no longer take the “how-to’s” of ministry for granted (Johnston, 2021). As a result of the COVID-19 pandemic restrictions, pastors found that everything became the “focus of conscious thought and deliberation” (Johnston, 2021). Pastors

described their initial experiences with many questions, meetings and discussions with their church leaders and lay leaders on next steps in moving forward. (Johnston, 2021). Pastors asked and were concerned about remaining present within the community of believers when the pandemic prevented everyone from being physically present together (Johnston).

The congregations' ability to worship in person has been greatly tested as a result of the pandemic. There were still churches that did not believe digital technology was the proper place for a church. However, for many pastors, the pandemic represented an opportunity, and in some cases, an important push, to reorient their ministry outward, towards the community (Johnston, 2021). Most pastors already held this as something they cared about and valued. The pandemic pushed them to align their practices more fully with their values (Johnston).

Kim (2020) wrote that despite churches having various mission statements, there is the same purpose, "to introduce people to Jesus Christ and to invite them to follow him with their whole lives...a lifelong process with others" (p. 14). He added, "[t]his is what the Bible means when it talks about discipleship – the life of apprenticeship under Jesus...alongside others" (p. 14). We have heard of church shoppers – people who go from church to church to find that perfect church, with the perfect people, with the perfect Pastor, music, etc. When people do this, they have lost the reasons of what the church is actually supposed to be (Kim). Dietrich Bonhoeffer (1937) wrote, "those who love their dream of a Christian community more than the Christian community itself become destroyers of that Christian community even though their personal intentions may be ever so honest, earnest, and sacrificial (p. 36). Kim (2020) warned:

An "online church" is more a product to be consumed than it is a people to be joined. Community isn't about getting a product out there but about gathering people wherever they are. Yet, so many of our churches continue to push into online spaces and call it community and connection. And in doing so, we are doing tremendous damage to the very communities and connections we so desperately long to see (p. 93).

There is no doubt that digital technology has been a blessing during the pandemic. As long as the pandemic continues, and smaller churches remain closed to in-person worship, using Zoom or other forms of digital technology is the only means to reach their church members. How do we practice the Great Commission over a screen? Discipleship is impossible without a Christian community and that is one of the reasons the church exists. To overstate the point, we cannot practice the “one another” commands without one another (Pritchett, 2020).

According to Kane (2015), using social media in the church gives the church the ability to reach their objectives in a more efficient and effective manner and with more impact and a greater reach. Schulte (2017) wrote that social media can give the church a new way to share the Christian faith to many separate groups using online evangelism, religious identification, and expand through world missions.

Early on in the pandemic, Barna Group (2020) asked in a study whether digital ministry could be more than a sermon. Barna found that a “holistic strategy for digital or hybrid ministry is needed for the long term” (Barna Group). While we “see” each other online during the service, and even chat, this type of service cannot replace the personal connections that physical gathering sustains (Pritchett, 2020). Churches must find a way to use technology so that congregants are not just consumers but remain actively involved and feel like they belong (Pritchett). It is easy, at least for those of us concerned for faith and faith communities, to see the dangers and challenges social media pose for our relationships and our spirituality (Duke, 2018). Can we also see the opportunity for good? And how can we respond with faithfulness to the difficulties social media presents? (Duke).

Internet pioneer, Brian Reid, “argues that the internet can help the church with its mission...in part because it allows people to form communities without needing buildings”



(Hutchings, 2017, p. 40). Further, Reid defined community as “a group of people who talk to one another because they share common interests” (Hutchings, p. 40). Christian leaders however note that there are more than shared interests: “community is not just communication but embodied presence, face-to-face relationships, discipline, and the physical service of each member to the group” (Hutchings, p. 41). Episcopal Bishop Katherine Shori adds to this noting that a faith community needs people in “physical proximity” in order to grow as a community and individually. Adding that it is difficult to have a deep faith community on the Internet, instead dealing with “caricatures...perceptions and positions rather than full human beings in our presence...the incarnate piece is missing (Hutchings, p. 41).

In June 2020, the Lutheran Church Missouri Synod (LCMS) sent a survey to nearly five thousand of their congregations. This survey indicated in part that 90% of congregations stopped meeting in person for some time during the pandemic; 92% of the congregations provided worship content during the pandemic; 60% of congregations that instituted some form of online worship during the pandemic plan to maintain it. While many churches had reopened to in-person worship, problems remained with having congregants returning to in-person worship, and smaller churches were impacted significantly more financially (Magness, 2021). A small Lutheran congregation attempted to reopen, but due to the continued spread of the virus and the age of many congregants, the congregation primarily worships via Zoom. While the congregation lacks in-person fellowship, there is an agreement to continue services online, with special services at the church.

The pandemic has affected congregations differently, most notably between smaller and larger congregations. Smaller churches appear to have suffered the most during the pandemic. Smaller congregations may already have had financial issues pre-pandemic, and the pandemic

has made it more difficult (Magness, 2021). Many churches have decreased attendance since reopening, while others seem to have thrived and grown (Wingfield, 2021). Andrew Gardner, a Baptist News Global columnist, noted that the congregations least willing to change were the smaller congregations, and these congregations saw much decline during the pandemic. Larger churches using hybrid worship saw growth during the pandemic. (Wingfield).

Rev. Vicki (Honea) Copp, D.Min., pastor of Cameron Church of the Nazarene in Cameron, Missouri, found that creating an online presence allowed her congregation to continue to worship together. The COVID-19 shutdown was the first time she had preached online, and within a month, the church was livestreaming the worship team and her messages on Facebook Live” (Spicer, 2021). Rev. Vicki’s church continued their online presence even after the church reopened so that they could “serve as many people as possible (Spicer). Pastor Dave Roberts reports,

For us the philosophical piece was much more difficult to navigate. Making decisions about content became the focal point. When everything is said and done, you have lost so much of what makes the church the church – the personal touch, connection, camaraderie, friendships. So we had to ask: how are we creating unity around the content that is being produced? (para. 8).

Ministry depends on relationships (Nelson, 2019). In the past it made it difficult for isolated believers or newly planted churches to feel or stay connected to their Christian church (Nelson, 2019). Even pre-COVID-19 pandemic, many churches were using technology to increase the impact of their ministry and to nurture their community. Nelson uses the example of livestreaming services to keep the sense of community – all people, those present in the church building, and those using the livestream can still receive the same message. Religious leaders also noted that there were lessons to be learned as a result of the pandemic. Like stretching a muscle, a person’s faith must be stretched to see if you truly believe (Wimbley).

But can a virtual service be worship? Berger (2017) asks this very question. Some believe that virtual worship is just not real, just an illusion. Berger notes that the definition that digital worlds are unreal and offline worlds are real is inadequate and outdated. With the introduction of Web 2.0, the distinctions between “online-virtual” and “offline-real” have become much more difficult to determine as people use internet devices in almost all aspects of their lives today (pp 16-17). Today, we can easily access the Bible online, watch services on YouTube, and receive devotions through Facebook. But doing so requires people, and as in-person worship requires a person, so does online presence (p. 17). Berger thought that digital worship can easily become a part of a multi-tasked lifestyle making it nothing more than taking a jog or doing dishes (p. 28). But even with the challenges and problems with digital technology in the church, Berger provides an example of Pope Francis in 2016 and using digital technology, being able to preside over a Papal Mass at the U.S.-Mexican border cities of El Paso and Ciudad Juarez. Pope Francis commented at the end of the Mass, “with the help of technology, we can pray, sing and together celebrate the merciful love that the Lord gives us and that no border can stop us from sharing” (p. 29).

### **Digital Technology and the Church**

Digital technology has made sweeping changes in how we live our lives today. “The Jetsons” was a cartoon show in the early sixties about a family living in the future with a house full of technology – technology that is current and being used today. Today doctors see and treat patients online, flying cars have been designed, people are using smart devices; cars can drive themselves; people are connected 24/7 to friends and family, and the world; private citizens visit a space station orbiting above the earth.

People are seen at restaurants, or sitting next to each other, engrossed in their phones, and not conversing with each other, or even looking at each other. The effect of the digital age has

found its way into the life of the local church (Kim, 2020, p. 86). “Concerned conversations about declining attendance and engagement are commonplace among church leaders” (p. 86). Kim noted that in a 2017 Pew Forum survey on why people attend church, that “there was no mention of the communal life of the church” (p. 87). Kim also noted that even in our churches, people “gather as a scattered collection of individuals, with priority given to our own individual needs and desires, over and above the unique roles we might be called and equipped to play in the larger life of the body” (p. 87). Even so, for those who have attended a Zoom worship service, there can be many distractions – dogs barking, phones ringing, people talking, etc. It can be challenging to stay engaged during the service.

Kruger (2021) performed a study on church members’ attitudes toward virtual worship services. His study found that two-thirds of the respondents believed the pandemic influenced their conviction on worship in their lives. Most responded that they longed for more prominent visibility and experience of the community of believers but with certain reservations. They believed that physical worship was pivotal, but that virtual engagement in the liturgy had benefits and that local congregations should look further into this. Further, many respondents believed that virtual services were genuine worship services, though there were challenges with the liturgy. More attention was needed concerning the interplay between pastoral care and liturgy both offline and online.

Jacob Dunlow (2021) performed an analysis on digital discipleship analyzing twenty-one churches in New York City in how these churches ministered to their congregations during the COVID-19 pandemic. Dunlow described digital discipleship as “the process of making disciples using digital technology as the primary delivery instead of face-to-face engagement...and was more than living out the mission of Christ through carefully constructed social media posts” (p.

461). Dunlow quotes Hunt in that digital discipleship is “the practice of modeling one’s spiritual life and actions after the life of Christ within both physical and digital realities” (p. 461). Dunlow concluded that over 95% of the churches engaged in digital discipleship, with half of the congregations finding it effective (p. 458). He adds that using digital discipleship ministries provided a sense of community by gathering people together. This in turn helped to strengthen believers’ faith during a very difficult time (p. 470).

As the world has observed, every age has technology, whether it be a stone wheel or an iPhone (Holland, 2021). Holland adds that while digital technology can be exciting and captivating, God is not necessarily impressed. God may use technology to reach out to individuals, but God does not have to have it. Technological progress has changed many things within the world; however, the church has done well for quite some time without it (Holland). Holland provides the following example of telemedicine – “pink eye can be treated by telemedicine, cancer cannot. The flu can be treated by telemedicine; a Chiari malformation cannot” (Holland). Obvious – yes, but Holland goes further:

Do we have the same “of course” reflexes when it comes to what is appropriate for a church to do online and what is not? The content of a sermon can be posted online; a sacrament cannot. Our lack of “of course” scenarios for what is appropriate for a church to do online is disconcerting (Holland).

With all of this exciting technology, Moncrieffe (2019) reminds the church to keep the continuous flow of information “relevant, spiritual, and valuable” (p. 10). Campbell and Garner (2018) continue this discussion by noting that churches face increasing challenges in how to use digital media changes church practice and the importance of evaluating theologically on these changes. Clearly, any church that uses digital technology should have the church practices, policy, procedures, and training in place and updated as needed.

It is understandable that for many years, churches were against using digital technology for anything, let alone using it for a service. There were problems (and these still exist today) where content was an issue as well as hackers invading a Zoom meeting. Additionally, having services online, the members miss the sacraments, greeting people in person, etc. (Eidsomoe, 2020). Digital technology plays a key role in the church, but what COVID-19 has shown is that being the church online requires more than simply streaming a worship service. If churches discontinue discipling those in their congregation and communities in exchange for virtual worship services, they are missing a key element of their biblical calling and a wonderful opportunity (Pritchett, 2020). Using digital technology exclusively prevents the community of saints and building spiritual formation within the church body and with each other. However, “churches need to be aware of the risks of social media, yet also recognize that their digital presence can be a positive force” (Turkle, 2012). While the COVID-19 pandemic changed the nature of worship and using technology, technology is not required to share the Gospel. The Gospel is powerful and life changing by itself (Evans, 2011). Further, technology should not be used to replace the Word (Evans). Pastors must find a balanced way to include digital in the worship environment so that it infuses the worship culture with excellence, informs our digital natives with connectivity, and marries fellowship and spirituality with growth. The digital should also be used as a tool to extend ministry reach and share the church’s brand of worship with an ever-widening digital audience. Care must be given to those who are not familiar with technology. Digital resources are a tremendous blessing from the Lord, a tool to accomplish the gospel commission. The right stewardship of this blessing is the real challenge and opportunity our church leaders face in an age (Moncrieffe, 2019).

## **The Generation Gap**

The younger generation finds it much easier to use digital technology than an older adult. The younger generation is more likely to embrace using digital technology in a church setting (Jobling, 2014). A Pew study found that millennials daily merge technology into their routines. Millennials also heavily use mobile technology such as the internet, connectivity, interactive media and social networks (Kim, 2020). There is even a difference in how Generation X (born between 1965 and 1980) users use digital technology. These individuals were not raised on the internet and digital technology but learned to use it as adults and quickly adapted the technology into everyday life with personal computers and downloading from the internet (Prensky, 2001; Hill, 2017).

Different generations use different technology to communicate though “not always appreciative of ways of communications different from what they are used to” (Venter, 2017, p. 498). Generation Y is the first digital generation and Baby Boomers have often used face-to-face communications. Most of the Gen Y generation have spent hours using the internet, social media, mobile phones, and instant messaging, while Baby Boomers primarily use digital technology to send emails, or to phone another person, rarely using digital technology for interpersonal communications (p. 499). As a result of the differences in use of digital technology across generations, conflicts can arise, and church leaders need to know how to deal with using digital technology within and for all generations.

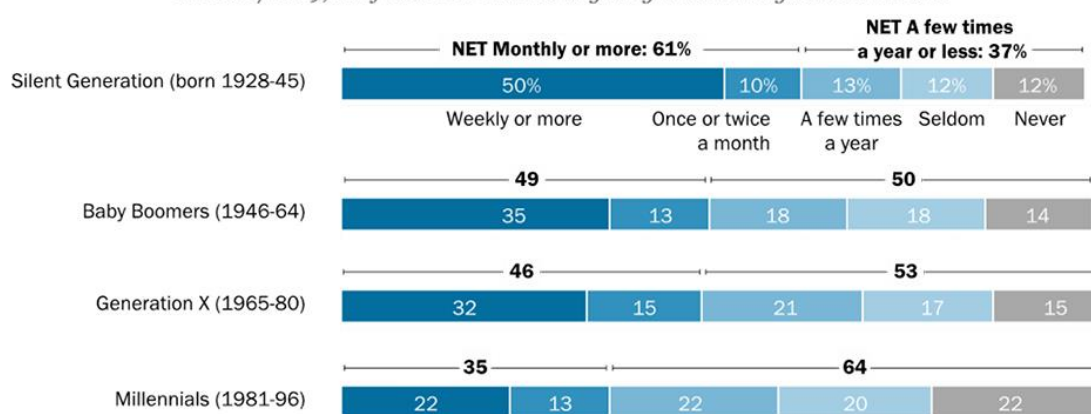
While more adults are beginning to use technology, especially out of necessity due to the pandemic, they are also becoming more comfortable with its use (Damodaran, 2018). However, differences remain in the use and comfort factor in using digital technology, especially within a church setting and a church must be prepared for the unexpected. Dunlow (2021) warned

churches to “take the time to cultivate a healthy discipleship ministry while you can, because a time may hit when it is not possible, and your people will be worse off for it” (p. 469). For a church that has many older members, this means having classes for older adults to learn how to use the digital technology the church is using, be it Zoom, YouTube, etc. It may mean investing in iPads or tablets for the shut-ins of the congregation, or even for younger members who do not have the means or ability to access a computer. It means being creative with the ministry, church community, and discipleship.

Not only is there a generational gap in technology, but there also exists a generational gap within the church itself. The experiences of each generation affect how people learn, relate to each other, and worship. In recent years, there has been a continual decline of the family – single parent families are becoming the norm, non-married households with children, divorce, violence in schools, mass shootings, etc. (Wuthnow, 2013).

A 2019 Pew Research Center study found a large generation gap in the American religion. The study as illustrated in Figure 5, shows the wide gap between older Americans, Baby Boomers, and members of the Silent Generation, in their levels of religious affiliation and attendance (Pew). More than eight in ten members of the Silent Generation (those born between 1928 and 1945) describe themselves as Christians (84%), while only one-half of Millennials (49%) consider themselves as Christians (Pew). Despite this change, church attendance is at about the same rate as it was in 2009, approximately 62% of Christians attend religious services at least once or twice a month. Pew’s (2019) findings suggest that religious attendance is declining because there are fewer Christians in the population – not that they are attending church less.



**Figure 5***Large generation gap in American religion***Large generation gap in American religion***In 2018/2019, % of U.S. adults who identify as ...**In 2018/2019, % of U.S. adults who say they attend religious services ...*

Note: Don't know/refused not shown.

Source: Aggregated Pew Research Center political surveys conducted January 2018-July 2019 on the telephone. "In U.S., Decline of Christianity Continues at Rapid Pace"

PEW RESEARCH CENTER

*Note:* Aggregated Pew Research Center political survey conducted January 2018-July 2019. In U.S., Decline of Christianity Continues at a Rapid Pace. Graphic courtesy of Pew Research Center.

The church needs to address the generational gap issue as well as work with the generational gap that digital technology has created. Part of the problem within the church is that the younger generation no longer trusts the church leadership. Further, many mainline churches are losing their identity against the secular world view around them. Giatti (2022) found that at least one third of mainline denomination pastors did not believe in salvation by accepting Jesus as their savior - you just needed to be a good person. The Millennials and younger generation see that, and question why go to church at all? Churches can maximize the use of digital technology

to reach the younger generation and bring them back to the church. The smaller church can use digital technology as a building block to reach the younger generations that more than ever need to know Christ.

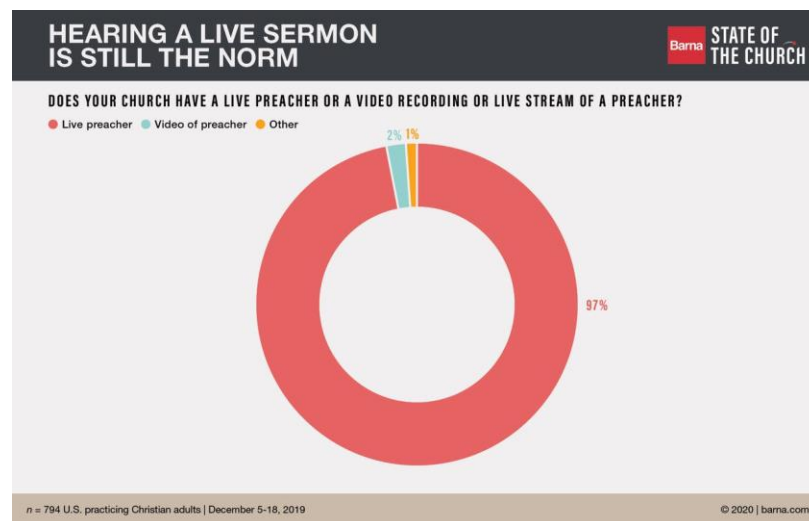
## Rationale for the Study and Gap in Literature


### Rationale for the Study

Many small churches pre-COVID did not have any social media presence. Before the pandemic, familiarity with digital technology may have only involved Facebook and perhaps a webpage that they may or may not have kept current. This severely impacted how the church and church leaders were able to continue witnessing to their congregation. New ways of interacting with their members had to be quickly created, including members who had limited or no technological experience. Even during the pandemic, a 2020 Barna study showed that Christians still preferred to hear a live sermon (Figure 6). Even though a sermon would be heard online through Zoom or YouTube, parishioners still missed the community provided by in-person services.

### Figure 6

*Do Americans Replace Traditional Church with Digital Faith Expressions?*



Note:  2020 report on whether Americans replace traditional church with digital faith expressions. Used with permission.

Since the states and counties have removed most or all of the mandatory requirements due to the pandemic, some churches have returned to either complete in-person church services or a hybrid mix of in-person and Zoom, or by using other digital technology. Regardless, at the time of this writing there are still a number of churches that continue to use Zoom because members do not feel comfortable attending in person, for distinct reasons, even as the overall pandemic numbers wind down. Studying how the pandemic and the sudden transition to using digital technology affected church members and churches will help determine the effectiveness of continuing the use of digital technology in some form, as well as what churches can do to assist their members with digital technology.

### **Gaps in the Literature**

Currently, there is little or no reliable research on how digital technology has affected small churches positively or negatively. Lines notes that when social media is used intentionally, it is the greatest tool that the church has ever had to fulfill the Great Commission (Lines, 2021). There is research with regard to using digital technology in churches for marketing and evangelism (Lines). However, there is no research discussing the use of digital technology in small churches and the impact that digital technology has on the small church members' worship experiences. Barna Group (2023) performed studies concerning churches in general throughout the pandemic and post pandemic. In their latest study, Barna found that 32% of Christians would be disappointed if their church remained only online (Barna Group). Further, the Barna study found that Christians want a physical space to worship, and a majority believe that the physical church presence should stand out in the community (Barna Group).

### **Profile of the Current Study**

This quantitative study used a survey study sent to small churches within the LCMS that had limited digital technology experience prior to the COVID-19 pandemic. Participants were obtained from small churches throughout the 35 (thirty-five) districts within the LCMS, approximately two churches per district. Participants included church leaders and congregational members. The selected churches were chosen based on attendance – averaging fifty or less per Sunday. The study began upon approval by the IRB for the research design and ethics of the study. Participants were offered the opportunity to receive a \$100.00 Amazon gift card through a drawing at the end of the research study. Participants who completed the study were placed in another drawing for a \$100 gift card. The participants were initially contacted via email with a detailed invitation letter explaining the study and its purpose. If there was no response within 14 days of the original email, a follow-up email and letter would be sent. The participants received a Qualtrics survey. All participants remained anonymous throughout the study. All data collected was organized using Microsoft Excel. A statistician from Concordia University Chicago along with a private statistician assisted in narrowing the field of participants and assisting in analyzing the results. The data was presented in figure and table format. It was the goal of the research to show that digital technology was effective when it was used in the small church's mission and ministry and that this technology was able to increase their members' spiritual formation.

### **Conclusion**

At the beginning of the coronavirus surge, many churches scrambled to take their worship services online, and content became king. But as the weeks of lockdown continued, it quickly became evident that it is not content but connection that is necessary (Pritchett, 2020). Today's pastors face a choice: view the changing digital landscape as gates of opposition to be

frowned upon or doors of opportunity to be knocked on. Equipping members digitally makes the church relevant in their lives, increases their spiritual knowledge, and empowers them to share the gospel—digitally. Without this shift, the church continues to be at risk of losing a meaningful connection with groups that will be its future (Moncrieffe, 2019).

Schools and universities have struggled to balance online education and the importance of interpersonal relationships because of the loss of community and interpersonal relationships. While the younger generation is the most familiar with digital technology, this familiarity has not brought them closer in relationships with each other. In fact, the opposite has occurred, that of emotional and spiritual disconnect (Hunt, 2019).

There has also been a concern in the church, the Roman Catholic church in particular, that using digital technology to worship virtually was just that – virtual worship and therefore not real worship. It was not concrete. Sacraments were not provided. The liturgy, if given, was most likely abbreviated. The Roman Catholic church noted that worship through digital technology could not substitute for interpersonal community – it could complement the proclamation of the gospel and provide a fuller and richer worship experience (Chow, 2020).

Worshiping through the use of digital technology was no substitute for real community, sacraments, and evangelism (Chow). Further, God came into this world to be a part of this world. In Genesis, God was noted to walk in the Garden of Eden with Adam and Eve. When God communicated with Abram, later Abraham, God communicated in-person or through Angels. Christ came in-person to communicate His mission and ministry to the disciples and all peoples. Though a few of the disciples and apostles did write, they mainly communicated in-person. Both Paul and John despaired when they could not be with the church in-person – physically.

Using digital technology is a way to stay connected with the church membership and the Barna 2020 study found that using digital technology did not replace the existing community.

Rather, it is an enhancement of community by reimagining the tools that the body of Christ can use to reach people with the hope of Jesus. Phygital ministry uses technology as a tool to support the mission of the church in both the physical and digital realms—to grow across multiple contexts and to multiply everywhere that people gather, online or in person (Barkley, 2021).

God did not intend that we be alone on the journey. All the Bible's analogies for the church make this point: We are one. Each person acts as a powerful witness to Jesus—but we stand or fall as part of one body. This is an unprecedented time but that does not mean a church should not remind congregants of the importance of joining a church on a deeper level (Pritchett, 2020). Adding digital technology into the mix of the church ministry may be a way to bring millennials and the younger generations back into the community of believers. Another study from the Barna Group (2020) found that millennials would substitute an in-person service with listening to a sermon on a podcast, for example. While this may be alarming to many pastors, this could also be found to be an opportunity for pastors and churches to reach the younger generation in developing their spiritual formation using these tools. There can be a place for using digital technology in spiritual development, just as there are areas where digital technology is not right for the church (Barna Group).

There is a reason for optimism. Our digitally robust congregants may appear digitally preoccupied or distant. However, they are persistent in their search for God, beyond the walls of the church, within their interconnected world (Moncrieffe, 2019). It is an opportunity for the church to rewire its ministry framework digitally, enabling our digital natives to *retain* their digital connection with the Lord while at worship (Moncrieffe). Way before the pandemic

occurred, Barna (2013) researched Millennials, faith, and technology. The study found that Millennials often read their Scripture on screen (70%), and they were heavy users of online videos pertaining to faith. BibleGateway.com has become one of the top Christian websites – and presently that is not just for Millennials (Barna). Christians of all ages have found this website to be useful in their spiritual formation journey. Also today, we have *The Chosen* and other streaming productions that reach people of all ages sharing God’s Word across the world.

## **CHAPTER THREE: METHODOLOGY**

### **Introduction**

The COVID-19 pandemic caught everyone off-guard. Churches especially had to reinvent their ministry when mandatory shutdowns took place. While digital technology use was not something new, not all churches, particularly the smaller congregations, used it extensively in ministry due to cost, logistics, training, or lack of interest. This had to change quickly to continue the ministry during the pandemic and reach parishioners. This study looked at how the small church dealt with digital technology during this period and its effects on the ministry.

### **Research Problem and Gap**

How churches were able to continue the oral delivery of God's Word in person to the community of believers was severely disrupted due to the COVID-19 pandemic. Holding church services and sharing God's Word with the members in person could not take place. Unlike mega churches or larger churches in the community, many small churches did not use digital technology, or if they did, they used it only minimally.

Many small churches, pre-COVID, did not have the social media presence of larger congregations. Prior to the pandemic, familiarity with digital technology may have only involved Facebook and perhaps a webpage that may or may not be current. There is research regarding churches using digital technology in marketing and evangelism. No research has been identified on the matter of the positive or negative effects of digital technology on small churches that were technology deficient before the pandemic. Lines (2020) notes that when social media is used intentionally, it is the greatest tool that the church has ever had to fulfill the Great Commission.

Martin Luther believed that oral communication formed the basis of human community and of individual human identity. He accentuated the "necessity of the oral delivery of the



biblical message—and none other! —to his hearers” (Kolb, 2016, p. 51). St. Paul writes, “For just as each of us has one body with many members, and these members do not all have the same function, so in Christ we, though many, form one body, and each member belongs to all the others” (Rom. 12:4).

### **Research Purpose**

The purpose of this quantitative study was to address how small churches have used digital technology during the pandemic to enhance their worship service, and whether or not the small church was successful in retaining membership and expanding ministry and discipleship, through the use of the digital technology resources available.

### **Research Questions**

The following Research Questions guided this quantitative study:

**RQ1.** How did the church address the use of digital technology platforms before, during, and post-pandemic?

**RQ2.** How did the church’s use of digital technology affect the church members’ overall worship experience individually and with other believers?

**RQ3.** What relationship, if any, was there in retention or expansion of membership and the use of digital technology?

### **Research Hypotheses**

**HO3.** There will be no significant change in membership retention or expansion of membership as a result of using digital technology.

**HA3.** There will be a significant change in membership retention or expansion of membership as a result of using digital technology.

## **Methodological Design**

The researcher chose quantitative research for this study to determine the social or human problem by testing variables and using statistical procedures (Creswell, 2018). The researcher used a correlation study. Correlation research is non-experimental research explaining the relationship among variables (Seeram, 2019). The survey method will be used as it provides the ability to reach a larger population, economy of the design, and rapid turnaround in data collection (Creswell, 2018). A qualitative study was not chosen as it was difficult to reach a wide group of participants in the amount of time required to interview and analyze all the data.

### **Quantitative Research Methodology**

#### **Population**

The Lutheran Church Missouri Synod (LCMS) currently has approximately two million baptized members with more than 6,000 congregations and 9,000 pastors (LCMS.org, 2022). An appropriate sampling of small churches (50 attendees or less per Sunday) was selected from each of the 35 districts within LCMS for this study. This was relevant as all of the churches were affected by the pandemic at the same time. The social science statistics calculator in Social Science Statistics (<https://www.socscistatistics.com>) was used to determine sample size and study reliability. A confidence level of 80% was desired with a margin of error of plus or minus 5%. For a smaller population, as in this study, Cochran's equation was used together with the population correction to calculate sample size (Social Science Statistics, n.d.). Social Science explains the precision level is the margin of error one is prepared to accept. Five percent means it is within five percentage points of the true population value. Confidence level is explained as the measure of confidence in the precision of the result. Choosing 5% indicates a result that is within 5% of the real population. The estimated proportion is described as a measure of variability (Social Science Statistics). The formula is as follows:

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

As of the 2021 LCMS statistical report (Lutheran Annual, 2021), 2,734 congregations reported a weekly attendance of less than 50 people. Using Social Science Statistics, and basing the study on 2,734 churches, the appropriate sample size given this population size and specified combination of precision, confidence, and variability, calculated to 155 small churches. This number was adjusted to ensure balance was achieved in this study.

### **Sampling Procedures**

The researcher performed a non-experimental survey using a non-probability, purposive sampling from the LCMS churches with 50 attendees or less per Sunday for the past five years. The church leader or Pastor was surveyed to determine the membership of the churches between 2019 and 2023, and what digital technology resources were used. The survey portion of the study was completed through email. Potential participants were offered an incentive to participate in the research study. The introduction letter was clear that only the church leader or Pastor was to take the survey. To be a church leader, that individual had to be a voting member of the church. The church leader could be either senior staff, an officer, or in the position of lay service, i.e., elder or deacon.

The survey was presented through Qualtrics in multiple choice and Likert scale formats. Using this type of survey provided the best information to answer how the church and attendees handled using digital technology during the pandemic, and their thoughts on the continued use for the mission and ministry of the church (McGregor, 2019).

Leavy (2017) reported that the survey is most often used as it provides a large amount of data from a larger population and the researcher will be able to “ascertain individuals’ attitudes,

beliefs, opinions” (p. 101). The survey was carefully drafted to minimize participant fatigue and feeling unduly burdensome. Leavy wrote that this burden occurred when participants felt that it was too stressful or time consuming.

### **Limitations of Generalization**

The survey and analysis were limited to small churches within the Lutheran Church Missouri Synod (50 attendees or less per Sunday). This study was to research the effect of digital technology on the small church that never used this type of technology previously, specifically on how small churches coped using only digital technology, as well as the positive and negative effects of using digital technology on ministry and the community of members within the church. The research sought insight into how the church leaders and attendees adapted to suddenly changing to a complete form of digital format of worship, and the importance - especially during the pandemic of spiritual formation, team building, and community. It did not discuss the pros and cons of using various types of digital technology. The findings may apply to larger churches, or to small churches that regularly used digital technology prior to the COVID-19 pandemic. *Regularly* is defined as using some form of digital technology, such as YouTube or Zoom, at least once a month in the church service, and to be shared via the internet. Additional studies can be performed to include small churches that regularly used digital technology pre-pandemic to see how these churches compare in retention of members and expansion of ministry pre- and post-pandemic.

### **Ethical Considerations**

This researcher took steps to make sure that the research methods used were appropriate and the findings “plausible and defensible” (Leedy, 2018, p. 271). The researcher provided information to the participants that the study was approved by the Institutional Review Board

(IRB). The researcher did not need to obtain informed consent from the participants. The researcher protected the participants from undue distress, discomfort, embarrassment, or other forms of harm; confidentiality and anonymity will be maintained (Leedy, 2018; McGregor, 2019).

The researcher's samples were the same or sufficiently similar to justify comparisons between the quantitative data obtained. The researcher did not falsify or misrepresent data; the researcher presented the data in an unbiased manner. The researcher did not exaggerate the accuracy of the data. The researcher was fair and truthful when applying the data (Leedy, 2018; McGregor, 2019). The researcher is a member of a small LCMS congregation that had limited use of digital technology prior to the pandemic.

### **Proposed Instrumentation**

A survey instrument of fifteen questions was created to collect quantitative data providing ordinal, nominal, or ratio data using Qualtrics. The questions were presented in multiple choice, ranked order, and Likert scale format. The survey questions were aligned with specific research questions. For the purposes of the survey, the researcher used the U.S. Government CDC official start of the shut down and the ending dates of the COVID-19 pandemic. The CDC established March 15, 2020, as the start of the shut down for the pandemic and declared the pandemic ended on May 11, 2023 (CDC, 2023).

The survey questions sent to the Church leaders were as follows:

1. Did your church use digital technology prior to the pandemic?
2. What digital technology did you use before, during, and after the pandemic?  
[Multiple choice]
3. Did you offer any training for the use of online/digital technology?

4. What was your average weekly attendance in each of the following years: 2019, 2020, 2021, 2022? [This question is asked to note the change in attendance pre-COVID, during COVID, and once the pandemic was officially determined ended to see if digital technology had an impact on the church attendance.]
5. What is your current average weekly attendance? [This question is asked to determine if digital technology had any lasting impact.]
6. How long was your church closed for in-person services?
7. What are the age groups of your members?
8. Did you observe a decrease in overall attendance while holding services online?
9. Was there an increase in attendance after you reopened your church for in-person services?
10. How did you reach members who did not have access to digital technology? [Multiple choice.]
11. Do you continue to use digital technology for your worship services?
12. How did you assist congregants in their spiritual formation during the pandemic? [Multiple choice.]
13. Do you think using digital technology is right for church worship services? [Multiple choice.]
14. How strongly did your church benefit from using digital technology? [Likert scale.]
15. How do you think digital technology will benefit small churches in the future? [Likert scale.]

The use of a survey can provide information on specific issues, behaviors, attitudes, and perceptions within a specific period (Creswell, 2018; Leavy, 2017). Further, the ease of using a survey such as Qualtrics provided a better opportunity for responses (Leavy, 2017). In this survey, the researcher was looking at church leaders' perceptions about the role of digital technology in their church services. The survey was used to determine how church leaders used

digital technology, and what support was needed to implement this technology during the pandemic.

### **Validity and Reliability**

Validity and reliability of the research made the research useful for reporting and further studies. Surucu (2020) describes validity as whether the instrument used for measuring the behavior or quality is what is intended to be used; and how well the measuring instrument performs its function (p. 2695). Or, as Odom and Morrow (2009) note validity is “the truth of measurements” (p. 139). Surucu (2020) defines reliability as an “indicator of the stability of measured values obtained” using the same circumstances and the same measuring instrument. Surucu adds that “reliability is also a feature of the results of the measuring instrument” (p. 2695). Adding to this is the example that a measuring instrument may be reliable without being valid, but if it is reliable, it is most likely valid. The data must be reliable in that it can be replicated, adopted, or adaptable in another setting (McGregor, 2019).

It was this researcher’s intent to show that the measurements used were both valid and reliable. Leedy (2018) warns that researchers must always remember that “data are not absolute reality or truth” (p. 84). Further data may be accurate for only a brief period of time. Primary data is considered to be the most valid (Leedy).

The researcher is a member of a small church within the Lutheran Church Missouri Synod and is currently its president and serves as an elder. While the pandemic was the impetus for the study, the researcher was careful not to formulate the direction of the study, sampling, questions, or analysis based on church or leadership roles. The researcher was aware of biases that could occur within the interpretation of the data collected. Biases included group selection procedures, statistical regression, and differing attrition rates and these can adversely affect the

internal validity of a study (Leedy, 2018). External validity can also be affected by using biased samples, as well as the researcher's expectations or experiences (Leedy).

### **Research Procedures**

The research for the quantitative study began with a background question to determine whether or not the small churches used digital technology prior to the pandemic. The initial phase of the research and the information would be obtained through church information, names, and emails which the researcher first sought from the Lutheran Church Missouri Synod Headquarters Research Team in St. Louis, Missouri, and through LCMS.org – Find a church, and the Lutheran Annual. The researcher used Constant Contact, Microsoft Excel, and Qualtrics. Constant Contact to send the link, letters, and information efficiently to the participants. Microsoft Excel was used to assist in charting and organizing the data. Qualtrics was used to create the survey questions as well as provide a link that was sent via email to all participating churches. Figure 7 describes the best practices to use when using the quantitative research method. It is important to keep questions clear and the questions simple (Leedy, 2018).



**Figure 7***Best Practices to Conduct Quantitative Research*

*Note:* Adapted from Question Pro Best Practices to Conduct Quantitative Research, 2015.

A list was created providing specific information as to churches within the Synod that have had fifty members or less within the past five years, the name and email of the pastor or congregational president, and what district the church is located within the district. A letter to the pastor and congregational leader was sent via email explaining the reasoning for the survey and asking for their participation in the survey, along with the survey. If no email was available, the researcher did not use that particular church. The participants who received the survey had fourteen days to complete and return the survey instrument. If no response had been received by day seven, a follow-up email was sent requesting that the survey instrument be completed. A final reminder was sent on day twelve if the survey instrument had not been completed. A Letter of Support from the President of the LCMS Southeastern District was included in the final email. The researcher also provided an incentive for the participants who completed the survey. The incentive was a drawing for a \$100.00 gift card. The researcher's questions were guided to determine the extent and effect of digital technology on that particular church body. While the

interviewees had different experiences, the questions were the same for each participant. Once the survey instruments were returned, the responses were reviewed, organized, and analyzed. Each church was responsible for providing who fit the criteria for participation in the actual questionnaire. The researcher engaged two professional academic statisticians for the data analysis portion of the study. The data obtained from the research was presented in the final report.

### **Data Analysis and Statistical Procedures**

The researcher used Microsoft Excel and IBM SPSS statistical analysis software and the researcher imported the data collected to describe and analyze the quantitative data collected using ordinal, nominal, or ratio data. Leedy (2018) reports that statistics have two major functions – describing what the data looks like, i.e., descriptive data; and inferential data – drawing inferences from the data or estimating the characteristics of a population (Leedy). The researcher was seeking to find out the challenges and successes small churches had using digital technology during the pandemic, and if the use of digital technology continued once the church reopened to in person services.

The researcher contacted the research division of LCMS and sought to work with a statistician within that department or other appropriate sources for this study. Due to the constraints from LCMS, the researcher engaged a statistician from Concordia University Chicago and a private statistician to review and analyze the data. The researcher had to be mindful that how the data was prepared for inspection or interpretation could affect the meaning and results (Leedy). During the process, the researcher organized the data collected to make the information received easier to interpret. The quantitative data was used to examine the relationship between the use of digital technology as it related to the small church ministry

during and post-COVID 19 pandemic. Whether digital technology had any role in how the small church adapted as a result of the pandemic with its mission and ministry would be assessed.

Inferential statistics provide a way of helping us make reasonable assessments about a large, unknown population by examining a small sample that is known (Leedy, 2018). Two types of statistical hypothesis tests are used in testing. They are null ( $H_0$ ) and alternative hypotheses ( $H_A$ ). The null hypothesis always predicts no relationship between variables. The alternative hypothesis predicts a relationship (Turney, 2023). The study's null hypothesis is that the small church membership did not experience significant change once it began using digital technology and many churches have returned to in-person services only. The alternative hypothesis position is that the small church experienced a significant change in membership when they began using digital technology.

### **Summary**

The COVID-19 pandemic caught everyone by surprise. The mandatory closures were particularly hard on the church. Pastors were frustrated by being disconnected from their congregations and the inability to carry out their duties as usual (Magness, 2021). Approximately 90% of LCMS congregations did not meet in person for some time during the pandemic and 92% of congregations moved to online worship during the pandemic (Magness). It is important to understand how the pandemic affected the small churches that may not have been technically predisposed at the onset of the pandemic.

The researcher chose the quantitative method using a survey. During the research and analysis, it was important to show how researching that data was prepared for interpretation or inspection, and how it could affect the meaning of the data. Leedy (2018) recommends that the

researcher provide a “clear, logical rationale for the procedure[s] used to arrange and organize the data” (p. 303).

While collecting and analyzing the data, the researcher needed to be mindful that the research project must be properly sized to the time and resources that are available. A major project cannot be done well overnight. Planning must be done adequately – design, execution, and proper analysis are all processes involving several steps. The researcher needed to stay on track. The researcher created a timeline and kept to it to the best of his ability, leaving adequate time for the completion of the project. The researcher was aware of biases that he may have or that may occur during the research project. Maxwell (2013) writes, “[R]esearch is primarily concerned with understanding how a particular researcher’s values and expectations may have influenced the conduct and conclusions of the study (which may be either positive or negative) and avoiding the negative consequences of these” (p. 124).

While some church leaders and members have some familiarity with digital technology, the church’s use of this medium was limited to a Facebook page and website. The COVID-19 pandemic caught the church leaders and congregation off-guard when mandatory closures were put in place, but the church ministry had to continue. Everyone had to quickly learn how to use Zoom. Several members were not familiar with computer use or email. The researcher is familiar with small churches. The researcher’s biases must be considered during the research study by remaining strictly objective.

It is the prayer of the researcher that the information obtained during the study will help the small church gain additional knowledge on how digital technology can benefit the church’s mission and ministry for all members and church leaders. Further goals are that church leaders will not be intimidated by digital technology. Optimally digital technology will become another

effective tool to share God's message to those who may not be able to attend in-person services.

As Rev. Edward Killian, pastor of Good Shepherd Lutheran Church in Inglewood, CA notes,

“There's not exactly a playbook. Yet there's no greater time than now to proclaim the certainty of Christ in the midst of a world that is uncertain” (Maxwell, p. 124).

## **CHAPTER FOUR: ANALYSIS OF FINDINGS**

### **Overview**

The research findings in this chapter are presented as a quantitative study with a descriptive component. The purpose of this quantitative study was to address how small churches used digital technology during the pandemic to enhance their worship service and whether or not the small church was successful in retaining membership and expanding ministry and spiritual formation, through the use of the digital technology resources available. This chapter provides the data, analysis, and results of this research and presents the data through figures and tables. When appropriate, there is an accompanying narrative to support or enhance the presented data.

### **Compilation Protocol and Measures**

The statistical methodology for this research involved a two-tiered approach. For research questions 1 and 2, descriptive statistics are employed. This technique is suitable for summarizing and presenting the fundamental features of the dataset, specifically focusing on the digital online presence of small Lutheran Church–Missouri Synod (LCMS) congregations (with memberships of fifty or fewer) before, during, and after the COVID-19 pandemic. For research question 3, the analysis is extended to include paired-samples *t*-tests in addition to descriptive statistics. This allows for a more nuanced examination of how variations in the digital engagement of these churches impacted their membership numbers over time. By utilizing these methods, the study aimed to provide a comprehensive view of the effectiveness of digital strategies among small congregations and how these strategies correlate with changes in membership dynamics during the pandemic.

### **Data Collection Process**

Data collection for this study took place from October to November 2023, using a systematic approach with the online Lutheran Church Missouri Synod (LCMS) Manual database. Accessible through the “find a church” locator on [lcms.org](https://www.lcms.org), this resource was key in identifying small churches across the 35 LCMS districts. The focus was on churches with 50 or fewer communicant/voting members based on LCMS records that had an email address for survey dissemination.

This task involved a detailed review of each district via the online LCMS Church Search, to gather information for churches meeting the research membership and email criteria. This information was then organized into an Excel sheet for each district, highlighting the churches that fit the research parameters. Through this process, 679 churches were identified as suitable for the survey.

Subsequently, an email was prepared and sent to each of the 679 churches using Constant Contact. This email provided an overview of the research, a link to the survey, and a letter explaining the survey's objectives. This method ensured a thorough and focused data collection, aimed at collecting relevant data efficiently for the study. Emails were sent out in two batches with 365 emails sent out in one email blast and 314 emails in the second email blast for a total of 679 emails altogether. Due to a limited number of responses from the initial email, a follow-up email was sent with a reminder about the survey but through regular email, not using Constant Contact, as there was concern that the emails were potentially being blocked or filtered. Additional responses were received. A cut-off-date of November 15, 2023, was decided upon and a final email noting the cutoff date was sent with the reminder letter and the survey link,

along with a letter of support from the President of the LCMS Southeastern District. This mailing resulted in a 50% increase in survey responses throughout the LCMS districts.

With a population of 2,734 small churches in LCMS with 50 members or less in the US, 679 churches were found that had email addresses. Of those who were sent the surveys via email, 107 responded. While the sample constitutes only 4% of the total population, it met the requirements for conducting a paired-samples *t*-test for research question 3. Based on the criteria set by G\*Power (Faul et al., 1996), the minimum sample size required to achieve a power of .8, with a moderate effect size of .5, is 34. This threshold has been met for the purposes of this statistical test. However, when considering descriptive analysis for RQ1 and RQ2, the sample size of this study is less than ideal. For a confidence level of 80% and a margin of error of 5%, a sample size of 155 is necessary, a benchmark that this study does not reach. This discrepancy in the sample size for descriptive analysis represents one of the limitations of the study, potentially affecting the generalizability of the findings for RQ1 and RQ2.

### **Demographic and Sample Data**

The requirement for participation in the survey was an LCMS small church with 50 or fewer voting members. A voting member is defined as a church member who is confirmed and baptized and at least 18 years old. The church needed to have an email address to receive and answer the survey. It was irrelevant whether or not the church currently had a pastor. The sampling procedure for this research was non-probability convenience sampling. The population was identified by the individual church and only sent to the small churches with an email address available. The survey was limited to a specific window of time, making convenience sampling a logical choice.



## Data Analysis and Findings

All collected responses were processed and analyzed while maintaining the anonymity of the participating churches' names. Out of the 679 surveys sent via emails, 107 responses were received from churches within twenty-one out of the 35 districts. Qualtrics was used to capture the data received from the surveys. Later, IBM SPSS (Version 28) was used for analyzing the data collected during this study.

For RQ1, descriptive analyses employing percentages were utilized to quantify the usage of digital technology by small LCMS churches in the US before, during, and after the pandemic. This analysis focused on the variety of online media platforms employed by these churches as well as any training members of the church received related to online/digital technology. In addressing RQ2, a similar approach using descriptive statistics and percentages was adopted. This aimed to evaluate the impact of digital technology on the worship experiences of church members, both individually and collectively. While the survey items did not directly target this research question, they provided insights into the churches' perspectives on the appropriateness and benefits of digital technology in worship services.

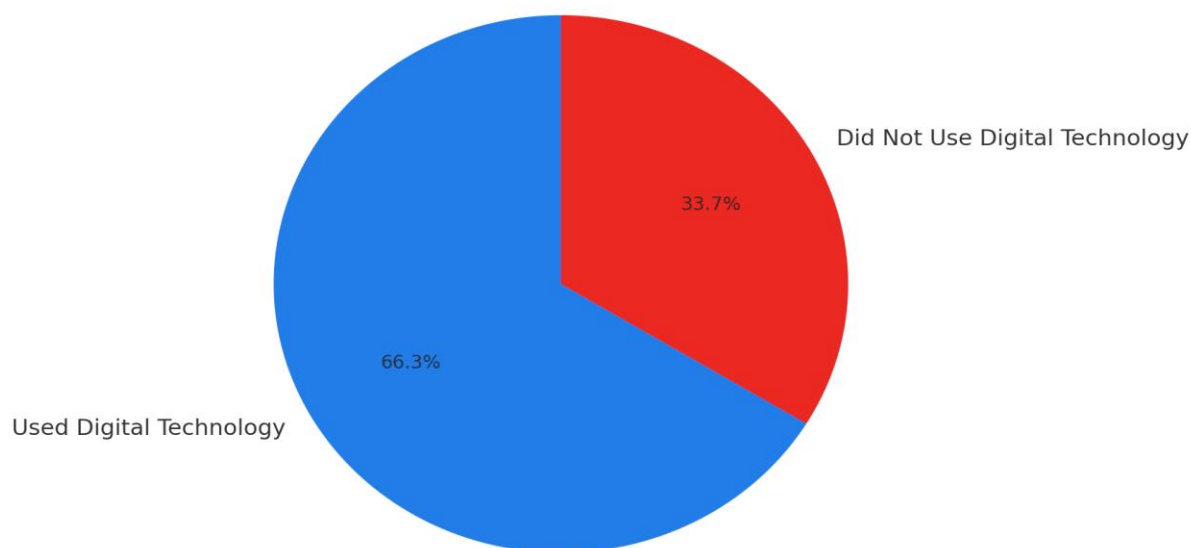
Regarding RQ3, descriptive analysis was again used to examine shifts in membership numbers from 2019 (pre-Covid-19) to November 2023 (post-pandemic). This analysis included all responding churches, categorizing them based on their use or non-use of digital technology prior to the pandemic. Furthermore, a number of paired-samples *t*-tests were conducted to compare the influence of digital technology on church enrollment before and after Covid-19. This assessment was carried out separately for those small LCMS churches that had previously embraced digital technology and those that had not. Throughout these analyses, an alpha level of .05 was maintained.

### Research Question One

To explore the adoption of digital technology platforms by small LCMS churches before, during, and after the pandemic, survey items 1, 2, and 3 were employed. Figure 8 presents a percentage distribution of the churches that utilized digital technology in 2019. According to responses to survey item number 1, 33.7% of the churches indicated they did not use digital technology prior to the pandemic. This implies that a majority, slightly over 66%, had already incorporated some form of digital technology before the pandemic began.

**Figure 8**

*Pre-Covid-19 Digital Technology Adoption Rates in Small LCMS Churches*



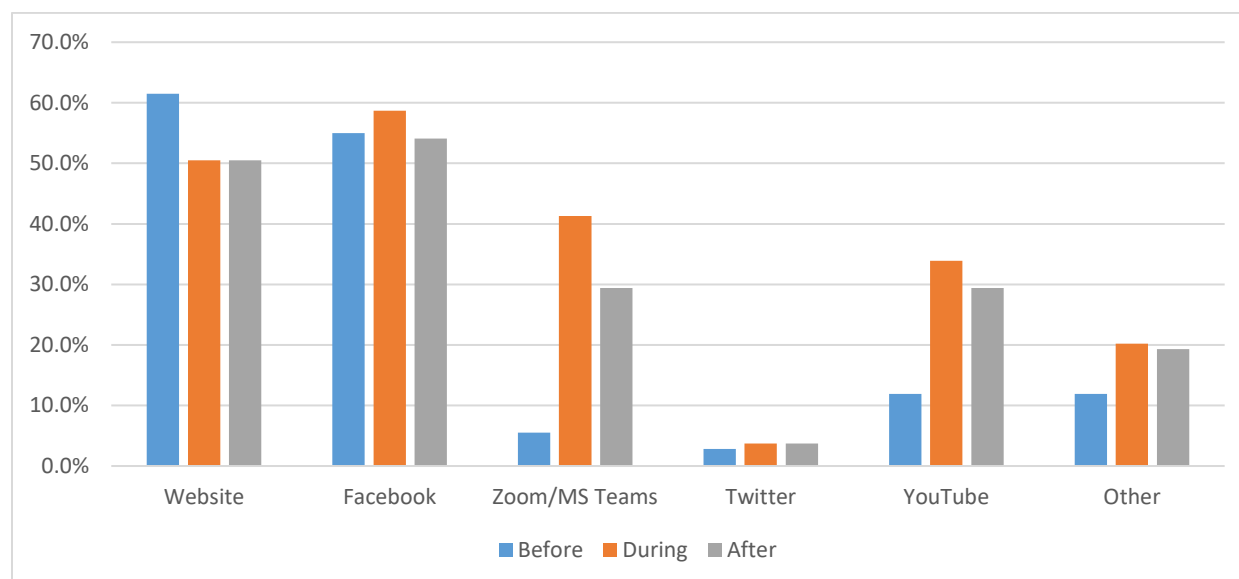
*Note.* This figure represents the percentage of small LCMS churches (50 or fewer voting members) categorized by their use of digital technology prior to the Covid-19 pandemic.

The survey also asked for information on various forms of digital technology used by the churches—before, during, and after the pandemic. Figure 9 illustrates the significant changes in the use of digital technology by small churches, especially in the adoption of Zoom/MS Teams

and YouTube. Zoom/MS Teams usage saw a substantial increase, growing from just 5.5% before the pandemic to 41.3% during it, and then slightly decreasing to 29.4% afterward. YouTube, possibly used for streaming church services and worship, also grew in popularity, rising from 11.9% pre-pandemic to 33.9% during, and remaining high at 29.4% after the pandemic. In contrast, the use of church websites and Facebook showed more consistency, remaining relatively steady through all three phases of the pandemic.

**Figure 9**

*Forms of Digital Technology Used by Small LCMS Churches Before, During, and After Covid-19*



*Note.* This figure represents the percentage of various forms of digital technology used by small LCMS churches (50 or fewer voting members) before, during, and after the Covid-19 pandemic.

Lastly, for RQ1, the survey asked about the church members being offered any training for digital technology.

**Table 1**

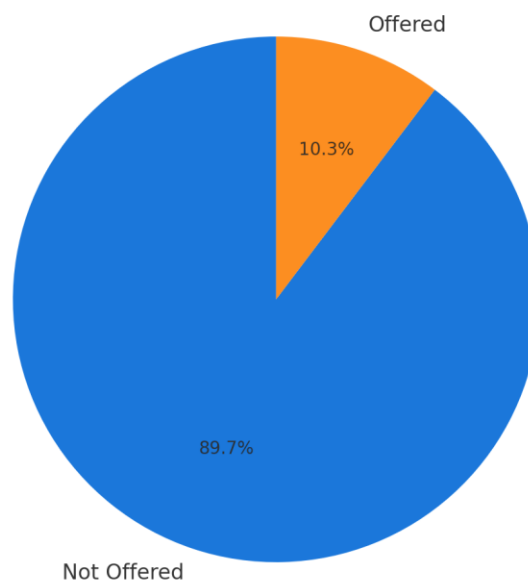
*Frequencies and Percentages for “Did You Offer Any Training for Digital Technology?”*

	<i>n</i>	%
No	94	87.8
Yes	11	10.3
No response	2	1.9

Total	107	100.0
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**Figure 10**

*Digital Technology Training Provided in Small LCMS Churches*



*Note.* This figure illustrates the proportion of small LCMS churches (50 or fewer voting members) offering or not offering digital technology training. “No responses” were considered as not offered for purposes of this survey.

The survey results, as shown in Table 1, Table 2, and Figure 10, provide an important insight into the adoption of digital technology training in small LCMS churches. Notably, only 10% of the surveyed churches reported providing any training in online or digital technology.

### **Research Question Two**

The second research question explored the impact of digital technology on individual and collective worship experiences among members of small LCMS churches. While the survey did not provide a direct answer to this question, several items within the survey addressed it

vicariously. These survey items included: Q6, which asked how long their church was closed for in-person services; Q12; How did you assist congregants in their spiritual formation during the pandemic; Q13, which asked if the use of digital technology is appropriate for church worship services; Q14, which inquired about the benefits derived from using digital technology in the church; and Q15, which sought opinions on the potential future benefits of digital technology for small churches. The responses to these worship-related survey items are depicted in Figures 10 and 11.

Less than half stated that the church was closed for in-person services for one to three months ( $n = 50$ , 46.7%). This was followed by never closed ( $n = 21$ , 19.6%), three-six months ( $n = 17$ , 15.9%), six months to a year ( $n = 11$ , 10.3%), and over a year ( $n = 6$ , 5.6%) (see Table 2 and Figure 11).

**Table 2**

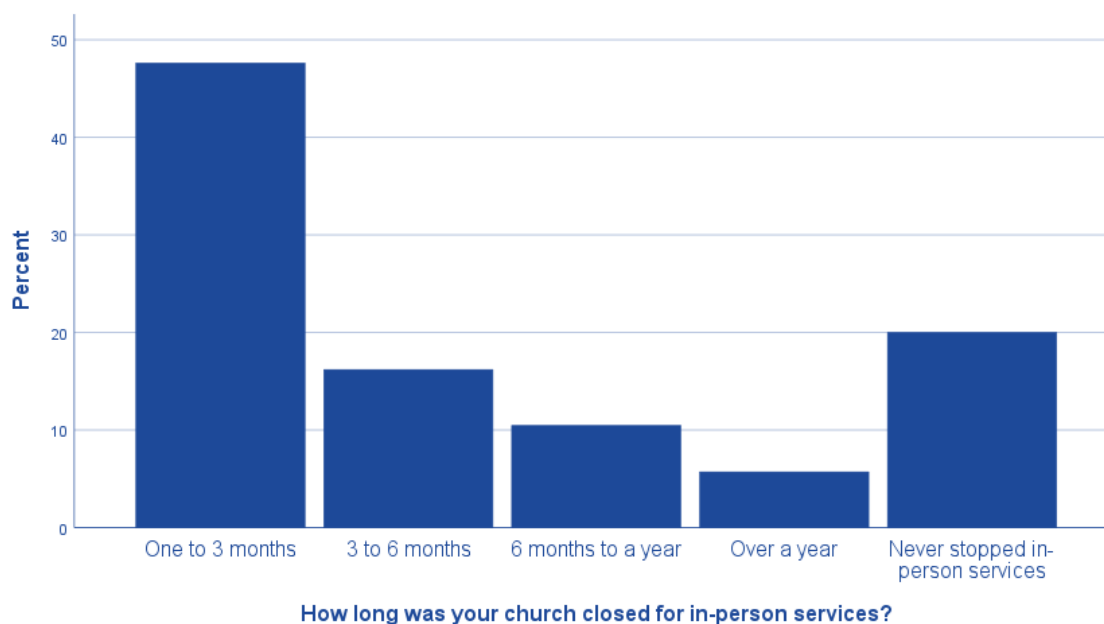
*Frequencies and Percentages for “How Long Was Your Church Closed for In-Person Services?”*

	<i>n</i>	%
One to 3 months	50	46.7
3 to 6 months	17	15.9
6 months to a year	11	10.3
Over a year	6	5.6
Never stopped in-person services	21	19.6
No response	2	1.9
Total	107	100.0*

\*May vary due to rounding.

**Figure 11**

*Percentage of Church Closures by Length of Time*

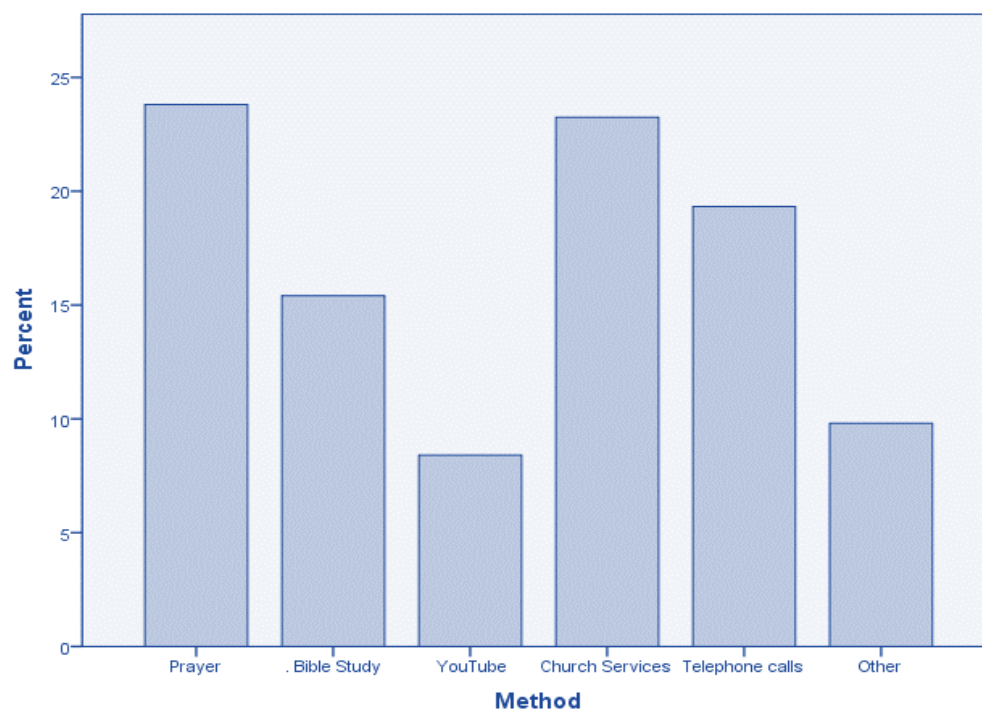


While this survey could not specifically quantify how an individual's spiritual formation was impacted without interviewing the individual members, the largest number of participants stated that they used prayer as an aid to assist congregants in their spiritual formation during the pandemic ( $n = 85$ , 23.8%). This was followed by church services ( $n = 83$ , 23.3%), telephone calls ( $n = 69$ , 19.3%), and some other form ( $n = 35$ , 9.8%). See Table 3 and Figure 12.

**Table 3**

*Frequencies and Percentages for "How Did You Assist Congregants in Their Spiritual Formation During the Pandemic?"*

	<i>n</i>	%
Prayer	85	23.8
Bible Study	55	15.4
YouTube	30	8.4
Church Services	83	23.3
Telephone calls	69	19.3
Other	35	9.8
Total	357	100

**Figure 12***Pastoral Support Activities During the Pandemic*

*Note:* This figure illustrates the methods pastors and church leaders used to provide spiritual support to church members during the pandemic.

The utilization of telephones, mail, personal visits, and other means of contacting other members who did not have access to digital technology decreased as the length of closure time of the church increased (see Table 4).

**Table 4**

*Crosstab Frequencies for the Utilization of Telephones, Mail, Personal Visits, and Other Means of Contacting Other Members by Length of Church Closure*

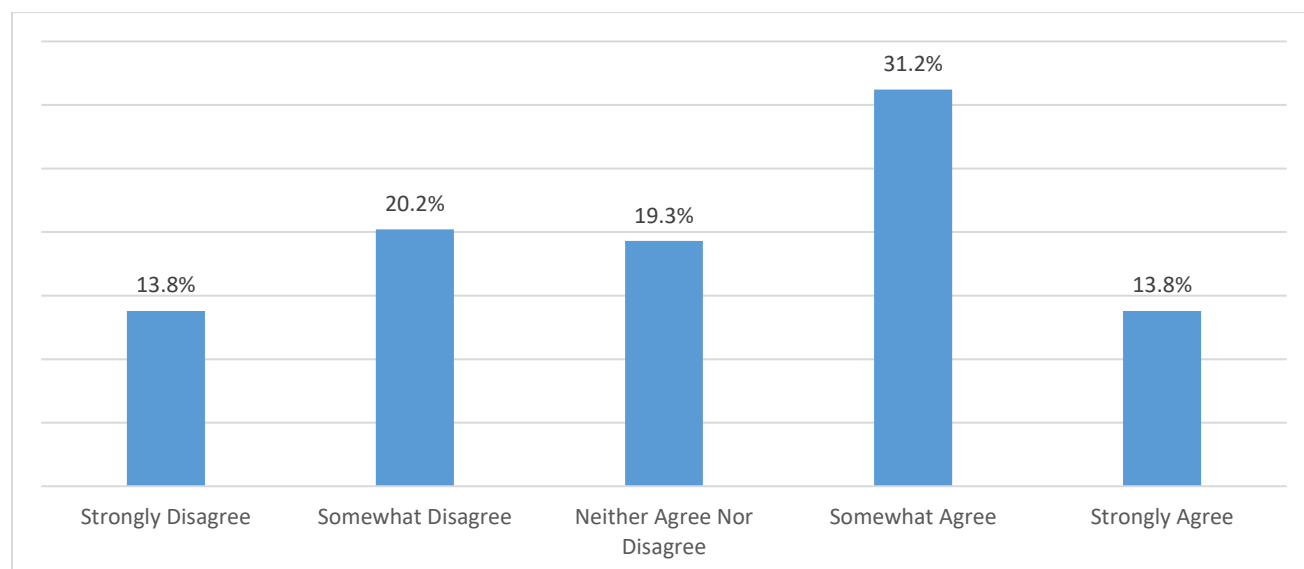
How did you reach members who did not have access to digital technology during the pandemic?	How long was your church closed for in-person services?				Total
	One to 3 months	3 to 6 months	6 months to a year	Over a year	
Telephone	31	12	7	5	55
Mail	13	3	3	3	22

Personal visits	25	4	0	4	33
Other	8	5	3	2	18
Total	77	24	13	14	128

Regarding the perceived suitability of digital technology in church worship, almost half of the respondents favored its use: 45% of respondents either strongly or somewhat agreed that digital technology is appropriate for church worship. In contrast, 34% either strongly or somewhat disagreed with its use. Additionally, nearly one in five respondents remained neutral, expressing no strong opinion either way (see Figure 13).

**Figure 13**

*Perceived Appropriateness of Using Digital Technology in Church Worship Services Among Small LCMS Churches*



*Note.* This figure illustrates the responses of small LCMS churches (50 or fewer voting members) in their perception of the appropriateness of using digital technology in church worship services. Two respondents did not answer the survey item.

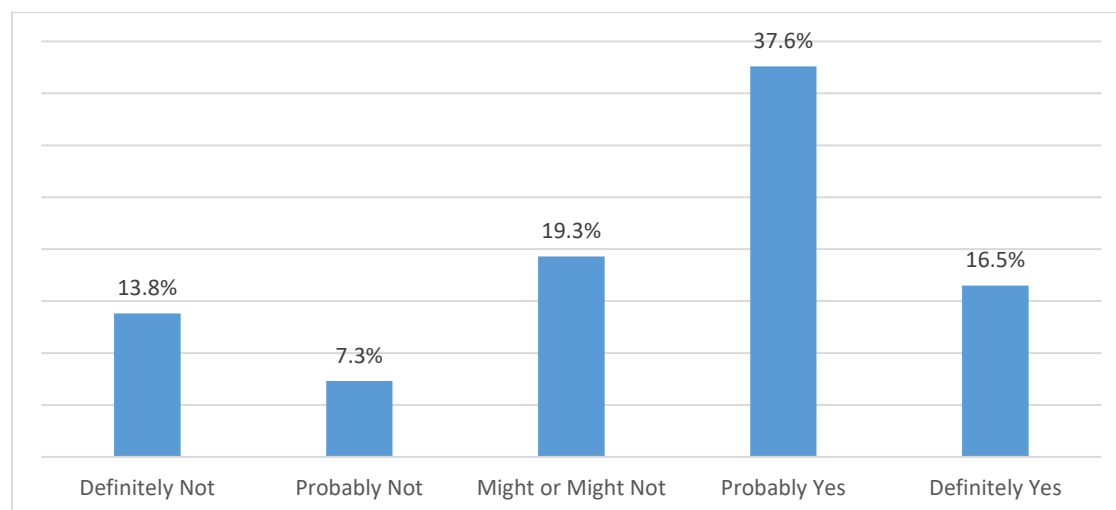
Regarding the respondents' views on the overall benefits of technology usage for their church, a majority (54.1%) responded positively, indicating that their church either probably or



definitely benefited. On the other hand, about 21% believed that their church did not benefit from digital technology, either probably or definitely, as illustrated in Figure 14. Roughly one in five (19.3%) did not have strong feelings either way.

**Figure 14**

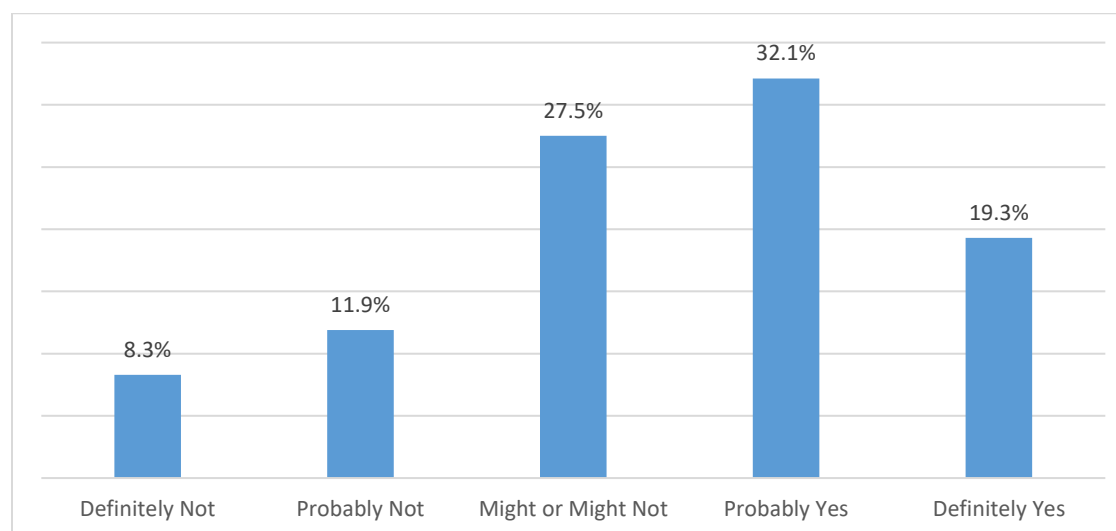
*Perceived Past Benefits to the Church from Using Digital Technology*



*Note.* This figure illustrates the responses of small LCMS churches (50 or fewer voting members) in their perception of past benefits to their church as a result of using digital technology. Six respondents did not answer this survey item.

**Figure 15**

*Perceived Future Benefits to the Small Churches from Using Digital Technology*



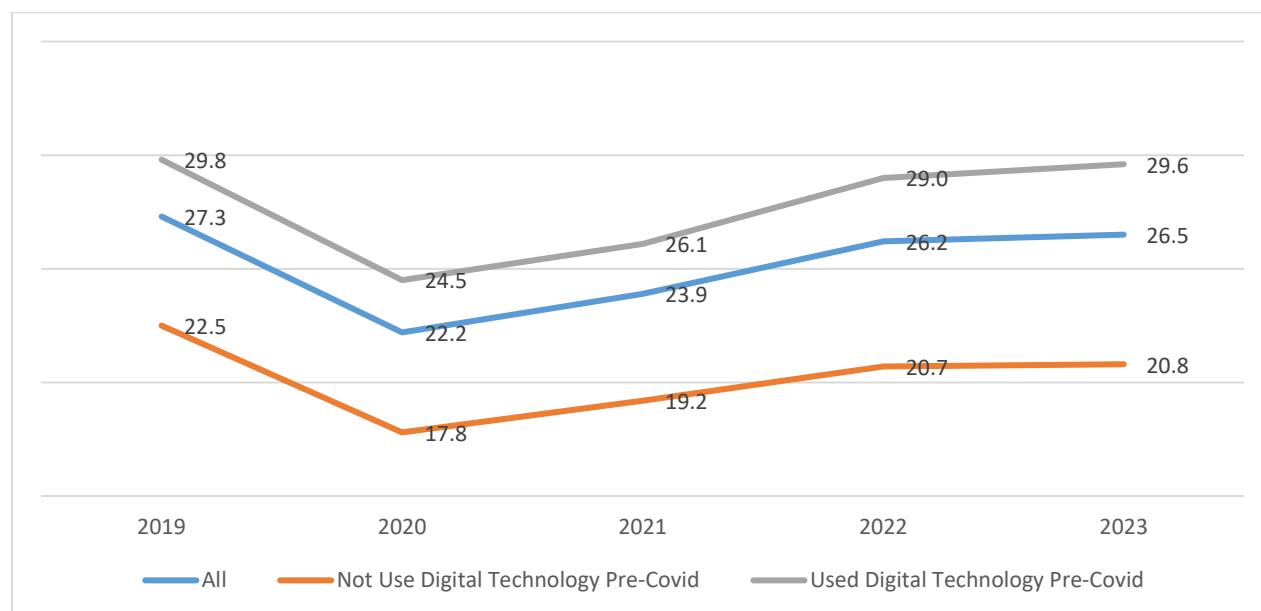
*Note.* This figure illustrates the responses of small LCMS churches (50 or fewer voting members) in their perception of future benefits to small churches as a result of using digital technology. One respondent did not answer this survey item.

### Research Question Three

The third and final research question delved into how digital technology influenced membership retention, loss, or growth in small LCMS churches across various stages of the pandemic. To facilitate this analysis, trends in church enrollment from 2019 to 2023 were examined, with the latest data being collected in November 2023. The study categorized the changes in attendance into three groups: all respondents, churches that had implemented digital technology before the pandemic, and churches that had not. These distinctions are clearly illustrated in Figure 16, providing a comprehensive view of the impact of digital technology on church membership dynamics during this period.

**Figure 16**

*Attendance in Small LCMS Churches from 2019 to 2023*



*Note.* This figure illustrates the average weekly church attendance among small LCMS churches (50 or fewer voting members) from 2019 to 2023.

From Figure 16, a key observation to be noted is the overall decline in attendance across all small LCMS churches from 2019 to 2020, followed by a gradual recovery from 2021 onwards. Notably, churches that utilized digital technology prior to the COVID-19 pandemic demonstrated higher average attendance compared to those that did not. For instance, churches not using digital technology pre-Covid saw a significant drop in attendance in 2020, decreasing from an average of 22.5 in 2019 to 17.8, with a slow recovery to 20.8 by 2023. In contrast, churches using digital technology pre-Covid also experienced a decrease in 2020 but maintained higher attendance levels, decreasing from 29.8 in 2019 to 24.5 in 2020 and then recovering to pre-Covid levels of 29.6 by 2023. Overall, the average attendance for all small LCMS churches decreased from 27.3 in 2019 to 22.2 in 2020, then increased to 26.5 by 2023.

Moving beyond descriptive analysis of the attendance numbers for the five years which represents pre, during, and post pandemic data, a number of paired-sample *t*-tests were conducted to assess if the changes in church attendance (as compared to the pre-pandemic attendance figures) differed significantly by whether it did or did not embrace digital technology prior to the pandemic.

In Table 5 a detailed statistical analysis of small LCMS churches, categorized by their pre-pandemic adoption of digital technology, offers a deeper insight into the impact of Covid-19 on church attendance. Churches without pre-pandemic adoption of digital technology exhibited a notable decline in attendance, as evidenced by a mean decrease with moderate effect sizes (values ranging from 0.51 to 0.56). The statistical significance of this decline was notable in the immediate aftermath of the pandemic (2019-2020 and 2019-2021) but diminished in the following years (2019-2022 and 2019-2023), indicating a stabilization in attendance figures.

Similarly, churches that had embraced digital technology before COVID-19 also showed a notable decline in attendance, but with slightly higher mean decreases and comparable effect sizes (around 0.55 in the first year). The decline in attendance numbers in these churches was statistically significant in the initial years (2019-2020 and 2019-2021), reflecting a more immediate and pronounced impact of the pandemic. However, similar to the non-digital technology group, this statistical significance eroded over time, suggesting a recovery or adaptation phase.

**Table 5**

*Comparison of Church Attendance Before Covid-19 in 2019 and Subsequent Years (2020-2023), Disaggregated by Small LCMS Churches' Use of Digital Technology Pre-Pandemic*

	Mean Difference	<i>t</i> -value	<i>p</i> -value	Cohen's <i>d</i>
No Digital Technology Prior to Covid ( <i>n</i> = 32)				
2019 - 2020	-4.28	3.16	0.003	0.56
2019 - 2021	-3.16	2.88	0.007	0.51
2019 - 2022	-1.91	1.34	0.19	--
2019 - 2023	-1.69	0.87	0.39	--
Digital Technology Prior to Covid ( <i>n</i> = 63)				
2019 - 2020	-5.06	4.35	<.001	0.55
2019 - 2021	-3.48	3.38	<.001	0.42
2019 - 2022	-0.86	0.79	0.43	--
2019 - 2023	-0.22	0.16	0.87	--

*Note.* The mean difference was calculated by subtracting attendance numbers from 2020 to 2023 from 2019 (pre-COVID-19) figures.

The main findings underscore the similar impact of the pandemic on these two groups of churches. Additionally, the convergence in the patterns of decline losing statistical significance in both groups by 2022 and 2023 indicates a similar trajectory of adjustment and recovery over the longer term. However, it must be noted that despite the similarities, the small Lutheran churches that embraced digital technology showed evidence of regaining their pre-Covid numbers slightly faster than their non-digital counterparts. Given these results, the null

hypothesis that there will be no significant change in membership retention or expansion of membership as a result of using digital technology was rejected.

### **Evaluation of Research Design**

This research design used a quantitative research approach with a descriptive component. This design approach tried to explain, describe, study, and predict relationships (Creswell & Creswell, 2018). There was very little in the way of previous studies with regard to the topic of the use of digital technology in small churches, especially during the sudden closure of the churches during the pandemic.

### **Strength of the Research Design**

The quantitative descriptive methodology used during this research was a significant strength of the research design. Using a quantitative method provides the ability to provide large amounts of data where none previously existed. Quantitative questions provide insight into “numeric description of trends, attitudes, or opinions of a [larger] population” (Creswell & Creswell, 2018). The findings from this method provide a foundation of information/data that can be used for further quantitative and qualitative research.

The research design strength included sampling the small churches within the 35 Districts of LCMS. These churches are a significant resource to obtain information for the future of the LCMS church, specifically the small church. The researcher was able to obtain a relatively strong response for the study, though a higher result would have been ideal. As a result of this, the researcher was able to analyze the importance of using digital technology within the small LCMS church. Many pastors and church leaders were excited about the research study and its findings.

### **Weakness of the Research Design**

The researcher found that some of the survey questions could have been more clearly stated with regard to topics such as spiritual formation and whether the question was specific enough about digital technology, as they related to the research questions. Then all questions could be used to provide more direct quantitative answers to the research questions. More descriptive analysis was required to answer some research questions rather than conducting more in-depth statistical analysis.

Some clarity was needed in the response instructions. The researcher found that not all pastors are considered voting members of the church although clearly, the pastor is a church leader. This may have reduced the number of survey responses. Additionally, it was noted that several churches lost members due to deaths during the closure of their churches. This membership decrease was not considered in relation to the use or lack of use of digital technology. Overall, there was a good response to the survey, although the findings may be stronger if more church leaders responded.

### **Summary**

The study showed that digital technology had a positive impact on church attendance. The data shows that there were significant correlations found between the use of digital technology and attendance. The data also shows that small churches that had a history of using digital technology prior to the pandemic had attendance that rebounded better than those churches that had not used digital technology prior to the pandemic.

This chapter discussed the means of compiling and analyzing the data obtained from the survey. Using the data, analysis is completed for each research question. The hypothesis question

was answered as to whether or not the use of digital technology had any impact on membership retention following the pandemic.

The researcher was pleased with the responses received from the church leaders and the number of districts represented in the study. Ideally, if more church leaders responded to the survey, the analysis would be more complete. The researcher is confident that the data will be used to assist church leaders in assessing their use of digital technology and determine how to use it within their church ministry.

## CHAPTER FIVE: CONCLUSIONS

### Research Purpose

This quantitative study researched how small churches have used digital technology during the pandemic to enhance their worship service and whether the small church was successful in retaining membership as well as keeping the Communion of Saints active in the ministry with the use of the digital technology resources available.

### Research Questions and Hypotheses

The following three research questions guided this study in determining the relationship between a church's knowledge and use of digital technology, membership retention, and spiritual formation development. It was also the goal of this research to address the two hypotheses listed.

#### Research Questions

**RQ1.** How did the church address the use of digital technology platforms before, during, and post-pandemic?

**RQ2.** How did the church's use of digital technology affect the church members' overall worship experience individually and with other believers?

**RQ3.** What relationship, if any, was there in retention or expansion of membership and the use of digital technology?

#### Research Hypotheses

**HO3.** There will be no significant change in membership retention or expansion of membership as a result of using digital technology.

**HA3.** There will be a significant change in membership retention or expansion of membership as a result of using digital technology.



## Research Conclusions

Using digital technology within the church has received mixed responses from both the church leadership and members of the congregation. Some believe that using digital technology, such as social media, is a way of expanding the church's mission and ministry. Other people feel that using these methods is expensive, secular, evil, and have no place in church ministry. The research questions were used to guide the study to determine whether or not the use of digital technology benefited the worship experience of the small church pre-pandemic, during the pandemic, and post pandemic in retention of membership, and keeping the spiritual formation of the church members engaged with the church ministry.

First and foremost, this study demonstrates that the use of digital technology was effective in maintaining membership in small churches and rejects the notion that digital technology does not affect member growth and retention. This study contributes to the empirical literature by providing an understanding of how small churches were impacted by the pandemic and how the use of digital technology impacted their services and membership. With the increased use of digital technology in today's culture and the increasing generation gap both inside and outside the church, church leaders need to be more cognizant of ways to implement digital technology to reach all members. Further, this study provides an exclusive look at the impact of the pandemic on the small church and how the small church pivoted to using digital technology during this period of time, and how they will use it going forward in their mission and ministry.

Research question one asked how the church used digital technology before, during, and after the pandemic. The analysis shows that a majority, 66%, of the churches used some form of digital technology prior to the pandemic. While there was a decrease in digital technology use

after the pandemic ended and churches began returning to their pre-pandemic services, it appears from this research, that many small churches continue to use digital technology in some form post-pandemic. Additionally, the analysis revealed that there was a significant change in which digital technology platforms were used during the pandemic – especially the shift to Zoom and YouTube. Notably, little training was offered to the membership in using digital technology, and this may have been instrumental and the decrease in attendance during the pandemic. Even though the churches had to make a major pivot during the pandemic into using digital technology, very few churches did any type of training for their members in using digital technology. Only 10% of the churches responded that they offered training. This finding is particularly noteworthy given the rapid and widespread shift towards online platforms by many churches and religious organizations during and after the pandemic.

Research question two researched how digital technology affected the overall worship experience. Although the survey did not yield a specific answer to this question, the largest number of participants stated that they used prayer as an aid to assist congregants in their spiritual formation during the pandemic. Respondents followed by making telephone calls to stay in touch with their congregational members. The methods of assisting congregants in their spiritual formation during the pandemic, such as telephone, mail, and personal visits to those who did not have access to digital technology, decreased as the length of closure time of the church increased. The fact that digital technology use increased during the pandemic would have impacted the overall experiences of the members who could use digital technology. In fact, the majority of respondents viewed a positive benefit in the use of technology in their church.

Research question three was answered by analysis of the data involving the retention of members and the churches' use of digital technology. The study measured changes in attendance

of churches that had implemented digital technology before the pandemic and those churches that had not used digital technology. During the first year of the pandemic, there was a notable decline in attendance with a gradual increase in attendance in the following years. Overall, churches that adopted digital technology prior to the pandemic had higher attendance than those churches that did not use digital technology prior to the pandemic. The statistical analysis using the *t-test* confirmed the significant decline in attendance of churches that had not used digital technology prior to the pandemic. While churches that had already been using digital technology pre-pandemic also had a noticeable decline in attendance, it was less than the churches without any digital technology prior to the pandemic.

It must be noted that the recovery to the pre-pandemic level of church attendance seems quicker with the churches that embraced digital technology. By 2023, the analysis indicates a difference of less than one at .22 whereas for the non-digital pre-COVID adapters, it was still close to two at 1.69. In both cases, however, the differences between 2019 and 2023 attendance numbers were not large enough to be statistically significant. Overall, this analysis highlights the resilience and adaptive capabilities of small LCMS churches in the face of unprecedented challenges, irrespective of their digital preparedness prior to the pandemic.

The data suggests that the adoption of digital technology might have been beneficial, particularly during and after the COVID-19 pandemic. Churches that were already embracing digital technology appeared more resilient in maintaining higher attendance figures and were better able to “recover” their membership numbers than churches that did not embrace digital technology pre-pandemic.

## **Hypotheses**

The null hypothesis was that there will be no significant change in membership retention or expansion of membership as a result of using digital technology. The researcher hypothesized that there would be a significant change in membership retention or expansion of membership as a result of using digital technology. Given the results of the survey, the null hypothesis that there will be no significant change in membership retention or expansion of membership as a result of using digital technology was rejected since retention and expansion of membership were noted during the pandemic and following, especially for the churches that had previously embraced digital technology prior to the pandemic. The researcher's hypothesis was proven.

## **Research Implications, and Applications**

### **Communion of Believers**

The church is more than a building, but the church needs the building, its people, and the community of believers gathering together in corporate worship; Paul prayed daily for the opportunity to see the Thessalonians face to face (1 Thess. 3:20). The apostle John knew he would feel joy when he could see people face-to-face instead of writing (2 John 12). Bonhoeffer (1930) adds that the Christian community is a gift of God (p. 38). During the pandemic, attendance suffered, especially during the first year, as churches adjusted to the new normal of holding services using digital technology and working to keep their church family together.

### **Corporate Worship**

Corporate worship is the gathering of God's people in worshipping God. Worshipping with other believers together is not an option but is necessary for spiritual formation (Morrow, 2008). Digital technology allowed the churches during the pandemic to gather together though in a different way. While not gathering in-person, the churches significantly increased the use of

digital technology methods such as Zoom, Microsoft Teams, and YouTube to reach their members to keep their ministries active and ongoing during the time of closure.

### **Communication**

God's Word is to be heard. A worship leader needs to be able to communicate God's Word (Wilburn, 2020). We are to glorify God in our worship. All of this continued with the use of Zoom meetings, Microsoft Team meetings, YouTube services, and Bible studies during the pandemic. God's Word continued to be communicated despite the challenges of not being able to worship physically together. Church leaders and pastors found that the use of digital technology was beneficial to them during the pandemic. The research also showed that most churches continue to use digital technology as a means of communication for their worship services.

### **Discipleship**

Jesus calls people as disciples because he is the Christ – nothing is needed but the obedience of following Him. Jesus' command is not difficult if one accepts it (Bonhoeffer, 1937). With the use of digital technology, churches were able to continue to address Christ's call to themselves and to their members to follow Him. Discipleship is not something that can be measured statistically. The fact that the churches remained open through the use of digital technology, one could assume that their members' needs were being addressed through the gift of the Holy Spirit.

### **Spiritual Formation**

Spiritual formation is not measured by the size of a church or how much it receives in tithes, but rather the spiritual health of its members – the members in a healthy church are progressing in their spiritual maturity (Blackaby & Blackaby, 2011; Warren, 1995; Sironen, 2020). As a confessional church, the Lutheran Church Missouri Synod holds that the Sacraments of Holy Communion and Baptism are essential in the spiritual formation of its members. The

synod teaches that the Word of God, both written and preached, and the Sacraments are means of grace through which the Holy Spirit gives the gift of God's grace, creates faith in the hearts of individuals, forgives sins for the sake of Christ's death on the cross, and grants eternal life and salvation (LCMS.org). To do so, in-person worship services are necessary.

The pandemic and closure of churches to in-person worship made it difficult to access the spiritual formation of its members. It is also difficult to quantify a person's spiritual formation. Questions were asked of the church leaders and pastors as to what tools they used to continue the spiritual formation of their members. The number one answer was praying with and for their members, followed by church services and Bible study. Additionally, the survey results indicated that while many small churches thought digital technology was beneficial during the pandemic, the benefit of use of using it in the future dropped, while more churches noted that they would believe there would be any benefit to using the technology in the future.

### **Digital Technology**

Without the use of digital technology, the closures of churches during the pandemic would have had a debilitating effect on the churches' means of worship and serving their church members both spiritually and emotionally. The survey showed a major uptick in pastors and church leaders reaching out to their members through the use of the telephone and prayer. The survey also showed that churches that had some form of digital technology use prior to the pandemic managed the sudden change better than their counterparts who had not.

The low percentage of small LCMS churches engaging in digital training suggests an unsettling gap in digital literacy and proficiency. This lack of training initiatives could be an area of concern for Lutheran church leadership, highlighting a key opportunity for development in an era where a digital presence is increasingly crucial for church operations and community

engagement. Using digital technology might have been beneficial, particularly during and after the COVID-19 pandemic, as churches that were already embracing digital means appeared more resilient in maintaining higher attendance figures and were better able to “recover” their membership numbers than churches that did not embrace digital technology pre-Covid.

Concerning the projected benefits of digital technology for small churches in the future, a slim majority anticipated that its use will probably or definitely be advantageous. Churches that had already adopted digital technology pre-pandemic had higher attendance figures during the pandemic and recovered more quickly to their pre-pandemic level of attendance than churches that did not use digital technology prior to the pandemic. Even so, many churches did not continue using digital technology post-pandemic.

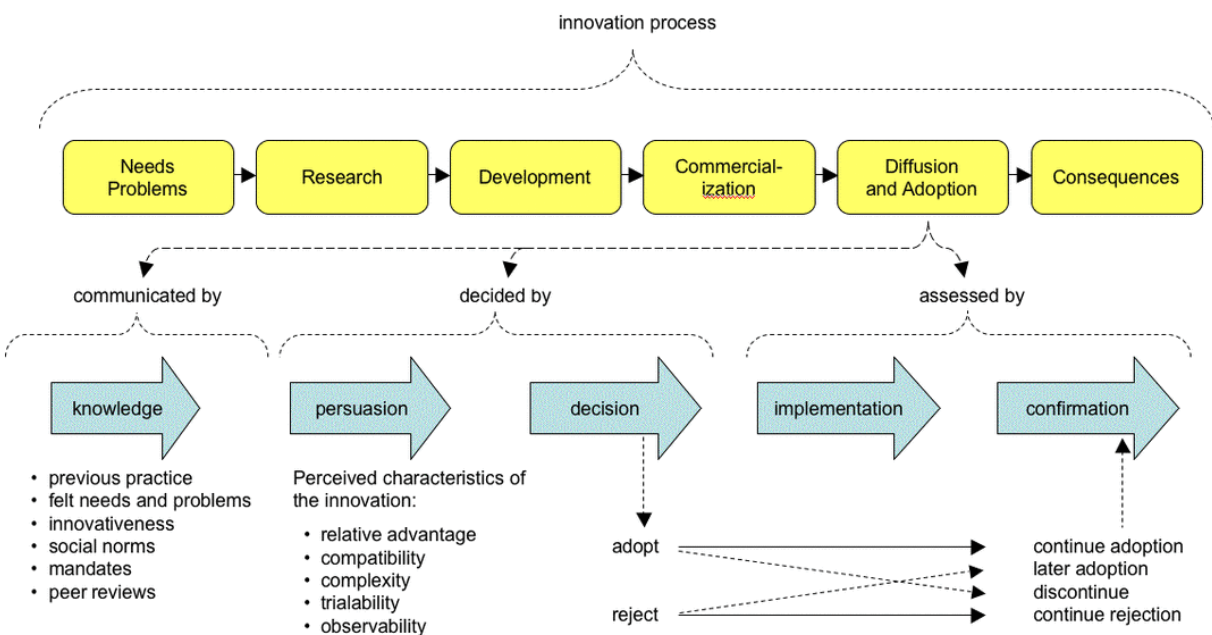
### **Rogers’ Diffusion of Innovation Theory**

Rogers’ theory shows how churches dealt with using digital technology in their ministry and whether or not they continue to use the technology today. Rogers’ Diffusion of Innovation Theory is used to investigate the adoption of technology through a specific population over time. Key in this theory are the five stages of the innovation design process for the communication of a new idea or technology. Figure 16 shows the thought processes people go through when dealing with innovation.

Because of the urgency of the pandemic requiring closures, there was very little time for churches to prepare for the paradigm shift for all services being through some form of digital technology. Churches that did not use digital technology prior to the pandemic were at a disadvantage in the knowledge of the various means to share their services with members and others not attending in-person. There was no choice but to use digital technology so the persuasion part would be minimal as far as using the digital technology during the pandemic.

Continued use of post-pandemic would require persuasion and decision making as to continue its use, and in what form if they decided to do so. The churches had to implement the use of digital technology immediately in order to provide their Sunday services and other services to their members. Confirmation of continual use of digital technology would again require persuasion, decision, and implementation as noted in Figure 17.

**Figure 17**



*Note:* Reprinted from *The Innovator's Way*, p. 62, by P. Denning & R. Dunham, MIT Press, © 2010, with permission of the author, Peter Denning.

From the data received, churches that used digital technology pre-pandemic could be classified as Innovators, Early Adaptors, and Early Majority – not afraid to take risks and aware of the change (Maeli, Singer). The churches that had not used digital technology prior to the pandemic could be classified as Late Majority and Laggards – skeptical of change and conservative in accepting new ideas (Maeli, Singer). During the pandemic, there was no choice but to use some form of digital technology, though post-pandemic the Late Majority and



Laggards appeared to be stronger as the data shows a decrease in the use of digital technology – not the level pre-pandemic, but still a decrease.

### **Social Media**

A ritual view of communication involves connecting with others and maintaining community (Francis, 2020). The role of the pastor and church leaders within a church do not just want to communicate the Word, but to connect with their members and maintain the community within the church. Social media provides a way for church members and church leaders to connect, remain involved, and engaged without worshipping in-person (McFarland and Ployhart, 2015). This was evident during the pandemic as social media was the only means to keep church members involved and engaged in church services, Bible studies, meetings, etc. It was the most efficient and effective way to deliver God’s Word during that period of time (Webb, 2012). The data shows that participation increased in worship increased during the pandemic while using social media. Churches had no choice but to embrace using social media in some form – with the majority choosing Zoom and YouTube – in order to continue their presence with their church community.

### **Related Literature**

#### **The COVID-19 Pandemic**

No one expected a pandemic in today’s modern world. No church ever thought that the government would insist that the churches cease in-person church services during the pandemic. The research shows that a majority of the churches closed during the pandemic, and most closed for up to three months. The research also shows that this affected the churches’ attendance with a decrease in attendance for the first year. However, the study also shows the resilience of the small church in that post-pandemic, many churches are nearly back to their pre-pandemic levels

of worship attendance. And the research shows that more churches have embraced the continual use of digital technology post-pandemic than they had pre-pandemic. Pastors and church leaders once again reached out to their members by using personal touches such as telephone calls and prayer during the pandemic. As noted in a 2020 study by the Church of the Nazarene, 84% of pastors were in agreement that their church would be stronger post pandemic (Spicer, 2021).

### **Digital Technology and Community of Worship**

Worship was affected in that people could not meet in-person for several months, and for some churches up to a year or more. Not every church embraced digital technology as noted in the survey where there was a notable change pre-pandemic and during the pandemic of using digital technology. There was a marked increase in the use of Zoom and YouTube during the pandemic. Post pandemic the use of these forms of digital technology have decreased but not to the pre-pandemic levels. The fact that the majority of churches reopened to in-person services within three months, despite the ongoing pandemic, could indicate that the pastors and church leaders valued the importance of community of worship over digital technology – the Sacraments of Holy Communion and Baptism; and the value of being together as a church body. Discipleship is not possible without a Christian community (Pritchett, 2020).

### **Digital Technology and the Church**

While using digital technology can be a benefit to the church, churches need to recognize the risks inherent in using digital technology, and pastors need to find that balance between digital technology and in-person services (Moncrieffe, 2019, Evans, 2011). Digital technology is but one tool to reach members and non-members to share the Gospel. While a sermon or church service can be viewed online, participating in Holy Communion cannot (Holland, n.d). The analysis of the survey tends to show that churches recognize that the use of digital technology

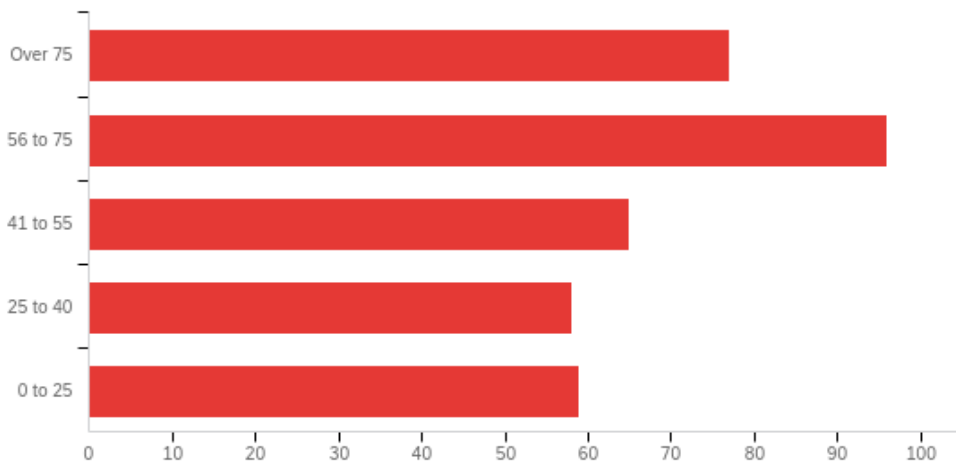
had some benefit to their church and that some benefits could remain in the future, but still many chose to cease using digital technology post-pandemic.

### The Generation Gap

While the church needed to use some form of digital technology during the pandemic, minimal training was provided for their members – a mere 10%. While the younger generations would have minimal trouble navigating social media and digital technology, that is not necessarily true for the older generations. While not directly analyzed, Q7 asked about the age of the membership. The Qualtrics results (Figure 17) show the majority of the church members were between the ages of 56 and 75, and the next group was over 75 years of age. This may have some bearing on the decline in attendance during the pandemic, as well as the decline in the use of digital technology post pandemic. Older adults may be considered Late Majority or Laggards when it comes to using digital technology (Singer). This is even more apparent when it comes to religion as noted in Figure 5 of the Pew Research Study (p.66). Not only do the younger generations have more involvement with digital technology, but they are also less likely to attend an in-person service.

**Figure 18**

*Qualtrics Results on the Ages of Church Members in Small LCMS Churches*



### **Research Limitations**

The major limitation of this research study was the inability to reach all of the 35 districts within LCMS. Only twenty-one out of 35 districts were represented, and only 107 churches out of 679 small churches responded. A larger response would provide more validity to the survey, and more could be done to increase the number of participants. There is a larger potential for refinement with more participation from the small churches. Adding members to the survey in addition to the pastor and church leaders would provide a broader spectrum of data as to how it affects the entire church body – not just the church laity or church leaders.

### **Further Research**

In the process of this study, it became clear that the questions asked, while relating to digital technology in the small church, needed to be even more narrow in scope, and that a qualitative component would be very beneficial in exploring the questions. Further, this research would not only be beneficial to the small church but also to the medium and larger churches within LCMS, as well as other church bodies. The church in general did not appear to be prepared to do such a quick pivot in using or expanding the use of digital technology. Regardless of size, determining how LCMS churches can embrace and use digital technology to expand the mission and ministry of the church, at the same time continuing with in-person services may help the churches within the Lutheran Church Missouri Synod reach the unreachable.

This study, though with a small sample size, provided research on how the small church used digital technology pre-pandemic, during the pandemic, and post pandemic. Reaching out to pastors and church leaders identified in this study provided an idea of how beneficial digital technology was for them during the pandemic and now. The study could be further pursued using a qualitative methodology or mixed methods to determine specific details about respondents' experiences. Comments received noted a perceived lack of detail about the questions. A

qualitative study would provide more insight into the experiences of pastors, church leaders, and members experience and the use of digital technology in the church setting – apart from the COVID-19 pandemic. Future research should take into consideration the following:

- This study focused on LCMS small churches of fifty members or less within the 35 districts. Looking at LCMS churches with 150 members or less could provide a more in-depth understanding of digital technology use. A research question could be developed to ask more specifically what digital technology they currently use and how.
- While the researcher, through using Qualtrics, could assess what districts were represented, further exploration should be made into the demographics, age, gender, education, and relationship, and the use of digital technology within the church.
- Future studies should take into consideration that leadership perceptions often differ from congregant perceptions. Careful consideration must be taken in formulating questions and analyzing data to establish variances in views among these populations.
- A qualitative study should be added to the study as this would provide additional data as to the relationship between the people and digital technology used within the church.
- Future studies could include churches with over 50 or 150 members and also churches outside of the Lutheran Church Missouri Synod.
- Future research could assess a three to five-year history of digital technology use post-pandemic. Future research should be performed regularly within the small LCMS church to empower the small church in a changing society.
- Future study could examine the relationship of training to church growth and member retention.
- Future study on the use of digital technology could gain insights to increase diversity, youth attendance, and membership.

### **Summary**

This quantitative study researched how small churches used digital technology during the pandemic to enhance their worship service. The churches were asked about retention in membership and how they kept the Communion of Saints active in the ministry with the use of

the digital technology resources available. It was determined that a nexus exists between the use of digital technology and church attendance.

This study correlates with the 2020 Barna study that showed Christians want to hear a live sermon in person – missing the community that was provided by in-person services. The results of this research show that it is important and beneficial that the small church be digital technology forward in their thinking and utilization of digital technology in the church's mission and ministry. The small church can have a larger reach by adding digital technology to its ministry by providing church services and Bible studies via Zoom and YouTube. The data shows that attendance increased using these methods during the pandemic. Using digital technology will provide an outreach to the younger generations and involve the older generations who can use digital technology so that they are not missed by not being able to attend in-person. Using digital technology is another way to engage members, enhance their worship experience, and strengthen their spiritual formation.

This research is beneficial for the small LCMS church, as well as the LCMS church as a whole community striving to retain membership and reach out to the younger generations and more diverse generations of Christians. As digital technology continues to offer translation services and broadcast worldwide, to extend the church family, mission, and ministry, pastors and church leaders can now more than ever better serve and witness to their extended congregation through the use of digital technology in worship and ministry. When social media is used intentionally, it is the greatest tool that the church has ever had to fulfill the Great Commission (Lines, 2021).

The researcher hypothesized that there will be a significant change in membership retention or expansion of membership as a result of using digital technology. Retention and

expansion of membership were noted during the pandemic and following, especially for churches that previously embraced digital technology. Thus, the researcher's hypothesis was proven.

## References

- Abernathy, A. (2015). Corporate worship and spiritual formation: insights from worship leaders. *Journal of Psychology and Christianity*.
- Allison, G. (2012). *Sojourners and strangers: The doctrine of the church*. Crossway.
- Aniol, S. (2017). Practice makes perfect: Corporate worship and the formation of spiritual virtue. *Journal of Spiritual Formation*, (10)1, 93-104.
- Appah, G. O., & George, B. P. (2017). Understanding church growth through church marketing: an analysis on the Roman Catholic Church's marketing efforts in Ghana. *Journal of Economics and Business Research*, 23(1), 103-122.
- Arnold, C. (2019). *Pray believing*. Xulon Press.
- Arthur, J. (2015). The use of online technologies in the small church. *South African journal of information management*, (17/1), 1-6.
- Asiedu, S. T., & Boateng, R. (2019). Development of strategies and transformation paths for structured and targeted digital change: The case of the Presbyterian Church of Ghana trinity congregation. In *Digitalization Cases*. 205-224. Springer, Cham.
- Averback, R. (2008). Worship and spiritual formation. In P. Petitt (Ed.) *Foundations of spiritual formation: A community approach to becoming like Christ* (pp. 51-69). Kregel Publications.
- Ayyappan, J. (2022). Evolution of social media: The what, when, and how. *Mobius*.  
<https://blog.mobiuservices.com/evolution-of-social-media>
- Barton, R. (2015). Spiritual Transformation in the church. *Transforming Center*.  
<https://transformingcenter.org/2015/01/spiritual-transformation-church/>
- Barkley, S. (2021). No turning back: Churches embrace technology. *Baptist Standard*.  
<https://www.baptiststandard.com/news/faith-culture/no-turning-back-churches-embrace-technology/>
- Barna Group (2013). How technology is changing millennial faith.  
<https://www.barna.com/research/how-technology-is-changing-millennial-faith/>
- Barna Group. (2017). *The credibility crises of today's pastors*. [Video]. YouTube.  
<https://www.youtube.com/watch?v=Ts7Od3gvLs4>
- Barna Group. (2017). *Barna trends 2018: What's new and what's next at the intersection of faith and culture*. Baker Books.



- Barna Group. (2020). Do Americans replace traditional churches with digital faith expressions? <https://www.barna.com/research/worship-shifting/>
- Barna Group. (2022). Pastors' leadership is in question – even among pastors. *Culture & Media. Leaders & Pastors*. <https://www.barna.com/research/pastors-trustworthy-reliable/>
- Barton, R. (2015). Spiritual Transformation in the church. *Transforming Center*. <https://transformingcenter.org/2015/01/spiritual-transformation-church/>
- Baumgartner, E. (2017). Do we need a new approach to Christian leadership development? *The Journal of Applied Christian Leadership*, 11(1), 16-25. <https://digitalcommons.andrews.edu/jacl/vol11/iss1/1>
- Berger, T. (2017). *@Worship: Liturgical practices in digital worlds*. Routledge.
- Berman, M. (2021). What is digital technology? *Programming Insider*. <https://programminginsider.com/what-is-digital-technology/>
- Bible Blender. (2018). John the Baptist questions Jesus – are you the Messiah? <https://www.bibleblender.com/2018/bible-stories/new-testament/matthew/john-the-baptist-asks-jesus-are-you-the-messiah-matthew-11-1-11-1>
- Bolsinger, T. (2018). *Canoeing the mountains. Christian leadership in uncharted territory*. IVP Books.
- Blackaby, H. & Blackaby, R. (2011). *Spiritual leadership*. B&H Publishing.
- Bonhoeffer, D. (1937). *Discipleship*. Dietrich Bonhoeffer Works, 2001, Vol. 4, Augsburg Fortress Press.
- Bonhoeffer, D. (1939). *Life together/Prayer book of the Bible*. Dietrich Bonhoeffer Works, 1996, Vol. 5, Augsburg Fortress Press.
- Bonhoeffer, D. (1930). *Sanctorum communio. A theological study of the sociology of the church*. 1986, Vol. 1. Minneapolis Fortress.
- Boulianne, S. (2015). Social media use and participation: A meta-analysis of current research. *Information, communication & society*, 18(5), 524-538.
- Bourgeois, D. (2013). *Ministry in the digital age: Strategies and best-practices for a post-website world*. ReadHowYouWant.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- Bredfeldt, G. (2021). Qualitative methods: weighing words. *Liberty University*.

- Briggs, M. (2017). Reversing the credibility crises pastors face: Suggestions from Barna research. <https://churchleaders.com/news/301020-reversing-credibility-crisis-pastors-face-suggestions-barna-research.html>
- Brodie, J. (2020). How did early Christians face pandemics? *Crosswalk.com*. <https://www.crosswalk.com/faith/spiritual-life/how-did-early-christians-face-pandemics.html>
- Bruderer, H. (2021). When did the digital age begin? *Communications of the ACM*, <https://cacm.acm.org/blogs/blog-cacm/250397-when-did-the-digital-age-begin/fulltext>
- Campbell, H. (2013). Digital religion: Understanding religious practice in new media worlds.
- Campbell, H & Garner, S. (2018). *Engaging Culture: Networked Theology: Negotiating Faith in Digital Culture*. Baker Academic.
- Campbell, H. (2020). Introduction: Studying digital ecclesiology: How churches are being informed by digital media and cultures, *Ecclesial Practices*, (7)(1), 1-10. <https://doi.org/10.1163/22144417-bja10001>
- Campbell, H. (2021). What can the church learn from the pandemic about engaging with technology? *Faith and Leadership*. <https://faithandleadership.com/what-can-the-church-learn-the-pandemic-about-engaging-technology>
- Campbell, H. (2023). When churches discovered the digital divide: Overcoming technological inaccessibility, hesitance & digital reluctance during the covid-19 pandemic. *Ecclesiastical Practices* (10)(23), 36-61.
- Carey, J. (1989). *Communications as culture: Essays on Media and Society*. Psychology Press.
- CDC. (n.d.). CDC museum COVID-19 timeline. <https://www.cdc.gov/museum/timeline/covid19.html>
- Cendana, K. (2016). Paul, the letters of. <https://amazingbibletimeline.com/blog/paul-the-letters-of/>
- Chan, S. (2006). *Liturgical theology: The church as worshipping community*. IVP Academic.
- Choe, Y. (2016). *Do you want to save the church? A handbook for pastors and lay people*. Hamilton Books.
- Chow, A. & Kurlberg, J. (2020). Two or three gathered online: Asian and European responses to COVID-19 and the digital church. *Studies in World Christianity*, 26(3), pp. pp. 298-318.

- Cochrane, A. (1976). *The Church's confession under Hitler*. Pickwick Publications.
- Colt, S (Director). (2021). *Billy Graham: Prayer, politics, power*. [Film] American Experience; PBS. <https://www.pbs.org/wgbh/americanexperience/films/billy-graham/>
- Conrad, A. (2017). Is your technology use hurting your church? *Capterra*. <https://blog.capterra.com/technology-use-hurting-your-church/>
- Cooke, P. (2017). Will live streaming a worship service hurt a church's attendance? *Christian Media*. <https://www.philcooke.com/will-livestreaming-a-worship-service-hurt-a-churchs-attendance/>
- Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? *Journal of Advanced Nursing* 26, 623-630.
- Creswell, J & Creswell, J.D. (2018). *Research design*. Sage Publications, Inc.
- Creswell, J. W. & Plano Clark, V. L. (2018). *Designing and conducting mixed method research*. SAGE Publications, Ltd.
- Damodaran, L, Olphert, W., & Sandhu, J. (2018). *Fit for purpose. The new dynamics of ageing. Vol. 1*. Bristol University Press.
- Denning, P. & Dunham, R. (2010) *The Innovator's Way*, MIT Press,
- Donovan, W. (1998). *The theological notion of the Communion of Saints and the personalist notions of community in E. Levinas*. (UMI No. 9825847) [Doctoral dissertation, Fordham University] UMI Company.
- Dorling, S. (n.d.). Top 20 inventions of the 19<sup>th</sup> century. *Popular List*. <https://thepopularlist.com/inventions-of-the-19th-century/>
- Dorling, S. (n.d.) 23 greatest inventions of the 20<sup>th</sup> century. *Popular List*. <https://thepopularlist.com/greatest-inventions-of-the-20th-century>
- Driscoll, K. (2022). *The modern world: A prehistory of social media*. Yale University Press
- Due, N. & Due. K. (2018). Courage and comfort for pastors in need. *Lutheran Theological Journal*, 52(3), 128-140). <https://search.informit-org.ezproxy.liberty.edu/doi/10.3316/informit.161870326136570>.
- Duke, S. (2018). Faith and community in the digital age. @ *This Point*. <https://www.ctsnet.edu/at-this-point/faith-community-digital-age/>

- Dunlow, J. (2021). Digital discipleship: A study of how churches in New York used technology for adult discipleship during the COVID-19 pandemic. *Christian Education Journal: Research on Educational Ministry*, (18)(3), 458-472,
- Du Plessis, A.L. & Nkambule, C.M., 2020, Servant leadership as part of spiritual formation of theological students in contextualisation of 21st century theological training. *HTS Theologiese Studies/ Theological Studies* 76(2), 1-9. <https://doi.org/10.4102/hts.v76i2.5959>
- Dzekoe, R. (2017). *The church in friendship: A touchstone for theological reflection on ecclesial communication in a digital age*. (Publication No.: 10257184) [Doctoral dissertation, St. Thomas University] ProQuest, LLC.
- East, B. (2020). Sacraments, technology, and streaming worship in a pandemic. *Mere Orthodoxy*. <https://mereorthodoxy.com/churches-livestream-public-worship/>
- Eidsomoe, J. (2020) Quarantining the church. *The New American*, 36(22), p. 29.
- Ellis, R., McClintock, A. (2009), *If you take my meaning: Theory into Practice in Human Communication*. Bloomsbury Academic.
- Emily (2017). The impact of technology through the years on churches everywhere. *TechPatio*. <https://techpatio.com/2017/articles/impact-technology-years-churches>
- English, F. (2021). *Technology influences and impact of the COVID-19 pandemic on religious practices: An exploratory case study*. (Publication No.: 28716918) [Doctoral dissertation, Northcentral University] ProQuest, LLC.
- Evans, J. (2011). Using technology in ministry. *ChurchLeaders*. [https://churchleaders.com/youth/youth-leaders-blogs/157741-josh\\_evans\\_using\\_technology\\_in\\_ministry.html](https://churchleaders.com/youth/youth-leaders-blogs/157741-josh_evans_using_technology_in_ministry.html)
- Faith-based response to epidemics & pandemics. (n.d.). *Episcopal Relief and Development*. <https://www.episcopalrelief.org/what-we-do/us-disaster-program/faith-based-response-to-epidemics>
- Faul, F. Erdfelder, E., Lang, A.G., & Buchner, A. (2020) G\*Power (Version 3.1.9.7)
- Francis (2020). Ritual model of communication. <https://atlantisschoolofcommunication.org/communications-foundations/communication-models/ritual-model-of-communication/>
- Fulton, B. R., King, D., & Munn, C. (2018). Empty pews take a financial toll on many US congregations. The conversation: An independent source of analysis from academic researchers.

- Gangel, K. O., & Wilhoit, J. (1994). *The Christian educator's handbook on spiritual formation*. Victor Books.
- Gavi, Z. (2013). The Models of Communication. *The Communication Process*.  
<http://thecommunicationprocess.com/models-of-communication>
- Gazal, A. (2020). Martin Luther's advice on worshipping Christ amid a pandemic. *Christian Living*. <https://montanabiblecollege.edu/martin-luthers-advice-on-worshiping-christ-amid-a-pandemic/>
- Gehrz, C. (2020). What the 1918 influenza pandemic meant for American churches. *Anxious Bench*. <https://www.patheos.com/blogs/anxiousbench/2020/03/influenza-pandemic-1918-churches/>
- Geiger, E. (2018). 3 reasons why church leaders need to be familiar with secular worldviews. *Eric Geiger*. <https://ericgeiger.com/2018/01/3-reasons-why-church-leaders-need-to-be-familiar-with-secular-worldviews>
- Giatti, I. (2022). Over a third of senior pastors believe 'good people' can earn their way to Heaven: survey. *The Christian Post*. Retrieved from <https://www.christianpost.com/news/third-of-evangelical-pastors-say-people-can-get-heaven-just-by-being-good.html>
- Gilbert, G. (2020). Martin Luther and his incredible response to the black plague. *Patheos.com*. <https://www.patheos.com/blogs/chorusinthechaos/martin-luther-and-the-black-plague/>
- Gilson, T. (2022). Pastors sagging credibility: So right, yet so wrong. *Christianity Today*. <https://stream.org/christianity-today-article-on-pastors-sagging-credibility-so-right-yet-so-wrong/>
- Gjelten, T. (2020). Things will never be the same. How the pandemic has changed worship. *NPR. The Coronavirus Crisis*. <https://www.npr.org/2020/05/20/858918339/things-will-never-be-the-same-how-the-pandemic-has-changed-worship>
- God's purpose for music. (n.d.) <https://rcg.org/youth/articles/0603-gpfm.html>
- Gordon, C. (n.d.). The art of digital ministry: The good, the bad, and the uncertain. *FullerStudio*. <https://fullerstudio.fuller.edu/the-art-of-digital-ministry-the-good-the-bad-and-the-uncertain/>
- Grant, A. & Sturgill, A. (2019). *Religion online: How digital technology is changing the way we worship and pray*. Praeger.

- Gravelly, A & Harber, I. (2022). 4 social media shifts the church should know about. *The Ethics & Religious Liberty Commission*. <https://erlc.com/resource-library/articles/4-social-media-shifts-the-church-should-know-about>
- Harold, L. (1948). The structure and function of communication in society. In *The communication of ideas*, pp. 37-51. (Byson Ed.). Harper and Bros.
- Harrub, B. The origins of language and communication. *Journal of Creation*, (17)(3), p. 93.
- Hatch, J.A. (2002). *Doing qualitative research in education settings*. Sunny Press.
- Henson, J. (Ed.). (2020). *Modern metaphors of Christian leadership. Exploring Christian leadership in a contemporary organizational context*. Palgrave MacMillan.
- Hielema, S. (2010). Wide and long and high and deep: Biblical foundations of faith formation. In R. J. Keeley (Ed.), *Shaped by God: Twelve essentials for nurturing faith in children, youth, and adults*, (pp. 9-22). Faith Alive Christian Resources.
- Hilbert, M. (2020). Digital technology and social change: The digital transformation of society from a historical perspective. *Dialogues in Clinical Neuroscience*, (22)(2), p. 18.
- Hill, R., Betts, L. & Gardner, S. (2015). Older adults' experiences and perceptions of digital technology: (Dis)empowerment, wellbeing, and inclusion. *Computers in Human Behavior*, (48) pp. 415-423. <https://doi.org/10.1016/j.chb.2015.01.062>
- Hill, R. (2017). Embracing digital: Key considerations for publishers, marketers and customers. *Information Services and Use*, 37(3), pp. 349-353.
- Holland, J. (2021). The church in the digital age. *Tabletalk*, 12.  
<https://tabletalkmagazine.com/article/2021/03/the-church-in-the-digital-age>
- The Holy Bible, Concordia Self-Study Bible*. (1984). New International Version, International Bible Society, Zondervan Publishing House. (Original work published in 1973).
- Howard, E. (2018). *A guide to christian spiritual formation: How scripture, spirit, community, and mission shape our souls*. Baker Academic.
- Huggins, D. (2017). The credibility of Jesus Christ. *HisnamebePraised*.  
<https://hisnamebepraised.com/2017/01/03/the-credibility-of-jesus-christ>
- Hunt, J. (2019). The digital way: Re-imagining digital discipleship in the age of social media. *Journal of Youth and Theology*, 18(2).
- Hutchings, T. (2017). *Creating church online*. Routledge.
- Iorg, J. (2018). *Leading major change in your ministry*. B&H Publishing Group

- Janke, J. (2018). Ephesians 5:25-27 – The communion of saints. *Risen Savior Lutheran Church*. <http://www.risensaviorlutheran.org/sermon-blog/2018/8/27/ephesians-525-27-the-communion-of-saints-august-26-2018S>
- Jobling, M. (2014). To boldly go online: Empowering elders to connect socially with technology. *Journal of the American Society on Aging*, 38(1), pp. 48-50.
- Johnston, E.F., Eagle, D.E., Headley, J. (2021). Pastoral ministry in unsettled times: A Qualitative study of the experiences of clergy during COVID-19 pandemic. *Review of Religious Research*. <https://doi.org/10.1007/s13644-021-00465-y>
- Johnston, G. (2008). Old Testament community and spiritual formation. In P. Pettit (Ed)., *Foundations of spiritual formation. A community approach to becoming like Christ*. (pp 83-85).
- Jones, J., Murray, S. Warren, K. (2018). Christian leadership in a secular world. *The Journal of Applied Christian Leadership*. 12(2), 90-107. <https://jacl.andrews.edu/christian-leadership-in-a-secular-world/>
- Kane, G. C. (2015). Enterprise social media: Current capabilities and future possibilities. *MIS Quarterly Executive*, 14(1). <https://www.semanticscholar.org/paper/Enterprise-Social-Media%3A-Current-Capabilities-and-Kane/047ba78b9b3e5d254f3c73a5748c00a96760f92b>
- Kartawidjaja, Yakub E. *Music in Martin Luther's Theology*, Vandenhoeck & Ruprecht, 2021. *ProQuest Ebook Central*, <http://ebookcentral.proquest.com/lib/liberty/detail.action?docID=6550710>. Created from liberty on 2023-07-08 16:18:32.
- Kelly, S. (2020). Zoom’s massive overnight success actually took 9 years. *CNN Business*. <https://www.cnn.com/2020/03/27/tech/zoom-app-coronavirus/index.html>
- Kennebrew, D. (2012). What is true worship? Retrieved from <https://www.christianitytoday.com/biblestudies/bible-answers/spirituallife/what-is-true-worship.html>
- Kim, J. & McKnight, S. (2020). *Analog church: Why we need real people, places, and things in the digital age*. InterVarsity Press.
- Kirsch, J.P. (1911). *The doctrine of the communion of saints in the early church: A study in the history of dogma*. (Classic Reprint). Forgotten Books.

- Kolb, R. (2016). *Martin Luther and the enduring word of God: The Wittenberg school and its scripture-centered proclamation*. Baker Academic.
- Kruger, F. (2021). Descriptive empirical perspectives on participants' attitudes on virtual worship services kindle an ineluctable revisiting of ecclesial assumptions in a post-pandemic world. *Hervormde Teologiese Studies* (77)( 4). DOI:10.4102/hts.v77i4.7125.
- LaPelle, N. (2004). Simplifying qualitative data analysis using general purpose software tools. *Preventive and Behavioral Medicine Publications and Presentations*.
- Laughlin Adler, B. (2012). *The sound of scripture: Reading the Bible aloud – A brief guide for lay readers*. 1517 Media. <https://doi-org.ezproxy.liberty.edu/10.2307/j.ctvz3c9>
- Leach, T. (2021). *Radiant Church: Restoring the credibility of our witness*. InterVarsity Press.
- Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. ProQuest Ebook Central.
- Leedy, P. D., & Ormrod, J. E. (2018). *Practical research: Planning and design*. Pearson.
- Leeman, J. (2023). The Church: Universal and local. *The Gospel Coalition*.  
<https://www.thegospelcoalition.org/essay/the-church-universal-and-local>
- Lines, C. (2020). *The great digital commission: Embracing social media for church growth and transformation*. (Publication No. 27955399). [Doctoral Dissertation, Divinity School of Duke University]. ProQuest, LLC.
- Lines, C. (2021). *The great digital commission: Embracing social media for church growth and transformation*. Cascade Books.
- Lowe, M. (2017). Social Networks and Spiritual Formation Part1 and Part 2. *Liberty University*.
- Lowe, S. and Lowe M. (2018). *Ecologies of faith in a digital age: Spiritual growth through online education*. Inter Varsity Press.
- Lueker, E., Poellot, L., & Jackson, P. (2000). Lutheran Church Missouri Synod Districts" *Christian Cyclopedia*. Concordia Publishing House.  
<https://cyclopedia.lcms.org/definitions>
- Luther, Martin, (1955) *Luther's Works, (41)*. Muhlenberg and Fortress Press.
- The Lutheran Annual*. (2021). Concordia Publishing House.



- Macy, H. (2011). Community: God's design for growth. *Bible.org*.  
<https://bible.org/article/community-god%E2%80%99s-design-growth>
- Maeli, J. (2016). The Rogers adoption curve & how you spread new ideas throughout culture.  
<https://medium.com/the-political-informer/the-rogers-adoption-curve-how-you-spread-new-ideas-throughout-culture-d848462fcd24>
- Magness, C. (2021). COVID-19 and the church: One year later. *Reporter*.  
<https://reporter.lcms.org/2021/covid-19-and-the-church-one-year-later/>
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *AISHE*, (3).
- Marshall, K., Van Saanen, M. (2007). *Development and faith: Where mind, heart, and soul work together*. World Bank Publications.
- Materne, C. (2020). Challenges, stress and support reported by church workers of the LCA/NZ during Covid-19 pandemic restrictions. *Lutheran Theological Journal*, 54(2), 146–148.  
<https://search.informit-org.ezproxy.liberty.edu/doi/10.3316/informit.427906203571015>
- Mathers, B. (2018). Jumping the chasm: Whose influence matters most when implementing workplace change? *Celemi. The Power of Learning*.  
<https://celemi.com/blog/2018/managing-organizational-change>
- Maxwell, J.A. (2013). *Qualitative research design: An interactive approach*. Thousand Oaks: Sage.
- Maxwell, J. (2020). *21 leadership issues in the bible: Life changing lessons from leaders in scripture*. HarperChristian Resources.
- McDaniels, T. (2022). Can pastors and leaders survive the current leadership storm? *Thomas McDaniels Ministries*. <https://thomasmcdaniels.com/can-leaders-survive-the-current-leadership-storm>
- McElheny, T. (2020). How to reach millennials with your sermons. *PastorResources*.  
<https://pastorresources.com/how-to-reach-millennials-with-your-sermons/>
- McFarland, L. A., & Ployhart, R. E. (2015). Social media: A contextual framework to guide research and practice. *Journal of Applied Psychology*, 100(6), 1653-1657. doi: 10.1037/a0039244.
- McGregor, S. (2019). *Understanding and Evaluating Research*. SAGE Publications, Inc.

- Merriam, S. & Tisdell, E. (2016). *Qualitative research: A guide to design and implantation*. Josey-Bass.
- Modell, S. M., & Kardia, S. L. R. (2020). Religion as a health promoter during the 2019/2020 COVID outbreak: View from Detroit. *J Relig Health* 59, 2243–2255.  
<https://doi.org/10.1007/s10943-020-01052-1>
- Moncrieffe, L. (2019). Church ministry in a digital age: Five steps pastors must take. *Ministry Magazine*, 10-12.
- Morrow, J. (2008). Introducing spiritual formation. In P. Pettit (Ed), *Foundations of spiritual formation, A community approach to becoming like Christ*. (p 53). Kregel Publications.
- Nafzger, S. (2001). *An introduction to The Lutheran Church – Missouri Synod*. Concordia Tracts, Concordia Publishing House.  
<https://files.lcms.org/file/preview/sE6mMdo98tTT0gAKpzZNwZDCdm0Lz3oo>
- Nelson, R. (2019). How one church uses technology to drive community. *Pushpay.com*.  
<https://pushpay.com/blog/technology-create-community/>
- Noble, H. & Heale, R. (2019). Triangulation in research, with examples. *Evid Based Nurs*.22(9), pp. 67-68. <https://ebn.bmj.com/content/ebnurs/22/3/67.full.pdf>
- The Nook. (2018). How modern day pastors plan to reach millennials and gen-z. *Crown.edu*.  
<https://www.crown.edu/nook/how-modern-day-pastors-plan-to-reach-millennials-and-gen-z/>
- Odom, L. R. & Morrow Jr., J. R. (2006). What's this r? A correlational approach to explaining validity, reliability and objectivity coefficients. *Measurement in Physical Education and Exercise Science*, 10(2), 137-145. DOI: 10.1207/s15327841mpee1002\_5
- Ogunsola, K. & Raji, D. (2019). Qualitative study of the use of social media by church personnel for religious activities in Ibadan, Nigeria. *African Journal for the psychological study of social issues*, (22)(3).
- Paglioni, N. (2017). Virtual churches: Is vr the future of religious technology? *Capterra*.  
<https://blog.capterra.com/virtual-churches-is-vr-the-future-of-religious-technology/>
- Pamenberg, W. (1972). *The apostles creed in the light of today's questions*. (Kohl Ed.). Westminster Press.
- Pardes, A. (2021). The digital divide is giving American churches hell. *Wired*.  
<https://www.wired.com/story/covid-19-digital-divide-giving-american-churches-hell/>

- Parisot, A.H. (1997). Distance education as a catalyst for changing teaching in the community college: Implications for institutional policy. *New Directions for Community Colleges*, (99), pp 5-13.
- Peluso-Verdend, G. (2022). Church attendance, the pandemic, and discipleship. *Center for Religion in Public Life, Phillips Seminary*. <https://ptstulsa.edu/rpli/church-attendance-and-pandemic/>
- Pettit, P. (2008). Conclusion. In P. Pettit (Ed.), *Foundations of spiritual formation, A community approach to becoming like Christ*. (p 269, 271). Kregel Publications.
- Pew Research Center (2019). In U.S., decline in Christianity continues at rapid pace. *Pewresearch.org*. <https://www.pewresearch.org/religion/2019/10/17/in-u-s-decline-of-christianity-continues-at-rapid-pace/>
- Prensky, M. (2001). Digital natives, digital immigrants, part II. Do they really think differently? *On the Horizon*, 9(6), pp. 1-6.
- Pritchett, B. (2020). The danger of digital church without community. *Outreach Magazine*. <https://outreachmagazine.com/resources/technology/58611-the-danger-of-digital-church-without-community.html>
- Robinson, J. (2022). *Description of how Christians use digital technology for their religious practices*. (Publication No. 28967020). [Doctoral Dissertation, Grand Canyon University]. ProQuest, LLC.
- Roerkohl, A. 2016. The Luther Bible and the printing press. *DokumentARFilm*. <https://www.dokumentarfilm.com/en/luther-bible-and-printing-press>
- Rogers, E.M. (2003). *Diffusion of innovations*. Free Press.
- Roth, P. L., Bobko, P., Van Iddekinge, C. H., & Thatcher, J. B. (2016). Social media in employee-selection-related decisions: A research agenda for uncharted territory. *Journal of Management*, 42(1), 269-298.
- Ryan, G. & Bernard, H.R. (2003). Techniques to identify themes *Field Methods*, 15(1), pp. 85-109.
- Samra, J. (2008). *Being conformed to Christ in community: A study of maturity, maturation, and the local church in the undisputed Pauline epistles*. Bloomsbury Publishing Plc.

- Samushonga, H. (2021). Distinguishing between the pastor and the superhero: God on burnout and self-care. *Journal of Pastoral Theology*, 31(1), 4-19.  
<https://doi.org/10.1080/10649867.2020.1748919>
- Shiells, A. (2019). A critical examination of Christian leadership in the light of recent trends within the Church of England. *Journal of the European Pentecostal Theological Association*, 39(1), 39-47, <https://doi.org/10.1080/18124461.2018.1539902>
- Shirley, C. (2017). Overcoming digital distance: The challenge of developmental relational disciples in the internet age. *Christian Education Journal*, 14(2), 376-390.  
<https://doi.org/10.1177/073989131701400210>
- Shockley, K. (2019). What does communion of saints mean? Retrieved from  
<https://www.umc.org/en/content/ask-the-umc-what-does-communion-of-saints-mean>
- Sims, D. B. (2005). The Effect of Technology on Christianity: Blessing or Curse.  
<https://www3.dbu.edu/Naugle/pdf/The%20Effect%20of%20Technology%20on%20Christianity2.pdf>
- Singer, L. (2016). On the diffusion of innovations: How new ideas spread. <https://leif.me/on-the-diffusion-of-innovations-how-new-ideas-spread>
- Singer, L. (2019). Diffusion of innovation theory. <https://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories4.html>.
- Sironen, R. (2020). *The relationship between pastoral servant leadership and congregational spiritual formation in U.S. Churches*. [Unpublished doctoral dissertation]. Liberty University.
- Skoric, M. M., Zhu, Q., Goh, D., & Pang, N. (2016). Social media and citizen engagement: A meta-analytic review. *New Media & Society*, 18(9), 1817-1839.
- Social Science Statistics (n.d.). Statistic calculators. <https://www.socscistatistics.com/tests/>
- Spicer, C. (2021). The church, the pandemic and change. *PLNU Viewpoint*.  
<https://viewpoint.pointloma.edu/the-church-the-pandemic-and-change/>
- Standish, N.G., (2020). *And the church actually changed: Uncommon wisdom for pastors in an age of doubt, division, and decline*. Augsburg Fortress Publishers.
- Stetzer, E. & MacDonald, A. (2020). How can and should we reach and train our future pastors and Christian leaders? *Christian Education Journal*. 17(1), 160-176.  
 doi:10.1177/0739891320904968

- Stone, L. (2020). Christianity has been handling pandemics for 2000 years. *FP Insider Access*. <https://foreignpolicy.com/2020/03/13/christianity-epidemics-2000-years-should-i-still-go-to-church-coronavirus/s>
- Surucu, L. Maslakci, A. (2020). Validity and reliability in quantitative research, *BMU* 8(3), pp. 2694-2726. DOI:10.15295/bmij.v8i3.1540
- Szabo, L. V. (2014). The future of communication: from new media to postmedia. *Procedia-Social and Behavioral Sciences*, 163, 36-43.
- Tang, A. (2013). Spiritual formation community as the matrix of Christian spiritual formation. *Kairos2*. [https://www.kairos2.com/SFC\\_theMatrix\\_SFC.htm](https://www.kairos2.com/SFC_theMatrix_SFC.htm)
- The church: Universal and local (2023). *The Gospel Coalition*. <https://www.thegospelcoalition.org/essay/the-church-universal-and-local/>
- Tryggestad, E. (2021). A redefined church will emerge from pandemic. *The Christian Chronicle*. <https://christianchronicle.org/a-redefined-church-will-emerge-from-pandemic/>
- Turkle, S. (2012). Connected, but Alone?" *TED Talk*. [https://www.ted.com/talks/sherry\\_turkle\\_alone\\_together](https://www.ted.com/talks/sherry_turkle_alone_together).
- Turney, S. (2023). Null and Alternative Hypotheses. *Scribbr Editor*. <https://www.scribbr.com/statistics/null-and-alternative-hypotheses>
- Venter, E. (2017). Bridging the communication gap between generation y and the baby boomer generation. *International Journal of Adolescence and Youth*, 22(4), pp. 497-507.
- Wang, W. & Elhage, A. (2022). Here's who stopped going to church during the pandemic. *Christianity Today*. <https://www.christianitytoday.com/ct/2022/january-web-only/attendance-decline-covid-pandemic-church.html>
- Webb, M. S. (2012). Church Marketing: Building and Sustaining Membership. *Services Marketing Quarterly* 33(1), 68-84.
- Wellman, J. (2017). What does being a disciple of Jesus mean? *Christian Crier*. <https://www.patheos.com/blogs/christiancrier/2017/03/10/what-does-being-a-disciple-of-jesus-mean/>
- Wilburn, S. 2020. The three kinds of communication in worship. *The Worship Soujourner*. <https://worshipsojourner.wordpress.com/2020/02/23/the-3-kinds-of-communication-in-worship/>
- Willard, D. (2002) *Renovation of the heart: Putting on the character of Christ*. NavPress

- Wimbley, R. (2021). Church leaders reflect on COVID challenges, lesson 1 year into the pandemic. <https://www.fox2detroit.com/news/church-leaders-reflect-on-covid-challenges-lessons-1-year-into-pandemic>
- Wingfield, M. (2021). Most comprehensive study yet of COVID's impact on churches finds uneven results. <https://baptistnews.com/article/most-comprehensive-study-yet-of-covids-impact-on-churches-finds-uneven-results/>
- Wise, J. (2014). *The social church: A theology of digital communication*. Moody Publishers.
- Wuthnow, R. (2010). *After the baby boomers: How twenty- and thirty-somethings are shaping the future of American religion*. Princeton, NJ: Princeton University Press.

**APPENDIX A**  
**Recruitment Document**

Dear Pastor or Church Leader [add name if available],

Greetings in the name of our Risen Lord and Savior Jesus Christ.

As a member of the Lutheran Church Missouri Synod, I am conducting research as part of the requirements for a Doctor of Philosophy degree in Christian Leadership. The purpose of my research is to determine how small churches have used digital technology before, during, and after the pandemic to enhance their worship service and whether the small church was successful in retaining membership as well as keeping the communion of Saints active in the ministry while using the digital technology resources available.

This letter is to ask you to participate in a brief survey. As a doctoral candidate in the School of Divinity, at Liberty University. I am pleased to have the support of the LCMS and the President of the Southeastern District to conduct this study.

Participants must be a voting member of the congregation and a church leader. Participants will be asked to complete an online survey. It should take approximately fifteen (15) minutes to complete the survey. Participation will be completely anonymous, and no personal, identifying information will be collected.

To participate, please click here  
[https://qfreeaccountssjc1.az1.qualtrics.com/jfe/form/SV\\_cROcTUI5Q4MHrdc](https://qfreeaccountssjc1.az1.qualtrics.com/jfe/form/SV_cROcTUI5Q4MHrdc)  
to complete the online survey.

A consent document is attached to this email. The consent document contains additional information about my research. Because participation is anonymous, you do not need to sign and return the consent document unless you prefer to do so. After you have read the consent form, please click the link to proceed to the survey. Doing so will indicate that you have read the consent information and would like to take part in the study.

Participants will be included in a drawing at the end of the study for a \$100 Amazon gift card. Participants do not have to complete the study to be entered into the drawing.

Thank you very much for your participation.

Blessings always,

Phillip S. Woodruff

Doctoral Candidate  


## APPENDIX B

### Recruitment Follow-up Document

Dear Pastor or Church Leader [add name if available]:

Greetings in the name of our Risen Lord and Savior Jesus Christ.

As a member of the Lutheran Church Missouri Synod, I am conducting research as part of the requirements for a Doctor of Philosophy degree in Christian Leadership. Two weeks ago an email letter was sent to you inviting you to participate in a research study. This follow-up email is being sent to remind you to complete the survey if you have not already done so. The deadline for participation is \_\_\_\_\_.

As a doctoral candidate in the School of Divinity, at Liberty University. I am pleased to have the support of the LCMS and the President of the Southeastern District to conduct this study.

Participants must be the Pastor or church leaders of the congregation. Participants will be asked to take an anonymous, online survey. It should take approximately fifteen (15) minutes to complete the survey. Participation will be completely anonymous, and no personal, identifying information will be collected.

To participate, please complete the online survey. The hyperlink to the survey is included to complete the survey.

[https://qfreeaccountssjc1.az1.qualtrics.com/jfe/form/SV\\_cROcTUI5Q4MHRdc](https://qfreeaccountssjc1.az1.qualtrics.com/jfe/form/SV_cROcTUI5Q4MHRdc)

A consent document is attached to this email. The consent document contains additional information about my research. Because the participation is anonymous, you do not need to sign the consent document unless you would prefer to do so. After you have read the consent form, please click the link to proceed to the survey. Doing so will indicate that you have read the consent information and would like to take part in the study.

Participants will be included in a drawing at the end of the study for a \$100 Amazon gift card. Participants do not have to complete the study to be entered into the drawing.

Sincerely,

Phillip S. Woodruff

Doctoral Candidate  
[REDACTED]



## APPENDIX C

### Survey Questions

1. Did your church use digital technology prior to the pandemic?

\_\_\_\_\_ Yes      \_\_\_\_\_ No

2. What digital technology did you use before, during, and after the pandemic? Please choose all that apply.

a). Website

- Before pandemic \_\_\_\_\_
- During pandemic \_\_\_\_\_
- After pandemic \_\_\_\_\_

b). Facebook

- Before pandemic \_\_\_\_\_
- During pandemic \_\_\_\_\_
- After pandemic \_\_\_\_\_

c). Zoom

- Before pandemic \_\_\_\_\_
- During pandemic \_\_\_\_\_
- After pandemic \_\_\_\_\_

d). Twitter

- Before pandemic \_\_\_\_\_
- During pandemic \_\_\_\_\_
- After pandemic \_\_\_\_\_

e). YouTube

- Before pandemic \_\_\_\_\_
- During pandemic \_\_\_\_\_
- After pandemic \_\_\_\_\_

f). Microsoft Teams

- Before pandemic \_\_\_\_\_
- During pandemic \_\_\_\_\_
- After pandemic \_\_\_\_\_

3. Did you offer any training for the use of online/digital technology?

\_\_\_\_\_ Yes      \_\_\_\_\_ No

4. What was your average weekly attendance in each of the following years:

- 2019 \_\_\_\_\_

- 2020 \_\_\_\_\_
- 2021 \_\_\_\_\_
- 2022 \_\_\_\_\_

5. What is your current average weekly attendance?

\_\_\_\_\_

6. How long was your church closed for in-person services?

- One to three months \_\_\_\_\_
- Three to six months \_\_\_\_\_
- Six months to a year \_\_\_\_\_
- Over a year \_\_\_\_\_
- Never stopped services \_\_\_\_\_

7. What are the age groups of your members? Choose all that apply.

- Over 75 \_\_\_\_\_
- 56 to 75 \_\_\_\_\_
- 41 to 55 \_\_\_\_\_
- 25 to 40 \_\_\_\_\_
- 0 to 25 \_\_\_\_\_

8. Did you observe a decrease in overall attendance while holding services online?

\_\_\_\_\_ Yes      \_\_\_\_\_ No      \_\_\_\_\_ No Change

9. Was there an increase in attendance after you reopened your church for in-person services?

\_\_\_\_\_ Yes      \_\_\_\_\_ No      \_\_\_\_\_ No Change

10. How did you reach members who did not have access to digital technology during the pandemic?

- a). Telephone \_\_\_\_\_
- b). Mail \_\_\_\_\_
- c). Personal visits \_\_\_\_\_
- c). Other \_\_\_\_\_

11. Do you continue to use digital technology for your worship services?

\_\_\_\_\_ Yes      \_\_\_\_\_ No

12. How did you assist congregants in their spiritual formation during the pandemic?

- a). Prayer \_\_\_\_\_
- b). Bible study \_\_\_\_\_
- c). YouTube \_\_\_\_\_
- d). Church Services \_\_\_\_\_
- e). Telephone calls \_\_\_\_\_
- f). Other \_\_\_\_\_

13. Do you think using digital technology is right for church worship services?

---

Strongly Disagree Somewhat Disagree Neither Agree or Disagree Somewhat Agree

---

Strongly Agree

14. How strongly did your church benefit from using digital technology?

---

Definitely Not Probably Not Might or Might Not Possibly Yes Definitely Yes

15. Do you think digital technology will benefit small churches in the future?

---

Definitely Not Probably Not Might or Might Not Possibly Yes Definitely Yes

## APPENDIX D

### IRB Approval and Exemption Letter

#### LIBERTY UNIVERSITY INSTITUTIONAL REVIEW BOARD

October 6, 2023

Phillip Woodruff  
James Wood

Re: IRB Exemption - IRB-FY23-24-315 DIGITAL TECHNOLOGY USE AND INFLUENCE ON THE MISSION AND MINISTRY OF THE LUTHERAN CHURCH MISSOURI SYNOD CHURCH COMMUNITY IN THE UNITED STATES RESULTING FROM THE COVID-19 PANDEMIC: A QUANTITATIVE STUDY:

Dear Phillip Woodruff, James Wood,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

**For a PDF of your exemption letter, click on your study number in the My Studies card on your Cayuse dashboard. Next, click the Submissions bar beside the Study Details bar on the Study details page. Finally, click Initial under Submission Type and choose the Letters tab toward the bottom of the Submission Details page. Your Information sheet and final versions of your study documents can also be found on the same page under the Attachments tab.**

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at [irb@liberty.edu](mailto:irb@liberty.edu).

Sincerely,  
**G. Michele Baker, PhD, CIP**  
*Administrative Chair*  
**Research Ethics Office**

## APPENDIX E

### Letter of Support from President – Southeastern District



# Southeastern District

Lutheran Church – Missouri Synod

November 10, 2023

Dear Pastor and Church Leaders,

Greetings in the Name of our Lord and Savior Jesus Christ.

This letter is to make you aware of the research project on LCMS small churches and the use of digital technology before, during, and after the pandemic, being conducted by Mr. Philip Woodruff.

I encourage you to respond to this email survey in order to provide the greatest possible level of participation and statistical reliability. Responses are strictly confidential and anonymous as all replies go to Qualtrics for analysis.

The last day to respond to the survey is Wednesday, November 15<sup>th</sup>, 2023.

[https://qlheeaaccountsajc1.us1.qualtrics.com/jfe/form/SV\\_0ROcTUI5C4MHrdc](https://qlheeaaccountsajc1.us1.qualtrics.com/jfe/form/SV_0ROcTUI5C4MHrdc)

Mr. Woodruff is President of Concordia Lutheran Church of Upper Marlboro, Maryland. This study is part of his doctoral research. If you have any questions about the research or the survey, please contact him at 202.669.7445 or [info@concordialutheranum.org](mailto:info@concordialutheranum.org).

Yours in Christ,



Rev. Dr. William Harmon  
President  
Southeastern District LCMS

*Connecting People with Jesus*

2305 N Parham Rd Suite 200 | Henrico, VA 23229 | 703.971.9371 | [se.lcms.org](http://se.lcms.org)