12-2019

Social Media in Baptist Churches

Robin Amankwah
National Louis University

Follow this and additional works at: https://digitalcommons.nl.edu/diss

Part of the Educational Leadership Commons, Organizational Communication Commons, Organization Development Commons, and the Social Media Commons

Recommended Citation

This Dissertation - Public Access is brought to you for free and open access by Digital Commons@NLU. It has been accepted for inclusion in Dissertations by an authorized administrator of Digital Commons@NLU. For more information, please contact digitalcommons@nl.edu.
SOCIAL MEDIA IN BAPTIST CHURCHES

Doctoral Dissertation Research

Submitted to the Graduate Faculty of
National Louis University Chicago
College of Business

In Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education
Organizational Leadership

By
Robin N. Amankwah

December 2019
SOCIAL MEDIA IN BAPTIST CHURCHES

Doctoral Dissertation Research

Submitted to the Graduate Faculty of
National Louis University Chicago
College of Business

In Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education
Organizational Leadership

By
Robin N. Amankwah

Dissertation Committee Approval:

Matthew Kuofie
12/25/19
Matthew Kuofie, MBA, Ph.D., Chair

Abdullah Alshboul,
Abdullah Alshboul, DBA, Member
ABSTRACT

The integration of social media into Chicago Baptist Churches congregants recently increased over the last few years. This research study allowed church leaders to determine if social media was an effective media outlet in Baptist churches on the Southside of Chicago. The evaluation research approach was to assess the effectiveness of social media, in particular Facebook and Instagram. Within this conceptual framework, the researcher was able to produced flexible, fixed, and multi-design strategies to abstract a full spectrum of evaluation. The subsequent methodology focused on the dual use of social media and themes that coincide, specifically, marketing, politics, communication awareness, engagement behaviors, viral advertising, and engagement. Twenty-five participants responded to the 21 questions on the Baptist Leadership and Social Media Survey. Results showed that there was a strong, positive, and statistically significant correlation in daily use between the two types of media. For Facebook, the differences showed a strong statistical trend and there was a very strong effect of age. For Instagram, the differences were significant and there was again a very strong effect of age. With respect to changing their current use of social media in the future, men were very likely to change their use of Facebook in the future whereas on women were somewhat to very likely to; however, the difference was non-significant, and the gender effect was small. Men were ‘not so likely’ to change their current use of Instagram whereas women were not at all to not so likely to change in the future; however, this difference was also non-significant, and the gender effect was small.
ACKNOWLEDGEMENTS

I would like to first and foremost give thanks and praises to God for giving me patience and endurance for completing this dissertation. I cannot begin to express my thanks for my committee members for their support and encouragement throughout this process. A special thanks to Dr. Matthew Kuofie, my committee chairman for his countless hours of reflecting, reading, encouraging, and most of all patience throughout the entire process. Thank you Dr. Abdullah Alshboul for agreeing to serve on my committee.

I would like to acknowledge and thank Dr. Judah Viola and the College of Professional Studies and Advancement at National Louis University for giving me this opportunity.
DEDICATION

I dedicate my dissertation work to God and my family. A special feeling of gratitude to my very supportive husband Venistowel Adjei Amankwah, and parents Robert and Artis Rogers whose words of encouragement and motivation pushed me towards completion. I am grateful for God surrounding me around such a supportive and strong foundation. I also dedicate this dissertation to my church family who have supported me throughout the process in prayer and words of encouragement.
TABLE OF CONTENTS

LIST OF FIGURES ........................................................................................................................................ xi

CHAPTER ONE: INTRODUCTION ........................................................................................................... 1
   Problem Background .............................................................................................................................. 1
   Purpose of the Study .............................................................................................................................. 2
   Evaluation Research Approach .......................................................................................................... 2
   Setting .................................................................................................................................................. 3
   Participants of the Study ....................................................................................................................... 3
   Sources Review .................................................................................................................................... 3
   Collection of Data ............................................................................................................................... 6
   Research Questions and Hypotheses ................................................................................................. 6
   Analyzing and Interpreting Data ......................................................................................................... 9
   Reporting and Dissemination .............................................................................................................. 9

CHAPTER TWO: REVIEW OF THE LITERATURE ................................................................................. 11
   Introduction .......................................................................................................................................... 11
   Current Research in the Literature .................................................................................................... 11
      Social Media Marketing ................................................................................................................... 14
      Social Media Politic .......................................................................................................................... 14
      Communication Awareness ............................................................................................................ 15
      Engagement Behaviors .................................................................................................................... 17
      Viral Advertising ............................................................................................................................ 18
      Social Media Engagement ............................................................................................................. 19
      Social Media Research Gaps .......................................................................................................... 20
      Applications of Social Media Usage .............................................................................................. 21
   Summary of Chapter Two .................................................................................................................. 22

CHAPTER THREE: METHODOLOGY ................................................................................................. 23
   Research Design .................................................................................................................................. 23
   Research Questions and Hypotheses ................................................................................................. 23
   Selection of Subjects .......................................................................................................................... 25
   Instrumentation .................................................................................................................................... 27
   Process ............................................................................................................................................... 27
      Consent Form ................................................................................................................................... 29
   Methodological Assumptions ............................................................................................................ 29
      Limitations ....................................................................................................................................... 30
      Delimitations .................................................................................................................................... 31
   Data Processing and Analysis ........................................................................................................... 31
   Summary of Chapter Three ................................................................................................................ 32

CHAPTER FOUR: RESULTS ..................................................................................................................... 33
   Research Questions ............................................................................................................................ 33
   Pre-Analysis Data Handling ............................................................................................................... 34
Demographic Descriptive Statistics ....................................................................................... 37
General Social Media Preferences ......................................................................................... 39
  Current use Facebook and/or Instagram for church business ................................. 40
  Time devoted to Facebook and Instagram for church business ......................... 40
  Days devoted to Facebook and Instagram for church business ....................... 41
Results for RQ 1 ................................................................................................................. 42
  Answer to RQ 1 ............................................................................................................. 44
Results for RQ 2 ................................................................................................................. 44
  How Participants Use Facebook and Instagram for Church Business ............... 46
  Answer to RQ 2 ............................................................................................................. 49
Results for RQ 3 ................................................................................................................. 49
  Age differences in Facebook usefulness ................................................................. 49
  Age differences in Instagram usefulness ................................................................. 51
  Answer to RQ 3 ............................................................................................................. 53
Results for RQ 4 ................................................................................................................. 54
  Gender differences in Facebook usefulness ............................................................. 55
  Gender differences in Instagram usefulness ............................................................. 56
  Gender differences in likelihood of future change in Facebook use ................. 57
  Gender differences in likelihood of future change in Instagram use ................ 58
  Answer to RQ 4 ............................................................................................................. 59
Summary of Chapter Four ..................................................................................................... 60

CHAPTER FIVE: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS ....63
Discussion ............................................................................................................................. 63
Conclusions ......................................................................................................................... 64
Recommendations for Practice ......................................................................................... 66
Recommendations for Future Research .......................................................................... 67
Summary of Chapter Five ..................................................................................................... 68

REFERENCES ....................................................................................................................... 69

APPENDICES ....................................................................................................................... 74
Appendix A. Baptist Leadership Social Media Survey ................................................... 75
Appendix B. Email Invitation to Participate ..................................................................... 80
Appendix C. Participant Informed Consent ...................................................................... 82
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Percent distribution of men and women in the study</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td>Frequency distribution of percentages of participants by position in the Baptist Church</td>
<td>39</td>
</tr>
<tr>
<td>3</td>
<td>Percentage of participants who use Facebook or both Facebook and Instagram for church business</td>
<td>40</td>
</tr>
<tr>
<td>4</td>
<td>Frequency distribution of time devoted to using Facebook and Instagram for church business</td>
<td>41</td>
</tr>
<tr>
<td>5</td>
<td>Frequency distribution of the days of the week most likely devoted to using Facebook and Instagram for business</td>
<td>42</td>
</tr>
<tr>
<td>6</td>
<td>Bar graph of mean daily frequencies of using Facebook and Instagram for church business</td>
<td>43</td>
</tr>
<tr>
<td>7</td>
<td>Distribution of participants by the most effective social media for church business, Facebook or both Facebook and Instagram</td>
<td>45</td>
</tr>
<tr>
<td>8</td>
<td>Frequency distribution of Facebook's effectiveness compared to other types of social media for church business</td>
<td>46</td>
</tr>
<tr>
<td>9</td>
<td>Frequency distribution of Facebook's uses for church business</td>
<td>47</td>
</tr>
<tr>
<td>10</td>
<td>Frequency distribution of Instagram's uses for church business</td>
<td>47</td>
</tr>
<tr>
<td>11</td>
<td>Cross-tabulation of similarity and differences in use of Facebook and Instagram for church business</td>
<td>48</td>
</tr>
<tr>
<td>12</td>
<td>Mean ages across categories of Facebook usefulness of for church business</td>
<td>50</td>
</tr>
</tbody>
</table>
Figure 13. Mean ages across categories of Instagram usefulness for church business

Figure 14. Cross-tabulation of Facebook usefulness by gender

Figure 15. Mean usefulness of Facebook in men and women

Figure 16. Mean usefulness of Instagram in men and women

Figure 17. Gender differences in the likelihood of changing current use of Facebook in the future

Figure 18. Gender differences in the likelihood of changing current use of Instagram in the future
CHAPTER ONE: INTRODUCTION

Many churches have embraced the idea of using social media to interact with congregants. The content of this paper focused on the purpose of the evaluation research approach on social media in Chicago Baptist Churches. The focal areas described the setting or subjects that were selected, identified research questions that helped to guide the study, and the research design strategy, and why the approach was the best choice.

Problem Background

There has been much rapid growth through social media that has impacted people's daily lives and social interactions from the internet (Hsu & Lin, 2017). Social media platforms users have created online communities to share ideas, information, and other content (Hsu & Lin, 2017). Hsu and Lin (2017) both explained how social media played an important role in the improvements of social relationships, enhancing social life performance related to receiving updates while strengthening relationships.

The role of the church is changing with their approach to redefining their path (Daniels & Reynolds, 2012). David and Reynolds (2012) expressed that the changes within the church are impacting communities, church planning, design, and worship style to keep up with the times. There is a constant approach to create new trails in what is becoming a highly competitive journey for retaining and acquiring new members (Daniels & Reynolds, 2012). With utilizing social media networks, it creates an advantage for churches to define their congregation usage and involvement.

There is not a lot known regarding the patterns of churches when it comes to social media (Lee, 2018). Lee (2018) explained the recent increasing interest in social media platforms among religious congregations. His research findings suggest that religious
congregations' adoption of social media outlets are closely related to their community outreach and social marketing activities and their resources (Lee, 2018). This study helped to narrow the gap in understanding the relationship between social media usage, age, and gender, particularly in the Baptist church on the south side of Chicago.

**Purpose of the Study**

The purpose of this quantitative study was to determine if the social media outlets in Baptist churches on the southside of Chicago meet the needs of the church. This research study allowed Southside Baptist church leaders to determine if social media is effective. Having such information exposed what is working or not working with social media for the organization.

**Evaluation Research Approach**

Taking the evaluation research approach helped to identify the effectiveness of social media in Chicago Baptist Churches. Robson and McCartan (2015) define the purpose of evaluation in research is to assess the effects or effectiveness of something. Thus, commonly viewed as a policy, intervention, practice, or service (Robson & McCartan, 2015). Embracing evaluation research identified sensitive information that may highlight real issues where risk can be associated or assigned (Robson & McCartan, 2015).

The researcher has chosen such a design strategy to help to reflect a realist approach of Social Media in Chicago Baptist Churches. This form of research produced flexible, fixed, and multi-design strategies to abstract a full spectrum of evaluation (Robson & McCartan, 2015). The focus on a more summative form of evaluation identifying specifically effects and effectiveness (Robson & McCartan, 2015). Evaluations can sometimes be less negative or positive, having strong implications for change (Robson & McCartan, 2015).
Setting

Morris, Armstrong, and Balmer (2009) discovered that when both researchers and research subjects combined with the purpose of research, they develop a multi-faceted social relationship. When the formation of this relationship occurs, it endorses successful management that is important for both parties (Morris, Armstrong, & Balmer, 2009). This successful management will be between Baptist church leaders on the south side of Chicago.

Participants of the Study

The participants included those who use social media. The research participants more specifically included individuals from the congregation who use social media. It was important to identify the setting of the church to conduct evaluation research.

Sources Review

Social media is continuously expanding and is available to people in different countries and not only students in college (Kiefer, 2012). Social media, defined for this study, was an online tool that enhances social interactions between those that use it (Louie & Venkatesh, 2013). The evolution of social media has created many connections of people from various walks of life (Kiefer, 2012). Let's examine multiple sources that incorporate the use of social media and benefits for the Baptist churches of Chicago.

Collins (2010) suggested a re-evaluation of the definition of church in the world of social media. Within the United States, many organizations, especially churches, are moving towards the wave of electronic ministry (Collins, 2010). Collins (2010) continued to strongly suggest that technology will always continue to evolve, forcing churches to participate in its evolution. As time continues to progress, technology will evolve and continue to benefit churches that embrace it (Collins, 2010).
Many large congregations that are growing have seen the increased usage of social media in society and have taken advantage of it (Emerson, 2012). Emerson (2012) explored how Baptist churches that use social media have shown much increase in their religious operations. For example, The Avenue Road Baptist Church is a national organization and created ways for incorporating social media (ARBchurch.com, 2017). This organization could establish policies to help govern social media usage by members being aware of what is being posted (ARBchurch.com, 2017). The policies created help members to always make sure that the organization's beliefs and ministry are well represented and expanded (ARBchurch.com, 2017).

Social media can inform the masses through online platforms (Horton, 2018). Individuals, in general, have identified ways to stay current in the affairs of society through social media outlets (Horton, 2018). Malouf (2015) expressed how various social media platforms are becoming less private and more public. As a result, these organizations are taking note to get an advantage to gain more followers (Voorveld, Van Noort, Mutinga, & Bronner, 2018).

Lee (2010) identified four reasons to explain how social media has become very popular today. The very first reason discussed how social media had become a platform for people to express themselves (Lee, 2010). Secondly, social media is the fastest way to get news to the public (Lee, 2010). Social media presents the opportunity for family and peers to check in about what going in their personal lives (Lee, 2010). The last reason Lee (2010) discovered was the fact the people can use social media as an escape of their reality and not have to confront realities.
Used to expand the scope of information to current and future members was social media within the church (Smith, 2009). Smith (2009) discussed how information is more revolutionized and processed through social media outlets. The growing study of social media outlets will continue to help Baptist church attendees define their involvement because of continued expansion (Smith, 2009).

Social media in churches are becoming more and more in demand as time goes by (Williams, 2015). Staveley (2014) explained how local community projects involved 82% of individuals due to what they saw through social media outlets. Baptist churches in Chicago must focus on this expansion of social media to remain involved and updated (Staveley, 2014).

Many things have helped shape the researcher’s perspective on this applied research study topic. This research was necessary for Baptist churches to become more aware of how effective the use of social media is to their church. Being a part of an organization that does not use social media eliminates the flow of information spreading.

Baptist churches located on the south side of Chicago are the focus of this study. With large congregations of many members, the organization leaders should focus on the trend of applying attitude-behavior theories for social media marketing (Teng, Khong & Goh, 2015). Social media is becoming the fastest growing media in history (Richardson, Choong & Parker, 2016). Recent studies are showing that some of the largest social media websites attract over one billion visitors monthly (Richardson, Choong & Parker, 2016). This study helped Baptist Church leaders to harness the power of social media in ways that others have and taken advantage of to benefit the church.
Researchers are discovering that 27% of U.S. spent internet time is on social media marketing websites (Richardson, Choong & Parker, 2016). The most interesting thing to know about social media is that it is becoming the new 'word of mouth' online (Richardson, Choong & Parker, 2016). Richardson, Choong & Parker (2016) introduced the Social Network Theory that identified social ties between groups of individuals using different social media outlets.

The Social Network Theory highlighted ties of each social media group through links, sharing information, and memberships (Richardson, Choong & Parker, 2016). Identified were some ties as strong or weak, open or closed, directional, or reciprocal (Richardson, Choong & Parker, 2016). The Social Network Theory could show the strengths of social media networks and its leverage to create strong bidirectional ties and relationships through integrating social media platforms (Richardson, Choong & Parker, 2016).

Collection of Data

Completed through using an online survey monkey method was the data collection. Using online surveys gives more of a distinctive technological, demographic, and response rate characteristics that affect the design, response rates, and distribution (Landoy & Repanovici, 2009). Specific quality criteria must be used when creating an online survey for data collection purposes (Landoy & Repanovici, 2009). The criteria include the type of survey design, participant privacy and confidentiality, sampling and participant selection, distribution and response management, and survey piloting (Landoy & Repanovici, 2009).

Research Questions and Hypotheses

The analysis centered on four research questions, listed below with hypotheses where applicable.
RQ1: How much time do Baptist Church leaders devote to using Facebook and Instagram for church business? Answers for this question came from hypothesis testing.

H0: Baptist Church leaders devote an equal amount of time to using Facebook and Instagram for church business.

H1: Baptist Church leaders do not devote an equal amount of time to using Facebook and Instagram for church business.

RQ2: Which type of social media is more effective, Facebook or Instagram? Hypothesis testing from Likert-type survey items measuring effectiveness answered this description question.

H0: Facebook and Instagram are equally effective for church business.

H1: Facebook and Instagram are not equally effective for church business.

RQ3: What is the relationship between age and Baptist Church leaders’ use of Facebook and Instagram? Hypothesis testing answered this question.

H0: There is no statistically significant correlation between age and Baptist Church leaders’ use of Facebook and Instagram.

H1: There is a statistically significant correlation between age and Baptist Church leaders’ use of Facebook and Instagram.

RQ4: What is the relationship between gender and Baptist Church leaders' use of Facebook and Instagram? Hypothesis testing answered this question.

H0: There is no statistically significant difference between male and female Baptist Church leaders’ use of Facebook and Instagram.

H1: There is a statistically significant difference between male and female Baptist Church leaders’ use of Facebook and Instagram.
The collection of data was done through a survey online of Baptist leadership on the south side of Chicago. The reason for choosing to conduct an online survey was due to it being more convenient for participants to access via online.

Downloading of survey data occurred from SurveyMonkey.com as an Excel or SPSS spreadsheet. Analyses was also done with SPSS dedicated statistical software v. 25. Rounded off to whole numbers were percentages and the statistical significance was set at $\alpha = .050$, two-tailed. Participants were identified with case numbers. Survey responses were examined for missing data points; decisions were made at that time about cleaning those cases (e.g., cases that are missing a substantial number of survey items were removed). Continuous variables were screened for normality, linearity, outliers, and homoscedasticity with inspection of histograms and normal P-P plots for normality, box plots for outliers and skew, scatterplots for linearity, residual plots for homoscedasticity, and the significance of Schapiro-Wilks W statistics (Tabachnick & Fidell, 2019).

The data collection for the online survey method was conducted through computer software survey monkey electronically to generate a specific correlation of identified groups. Lastly, all analyzed responses occurred after getting results from survey monkey and interpreted through SPSS comparing the findings from the surveys.

Evaluated in two ways were the content validity and reliability of the Baptist Leadership Social Media Use Survey (Appendix A). The first was an external review (described in chapter 3). The second was an internal review of the data for reliability once the data are in hand; Cronbach's $\alpha$ for conceptually-related survey items measured internal consistency.

The proposed analyses (Pearson correlations and group comparisons with either $t$-tests or ANOVA) required normally-distributed data; transformed were non-normal variables to improve
normality (Tabachnick & Fidell, 2019). Described with frequencies and percentages were categorically-scaled variables. Explained with descriptive statistics such as means, standard deviation, and range were continuously-scaled variables.

**Analyzing and Interpreting Data**

Analyzing data has become a great business function within organizations (Daley, 2016). Daley (2016) has mentioned how the world's most progressive companies have invested much in analyzing data for their benefit. This research analysis method used was through a correlation analysis.

Defined as a multivariate statistical technique used in determining a relationship between variables is correlation analysis (Demirci, 2018). The correlation analysis also helped to determine the relationship between the quantitative and categorical variables (Demirci, 2018). The collected data used for the correlational analysis showed both high and low correlations for supportive evidence (Demirci, 2018).

Interpretation of the results from the Statistical Package for Social Science (SPSS) program occurred by a comparison of the findings using correlation analysis to combine results into a spreadsheet. The SPSS helped obtain a more predictive analysis through utilizing that data for a T-Test (Hsu, Kopf, & Shows, 2015). SPSS is a data analysis tool for statistical calculations that are too complex to do by hand.

**Reporting and Dissemination**

After completing the quantitative measures for the surveys and correlation analysis, the information was ready for reporting to church gatekeepers and executive leadership. This information was given to them in a presentation format to include the data collected and findings.
Each question provided a form of an explanation of social media use in the Baptist church. The information provided can also be used for publication purposes in future research. Lastly, the data can be incorporated into other forms of communication, such as bulletin boards or through the church Facebook account.
CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

The theoretical framework described many ways that social media benefits organizations today. This review introduced relevant literature identifying the theoretical approaches of social media, challenges of social media marketing and effective strategies (Bae & Zamrudi, 2018), the use of social media within distributing political information (Casero-Ripolles, 2018), social media and-enabled communication awareness (Krancher, Dibbern & Meyer, 2018), exploring social media engagement behaviors within consumers (Pentina, Guilloux & Micu, 2018), social media and consumers decisions in viral advertising (Seo, Li, Choi & Yoon, 2018), engagement experiment framework of social media platforms (Voorveld, Van Noort, Muntinga, & Bronner, 2018), and various gaps in research for future studies on social media use.

Current Research in the Literature

Bae and Zamrudi (2018) understand that unlocking digital potential gives many contributions to various motivators. The theoretical motivators of social media consist of personal identity, integration and social interaction, and entertainment (Bae & Zamrudi, 2018). Bae and Zamrudi (2018) identified the first personal identity through sub-motivations consisting of self-assurance, self-expression, and self-presentation. Secondly, integration and social interaction involved sub-motivations of social interaction, social identity, and helping other participants (Bae & Zamrudi, 2018).

Both Krancher et al. (2018) and Bae and Zamrudi (2018) displayed similarities relating to consumers' use of social media and motivational factors. Krancher et al. (2018) discovered two underlying motivations related to team episodes, communication, and awareness systems. First, Krancher et al. (2018) explained how the ambiguity of results regarding the association of the
amount of team communication during episodes and team performance. Secondly, how the lack of research examined technology-enabled communication awareness affected collaboration on social media projects longer than a few hours (Krancher et al., 2018).

The theoretical approach used by both Bae and Zamrudi (2018) and Krancher et al., (2018) discovered that people who use social media are doing so mainly for interaction with others of the same interest. That interest is driven by different sub-motivational contributors that drive these factors (Bae & Zamrudi, 2018). Hence, organizations that have this understanding of consumers’ motivations will help create more efficient brands in the market place (Bae & Zamrudi, 2018).

Bae and Zamrudi (2018) also introduced the COBRA concept showing the connection between how constructs of motivation and the multiple drivers of motivation. This allowed for each driver to be combined into consumers' usage of social media tendencies (Bae & Zamrudi, 2018). The findings of the study were useful for social media practitioners in the field, revealing the Indonesian retail market of consumers, and their increasing use of social media to make purchases while sharing their experiences (Bae & Zamrudi, 2018).

Bae and Zamrudi (2018) sample size consisted of 100 customers from two retail food stores. The collection of data occurred through both quantitative and qualitative methods (Bae & Zamrudi, 2018). For the quantitative data, the use of an online survey occurred and the results were abstracted using correlation and regression identifying the relationship from different constructs (Bae & Zamrudi, 2018).

Voorveld et al. (2018) explained the multilevel or multidimensional construct that emerges from multiple thoughts and feelings of rich experiences about reaching a personal goal. Voorveld et al. (2018) showed how the engagement of social media manifested in various
experiences (Voorveld et al., 2018). Multiple studies later implied how demonstrating the theory of multilevel engagement differs between brands and products (Voorveld et al., 2018).

Voorveld et al. (2018) sample size of research was 1,919 respondents who participated in taking a survey. Used in running a Principal Components Analysis (PCA) with eight components in SPSS was the questionnaire (Voorveld et al., 2018). The data set revealed 11 dimensions with all social media consumption moments as a unit of analysis (Voorveld et al., 2018).

Voorveld et al. (2018) and Pentina et al. (2018) were similar in their theoretical approach to social media engagement. Pentina et al. (2018) focused on the theory of Consumer Engagement Behaviors (CEBs) the generated active and creative behaviors, high-virality, and low-effort of motivated consumers who exhibited fewer complex needs. Pentina et al. (2018) also outlined characteristics of relationships, self-media, creative outlet, and collaboration.

Seo et al. (2018) talked about electronic word of mouth (e-WOM) sharing behaviors and how it encourages consumers to forward messages to others. Seo et al. (2018) could view how personal ties influence future sharing for senders and receivers. The method of e-WOM behavioral theory demonstrated many advertisement and message related influences that increase the motivation of social media users (Seo et al., 2018).

Casero-Ripollés (2018) theoretical approach focused on the consolidation of a more logic of network media in concept. There was no theory incorporated to demonstrate a strong connection to social media or behaviors associated. The researcher focused more on the digital environment itself and the political environment achieving support and attention via social media (Casero-Ripollés, 2018).

However, Seo et al. (2018) and Casero-Ripollés (2018) dealt with the aspect of the promotional use of social media and consumers. Both researchers contributed to the field,
introducing the influences of viral advertising for political information. Now that we considered the theoretical approach of the literature let's review the researcher's general approach to social media content.

**Social Media Marketing**

Social media is a marketing tool that's become a newly evolved way of using the World Wide Web (Bae & Zamrudi, 2018). This evolved way has introduced challenges of social media content management (Bae & Zamrudi, 2018). Researchers Bae and Zamrudi (2018) elaborated on how social media requires a continuation of new and fresh content for adopting social media marketing techniques. This has become a challenging task for organizations and created many limitations in embracing new technologies (Bae & Zamrudi, 2018).

Bae and Zamrudi (2018) determined that social media platforms have continually been used by marketing strategists to create their brand identity and awareness to obtain sales. The researchers further explored the potential effectiveness of social media marketing in engaging consumers and associated challenges (Bae & Zamrudi, 2018). They researched how social media has many possibilities for research to identify the most effective marketing strategies. Bae and Zamrudi (2018) research methods were for the Indonesian food retail sector. Let's discover other ways in which social media has impacted politics and information distribution.

**Social Media Politic**

In 2018, Casero-Ripolles researched the relationship between politics and social media. The key points that emerged were social media consolidating by having a more hybrid communication environment (Casero-Ripolles, 2018). As a result, the political environment discovered new principles and operating criteria affecting the informative process (Casero-Ripolles, 2018). Casero-Ripolles (2018) proclaimed that social media created transformations
introduced in political information through production, distribution, and consumption.

Consolidating social media in political communication puts technology directly in the center of academic debate (Casero-Ripolles, 2018). Social media digital platform has not yet replaced the efforts of journalist and conventional media (Casero-Ripolles, 2018). The researcher pointed out how ordinary social media users have shaped the information field (Casero-Ripolles, 2018). The information field consists of blogs, social networks, instant messaging services, video portals, and digital newspapers (Casero-Ripolles, 2018).

Casero-Ripolles (2018) did not specify a sample size of the research conducted. However, Casero-Ripolles (2018) used a one-to-many communication model to collect data. The type of statistical test used web analytics through technical filtering linked to algorithms degerming visible information and social filtering associated with the connectivity to social media propitiates (Casero-Ripolles, 2018).

Further research explains how social media has helped to set the public agenda by promoting demands and issues, placing them in the center of debate (Casero-Ripolles, 2018). Casero-Ripolles (2018) could identify strategies such as reverse agenda-setting that conditions the media agenda concerning politics. Having reverse agenda-setting through social media gives politicians an advantage for self-production advantages (Casero-Ripolles, 2018). Social media is evolving through politics and further enhancing communication awareness.

**Communication Awareness**

Krancher, Dibbern, and Meyer (2018) research indicated project teams mostly benefit from technology and social media enabled communication awareness. This focus of the study was to solve the inconclusive relationship between team communication during action episodes and team performance utilizing research on team communication (Krancher, Dibbern, & Meyer,
The teams used social media platforms to encourage constant communication while working on tasks (Krancher, Dibbern, & Meyer, 2018). The researchers discovered that the teams that used social media frequently communicated and achieved 'huge' outcomes with minimal efforts (Krancher, Dibbern, & Meyer, 2018).

Krancher, Dibbern, and Meyer (2018) set out to show how social media technology-enabled Communication Awareness (CA) of project teams. The research question asked if technology-enabled CA influenced the effectiveness and efficiency of the project team communications (Krancher, Dibbern, & Meyer, 2018). They could find a relationship between project teams of high communication awareness through Information Communication Technology (ICT) (Krancher, Dibbern, & Meyer, 2018). Feed provided to teams via Social Media Platforms (SMPs) could excel through communication (Krancher, Dibbern, & Meyer, 2018).

Krancher, Dibbern, and Meyer (2018) quantitative method sample size consisted of two teams for both studies. Study one had a total of 51 participants and study two had 35 (Krancher, Dibbern, & Meyer, 2018). The data collection used was ordinary least squares (OLS) regression for testing the hypothesis (Krancher, Dibbern, & Meyer, 2018). Krancher, Dibbern, and Meyer (2018) also used a three-step hierarchical regression strategy.

The key contribution that was theorized and demonstrating how the use of technology-enabled CA (Krancher, Dibbern, & Meyer, 2018). This was a key feature for SMPs, improving both the effectiveness and efficiency of project team communication (Krancher, Dibbern, & Meyer, 2018). Social media goes beyond team effectiveness and communication awareness, let’s explore social media engagement behaviors with consumers.
Engagement Behaviors

Pentina, Guilloux, and Micu (2018) research explored social media engagement behaviors from luxury shoppers located in Paris. This analysis was conducted through in-person interviews with consumers of luxury brands (Pentina, Guilloux, & Micu, 2018). They offered that marketers can preserve their unique social media position by providing top-quality content to reinforce brand associations (Pentina, Guilloux, & Micu, 2018). The associations in return would help formulate both active and creative behaviors, promote consumers' low efforts, and high virality behaviors from complex needs (Pentina, Guilloux, & Micu, 2018).

The researchers expressed how social media is a major resource for consumer decision making and brand-customer relationship development (Pentina, Guilloux, & Micu, 2018). They further analyzed how social media shifted the locus of brand creation from companies to customers and stakeholders (Pentina, Guilloux, & Micu, 2018). Social media has allowed for customers to focus on sharing their experiences and emotions through online social networks (Pentina, Guilloux, & Micu, 2018).

Data collection occurred by conducting 30 interviews with luxury consumers in Paris designer stores (Pentina, Guilloux, & Micu, 2018). This qualitative approach highlighted a constant comparison method to complete the analytic stages of research (Pentina, Guilloux, & Micu, 2018). Finally, Pentina, Guilloux, and Micu (2018) used investigator triangulation for expanding the coding of the transcribed texts and emerging themes for developing a grounded and conceptual approach.

Pentina, Guilloux, and Micu (2018) concluded that most luxury brands practice social media marketing (SMM) to increase business productivity (Pentina, Guilloux, & Micu, 2018). The researchers defined the term SSM as platforms and media that help to facilitate interaction,
content, and collaboration sharing among users (Pentina, Guilloux, & Micu, 2018). Social media is continuing to evolve into other forms of mass media of viral advertising.

**Viral Advertising**

Seo et al. (2018) research introduced the narrative transportation and paratextual features of social media in viral advertising. The researchers focused on how consumers are motivated to purchase and become more encouraged to forward promotional messages on to others (Seo et al., 2018). Their study helps contribute to this growing area of research on viral advertising (Seo et al., 2018). This form of advertising focus is directly on the processes and conditions, explaining how consumers share advertising messages on social media (Seo et al., 2018).

Seo et al., (2018) explained that electronic word of mouth sharing behaviors shows personal ties in how they influence future sharing intention of senders and receivers. Their study contributes to this by alluding that because of their ties, consumers are more likely to share their messages perceived as transporting (Seo et al., 2018). Sharing a message in narrative form is more enjoyable for readers (Seo et al., 2018). This is what makes personal ties become strengthened and more useful as resources (Seo et. al., 2018). Seo et. al., (2018) quantitative method sample size of the research was 50 undergraduate students. The data collection instrument was variance ANOVA on sharing intention that yielded significant effects (Seo et. al., 2018).

The researchers determined that there are specific factors that influence consumers choice to pass on viral advertising (Seo et. al., 2018). This viral advertising help to engage e-WOM behaviors (Seo et. al., 2018). These factors were categorized into three main areas advertiser related influences, sender related influences, and message related influences (Seo et. al., 2018). Overall, the existing brand relationships and perceptions about advertised brands affect consumer
sharing intentions (Seo et. al., 2018).

**Social Media Engagement**

Voorveld, Van Noort, Muntinga, and Bronner (2018) researched consumers engagement with social media platforms, and how they drive advertising and evaluations. Their method of research was through conducting surveys that mapped social media user’s engagement with Facebook, YouTube, LinkedIn, Twitter, Google, Instagram, Pinterest and snapchat (Voorveld, Van Noort, Muntinga, & Bronner, 2018). The researchers wanted to know their experiences and evaluations of advertising on such platforms of social media.

Their findings showed that engagement is highly contexted, specifically involving various types of experiences on social media (Voorveld, Van Noort, Muntinga, & Bronner, 2018). The findings stated that a different set of experiences was closely related to advertising evaluations (Voorveld, Van Noort, Muntinga, & Bronner, 2018). Researchers further explained how engagement with social media advertising a key denominator is in describing how social media engagement is related to advertising evaluations (Voorveld, Van Noort, Muntinga, & Bronner, 2018).

Researchers Voorveld, Van Noort, Muntinga, and Bronner (2018) adopted the framework of engagement experience, suggesting that digital experiences and engagement produces three characteristics. The first characteristics include consumer media interactions that enable advance knowledge on social media engagement (Voorveld, Van Noort, Muntinga, & Bronner, 2018). Secondly, viewing both positive and negative posts in response to advertising, helping to retrieve context-specific information (Voorveld, Van Noort, Muntinga, & Bronner, 2018). Thirdly, it was shown how engagement was demonstrated to be more predictive of advertising effectiveness (Voorveld, Van Noort, Muntinga, & Bronner, 2018).
Social Media Research Gaps

The future study on social media is to conduct quantitative research on consumer use of social media (Gibson, 2018). Companies must know the composition of marketing, which includes creating, communicating, delivering, and exchanging information that is valuable to society, clients, or customers (American Marketing Association, 2017). Social media marketing tools attract groups and specific persons through personalized messages getting their attention (Scott, 2015).

Social media platforms are highly visible and changing drastically on the way consumers are interacting (Bekoglu & Onayli, 2016). Bekoglu & Onayli (2016) explained how organizations must know the importance of managing the need for social media within their organizations. Social media should be the goal of business leaders to maintain growth by building a strong and loyal customer base (Widjaya, 2017). Lastly, organizations will need to identify how social media is benefiting their organizations for success.

Gibson (2018) identified several recommendations for further research on social media. First, he suggested that research on social media occurs by using a different sample of participants; rather, his study on brokers/agents (Gibson, 2018). Secondly, conducting a comparison of participants' perceptions of social media in another field of business (Gibson, 2018). Thirdly, using a quantifiable method of investigation on the consumer side of social media (Gibson, 2018). Gibson (2018) implied that having the consumers' point of view and quantifiable understanding of the consumer's role helps to advance research for organizations and the use of social media.

Ingram (2018) suggested that social media researchers expand the study to other international regions while excluding the American Demographic. Ingram (2018) expressed the
importance that further social media research in global demographics will help broaden the span. Lastly, the researcher suggested a strong consideration of times zones and the life span of social media networks globally (Ingram, 2018).

**Applications of Social Media Usage**

Social media applications such as Facebook and Instagram have used targeted content advertising (TCA) (Kanuri, Chen & Sridhar, 2018). Posting varies stories enables content platforms of social media to grow audiences while generating revenue from advertisements (Kanuri, Chen & Sridhar, 2018). Kanuri, Chen, and Sridhar (2018) expressed that the use of TCA requires all content platforms to decide what to post, when, and how much to spend on maximizing profits.

According to Kanuri, Chen, and Sridhar (2018), social media usage in 2016 had more than 1.8 billion users worldwide who spent, on average, 118 minutes a day on social media. This engagement actively of social media through likes, comments, shares, and link clicks were 77% (Kanuri, Chen & Sridhar, 2018). Other publications such as newspapers, magazines, and sports websites often use social media to disseminate information quickly to their audiences (Kanuri, Chen and Sridhar, 2018). For example, ESPN.com recorded to have 34 million Twitter page followers and post 24 times a day on average (Kanuri, Chen, and Sridhar, 2018). People magazine followers are now 6.8 million followers on their Facebook page and post 28 stories per day, on average (Kanuri, Chen and Sridhar, 2018). Building a social media following enables platforms that generate traffic on their websites while increasing online advertising revenue (Kanuri, Chen and Sridhar, 2018).
Summary of Chapter Two

Researchers identified various ways social media is utilized on diverse platforms but not its use within the church. Within this conceptual framework, the researcher included much content to help shape a generalize idea of social media use. The subsequent methodology focused on the dual use of social media and themes that coincide with each other. Specifically, the researcher examined preferences concerning social media marketing, politics, communication awareness, engagement behaviors, viral advertising, and engagement. To better understand social media use in Baptist churches on the southside of Chicago, this quantitative study had many perspectives relating to the benefits and needs of social media. This method had been designated as the general base for theoretical research and methodology for the completion of this study.
CHAPTER THREE: METHODOLOGY

The purpose of this research was to evaluate the use and effectiveness of using social media for church business among the leadership of Baptist churches. Social media was defined as Facebook and Instagram. Baptist church leadership was defined as pastor, member of the church’s board of directors or ministerial staff, and department leaders. Specifically, this investigation aims to describe the nature and purposes of social media usage for church matters, its effectiveness, and direction and significance of any associations between social media usage and church leaders’ gender and age. The goal was to provide evidence that may help Baptist Church leadership evaluate current policies and future directions for social media usage.

This chapter describes the methods used to collect the data for the current study in two main sections, research design and data processing and analysis. The main section, research design, is composed of six subsections that describe the subjects, instrumentation, process, methodological assumptions, limitations, and delimitations, respectively. The other main section describes data processing and analysis.

Research Design

The proposed study was quantitative. It used non-experimental associational and group comparison designs. The overarching question was, what is the contemporary use of social media for church business among Baptist Church leaders?

Research Questions and Hypotheses

Analysis was based on five research questions, listed below with hypotheses where applicable.
RQ1: How much time do Baptist Church leaders devote to using Facebook and Instagram for church business? This question will be answered with hypothesis testing.

H0: Baptist Church leaders devote an equal amount of time to using Facebook and Instagram for church business.

H1: Baptist Church leaders do not devote an equal amount of time to using Facebook and Instagram for church business.

RQ2: Which type of social media is more effective, Facebook or Instagram? This is a descriptive question that will be answered with hypothesis testing from Likert-type survey items measuring effectiveness.

H0: Facebook and Instagram are equally effective for church business.

H1: Facebook and Instagram are not equally effective for church business.

RQ3: What is the relationship between age and Baptist Church leaders’ use of Facebook and Instagram? This question will be answered with hypothesis testing.

H0: There is no statistically significant correlation between age and Baptist Church leaders’ use of Facebook and Instagram.

H1: There is a statistically significant correlation between age and Baptist Church leaders’ use of Facebook and Instagram.

RQ4: What is the relationship between gender and Baptist Church leaders’ use of Facebook and Instagram? This question will be answered with hypothesis testing.

H0: There is no statistically significant difference between male and female Baptist Church leaders’ use of Facebook and Instagram.

H1: There is a statistically significant difference between male and female Baptist Church leaders’ use of Facebook and Instagram.
Selection of Subjects

The inclusion criteria for recognizing individuals who qualify to participate in this study involved two dimensions. One, participants were individuals who served a Baptist Church as its pastor, member of its board of directors or ministerial staff, or one of its department leaders. Two, participants were members of church leadership as defined for this study who also use Facebook and Instagram in some capacity for church business.

This section describes sample selection to obtain a representative sample of the population of interest. The theoretical or target population was composed of men and women who hold leadership positions in Baptist Churches as defined for this study, which were of theoretical interest to the researcher as the group to which she would like to generalize. The accessible population or sampling frame were the group of participants to whom the researcher had access (O’Sullivan, Rassel, Berner, & DeVance, 2017). For the current study, the researcher had access to the leadership of Baptist Churches located on the South Side of Chicago. The accessible population or sampling frame included the 12 zip codes on Chicago’s South Side: 60615, 60617, 60619, 60620, 60621, 60628, 60633, 60636, 60637, 60643, 60649, and 60653 (https://www.zipmap.net/Illinois/Cook_County/Z_South_Chicago.htm). Each zip code was a cluster or collection of potential participants who do not overlap (O’Sullivan et al., 2017).

The selected sample were a subset of participants selected from the accessible population by the researcher and invited to participate in this study (O’Sullivan et al., 2017). The selected sample were 6 zip codes or clusters that identified with the following probabilistic sampling technique. Each zip code was labeled by its last two digits (for example, the Chicago zip code 60621 was labeled as “21”). Then a random numbers generator (https://www.graphpad.com/quickcalcs/randomN2/) was used to randomly identify six zip codes
as the first six zip codes that emerged. Identified zip codes were: 60615, 60617, 60619, 60628, 60636, and 60653. The above steps by which the selected sample was chosen made the sampling design a probabilistic process (O’Sullivan et al., 2017).

Church leadership in the identified zip codes were looked up on the Internet Yellow Pages, contacted by church website email, and invited to participate so that everyone in a cluster had an equal chance of being selected. These steps were taken to obtain a representative sample of the broader population. However, the demographics of Baptist Church leadership from the South Side of Chicago are unknown; providing this information was one of this study’s contributions to the literature.

Power analyses were conducted on the GPower 3.1 website to estimate the number of participants required. For bivariate correlations with an estimated medium effect size of .30, \( \alpha = .05 \) and power = .80, an estimated \( N = 67 \) participants would be needed. For group comparisons with an estimated medium effect size of .50, \( \alpha = .05 \) and power = .80, an estimated \( N = 128 \) participants would be needed (64 males and 64 females). If the true population difference in social media usage for Baptist Church business between participants who are younger versus older, or male versus female, is small to medium, a study of 67-128 Baptist leaders would detect the impacts of age and gender 80% of the time or in 8 out of 10 replications of this study.

Consequently, an estimated 150 members of Baptist Church leadership were invited, to cover for attrition. Individuals in the selected sample did not complete the study for many reasons (usually unknown); the extent to which individuals do not complete the study explains differences between the selected sample and the actual sample (O’Sullivan et al., 2017). The actual sample is composed of the participants who completed the study and whose data are
actually used in the analysis and in the report. The ratio of the size of the actual sample to the selected sample was reported as the response rate (O’Sullivan et al., 2017).

**Instrumentation**

This study collected data with the Baptist Leadership and Social Media Survey (Appendix A). This was conducted through SurveyMonkey.com. It was anticipated for the participants to spend 19 mins answering questions pertaining to the study. The directions were precise and understandable for all participants to complete. After getting all questions answered through SurveyMonkey.com site it was much easier to transpose that information for data processing.

The formulation of the questions was constructed to aid the research questions posed in chapter one of this study. There was a total of 21 questions that were being asked to compile data leading into processing for final conclusions. The questions were listed in a multiple choice close-ended format to include Likert scales. Currently, there no problems that have been reported by others who used this form of instrument. There was permission needed from all participants to consent before completing this survey for research (Appendix B).

**Process**

The researcher collected all information in accordance with National Louis University IRB policies. Once IRB permission to conduct the study was obtained, data collection begin. The survey was uploaded onto the SurveyMonkey.com site. This commercial survey site allows researchers to set up parameters that ensure participant confidentiality and privacy with the option of excluding participants’ computer IP addresses from downloaded databases. Participants’ confidentiality and privacy was further secured with SurveyMonkey.com’s (2019) Secure Sockets Layer (SSL) encryption and by identifying participants with unique untraceable
case numbers. Data remained in the researcher’s password-protected computer; she will be the only person with access to the computer. Three years after the completion of the proposed study, data will be erased and shredded.

The researcher looked up Baptist Churches in the select zip codes (described above in Selection of Subjects section) and contacted leadership through email to invite members of their leadership team to participate. The emailed invitation (Appendix B) briefly described the purpose of the study, benefits of participation, steps taken to ensure participant confidentiality, and included the direct link to the SurveyMonkey.com survey. After this initial invitation, leadership received two follow-up email reminders at one-week intervals prior to the survey closing date. The survey was available until an adequate sample had been obtained. An inadequate number of participants was obtained from the 6 randomly selected zip codes, participants from the remaining zip codes were contacted as well.

To further fulfill ethical guidelines established for protection of participants during data collection, the researcher followed the best practices by providing each Baptist Church leader with an understanding of the purpose of this study and solicited a signed consent form (Appendix C and described below). Survey participants usually respond with greater candor when assured that their responses are and will remain anonymous and confidential (Creswell & Creswell, 2018). This study involved an important but potentially challenging topic, the adequacy of the application of social media as a tool of the modern Baptist Church in a large metropolitan area like Chicago, where parishioners may be frequent social media users themselves. Priority was given to employing confidentiality safeguards, as described above in the SurveyMonkey.com section.
Consent Form

The survey started with Informed Consent (Appendix C) to obtain each participant’s consent before starting the survey. The informed consent letter outlined the study purpose, procedures that protect participants’ rights and confidentiality, and the voluntary nature of participation. It further informed participants that compensation is not forthcoming, although a report of results is available upon request. Informed consent was presented in accessible and understandable language, with contact information for principal investigator RA and her university affiliation (Appendix C). Participants must agree to informed consent before data collection.

Methodological Assumptions

There were several assumptions. An untested assumption is that the accessible population of Baptist Church leadership of Chicago's South Side is representative of the theoretical population across the United States. Based on probabilistic sampling design, another assumption is that the selected sample is representative of Baptist Church leadership of Chicago's South Side in terms of age- and gender-distribution. An assumption is that participants do not view their responses as admissions of leadership inadequacies but view participation as a way to honestly acknowledge impediments to their church’s growth through lack of contemporary online communication behavior.

The proposed design combined associational and group comparisons. Threats to internal and external validity, credibility, and generalizability include the self-developed survey. The researcher was unable to locate a social media usage survey that could be modified for church leaders. So, the researcher developed the survey personally, based on several publications on social media usage. The researcher currently serves as an ordained minister in the city of
Chicago and has been a part of the religious community for several years; she had a substantial professional network and piloted test the survey on 3 colleagues. Pilot testing or external review involved the researcher asking three colleagues in her professional network to evaluate the survey for appropriate depth and breadth of content and readability, provide an estimate of the time it takes to complete, and provide any further suggestions for improvements. Moreover, the survey also included various items that were used to measure the reliability of this study’s database, although the survey will not have been psychometrically validated before this study is conducted.

**Limitations**

Limitations are intrinsic but uncontrollable elements that potentially impact a researcher’s ability to obtain accurate results (Creswell & Creswell, 2018). Limitations in this study of social media use by Baptist Church leaders included willingness to participate, lack of external verification of status as a current Baptist Church leader, assumptions that their knowledge and reports of the church’s use social media are accurate, and that they completed the survey themselves. Response accuracy was a potential limitation along with their willingness to communicate their social media habits honestly. That is, members of Baptist leadership may opt to give “the professional response” based on what they think the researcher expects to hear or act on a need to “cover” for what they believe to be their ministry’s, their ministry’s leadership, or their own shortcomings. Limitations also included the researcher’s lack of knowledge about any unique personal or professional dilemmas that resulted from the participants’ use of or attempted use of social media that impacts their current behavior (e.g., if a participant was bullied online).

This study generated self-reported information about social media use. Self-report measures may be misleading. They do not measure participants’ behavior directly (O’Sullivan et
al., 2017) and the current study cannot track specific media usage but instead will rely on participants’ word. Self-report measures may also be influenced by any bias participants feel due to awareness of being studied and/or any responding wish to appear to be satisfactory to researchers (i.e., the social desirability bias). The latter consideration seems likely to be relevant to the topic of efficacy of social media usage because participants may wish to conceal something based on potential views of personal shortcomings.

**Delimitations**

The primary delimitation is that the researcher chose to study social media usage at the level of Baptist Church leadership rather than Baptist Church parishioners. The other delimitation is the choice to study Baptist churches instead of churches of other denominations. This study’s findings did not generalize to church leadership or members of churches of other denominations.

**Data Processing and Analysis**

Survey data was downloaded from SurveyMonkey.com as an Excel or SPSS spreadsheet. Analyses was done with SPSS dedicated statistical software v. 25. Percentages were to be rounded off to whole numbers. Statistical significance was set at \( \alpha = .050 \), two-tailed. Participants were identified with case numbers. Survey responses were examined for missing data points; decisions were made at that time about cleaning those cases (e.g., cases that are missing a substantial number of survey items may be removed). Continuous variables were screened for normality, linearity, outliers, and homoscedasticity with inspection of histograms and normal P-P plots for normality, box plots for outliers and skew, scatterplots for linearity, residual plots for homoscedasticity, and the significance of Schapiro-Wilks W statistics (Tabachnick & Fidell, 2019).
The content validity and reliability of the Baptist Leadership Social Media Use Survey (Appendix A) was evaluated in two ways. First was external review (described above). Second internal review of the data for reliability once the data was in hand; internal consistency was measured with Cronbach’s α for conceptually-related survey items.

The proposed analyses (Pearson correlations and group comparisons with either t tests or ANOVA) require normally-distributed data; variables that are non-normal may be transformed to improve normality (Tabachnick & Fidell, 2019). Categorically-scaled variables were described with frequencies and percentages. Continuously-scaled variables also were described with descriptive statistics such as means, standard deviation, and range for variables.

**Summary of Chapter Three**

The purpose of this study was to evaluate the use and effectiveness of using social media for church business among the leadership of Baptist churches. Chapter Three served as an overview of the methodology, describing the methods used for collecting data in two sections. Each section was represented through the research design and data processing and analysis. The main sections covered the important layout of the research design describing the subjects, instrumentation, process, methodological assumptions, limitations, delimitations and concluding with data processing and analysis. The methodology will be implemented and findings written in Chapter Four.
CHAPTER FOUR: RESULTS

The purpose of this research was to discover how members of the leadership of Baptist churches use social media for church business, matters, and perceptions about current and future use. In addition, this investigation aimed to identify associations between social media usage and church leaders’ gender and age. The goal was to provide evidence that may help Baptist Church leadership evaluate their church’s current policies and develop potential future directions. For the purposes of this study, social media consisted of Facebook and Instagram. Defined as pastor, member of the church’s board of directors or ministerial staff, and department leaders was Baptist church leadership.

This chapter is divided into nine sections. The first section lists the research questions. The second section describes pre-analysis data handling. The third section presents demographic descriptive statistics. The fourth section presents general social media preferences. The fifth-eighth sections present results for RQ 1, RQ 2, RQ 3, and RQ 4, respectively. The ninth section is the summary.

Research Questions

This non-experimental, quantitative study used descriptive and group comparison designs. The overarching question was, What is the contemporary use of Facebook and Instagram among Baptist Church leaders for church business? Analysis was based on four research questions. Hypotheses, where applicable, are presented in the section that presents the results of addressing the specific research question.

RQ1: How much time do Baptist Church leaders devote to using Facebook and Instagram for church business?

RQ2: Which type of social media is more effective, Facebook or Instagram?
RQ3: What is the relationship between age and Baptist Church leaders’ use of Facebook and Instagram?

RQ4: What is the relationship between gender and Baptist Church leaders’ use of Facebook and Instagram?

**Pre-Analysis Data Handling**

Downloaded from SurveyMonkey.com as an Excel spreadsheet and transferred to dedicated statistical software SPSS v. 25 for analysis was the survey data. Participants were identified with case numbers. Screening for missing data points revealed a small number of scattered blank responses. These did not show any obvious pattern; the mean replaced the missing responses for continuous data since this enables the case to be included in analysis without changing the outcome and helps small databases retain cases (Tabachnick & Fidell, 2019). Statistical significance was set at \( \alpha = .050 \), two-tailed.

RQ 1 included a paired samples \( t \)-test (aka matched or repeated measures \( t \) test), the appropriate test to use to establish whether the difference between two related measures on a continuous scale (i.e., variables measured on a ratio or interval scale, Weaver & Goldberg, 2011) is statistically significant. An example in the current study was whether the difference between Facebook use and Instagram use was significant. Once that comparison is done, inspection of the mean or average difference between the means reveal how the two groups compared. The paired samples \( t \)-test calculations generate the difference between each person’s two answers. The results will then be used to generate the overall mean difference. This provides a measure of how similar or dissimilar each participant was on the two measures. The standard error (SE) of the difference is the standard deviation of the differences. Both standard error and standard deviation reflect the extent to which the individual data points differ from the mean. The larger the
numeric value of the SE of the difference, the more dissimilar each participant was on the two measures. Larger SE’s indicate that the estimate of the differences (based on the sample we are working with) is less accurate and smaller SE’s indicate that the estimate of the differences is more accurate. Calculation of effect sizes occurred by using Cohen's $d$ to assess the magnitude and practical importance of results regardless of statistical significance (Weaver & Goldberg, 2011). Cohen’s $d$ divides the average (mean) difference between means by the standard deviation and is interpreted as indicative of small ($d = .20$), medium ($d = .50$), or large ($d = .80$) effects of the independent variable.

RQ 3 was addressed with ANOVA tests. ANOVA is the acronym for analysis of variance and refers to a large family of tests that compare means across three or more groups ($t$ tests are used to compare means across two groups; Weaver & Goldberg, 2011). ANOVA results indicate whether the groups are similar enough to have most likely been sampled from one population or different enough to suggest that at least one of the sampled groups came from a different population. In the latter case, the group is significantly different. ANOVA generates an $F$ statistic, that is always positive, which is a ratio of the variance between the groups divided by the variance within the groups. When there is roughly comparable variance between and within the groups, the $F$ statistics is close to one in value, assumption that the sampled groups come from the same population, and deemed statistically non-significant. Higher $F$ statistics reflect greater differences between groups. Due to small sample size, verification of the ANOVA results in the current study occurred with Brown-Forsythe (BF) robust tests of the equality of means. For significantly different groups, the statistic called partial eta squared ($\eta^2$) measured the size of the effect of the independent variable. The interpretation of the statistic was the amount of variance in the dependent variable (the variable used to generate group means) that is explained
by the independent variable (the variable used to create the groups). Interpretation of numeric values occurred categorically, which was indicated as small (0.01), moderate (0.06), or large effects (0.14). Planned comparisons occurred with Tukey’s HSD tests to identify significantly different pairs of groups.

RQ 4 addressed gender differences examined with independent samples t-tests, the appropriate test to use when exploring differences between the means of two unrelated groups on a continuous dependent variable (Weaver & Goldberg, 2011). Each participant is only included in one group. The t-test generates a t-statistic and a p-value (which is based on the number of degrees of freedom, calculated as the total number of data points minus 2). Comparison of the p-value ($p =\text{probability}$) to the alpha level allows for a decision to reject or fail to reject the null hypothesis. Effect sizes were calculated using Cohen’s $d$ to assess the magnitude and practical importance of results (Weaver & Goldberg, 2011), regardless of statistical significance.
### Demographic Descriptive Statistics

**Table 1**

*Participant Demographics*

<table>
<thead>
<tr>
<th>Participants</th>
<th>Gender</th>
<th>Age</th>
<th>Leadership Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female</td>
<td>48</td>
<td>Ministerial Staff</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>52</td>
<td>Pastor</td>
</tr>
<tr>
<td>3</td>
<td>Female</td>
<td>N/A</td>
<td>Ministerial Staff</td>
</tr>
<tr>
<td>4</td>
<td>Female</td>
<td>42</td>
<td>Board of Directors</td>
</tr>
<tr>
<td>5</td>
<td>Female</td>
<td>55</td>
<td>Ministerial Staff</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td>60</td>
<td>Board of Directors</td>
</tr>
<tr>
<td>7</td>
<td>Female</td>
<td>N/A</td>
<td>Department Leader</td>
</tr>
<tr>
<td>8</td>
<td>Male</td>
<td>52</td>
<td>Pastor</td>
</tr>
<tr>
<td>9</td>
<td>Male</td>
<td>67</td>
<td>Ministerial Staff</td>
</tr>
<tr>
<td>10</td>
<td>Male</td>
<td>65</td>
<td>Board of Directors</td>
</tr>
<tr>
<td>11</td>
<td>Female</td>
<td>62</td>
<td>Department Leader</td>
</tr>
<tr>
<td>12</td>
<td>Female</td>
<td>58</td>
<td>Ministerial Staff</td>
</tr>
<tr>
<td>13</td>
<td>Male</td>
<td>29</td>
<td>None of the Above</td>
</tr>
<tr>
<td>14</td>
<td>Male</td>
<td>59</td>
<td>Ministerial Staff</td>
</tr>
<tr>
<td>15</td>
<td>Male</td>
<td>59</td>
<td>Pastor</td>
</tr>
<tr>
<td>16</td>
<td>Female</td>
<td>40</td>
<td>Department Leader</td>
</tr>
<tr>
<td>17</td>
<td>Female</td>
<td>38</td>
<td>Ministerial Staff</td>
</tr>
<tr>
<td>18</td>
<td>Female</td>
<td>43</td>
<td>Department Leader</td>
</tr>
<tr>
<td>19</td>
<td>Female</td>
<td>25</td>
<td>Department Leader</td>
</tr>
<tr>
<td>20</td>
<td>Male</td>
<td>36</td>
<td>None of the Above</td>
</tr>
</tbody>
</table>
A total of $N = 25$ Baptist church employees agreed to participate in this study. This section presents the demographic data, which show that the modal participant was a 50-year-old man who held a leadership position in the church as part of the ministerial staff.

The participants were evenly divided between men, 52%, $n = 13$ males, and women, 48%, $n = 12$ females, shown on Figure 1. The average participant was in his or her 50s, $M = 50.27$ years old, with about a decade of variation, $SD = 11.86$ years. There was a broad range between the youngest and older participant, $min = 25$ years old, $max = 67$ years old.

*Figure 1.* Percent distribution of men and women in the study.
The majority of participants held a leadership position at the church (88%, \( n = 22 \) participants in leadership; \( n = 3 \) participants outside of leadership, 12%). Participants identified the position they held in their Baptist Church from an array of four choices. The distribution of their responses is illustrated on Figure 2 in descending order. Just under half of the participants worked as ministerial staff (\( n = 10 \) participants, 40%). The remaining participants were pastors, department leaders, or a member on the Board of Directors (\( n = 6 \) pastors, 24%; \( n = 5 \) department leaders, 20%; \( n = 4 \) Board of Directors members, 16%).

![Figure 2. Frequency distribution of percentages of participants by position in the Baptist Church.](image)

**General Social Media Preferences**

Before addressing the research questions, this section presents three types of baseline information about participants’ use of Facebook and Instagram for church business. The first type of baseline information was if participants currently used Facebook and/or Instagram for church business. The second type of baseline information was the amount of time they devoted to using Facebook and Instagram for church business. The third type of baseline information was the day of the week that leadership devoted to using Facebook and Instagram
for church business. This section shows that participants preferred to use Facebook, but used both Facebook and Instagram ‘very often’ and most typically on Sundays.

**Current use Facebook and/or Instagram for church business**

Participants were asked whether they tended to use Facebook, Instagram, or both for church business. Figure 3 illustrates their clear preference: The majority used Facebook, about three-quarters (72%, $n = 18$ participants). The remaining participants, or about a quarter, used both Facebook and Instagram (28%, $n = 7$ participants). None of the participants chose Instagram as their primary use of social media for church business.

![Currently Use Facebook and/or Instagram](image)

*Figure 3. Percentage of participants who use Facebook or both Facebook and Instagram for church business.*

**Time devoted to Facebook and Instagram for church business**

Participants were then asked to estimate the amount of time they devoted to using both Facebook and Instagram for church business. Figure 4 shows their responses. Taken together, 44% or less than half of the participants used Facebook and Instagram relatively infrequently, from not at all to somewhat often. Over half of the participants used Facebook and Instagram very often or extremely often, 56%. The largest group of these, or about a third, used Facebook
and Instagram very often (36%, $n = 9$ participants).

![Frequency distribution of time devoted to using Facebook and Instagram for church business](image)

*Figure 4.* Frequency distribution of time devoted to using Facebook and Instagram for church business.

**Days devoted to Facebook and Instagram for church business**

The third type of baseline information asked participants to identify the day of the week that they were most likely to devote to using Facebook and Instagram for church business. Figure 5 shows that the majority preferred Sunday (60%, $n = 15$ participants). The next two days that were preferred were Wednesdays (12%, $n = 3$ participants) and Saturdays (12%, $n = 3$ participants). Tuesdays and Fridays were the least popular.
Figure 5. Frequency distribution of the days of the week most likely devoted to using Facebook and Instagram for church business.

Results for RQ 1

RQ1 was, How much time do Baptist Church leaders devote to using Facebook and Instagram for church business? To answer RQ1, participants were asked to estimate how often they used Facebook for church business on a daily basis and, separately, how often they used Instagram for church business daily. The response array was a 5-point frequency scale coded so that higher values reflected greater frequency (1 = not at all often, 2 = not so often, 3 = somewhat often, 4 = very often, 5 = extremely often).

Figure 6 illustrates the mean daily frequencies of using Facebook and Instagram for church business. Mean frequencies showed that participants used Facebook more often every day than they used Instagram every day for church business. The mean frequency of using Facebook daily reflected a rating between ‘somewhat often’ and ‘very often’ (Facebook: $M = 3.52, SD = 1.01, n = 25$ participants). In comparison, the mean frequency of using Instagram daily reflected a rating of ‘not so often’ (Instagram: $M = 2.24, SD = 1.18, n = 21$ participants). Note that fewer
participants chose to estimate their daily use of Instagram for church business compared to those who used Facebook.

Figure 6. Bar graph of mean daily frequencies of using Facebook and Instagram for church business.

Although participants used Facebook more often than Instagram on a daily basis, there was a direct, significant, and modest correspondence between the daily frequency of Facebook versus Instagram, \( r(19) = .49, p = .025 \). The two sets of frequency data were compared with a paired samples \( t \) test. The hypotheses were:

\( H_0: \) Baptist Church leaders devote an equal amount of time every day to using Facebook and Instagram for church business. The difference was statistically non-significant.

\( H_1: \) Baptist Church leaders do not devote an equal amount of time every day to using Facebook and Instagram for church business. The difference was statistically significant.

Results of the \( t \) test showed that the difference in daily use frequencies was statistically significant, \( t(20) = 5.14, p < .001, \text{ mean difference } = 1.28, 95\% \text{ CI of the difference } [0.76, 1.81], SE = 0.25 \). The null hypothesis was rejected. The effect of differences between daily use of Facebook and Instagram for church business was very large, Cohen’s \( d = 1.12 \).
Answer to RQ 1

The answer to RQ1 (How much time do Baptist Church leaders devote to using Facebook and Instagram for church business?) was that participants used Facebook on a daily basis more frequently than they used Instagram on a daily basis for church business, although there was a strong, positive, and statistically significant correlation in daily use between the two types of media. On average, participants used Facebook somewhat to very often but used Instagram ‘not so often.’ The differences in the two types of media had a very large effect on church use.

Results for RQ 2

RQ2 was, Which type of social media is more effective, Facebook or Instagram? The response array was measured with a 5-pt Likert scale of effectiveness (1 = not at all effective, 5 = extremely effective).

Participants were asked to identify the type of social media that was the most effective for church business among three choices: Facebook, Instagram, or both Facebook and Instagram. The majority said Facebook was the most effective (Facebook: 83%, n = 19 out of 23 participants). No one chose Instagram. However, four participants chose both Facebook and Instagram (17% out of 23 participants). The skewed distribution is illustrated on Figure 7. The conclusion was that Facebook and Instagram are not equally effective for church business because four out of 5 participants identified Facebook as more effective. Because of the obvious skew towards Facebook, statistics were not run.
Figure 7. Distribution of participants by the most effective social media for church business, Facebook or both Facebook and Instagram.

Along these lines, participants were asked to comment on the effectiveness of Facebook for church uses compared to competing social media, although the competition was unspecified on the survey. Again, the response array was on a 5-pt Likert scale of effectiveness (1 = not at all effective, 5 = extremely effective). The distribution of responses, illustrated on Figure 8, shows that reference to other types of social media divided the participants. Approximately half of the participants, 46%, said that Facebook was not at all to somewhat effective compared to other types of social media. The other half, 54%, rated Facebook as very effective to extremely effective for church business compared to other types of social media.
Figure 8. Frequency distribution of Facebook’s effectiveness compared to other types of social media for church business.

How Participants Use Facebook and Instagram for Church Business

Consideration of the above ratings of effectiveness raised questions about the purposes for which participants used social media in conducting church business. Figure 9 and Figure 10 illustrate the percentages of participants in the four usage categories. In descending order, participants primarily used both types of media to communicate, and less often to collaborate, to organize and store information, and to support individual learning. There were slight differences in the percentages of participants across the different uses (to communicate: 54% Facebook vs 44% Instagram, to collaborate: 21% Facebook vs 25% Instagram, to organize and store information: 17% Facebook vs 19% Instagram, and to support individual learning: 8% Facebook vs 13% Instagram).
The similarity of prioritized uses of Facebook and Instagram for church business (Figs. 9 & 10) raised questions about whether the individual participants tended to use both Facebook and Instagram for the same uses. For example, did the individuals who primarily used Facebook to communicate with church members also primarily use Instagram to communicate with church members? Only 16 participants provided answers to both usage survey questions. The cross-
tabulation of their responses is illustrated on Figure 11. Starting from the left side of the graph, most of the participants who used Facebook to communicate also used Instagram to communicate; however, two of the participants who used Instagram to communicate used Facebook to collaborate or support learning, respectively. Four participants used Facebook to organize information; two of them also used Instagram to organize information but the other two used Instagram to collaborate. Five participants used Facebook to collaborate; only one also used Instagram to collaborate. Two participants used Facebook to support learning, but neither used Instagram to support learning. In essence, Figure 11 shows that participants who primarily used Facebook for communication also used Instagram for communication. However, participants who primarily used Facebook to organize, collaborate, or support learning tended to use Instagram for other purposes.

Figure 11. Cross-tabulation of similarity and differences in use of Facebook and Instagram for church business.
Answer to RQ 2

The answer to RQ2 (Which type of social media is more effective, Facebook or Instagram?) was Facebook. The majority of participants (83%) identified Facebook as more effective for church business than the use of both Facebook and Instagram. Although 17% said the combination of Facebook and Instagram was the most effective, no one identified Instagram as the most effective. However, participants were divided on whether Facebook was more effective for church business compared to other types of social media. Participants who primarily used Facebook for communication also used Instagram for communication, whereas participants who primarily used Facebook to organize, collaborate, or support learning tended to use Instagram for other purposes.

Results for RQ 3

RQ3: What is the relationship between age and Baptist Church leaders’ use of Facebook and Instagram? In keeping with the comparative nature of this analysis, Facebook and Instagram were examined separately.

Age differences in Facebook usefulness

Mean ages across categories of usefulness of Facebook for church business are illustrated on Figure 12. Participants who said Facebook was somewhat useful were in their mid-50’s on average ($M = 56.86$ years, $SD = 13.52$, $n = 7$ participants). Participants who said Facebook was very useful were in their low-50’s on average ($M = 52.83$ years, $SD = 7.71$, $n = 6$ participants). Participants who said Facebook was extremely useful were in their low-40’s on average ($M = 43.44$ years, $SD = 9.99$, $n = 9$ participants).
The relationship between age and use for Facebook was evaluated with an ANOVA test. Age was measured on a continuous scale. Usefulness was measured categorically on a 5-pt Likert scale (1 = not at all useful, 5 = extremely useful). In the ANOVA, age was the dependent variable and usefulness was the independent variable. The hypotheses were:

\[ H_0: \text{Differences in participant ages across categories of Facebook usefulness were not statistically significant.} \]

\[ H_1: \text{Differences in participant ages across categories of Facebook usefulness were statistically significant.} \]

Results of the ANOVA for Facebook showed a strong statistical trend toward significant differences across ages, although the null hypothesis was retained, \( F(2, 19) = 3.31, p = .059 \). This result was verified by the Brown-Forsyth test, \( BF(2, 15) = 3.36, p = .062 \). Table 2 shows the results of the Tukey HSD planned comparisons of ages across categories of usefulness of Facebook; mean ages were not sufficient to achieve significance. However, there was a large effect of age on attitudes of Facebook’s usefulness, \( \eta^2 = .26 \).
Table 2

*Tukey HSD Multiple Comparisons of Ages across Categories of Usefulness of Facebook*

<table>
<thead>
<tr>
<th>Facebook Usefulness</th>
<th>n</th>
<th>Subset for $alpha = 0.05$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Useful</td>
<td>9</td>
<td>43.44</td>
</tr>
<tr>
<td>Very Useful</td>
<td>6</td>
<td>52.83</td>
</tr>
<tr>
<td>Somewhat Useful</td>
<td>7</td>
<td>56.86</td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td>.072</td>
</tr>
</tbody>
</table>

**Age differences in Instagram usefulness**

Mean ages across categories of Instagram usefulness for church business are illustrated on Figure 13. It shows that participant attitudes spanned four categories of usefulness.

Participants who said Instagram was not at all useful were in their mid-60’s on average ($M = 63.00$ years, $SD = 2.82$, $n = 4$ participants). Participants who said Instagram was somewhat useful were nearly 50 on average ($M = 49.33$ years, $SD = 7.42$, $n = 6$ participants). Participants who said Instagram was very useful were in their low-40’s on average ($M = 42.75$ years, $SD = 8.22$, $n = 4$ participants). Participants who said Instagram was extremely useful were not yet 40 years old on average ($M = 39.75$ years, $SD = 10.11$, $n = 4$ participants).

*Figure 13. Mean ages across categories of Instagram usefulness for church business.*
The relationship between age and use of Instagram was evaluated with an ANOVA test. Age was the dependent variable. Usefulness was the independent variable. The hypotheses were:

\( H_0: \) Differences in participant ages across categories of Instagram usefulness were not statistically significant.

\( H_1: \) Differences in participant ages across categories of Instagram usefulness were statistically significant.

Results of the ANOVA showed that differences in participant ages across categories of Instagram usefulness were statistically significant and the null hypothesis was rejected, \( F(3, 14) = 7.39, p = .003 \). This result was verified by the Brown-Forsythe test, \( BF(3.9) = 7.32, p = .008 \). However, there was a large effect of age on attitudes of Instagram’s usefulness, \( p\eta^2 = .61 \). Table 3 shows the results of the Tukey HSD planned comparisons of ages across categories of usefulness of Instagram. Participants who said Instagram was not at all useful for church business were significantly older than participants who said Instagram was extremely useful or very useful for church business. Participants who said Instagram was somewhat useful did not differ in age between those who said it was extremely or very useful, or between those who said Instagram was not at all useful.
### Table 3

*Tukey HSD Multiple Comparisons of Ages across Categories of Usefulness of Instagram*

<table>
<thead>
<tr>
<th>Instagram Usefulness</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely useful</td>
<td>4</td>
<td>39.75</td>
</tr>
<tr>
<td>Very useful</td>
<td>4</td>
<td>42.75</td>
</tr>
<tr>
<td>Somewhat useful</td>
<td>6</td>
<td>49.33</td>
</tr>
<tr>
<td>Not at all useful</td>
<td>4</td>
<td>63.00</td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td>.287 .079</td>
</tr>
</tbody>
</table>

**Answer to RQ 3**

The answer to RQ 3 (What is the relationship between age and Baptist Church leaders’ use of Facebook and Instagram?) was that ratings of the usefulness of Facebook and Instagram for church business were significantly associated with age. For both Facebook and Instagram, the relationship was inverse: Older participants rated usefulness lower and younger participants rated usefulness higher. For Facebook, the differences showed a strong statistical trend and there was a very strong effect of age. For Instagram, the differences were significant and there was again a very strong effect of age.
Results for RQ 4

RQ4 was, What is the relationship between gender and Baptist Church leaders’ use of Facebook and Instagram? Use was measured on a 5-pt Likert scale (1 = not at all useful, 5 = extremely useful). Gender was measured categorically. Figure 14 shows the cross-tabulation of Facebook usefulness categories and gender. There were not enough data points to compare usefulness categories and gender with chi-square tests, but the divergence across men and women in Figure 14 is easy to see. Nearly twice as many of the 13 men thought Facebook was somewhat useful ($n = 7$ men) compared to men who thought it was very useful ($n = 4$ men) or extremely useful ($n = 2$ men) for church business. In contrast, over twice as many of the 12 women thought Facebook was extremely useful for church business ($n = 8$ women) compared to very useful ($n = 3$ women) or somewhat useful ($n = 1$ woman).

![Bar Chart](image)

*Figure 14. Cross-tabulation of Facebook usefulness by gender.*

An independent samples $t$ test was run to compare mean usefulness between men and women for Facebook and Instagram, separately. The independent variable was gender. The dependent variable was usefulness. The hypotheses were:
\(H_0\): The difference in [Facebook or Instagram] usefulness between men and women was not statistically significant.

\(H_1\): The difference in [Facebook or Instagram] usefulness between men and women was statistically significant.

**Gender differences in Facebook usefulness**

Figure 14 illustrates the mean usefulness of Facebook in men and women. On average, men rated Facebook usefulness lower \((M = 3.62, SD = 0.77, n = 13\) participants\) than did the women \((M = 4.58, SD = 0.70, n = 12\) participants\). The men’s mean indicated that they considered Facebook to be somewhat to very useful. The women’s mean indicated that they considered Facebook to be very to extremely useful.

*Figure 15. Mean usefulness of Facebook in men and women.*
Results of the independent samples $t$ test for Facebook showed that the difference in usefulness between men and women was statistically significant, $t(23) = -3.34$, $p = .003$, $M_{\text{diff}} = -1.00$, $SE = 0.29$, 95% CI [-1.57, -0.37]. The null hypothesis was rejected. The effect of gender on ratings of Facebook usefulness was very strong, Cohen’s $d = 3.21$.

Gender differences in Instagram usefulness

Figure 15 illustrates the mean usefulness of Instagram in men and women. On average, similar to Facebook, men rated Instagram usefulness lower ($M = 2.40$, $SD = 1.35$, $n = 10$ participants) than did the women ($M = 4.00$, $SD = 1.18$, $n = 11$ participants). The men’s mean indicated that they considered Instagram to be ‘not so useful.’ The women’s mean indicated that they considered Instagram to be very useful.

![Figure 15. Mean usefulness of Instagram in men and women.](image)

Results of the independent samples $t$ test for Instagram showed that the difference in usefulness between men and women was statistically significant, $t(19) = -2.89$, $p = .009$, $M_{\text{diff}} = -1.60$, $SE = 0.55$, 95% CI [-2.75, -0.44]. The null hypothesis was rejected. The effect of gender on ratings of Instagram usefulness was very strong, Cohen’s $d = 1.33$. 

Further, participants were asked to address another element of gender and social media for church business: whether they thought men or women spent more time using Facebook and Instagram for it. Eleven of the 13 men chose women as the most frequent users of Facebook but said men and women were evenly split in their use of Instagram. All 12 of the women chose women as the most frequent users of Facebook but said that women were twice as likely to use Instagram as were men.

Finally, men and women were asked if they anticipated any future changes in their use of Facebook or Instagram. Their predictions were measured on a 5-pt Likert scale of likelihood of change (1 = not at all likely to change, 5 = extremely likely to change) and compared with independent samples t tests for Facebook and Instagram separately. The independent variable was gender. The dependent variable was the likelihood of changing their current use of Facebook or Instagram in the future. The hypotheses were:

\[ H_0: \text{The difference between men and women in the likelihood of changing their current use of Facebook or Instagram in the future was not statistically significant.} \]

\[ H_1: \text{The difference between men and women in the likelihood of changing their current use of Facebook or Instagram in the future was statistically significant.} \]

**Gender differences in likelihood of future change in Facebook use**

Figure 17, which illustrates the mean likelihood of changing current use of Facebook in the future, shows that men were more likely to change \( (M = 2.85, SD = 1.14, n = 13 \text{ participants}) \) than women were likely to change \( (M = 2.50, SD = 1.51, n = 12 \text{ participants}) \). The men’s mean indicated that they were ‘very likely’ to change their future use of Facebook on average. The women’s mean indicated they were between ‘somewhat likely’ and ‘very likely’ to change their future use of Facebook on average.
Figure 17. Gender differences in the likelihood of changing current use of Facebook in the future.

Results of the independent samples $t$ test for Facebook showed that the difference between men and women in the likelihood of changing their current use of Facebook in the future was not statistically significant, $t(23) = 0.65, p = .522, M \text{ diff} = 0.34, SE = 0.53, 95\% \ CI [-0.75, 1.44]$. The null hypothesis was retained. The effect of gender was small, Cohen’s $d = 0.26$.

Gender differences in likelihood of future change in Instagram use

Figure 18 illustrates the mean likelihood of changing their current use of Instagram in the future among men ($M = 2.09, SD = 1.22, n = 11$ participants) and women ($M = 1.55, SD = 1.29, n = 11$ participants). The men’s mean indicated that they were ‘not so likely’ to change their current use of Instagram in the future on average. The women’s mean indicated that they were ‘not at all’ to ‘not so’ likely to change their current use of Instagram in the future on average.
Results of the independent samples \( t \) test for Instagram showed that the difference between men and women in the likelihood of changing their current use of Instagram in the future was not statistically significant, \( t(20) = 1.02, p = .321, M_{\text{diff}} = 0.54, SE = 0.54, 95\% \ CI [-0.57, 1.66] \). The null hypothesis was retained. The effect of gender was small to medium, Cohen’s \( d = 0.43 \).

**Answer to RQ 4**

The answer to RQ 4 (What is the relationship between gender and Baptist Church leaders’ use of Facebook and Instagram?) was that women thought Facebook and Instagram were significantly more useful than did men. Women considered Facebook to be very to extremely useful for church business, whereas men considered Facebook to be somewhat to very useful for church business; the difference was statistically significant, and the effect of gender was very strong. The same held for Instagram, although usefulness ratings were lower: Women considered Instagram to be very useful whereas men considered Instagram to be ‘not so useful’.

*Figure 18. Gender differences in the likelihood of changing current use of Instagram in the future.*
for church business; again, the gender difference was statistically significant, and its effect was very strong. Men and women agreed that women were the gender most likely to use Facebook but saw gender use of Instagram differently: Eleven of the 13 men chose women as the most frequent users of Facebook but said men and women were evenly split in their use of Instagram. All 12 of the women also chose women as the most frequent users of Facebook but said that women were twice as likely to use Instagram as were men. With respect to changing their current use of social media in the future, men were very likely to change their use of Facebook in the future whereas on women were somewhat to very likely to; however, the difference between them was non-significant and the gender effect was small.

Summary of Chapter Four

The purpose of this research was to evaluate the nature and purposes of social media usage for church matters among the leadership of Baptist churches, and to identify any associations between social media use, age, and gender. The overarching research question was, What is the contemporary use of Facebook and Instagram among Baptist Church leaders for church business? The modal participant was a 50-year-old man who held a leadership position in the church as part of the ministerial staff, \( N = 25 \) Baptist church employees. General social media preferences showed that participants preferred Facebook over Instagram but used Facebook and Instagram ‘very often’ and most typically on Sundays.

The answer to RQ1 (How much time do Baptist Church leaders devote to using Facebook and Instagram for church business?) was that participants used Facebook on a daily basis more frequently than they used Instagram on a daily basis for church business. On average, participants used Facebook somewhat to very often but used Instagram ‘not so often.’ The differences in the two types of media had a very large effect on church use. However, there
was a strong, positive, and statistically significant correlation in daily use between the two types of media.

The answer to RQ2 (Which type of social media is more effective, Facebook or Instagram?) was Facebook. The majority of participants (83%) identified Facebook as more effective for church business than the use of both Facebook and Instagram. Although 17% said the combination of Facebook and Instagram was the most effective, no one identified Instagram as the most effective. However, participants were divided on whether Facebook was more effective for church business compared to other, unspecified types of social media. Participants who primarily used Facebook for communication also used Instagram for communication, whereas participants who primarily used Facebook to organize, collaborate, or support learning tended to use Instagram for other purposes.

The answer to RQ 3 (What is the relationship between age and Baptist Church leaders’ use of Facebook and Instagram?) was that ratings of the usefulness of Facebook and Instagram for church business were significantly associated with age. For both Facebook and Instagram, the relationship was inverse: Older participants rated usefulness lower and younger participants rated usefulness higher. For Facebook, the differences showed a strong statistical trend and there was a very strong effect of age. For Instagram, the differences were significant and there was again a very strong effect of age.

The answer to RQ 4 (What is the relationship between gender and Baptist Church leaders’ use of Facebook and Instagram?) was that women thought Facebook and Instagram were significantly more useful than did men. Women considered Facebook to be very to extremely useful whereas men considered Facebook to be somewhat to very useful; the difference was statistically significant, and the effect of gender was very strong. The same held
for Instagram although usefulness ratings were lower: Women considered Instagram to be very useful whereas men considered Instagram to be ‘not so useful;’ again, the gender difference was statistically significant, and its effect was very strong. Men and women agreed that women were the gender most likely to use Facebook but saw gender use of Instagram differently: Eleven of the 13 men chose women as the most frequent users of Facebook but said men and women were evenly split in their use of Instagram. All 12 of the women also chose women as the most frequent users of Facebook but said that women were twice as likely to use Instagram as were men.

With respect to changing their current use of social media in the future, men were very likely to change their use of Facebook in the future whereas on women were somewhat to very likely to; however, the difference was non-significant, and the gender effect was small. Men were ‘not so likely’ to change their current use of Instagram whereas women were not at all to not so likely to change in the future; however, this difference was also non-significant, and the gender effect was small.
CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Discussion

This dissertation helped us to understand how various types of leaders within Baptist church use social media for church business. The study being non-experimental, quantitative using descriptive, and group comparison designs helped define the contemporary use of Facebook and Instagram among leaders in the Baptist Church. The four research questions all yielded results that described the quantitative relationship between time and use, effectiveness between Facebook and Instagram, age and use, lastly, gender and use.

The data did not show any obvious patterns of participants skipping survey questions. Most participants were between the ages of 40-60 years old. However, there was a broad range between younger and older participants with the minimum 25 years old and maximum 67 years old. This shows us that social media use in the Baptist church are being utilized by the younger and older generation. This study helped to embark on a review of social media in the Baptist Church amongst leaders who serve their local congregation.

Social Media is becoming the driving force of influence amongst pastors, departmental leaders, board of directors and ministerial staff within the Baptist Church. Platforms such as Facebook and Instagram have shown that use of them are beneficial for church business. One would think that Sundays are for enjoying an exciting service, but for leaders it is showing as a day to maximize use of social media for church business. Social Media in the Baptist Church is helping leaders in the church to obtain information, connect, and build relationships with congregants.

Current research in the field has not shown any prior studies of Social Media in the Baptist Church, which makes this study even more significant. Chapter One summarizes the
need of Baptist churches to become more aware of how effective the use of social media is to their church. Chapter One also suggests that having such information may expose what is working or not working with social media for the organization.

The theoretical framework introduces the significance of Baptist Church leaders within Social Media platforms like Facebook and Instagram. The foundations of this theoretical research included a review of literature that is relevant in conjunction with Social Media in the church resource trends and themes. The literature review introduced scholarly and professional vendor preferences in relation to engagement behaviors, theoretical motivators, multilevel constructs, technology enabled communication awareness.

The methodology presented more exploration of the existence of Social Media platforms such as Facebook and Instagram. The methodology involved of the research design, research subjects, instrumentation, methodological assumptions, limitations, delimitations, data processing and analysis. The research results section analyzed the nature and purposes of social media usage for church matters among the leadership of Baptist churches, and to identify any associations between social media use, age, and gender. Chapter Four identified data in relation to the study’s research questions and associations between leadership of Baptist churches.

Conclusions

The problem addressed in this study was the lack of information upon social media usage for church matters among the leadership of Baptist churches, and to identify any associations between social media use, age, and gender. The main conclusions generated from the results of this study will be outlined before summarizing overall contributions.
This study found a three to one preference for Facebook over both Facebook and Instagram. That is when generalizations concerning individuals who fit Baptist church member demographics, there are three Facebook users for every Facebook/Instagram user.

What was found in this research study from general popularity of the two types of social media were that Facebook is the social media choice among the participants of this study. This was found in the use of social media among members of church leadership being that one out of every four participants included Instagram.

This research discovered that more participants used Facebook than they used Instagram daily. The evidence shows how Facebook was more popular amongst Baptist church leaders than Instagram and being more useful for church business. The differences in the two types of media had a very large effect on church use.

The effectiveness of Facebook and Instagram raised questions about the main purpose for which participants use social media in conducting church business. Within the usage categories Facebook was better used than Instagram for communicating, and less often to collaborate, to organize and store information, and to support individual learning. Facebook in this case is seen to be the better option for conducting church business. Overall, participants primarily used Facebook for communication also used Instagram for communication. However, participants who primarily used Facebook to organize, collaborate, or support learning tended to use Instagram for other purposes.

It was evident in this study that men result’s yielded that Facebook and Instagram were not useful tools for church business. The women of this study were very clear too, but their message was different. The women result’s yielded that Facebook and Instagram were useful tools for church business. The overall social media preference showed that participants
preferred Facebook over Instagram but used Facebook and Instagram ‘very often’ and most typically on Sundays. Even though both social media platforms had a big effect on church use, there were strong, positive, and statistically significant correlation in daily use between both. All participants were divided on whether Facebook was more effective for church business than Instagram. However, both Facebook and Instagram were used for communicating, but Facebook was primarily used to organize, collaborate, or support learning other than Instagram for other purposes.

Social media usage in this research of Facebook and Instagram both showed a strong statistical trend on the effect of age. Also, the results yielded how women considered Facebook to be extremely useful and men considered it somewhat useful. With the significance of men disagreeing with the women, they also showed trends in respect to changing their current use of Facebook in the near future and not so likely Instagram use.

**Recommendations for Practice**

This study can provide much valuable insight into understanding how various types of leaders within Baptist church use social media for church business. It also can be an awakening for leaders in the Baptist church to become more engage with online communities. Having the ability to maintain a presence in social media exposes the Baptist church to a bigger audience for conveying their message.

Leaders that have taken advantage of using social media have shown that it is useful for handling church business. This study used a quantitative approach to understand social media’s role among pastors, board of directors, ministerial staff, and departmental leaders. This study reinforced the importance of understanding the correlations of social media in the Baptist church through evaluation research. This paper did follow the consumer side of the
theoretical framework significance of Baptist Church leaders within Social Media platforms like Facebook and Instagram. As a result, there were confounding themes that presented theoretical and methodological underpinnings for future research to be conducted. Lastly, this study demonstrated social media as being an asset to the Baptist church, one that would not be going away.

**Recommendations for Further Research**

The research for social media usage for church business among the leadership of Baptist churches highlights a few topics regarding which further research that would be beneficial. The research study presents much industry research on social media evolving over time, it is recommended that researchers expand the study to other denominations within the religious communities across other cities. This will help in the researcher’s opinion to broaden the span of church demographic data on social media usage. Also, the researcher recommends and extension of time to collect more data to increase the number of participants.

Within the earlier stages of this research it was somewhat difficult to design a survey. One of the reasons is that any measure of frequency, such as in Figure 4, needed to have a time frame with it. For example, did the 36% of the participants who used Facebook and Instagram ‘very often’ use these medias during a church service, a day, a week, a month, a year? This element could have been changed earlier on in the study.

The RQ4 regarding gender differences in likelihood of the future change in Facebook use could have received more through an open-ended survey question. This opportunity would have yielded more insight from the participants of the study. To achieve better results, the researcher suggests strong consideration of crossing denominational lines and effectiveness of social media lifespans.
Lastly, the researcher suggests that future researchers and Baptist church leaders keep a perpetual interest in this field of study. This will help align the objectives of social media use in churches and its expansion across various platforms of technology. Having such investments will create new approaches for organizations to capitalize for the future.

**Summary of Chapter Five**

The purpose of this dissertation was to understand the relationship of leaders within Baptist church and their use of social media for church business. This quantitative research studied Baptist church leaders that serve in various capacities on the southside of Chicago and their use of social media. The results were in line with the theoretical framework in relation to engagement behaviors, theoretical motivators, multilevel constructs, technology enabled communication awareness.

This dissertation employed the consumer’s involvement portion of the theoretical framework. The study itself focused entirely of the leaders within Baptist church organizations. The results were in line with what was predicted from the literature. There were results that could be further expanded on in future studies on gender and social media use and social media preferences.

The results of this study may encourage leaders within the religious communities to implement their own social media strategies; such as using Facebook or Instagram, and many other applications for church business. It is hoped that the future of the industry involves embracing such technology within the church. However, there is still a lot to discover about social media use, and this study offered much support for the usefulness of social media in its entirety.
REFERENCES


Argosy University Online. (2018). Module 2 reading: Choosing a research design strategy. https://myclasses.argosy.edu/d2l/le/content/30303/viewContent/1587296/View


Collins, B. D. (2010). The definition of "church" may need to be re-examined in a social media World. Inside Counsel, 68-69.


APPENDIX A

Baptist Leadership Social Media Use Survey
1. What is your Gender?
   - Male
   - Female

2. What is your current age? ______

3. Are you currently in a leadership position?
   - Yes
   - No

4. What position do you currently serve in the Baptist Church?
   - Pastor
   - Board of Directors
   - Ministerial Staff
   - Department Leader
   - None of the Above

   (If you answer None of the Above to question #4 you are no longer required to complete this survey. Thank You for your cooperation.)

5. Do you currently use Facebook and/or Instagram for church business?
   - Facebook
   - Instagram
   - Both
   - None

   (If you answer None to question #5 you are no longer required to complete this survey. Thank You for your cooperation. If your answer is not None, please continue with the survey questions.)

6. How much time do you devote to using Facebook and Instagram for church business?
   - Extremely often
   - Very often
   - Somewhat often
   - Not so often
   - Not at all often
7. Which days of the week do you devote to using Facebook and Instagram for church business?
   - Sunday
   - Monday
   - Tuesday
   - Wednesday
   - Thursday
   - Friday
   - Saturday

8. Which type of social media is more effective, Facebook or Instagram?
   - Facebook
   - Instagram
   - Both
   - None

9. Overall, how would you rate Facebook?
   - Excellent
   - Very Good
   - Good
   - Fair
   - Poor

10. Overall, how would rate Instagram?
    - Excellent
    - Very Good
    - Good
    - Fair
    - Poor

11. How useful is Facebook to Baptist Church Leadership?
    - Extremely useful
    - Very Useful
    - Somewhat Useful
    - Not so useful
    - Not at all useful
12. How useful is Instagram to Baptist Church Leadership?
   - Extremely useful
   - Very Useful
   - Somewhat Useful
   - Not so useful
   - Not at all useful

13. Compared to competing social media, how effective is Facebook in the Baptist Church?
   - Much more effective
   - Somewhat more effective
   - About as effective
   - Somewhat less effective
   - Much less effective

14. Which of the following best describe your use of Facebook daily?
   - Extremely often
   - Very often
   - Somewhat often
   - Not so often
   - Not at all often

15. Which of the following best describe your use of Instagram daily?
   - Extremely often
   - Very often
   - Somewhat often
   - Not so often
   - Not at all often

16. How do you use Facebook in the Baptist Church?
   - To organize and store church information
   - To communicate
   - To collaborate with others
   - To support individualized learning

17. How do you use Instagram in the Baptist Church?
   - To organize and store church information
18. Looking ahead to the coming years will your use of Facebook change?

- Extremely change
- Very much change
- Somewhat change
- Not so much change
- Not at all change

19. Looking ahead to the coming years will your use of Instagram change?

- Extremely change
- Very much change
- Somewhat change
- Not so much change
- Not at all change

20. Who do you think spend more time using Facebook for Baptist Church business?

- Females
- Males

21. Who do you think spend more time using Instagram for Baptist Church business?

- Females
- Males
APPENDIX B

Email Invitation to Participate
Dear Sir or Madam,

As a Baptist minister on the South Side of Chicago since XXXX, I have learned that to survive, our churches must be contemporary. The most contemporary public behavior is social media.

However, little is known about if and how churches are currently using social media for church business. As a Baptist Church leader, do you think social media can grow your congregation? Do you use social media now?

I have contacted you because you are a Baptist Church leader on the South Side of Chicago. I am emailing to ask your Baptist Church’s leadership team to take about 19 minutes to participate in research that assesses the use and effectiveness of Facebook and Instagram for church business.

If you use Facebook and Instagram for church business, please help me by taking a short survey and encouraging all of your leadership members to also take it.

Please click this direct link to the SurveyMonkey.com survey: LINK HERE

The survey will take about 19 minutes. The benefit is promoting the presence and health of Baptist ministries on the South Side. There is no other compensation. You will remain anonymous; nothing in the survey can be traced to you.

Please contact me with any concerns or questions: robin.rogers@outlook.com

Thank You for your Participation!

Robin Amankwah
Doctoral Candidate, National Louis University
APPENDIX C

Participant Informed Consent
APPENDIX C

Participant Informed Consent

Thank You for your Participation!

I have been asked to participate in research that assesses the use and efficacy of social media for church business because I hold a leadership position in a Baptist church and use Facebook/Instagram.

If I participate, I will be asked to complete a 19-minute survey. My participation is voluntary. I may refuse to answer questions that make me uncomfortable and withdraw any time without finishing the survey. The risks of my participation are minimal, though consideration of the suitability of our church’s use of social media for our church’s business and parishioners may provoke discomfort. I will not receive compensation but may benefit by discovering new ways to use social media to improve the spiritual lives of myself and my parishioners.

This research study has been certified by the Institutional Review Board of National Louis University. My participation is confidential. Data will remain private. Any information that I provide will be labeled with a case number untraceable to me. Coded data will be maintained in a secure location accessible only to the principal investigator and published in the aggregate without linking me personal to the study in any way.

In the event that I have questions or require additional information, I can contact the researcher, Robin Amankwah, email: Robin.Rogers@outlook.com; phone: (773) 808-3464. If I have any concerns or questions before or during participation that has not been addressed by the researcher, I may contact Doctoral Committee Chair Dr. Matthew Koufie; email: mkuofie@nl.edu; phone: (248) 798-5597, the co-chairs of NLU’s Institutional Research Board: Dr. Shaunti Knauth; email: Shaunti.Knauth@nl.edu; phone: (312) 261-3526; or Dr. Kathleen Cornett; email: kcornett@nl.edu; phone: (844) 380-5001. Co-chairs are located at National Louis University, 122 South Michigan Avenue, Chicago, IL.

Consent: I understand that by checking ‘Yes” below, I am agreeing to participate in the study Social Media in Baptist Churches. My participation will consist of the activities below. Completion of an online survey taking approximately 19 minutes to complete.

ELECTRONIC CONSENT: Please select your choice below. You may print a copy of this consent form for your records. Clicking on the “Agree” button indicates that

- You have read the above information
- You voluntarily agree to participate
- You are 19 years of age or older
  - Agree
  - Disagree