ASSESSING FACILITATORS AND BARRIERS OF CONDUCTING ADULT HEALTH PROGRAMS WITHIN THE AFRICAN-AMERICAN CHURCH AND RE-EXAMINING RELIGIOUS BASED CONSTRUCTS USING ITEMS FROM THE RELIGION, AGING, AND HEALTH SURVEY

A Dissertation

by

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ABSTRACT

In this study, a systematic review was conducted to assess the facilitators and barriers of conducting adult health programs within the African-American church. Findings from this study were stratified by using the socio-ecological model. This study noted that facilitators and barriers were identified for disease/behavior specific health programs primarily at the intrapersonal level as well as the organizational level for most of the health topics in the study. There were also community and interpersonal level factors that were identified. However, no policy level factors were noted as findings of this study. The second study re-examined the factor structure of religious based constructs using items from the Religion, Aging, and Health survey as well as examined the nomological network structure of the factors identified through exploratory and confirmatory factor analysis. This study found that many of the religious-based constructs, such as spiritual connectedness, religious commitment, and religious music support matched what was in the literature. However, constructs for positive and negative religious coping, as well as God-mediated control did not match what was in the literature. In addition, the items for factors of private religious practices, and organizational religiousness did not load onto two separate factors which is different from what is in the literature as organizational religiousness is theorized as a factor that occurs within a religious based setting. In contrast, private religious practices is theorized as occurring outside of a religious-based setting. Instead, the items loaded onto one factor, faith-building activities, which could be used to measure how to build one's

faith from a one-faith perspective amongst elderly Whites and African-Americans. The third study was conducted by interviewing African-American women church leaders and pastors to assess facilitators and barriers of conducting adult health programs within the African-American church. This study found that facilitators and barriers exist at the intrapersonal, organizational, community, and policy levels of the socioecological model. This study also found that church policy awareness was an organizational level facilitator and barrier, as well as church-policy alignment, and policy influence which were three themes that had not been explored in the literature.

DEDICATION

This dissertation is dedicated to the main reason that I am here today and that is through my relationship and faith in the Lord Jesus Christ. I would also like to dedicate this work to my dad Enrique, my mom Irma who have loved and been there for my siblings and I from the very beginning. Thank you for all of your love, support, and sacrifices. I would also like to dedicate this dissertation to my siblings, Irma and Enrique who have always taken care of me since I was little as well as my nephews Manny and Danny. The world is yours, go out there and get it. I would also like to dedicate this dissertation to the many undocumented students and individuals who came to this country with the hopes of a better life but never had the opportunity to go to school. Also, I would like to dedicate this dissertation to my grandparents Irma, Tino, Abel, and Dolores, who sacrificed so much for our family. Your love and sacrifice will never be forgotten.

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Contributors

This work was supervised by a dissertation committee consisting of Professor James Burdine and Professor Lisako Jones McKyer of the Department of Health Promotion and Community Health Sciences and Professors Wen Luo of the Department of Educational Psychology and Professor Idethia Harvey of the Department of Health and Kinesiology.

The systematic review literature search was conducted by Margaret Foster. Denise Martinez was also a reviewer to ensure that the studies included in the systematic review met the study's eligibility criteria. The data analyzed for the second study was provided by Professor Wen Luo and myself. All other work conducted for the dissertation was completed by the student independently.

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No funding was used for the studies included in this dissertation.

NOMENCLATURE

MMAT	Mixed-Method Appraisal Tool
SEM	Socio-ecological model
Group IPT	Group Interpersonal Therapy
EFA	Exploratory Factor Analysis
CFA	Confirmatory Factor Analysis
HCFA	Healthcare Financing Administration
RAH	Religion, Aging, and Health
Harris Interactive	Louis Harris and Associates
MCAR	Missing completely at random
MAR	Missing at random
EM	Expectation-maximization
FAITHS	Faith Activities in the Home Scale
FAN	Faith, Activity, and Nutrition
AA	Alcoholic Anonymous

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1. INTRODUCTION

1.1. Introduction of Study One

Within the African-American community, churches have served as the center of African American life as they have laid the foundation of African American identity and culture (Billingsley and Caldwell, 1991; Taylor, Thornton, Chatters, 1987). In addition, they have also played a vital role in the development of the African-American community as they have served as the political, social, and spiritual core of the community (Taylor et al., 1987). With regards to health, African-American churches have played an important role in providing health programs that address health issues such as: HIV/AIDS, heart disease, breast cancer, nutrition, depression, obesity, diabetes, colorectal cancer, fruit and vegetable intake, cervical cancer, and physical activity (Campbell et al, 1999; Resnicow et al, 2001; Resnicow et al, 2004; Ammerman et al., 2003; Markens, Fox, Taub, Gilbert, 2002; Matthews, Berrios, Darnell, Calhoun, 2006; Campbell et al, 2004; Yanek et al., 2001; Wilcox et al., 2007; McNabb et al., 1997). As a result, the objective of this study is to review the scientific literature in order to identify facilitators and barriers that exist when conducting an adult health program/intervention within African-American churches, based on the perception of church pastors' and church leaders. Pastors and church leaders were selected as they serve as trusted messengers whose support is necessary for the success of health promotion interventions (Carter-Edwards, Johnson, Whitt-Glover, Bruce, & Goldmon, 2011).

1.2. Introduction of Study Two

In research, religion has been challenged as a subject for health research (Lawrence 2002; Sloan and Bagiella 2002; Sloan et al., 1999, Sloan et al., 2000). Despite many critics, research has found that there are benefits of religion with regards to health. Research has found that various religious-based constructs such as, religious attendance, have been associated with longer life, greater life satisfaction, as well as faster recovery from depression (McCullough et al., 2000; Strawbridge, Cohen, Shema, & Kaplan, 1997; Levin, Chatters, Taylor, 1995; Koenig, Pargament, & Nielsen, 1998). In addition to religious attendance, research has also examined factors such as forgiveness, prayer, and religious coping and their effects on physical and mental health (Krause & Ellison; 2003; Koenig et al., 1995). Within the elderly, religious-based factors are important as research has shown that religious faith was seen as the most important factor that allowed the elderly to cope with their illness (Koenig, 1998). In addition, a recent study examined the effect of church-based support on health amongst the elderly and discovered that older people who attend church feel their congregations are more cohesive, and that they receive more spiritual and emotional support from their fellow congregants in highly cohesive congregations (Krause, 2002). Instruments that have been used to measure constructs such as religious attendance, forgiveness, prayer, religious coping and church-based support include the Duke Religion Index, the Heartland Forgiveness Scale, the Measure of Prayer Activity scale, the Religious Coping Instrument, and the Religious Support Scale (Koenig, Parkerson, Meador, 1997; Thompson, Synder, Hoffman 2005; Poloma & Pendleton, 1991; Pargament, Koenig, Perez, 2000; Fiala, Bjorck, Gorsuch, 2002).

Although some of these religious factors have been studied, it is important for researchers to explore additional religious factors in order to fully understand the effect of religious factors

on health amongst the elderly (Koenig, Smiley, & Gonzales, 1988). As a result, this study will re-examine religious based constructs and their items in order to determine if the factor structure identified matches what is in the literature. In addition, it is important for researchers to examine the interrelatedness of religious-based constructs as this has not been previously done. As a result, this study will use the Religion, Aging, and Health survey, as this study examined the effects of religious-based factors amongst older adults, which included spiritual connectedness, positive religious coping, religious music support, religious commitment, private religious practices, and negative religious coping, God-mediated control, and organizational religiousness. Each of these constructs was selected as each has had an effect on health amongst the elderly (Lee, 2014; Krause & Hayward, 2014; Krause & Hayward, 2014; Abu-Raiya, Pargament, Krause; 2016; Krause, 2005; Krause 2006).

1.3. Introduction of Study Three

Racial health inequalities have been a prevalent public health concern for decades (Wasserman et al., 2019). Despite progress in reducing inequities over time, racial gaps in health persist (Wasserman et al., 2019). African-Americans, have historically remained a racial group, that has had disproportionately higher rates of obesity, hypertension and diabetes (Noonan et al., 2016).

Faith-based organizations bring people together for positive purposes and can serve as important centers to promote health (DeHaven et al., 2004). Participants of a study evaluating the health benefits of two biblically-based health promotion programs exhibited weight loss, and other positive health changes (Whisenant, Cortes, Hill, 2014). Specifically, within the African-American community, churches have served as the center of African American life as they have laid the foundation of African American identity and culture (Billingsley and Caldwell, 1991; Taylor et

al., 1987). In addition, they have also played a vital role in the development of the African-American community as they have served as the political, social, and spiritual core of the community (Taylor et al., 1987).

African-American churches have played an important role in providing health programs that address health issues such as: HIV/AIDS, heart disease, breast cancer, nutrition, depression, obesity, diabetes, colorectal cancer, fruit and vegetable intake, cervical cancer, and physical activity (Campbell et al, 1999; Resnicow et al, 2001; Resnicow et al, 2004; Ammerman et al., 2003; Markens, Fox, Taub, Gilbert, 2002; Matthews, Berrios, Darnell, Calhoun, 2006; Campbell et al, 2004; Yanek et al., 2001; Wilcox et al., 2007; McNabb et al., 1997). Despite the occurrence of these programs, African-American pastors have noted that there are facilitators and barriers that affect health programs being conducted within African-American churches (Coleman et al., 2012). In addition, facilitators and barriers are noted to exist at the intrapersonal, interpersonal, organizational, and community level of the socioecological model (Coleman et al., 2012). However, research has failed to analyze facilitators and barriers affecting health programs from the perspective of African-American women pastors (Gandara, 2020). In addition, research has not yet analyzed facilitators and barriers at the policy level of the socioecological model, that could affect health programming to occur within the African-American church (Gandara, 2020). This is important as the percentage of African-American women clergy rose from 3% in 1970 to 19% in 1990 (Barnes, 2006). Moreover, it is important to assess the perceptions of African-American pastors as pastors are trusted messengers within the African-American community and whose support is necessary for the success of health promotion interventions (Carter-Edwards, Johnson, Whitt-Glover, Bruce, & Goldmon, 2011).

1.4. Purpose of Study

Thus, the purpose of this study is to first conduct a systematic literature review in order to identify facilitators and barriers of conducting adult health programs within the African-American church from the perspective of African-American pastors/church leaders. In addition, to understanding the facilitators and barriers that exist when conducting adult health programs within the African-American church, this study will re-examine the factor structure of religious-based constructs by using items from the Religion, Aging, and Health survey in order to assist researchers who are interested in measuring religious-based constructs. Lastly, this dissertation hopes to identify facilitators and barriers of conducting adult health programs within the African-American church, from the perspective of African-American women pastors and church leaders.

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2. PASTOR'S AND CHURCH LEADERS' PERCEPTIONS OF FACILITATORS AND BARRIERS THAT EXIST WHEN CONDUCTING AN ADULT HEALTH PROGRAM/INTERVENTION WITHIN THE AFRICAN-AMERICAN CHURCHES: A SYSTEMATIC REVIEW

2.1. Introduction

Within the African-American community, churches have served as the center of African American life as they have laid the foundation of African American identity and culture (Billingsley and Caldwell, 1991; Taylor, Thornton, Chatters, 1987). In addition, they have also played a vital role in the development of the African-American community as they have served as the political, social, and spiritual core of the community (Taylor et al., 1987). With regards to health, African-American churches have played an important role in providing health programs that address health issues such as: HIV/AIDS, heart disease, breast cancer, nutrition, depression, obesity, diabetes, colorectal cancer, fruit and vegetable intake, cervical cancer, and physical activity (Campbell et al, 1999; Resnicow et al, 2001; Resnicow et al, 2004; Ammerman et al., 2003; Markens, Fox, Taub, Gilbert, 2002; Matthews, Berrios, Darnell, Calhoun, 2006; Campbell et al, 2004; Yanek et al., 2001; Wilcox et al., 2007; McNabb et al., 1997). As a result, the objective of this study is to review the scientific literature in order to identify facilitators and barriers that exist when conducting an adult health program/intervention within African-American churches, based on the perception of church pastor's and church leaders. Pastors and church leaders were selected as they serve as trusted messengers whose support is necessary for the success of health promotion interventions (Carter-Edwards, Johnson, Whitt-Glover, Bruce, & Goldmon, 2011).

2.2. Methods

2.2.1. Eligibility criteria

In this systematic review, studies were included if: 1) studies had African-American church leaders or pastors as study participants, and 2) studies that discussed facilitators and barriers of conducing health programs or interventions within African-American churches from the perspective of African-American church leaders or pastors. It was important to assess the perception of church pastors or church leaders as they serve as trusted messengers whose support is necessary for the success of health promotion interventions (Carter-Edwards, Johnson, Whitt-Glover, Bruce, & Goldmon, 2011). In addition, it was important to only include articles that discussed facilitators and barriers of conducting adult programs or interventions within African-American churches, from the perspective of African-American church leaders or pastors, as that was the objective of the study.

Using a combination of keywords and thesaurus terms as appropriate, 3 concepts were combined: African America, faith based/ pastors/ or church, and readiness or capacity or assessment. Four databases were searched Medline Complete (Ebsco), CINAHL (Ebsco), APA PsycInfo (Ebsco), and Cochrane CENTRAL (Wiley). The cited and citing citations of included studies were also searched using Scopus and Web of Science. In addition, a search of the grey literature was conducted in order to determine if additional articles should be added to the review.

2.2.2. Study selection criteria

Study eligibility was performed independently by both reviewers. Articles were first screened by title and abstract. Then, the articles were screened by reading their full-text. In addition, a search of the grey literature was conducted in order to determine if additional articles

should be added to the review. In addition, articles that were disagreed upon by the reviewers were re-examined and both reviewers reached a consensus to determine their eligibility in this study.

2.2.3. Data collection process

In this study, a data extraction form was created in Google Forms and was based on Cochrane's Consumers and Communication Review Group's data extraction template. The primary author of this study extracted the following data from the included studies. In addition, no contact was made to authors regarding the data that was extracted as no further information was needed.

2.2.4. Data items

In this study, the following information was extracted from each selected article: 1) article topic (health, health promotion, church readiness), 2) methodology (qualitative, quantitative, mixed-method), 3), church denomination, 4) church geographic location, 5) setting of the church (rural, urban, suburban), 6) pastor or church leader age, 7) church position of study participants, 8) gender of pastor/church leader, 9) facilitator factors at the socio-ecological level (individual, interpersonal, organizational, community, or policy), and 10) barrier factors at the socio-ecological level (individual, interpersonal, organizational, community, or policy).

2.2.5. Risk of Bias in Individual Studies

In this study, the Mixed-Methods Appraisal Tool (MMAT) was used to assess risk of bias in individual studies. The MMAT is a critical appraisal tool designed to appraise the methodological quality of qualitative, randomized controlled trials, non-randomized studies, quantitative descriptive studies, and mixed method studies (Hong et al., 2018). After analyzing

the articles using the Mixed-Methods Appraisal Tool (MMAT), the researchers were able to note that some of the qualitative studies included in this study failed to include their data within their results section. This in turn, left the research team wondering if the findings were derived from the data, as well as how were the results interpreted. Moreover, it left the team wondering if there was coherence between data sources, collection, analysis and interpretation.

After analyzing the articles using the Mixed-Methods Appraisal Tool (MMAT), the researchers were able to note that some of the mixed-methods studies included in this study failed to show how the different components of their study adhered to the quality criteria of each method that was used in their study. With regards to the articles that were solely quantitative focused, the research team agreed that there was no discrepancies found after reviewing them using the MMAT.

2.2.6. Planned Method of Analysis

The purpose of this study was to identify facilitators and barriers that exist when conducting adult health program/intervention within African-American churches, based on the perception of African American church pastors' and church leaders. Thus, in order to do so, the socio-ecological model (SEM) was be used to stratify facilitators and barriers that were found in the study. The SEM model was used as it is a useful framework for obtaining a better understanding of facilitators and barriers to a variety of health topics (Robinson, 2008; Wilcox et al., 2010; Baruth Bopp, Webb, and Peterson 2015), as well as when assessing African-American church pastors and church leaders' influence on health-related issues within their congregation.

The SEM focuses on both individual and social environmental factors that can affect health promotion interventions (McLeroy, Bibeau, Steckler, & Glanz, 1988). It addresses the importance of interventions addressing intrapersonal, interpersonal, organizational, community,

or policy level factors that could be impact health. In this model, intrapersonal level factors are defined as characteristics of individuals (McLeroy et al., 1988). This includes an individual's knowledge, attitudes, behaviors, self-concept, and skills. In addition, this includes the developmental history of an individual (McLeroy et al., 1988). With regards to interpersonal level factors, the SEM defines interpersonal level factors as formal and informal social network and social support systems (McLeroy et al., 1988). This includes family members, work groups, as well as friendship networks (McLeroy et al., 1988). In addition, institutional, or organizational level factors, are defined by social institutions and their unique organizational characteristics (McLeroy et al., 1988). Also, they are defined by the formal and informal rules and regulations for which they operate (McLeroy et al., 1988). In contrast, community level factors are defined by the relationships that exists amongst organizations, institutions, as well as informal networks that have defined boundaries (McLeroy et al., 1988). Lastly, policy level factors are characterized as local, state, and national laws and policies that exist within that socio-ecological context (McLeroy et al., 1988).

As a result, every article included this study was assessed for facilitators or barriers. After identifying the facilitators and barriers, the primary author then classified each facilitator and barrier into being an intrapersonal, interpersonal, organizational, community, or policy level factor. In order to ensure that each facilitator or barrier was classified as intended, each facilitator or barrier was classified twice, blindly. In addition, each article was divided into three categories, based on the focus of the article. The three categories used were: disease topic/behavior, health promotion activities, or church readiness. In the end, facilitators or barriers were identified for each study and were stratified using the socioecological model. Thereafter, the findings were separated into the category of focus that the article was a part of.

2.2.7. Risk of Bias Across Studies

In order to minimize bias across studies, the primary author classified each facilitator or barrier twice, blindly. Since the objective of the study was to determine facilitators and barriers that exist when conducting adult health program/intervention within African-American churches, from the perspective of African American church pastors' and church leaders, the primary author ensured that each facilitator and barrier was classified based on what was said from African-American church pastors' and church leaders. This exempted facilitators and barriers that were mentioned by church members, or members of the research team as they were not the population of interest for this study.

2.2.8. Study selection

After conducting an initial search, 288 articles were found. Twenty-nine of those articles were excluded as they were duplicates. Moreover, eight articles were identified in the grey literature. As a result, an abstract and title review was conducted on the remaining 267 articles. Moreover, the full article was reviewed when the information provided in the abstract was insufficient to determine if the study met the inclusion or exclusion criteria of our study. In addition, articles that were disagreed upon were revisited and discussed amongst research investigators until consensus was reached. Thus, 238 articles were excluded after the title and abstract review. Specifically, sixty articles were excluded for being international, while forty-nine articles were excluded for not focusing on African-American pastors. Ten articles were excluded for not taking place within African-American churches, and eighty-three articles did not focus on the perceptions that African-American pastors had on facilitators or barriers to conducting health programs within African-American settings. Lastly, thirty-six articles were excluded for not focusing on the facilitators or barriers that were affecting health programs being

conducted within African-American churches. Overall, twenty-nine studies were included in the systematic review. See flow diagram in Appendix A Figure 1.

2.3. Study characteristics and results

2.3.1. Article Topic

In this study, articles were divided by their topic of focus: disease/behavior-specific health programs, health promotion activities, and church readiness. In the first category, eighteen of the twenty-nine articles were classified as articles that focused on understanding facilitators and barriers of disease-specific health programs or health-behavior programs. For example, thirteen articles focused on facilitators and barriers that were specific to HIV/AIDS programs and testing (Abara et al., 2015; Stewart, 2015; Foster et al., 2011; Alio et al., 2014; Coleman et al., 2012; Berkley-Patton et al., 2013; Wooster et al., 2011; Pichon et al., 2016; Stewart et al, 2016; Nunn et al., 2012; Smith et al., 2005; McNeal et al., 2007; Berkley-Patton et al., 2010). In addition, one article focused on facilitators and barriers that were specific to cardiovascular related health programs, while one article focused on a depression-based health program (Carter-Edwards et al., 2018; Hankerson et al., 2013). Moreover, three articles focused on programs that were cancer specific and one article focused on physical activity (Rodriguez et al., 2009; Markens et al., 2002; Campbell et al., 2000; Gross et al., 2018). In the second category, only seven articles were classified as focusing on conducting health promotion activities within African-American churches (Holt et al., 2018; Holt et al., 2017; Berkley-Patton et al., 2018; Maxwell et al., 2019; Carter Edwards et al., 2012; Tuggle, 1995; Rowland et al., 2013). Lastly, three of the twenty-nine articles were classified into the church readiness category as these articles focused on facilitators and barriers that affected the readiness of African-American

churches conducting health programs (Brand et al., 2017; De Marco et al., 2011; Brand et al., 2018).

2.3.2. Methodology

In this study, seventeen of the twenty-nine articles solely focused on a qualitative approach (Abara et al., 2015; Stewart 2015; Coleman et al., 2012; Brand et al., 2017; Carter-Edwards et al., 2018; Holt et al., 2018; Holt et al., 2017; Hankerson et al., 2013; Wooster et al., 2011; Pichon et al., Stewart et al., 2016; Rodriguez et al., 2009; Gross et al., 2018; Nunn et al., 2012; Tuggle, 1995; Markens et al., 2002; Berkley-Patton et al., 2010), while six articles used a quantitative approach (Berkley-Patton et al., 2013; Maxwell et al., 2019; Carter Edwards et al., 2012; Brand et al., 2018; Smith et al., 2005; Rowland et al., 2013). Moreover, six articles used a mixed-method approach as their study design (Foster et al., 2011; Alio et al., 2014; De Marco et al., 2011; Berkley-Patton et al., 2018; McNeal et al., 2007; Campbell et al., 2000).

2.3.3. Church denominations

Nineteen of the twenty-nine articles assessed African American pastors and church leaders who were Baptist (Stewart, 2015; Foster et al., 2011; Brand et al., 2017; De Marco et al., 2011; Carter-Edwards et al., 2018; Berkley-Patton et al., 2013; Holt et al., 2017; Berkley-Patton et al., 2018; Maxwell et al., 2019; Brand et al., 2018; Pichon et al., 2016; Stewart et al., 2016; Rodriguez et al., 2009; Nunn et al., 2012; Smith et al., 2005; McNeal et al., 2007; Markens et al., 2002; Berkley-Patton et al., 2010; Rowland et al., 2013). In addition, thirteen of the twenty-nine articles assessed African American pastors and church leaders who identified as non-denominational (Stewart, 2015; Foster et al., 2011; Brand et al., 2017; De Marco et al., 2011; Holt et al., 2017; Berkley-Patton et al., 2018; Maxwell et al., 2019; Brand et al., 2018; Pichon et

al., 2016; Stewart et al., 2016; Nunn et al., 2002; Markens et al., 2002; Berkley-Patton et al., 2010). Moreover, eight of the twenty-nine articles included pastors who identified as Pentecostal (Stewart, 2015; De Marco et al., 2011; Berkley-Patton et al., 2018; Brand et al., 2018; Pichon et al., 2016; Stewart et al., 2016; Rodriguez et al., 2009; Nunn et al., 2012). Nine of the twenty-nine articles included pastors who identified as part of the Church of Christ denomination (Stewart, 2015; Brand et al., 2017; Holt et al., 2017; Berkley-Patton et al., 2018; Brand et al., 2018; Pichon et al., 2016; Stewart et al., 2016; Rodriguez et al., 2009; Rowland et al., 2013). In addition, two of the twenty-nine articles included pastors who identified as Protestant and eight of the twenty-nine articles included pastors who identified as part of the African Methodist Episcopal Zion denomination (Brand et al., 2018; Brand et al., 2017; Maxwell et al., 2019; Pichon et al., 2016; Rodriguez et al., 2009; Nunn et al., 2012; Smith et al., 2005; Rowland et al., 2013). Three of the twenty-nine articles included pastors who identified as part of the Christian Methodist Episcopal denomination (Brand et al., 2017; De Marco et al., 2011; Rowland et al., 2013). Two of the twenty-nine articles included pastors who were a part of the Seventh-Day Adventist denomination and seven pastors who identified as Methodist or United Methodist (Holt et al., 2017; Markens et al., 2002; DeMarco et al., 2011; Hankerson et al., 2013; Maxwell et al., 2019; Nunn et al., 2012; Smith et al., 2005; Berkley-Patton et al., 2010).

Two articles included Presbyterian pastors, while only one article include Apostolic African-American pastors (Brand et al., 2018; Rodriguez et al., 2009). Moreover, there was one article that included African-American pastors that were either Jewish, Muslim, or Evangelical (Nunn et al., 2012). Also, there was two articles that included African American pastors that identified as Lutheran and one article that included African American pastors that identified as Catholic (Brand et al., 2018; Markens et al., 2002). Moreover, three articles reported “other” and

did not specify what other denominations African-American pastors identified (Smith et al., 2005; McNeal et al., 2007; Rowland et al., 2013). Lastly, nine of the twenty-nine articles did not specify the denominations of the African-American pastors included in their study (Abara et al., 2015; Alio et al., 2013; Coleman et al., 2012; Holt et al., 2018; Wooster et al., 2011; Carter Edwards et al., 2012; Gross et al., 2018; Tuggle, 1995; Campbell et al., 2000).

2.3.4. Geographic location of churches

The churches that were included in this study were based predominantly in the South or Northeast coast of the United States. Two studies were conducted in churches in South Carolina, while three studies were conducted in Pennsylvania (Abara et al., 2015; Coleman et al., 2012; Stewart, 2015; Stewart et al., 2016; Nunn et al., 2012). Moreover, two studies were conducted in Alabama, and three in New York (Foster et al., 2011; Carter-Edwards et al., 2018; Alio et al., 2014; Hankerson et al., 2013; Wooster et al., 2011). Three studies were conducted in churches in Illinois, while seven studies were conducted in North Carolina (Brand et al., 2017; Wooster et al., 2011; Brand et al., 2018 DeMarco et al., 2011; Carter-Edwards et al., 2018; Carter Edwards et al., 2012; Gross et al., 2018; Campbell et al., 2000). Also, three studies were conducted in Maryland and three studies in Missouri (Holt et al., 2018; Rodriguez et al., 2009; Tuggle, 1995; Berkley-Patton et al., 2013; Berkley-Patton et al., 2018; Berkley-Patton et al., 2010). In addition, two studies were conducted in Kansas, while two studies were conducted in Mississippi and one in Arizona (Berkley-Patton et al., 2018; Wooster et al., 2011; Berkley-Patton et al., 2010; McNeal et al., 2007). Only two studies were carried out in California, while one studies was carried out in Tennessee as well as Rhode Island (Maxwell et al., 2019; Markens et al., 2002; Pichon et al., 2016; Smith et al., 2005). Two of the twenty-nine studies reported being conducted in a Mid-Atlantic State or Midwestern state, respectively (Holt et al., 2017; Rowland et al., 2013).

2.3.5. Church Setting (Urban, rural, suburban)

In this study, fourteen of the twenty-nine articles reported their study being conducted within an urban African-American church (Stewart, 2015; Carter-Edwards et al., 2018; Berkley-Patton et al., 2018; Hankerson et al., 2013; Wooster et al., 2011; Maxwell et al., 2019; Pichon et al., 2016; Rodriguez et al., 2009; Nunn et al., 2012; Tuggle, 1995; McNeal et al., 2007; Markens et al., 2002; Berkley-Patton et al., 2010; Rowland et al., 2013). Only one study was conducted in a rural setting as well as a suburban setting (Campbell et al., 2000; Gross et al., 2018). Two studies included churches from both urban and rural settings and five studies included churches from urban, rural, and suburban settings (Foster et al., 2011; Carter Edwards et al., 2012; Stewart et al., 2016; Brand et al., 2018; De Marco et al., 2011; Brand et al., 2017; Alio et al., 2014). Six studies did not report the church setting (Abara et al., 2015; Coleman et al., 2012; Holt et al., 2018; Berkley-Patton et al., 2013; Holt et al., 2017; Smith et al., 2005). Overall, each pastor self-identified their church to fall into one of these categories.

2.3.6. Church Pastor/Church Leader Age

Five of the twenty-nine studies included church pastors/church leaders who were between the ages of 35-60 (Stewart, 2015; Foster et al., 2011; Brand et al., 2017; Hankerson et al., 2013; Pichon et al., 2016). One study included pastors that ranged from 26-82, while one study included pastors between the ages of 18-66 and older (Coleman et al., 2012; Berkley-Patton et al., 2013). In addition, one study included pastors/church leaders between the ages of 20-86 while one study included pastors/church leaders between the ages of 33-69 (Holt et al., 2017; Carter Edwards et al., 2012). Moreover, one study included pastors between the ages of 34-62 while one article included pastors between the ages of 44-61 (Smith et al., 2017; Stewart et al., 2016). Also, one article included pastors between the ages of 50-59 and two separate articles

included pastors that were over the age of 18 and 21, respectively (Rowland et al., 2013; Berkley-Patton et al., 2018; Alio et al., 2014). Lastly, fifteen articles did not report the age of the pastors/church leaders that were assessed (Abara et al., 2015; De Marco et al., 2011; Carter-Edwards et al., 2018; Holt et al., 2018; Wooster et al., 2011; Maxwell et al., 2019; Brand et al., 2018; Rodriguez et al., 2009; Gross et al., 2018; Nunn et al., 2012; Tuggle, 1995; McNeal et al., 2007; Markens et al., 2002; Berkley-Patton et al, 2010; Campbell et al., 2000).

2.3.7. Church Size

With regards to church size, the findings in the study varied according to each study. One study reported assessing a church with 76-150 congregants as well as another with 226-450 (Stewart, 2015). In addition, one study assessed a church that had between 15-2000 congregants, while another had 0-250 as well as greater than 250 congregants (Alio et al., 2014; Coleman et al., 2012). Another study assessed churches that had a size of 1-76, 76-150, 151-225, 226-450, 450-699, 700-999, and 1000-2000 congregants (Brand et al., 2017). Another study, assessed churches with congregants of 75-2000, while two other studies assessed a church with greater than 2000 congregants (De Marco et al., 2011; Hankerson et al., 2013; Carter Edwards et al., 2018). In addition, another study assessed a church with 150-500 congregants, while another study assessed a number of churches with congregants ranging from less than 100, 100-199, 200-399, 400-999 (Holt et al., 2018; Berkley-Patton et al., 2013). Also, a study included a church that had between 50-1000 participants, while another study included between 50-750 congregants (Holt et al., 2017; Berkley-Patton et al., 2018). One study also assessed churches with either less than 50 congregants, 50-99 congregants, or greater than 100 congregants, while another study assessed a church with less than 300 congregants (Maxwell et al., 2019; Carter Edwards et al., 2012). Another study assessed churches with 1-75, 76-150, 151-225, 226-450, 450-699, 700-999,

1000-2000, and >2000 congregants (Brand et al., 2018). In addition, one study included a church with 150-250 participants, while another study assessed a church with less than 100 congregants as well as a church with 100-499 congregants (Stewart et al., 2016; Smith et al., 2005). Also, one study included churches with less than 500 and more than 500, while another study included a church with 35-400 congregants (McNeal et al., 2007; Markens et al., 2002). Another study assessed a church with 50-700 congregants while another study assessed churches with less than 100 and greater than 100 congregants (Berkley-Patton et al., 2010; Campbell et al., 2000). In addition, one article included churches with a size of 100-249 and 250-299 congregants, while another did not specify the number but deemed the congregation size to be large (Rowland et al., 2019; Nunn et al., 2012). Lastly, seven articles did not report their church size (Abara et al., 2015; Foster et al., 2011; Wooster et al., 2011; Pichon et al., 2016; Rodriguez et al., 2009; Gross et al., 2018, Tuggle, 1995).

2.3.8. Pastor/Church Leader Position

Ten of the twenty-nine articles included African-American pastors at the senior, executive, or associate level (Alio et al., 2014; De Marco et al., 2011; Holt et al., 2018; Maxwell et al., 2019; Gross et al., 2018; Smith et al., 2005; Tuggle, 1995; McNeal et al., 2007; Markens et al., 2002; Rowland et al., 2013). In addition, ten of the twenty-nine articles included African-American pastors at the senior, executive, or associate level as well as church/faith leaders (Foster et al., 2011; Coleman et al., 2012; Carter-Edwards et al., 2018; Berkley-Patton et al., 2013; Carter-Edwards et al., 2018; Brand et al., 2018; Pichon et al., 2016; Stewart et al., 2016; Rodriguez et al., 2009; Nunn et al., 2012). Only two articles included African-American pastors at senior, executive, or associate level as well as health ministry leaders (Stewart, 2015; Brand et al., 2017), and one article assessed solely ministers but did not report their level of position in the

church (i.e., senior, executive, or associate (Hankerson et al., 2013). Moreover, four of the twenty-nine articles included solely church/faith leaders and only one article assessed pastors (senior, executive, or associate) as well as leaders of a health ministry, and or/church faith leaders (Berkley-Patton et al., 2018; Wooster et al., 2011; Berkley-Patton et al., 2010; Campbell et al., 2000; Holt et al., 2017). Lastly, one article did not report the position of their pastor or church leader (Abara et al., 2015).

2.3.9. Sex of Pastor/Church Leaders

In this study, only two articles included pastors or church leaders who were male (Tuggle, 1995; Gross et al., 2018). Seventeen of the articles included either male and female church pastors or church leaders (Stewart, 2015; Foster et al., 2011; Coleman et al., 2012; Brand et al., 2017; Carter-Edwards et al., 2018; Berkley-Patton et al., 2013; Holt et al., 2017; Berkley-Patton et al., 2018; Hankerson et al., 2013; Carter Edwards et al., 2012; Brand et al., 2018; Pichon et al., 2016; Stewart et al., 2016; Rodriguez et al., 2009; Nunn et al., 2012; McNeal et al., 2007; Berkley-Patton et al., 2010). In contrast, ten articles did not report the biological sex of the pastors or church leaders that were assessed (Rowland et al., 2013; Campbell et al., 2000; Markens et al., 2002; Wooster et al., 2011; Maxwell et al., 2019; De Marco et al., 2011; Holt et al., 2018; Alio et al., 2014; Abara et al., 2015).

2.3.10. Level of facilitators

With regards to facilitators that were stratified using the socio-ecological model, only one study included intrapersonal, interpersonal, and organizational level factors (Abara et al., 2015). Moreover, four studies included intrapersonal, and organizational level factors (Stewart, 2015; Coleman et al., 2012; Berkley-Patton et al., 2013; Wooster et al., 2011). In addition, only one study included intrapersonal, interpersonal, community and organizational level facilitators,

while twelve studies included solely organizational level facilitators (Foster et al., 2011; Brand et al., 2017; De Marco et al., 2011; Carter-Edwards et al., 2018; Holt et al., 2017; Hankerson et al., 2013; Maxwell et al., 2019; Carter Edwards et al., 2012; Brand et al., 2018; Pichon et al., 2016; Stewart et al., 2016; Rodriguez et al., 2009; Smith et al., 2005). In this study, only three articles identified interpersonal and organizational level factors and only six articles included community and organizational level facilitators (Gross et al., 2018; McNeal et al., 2007; Campbell et al., 2000; Holt et al., 2018; Berkley-Patton et al., 2018; Nunn et al., 2012; Markens et al., 2002; Berkley-Patton et al., 2010; Rowland et al., 2013). Lastly, one article only included community level facilitators and one study did not report any facilitators at all (Tuggle, 1995; Alio et al., 2014).

2.3.11. Level of barriers

With regards to barriers, only one study reported intrapersonal, interpersonal, community, and organizational level barriers (Foster et al., 2011). In addition, only six articles reported intrapersonal and organizational level factors (Alio et al., 2014; Coleman et al., 2012; Carter-Edwards et al., 2018; Holt et al., 2017; Hankerson et al., 2013; Maxwell et al., 2019). Moreover, eight studies only included organizational level barriers while two studies only included intrapersonal level barriers (Holt et al., 2018; Carter Edwards et al., 2012; Brand et al., 2018; Stewart et al., 2016; Smith et al., 2005; McNeal et al., 2007; Berkley-Patton et al., 2010; Rowland et al., 2013; Berkley-Patton et al., 2013; Wooster et al., 2011). Moreover, one study included community and organizational level barriers while only one study solely focused on community level barriers (Nunn et al., 2012; Tuggle, 1995). Lastly, one article included intrapersonal, community, and organizational level barriers and (Markens et al., 2002; Gross et al., 2018; Pichon et al., 2016; Rodriguez et al., 2009; Berkley-Patton et al., 2018; De Marco et

al., 2011; Brand et al., 2017; Stewart, 2015; Abara et al., 2015). Table 1 in Appendix A has all of the study characteristics found in this study.

2.3.12. Facilitators of Health Topic

2.3.12.1. Health Topic: Depression

Intrapersonal: With regards to conducting depression-based health care programs within African-American churches, African-American ministers believed that they had multiple responsibilities for providing depression care as pastors of their congregation (Hankerson et al., 2013). This included providing prayer, "faith healing" as well as quoting Scripture for their congregants. Moreover, pastors also believed in providing short-term counseling for members who were experiencing psychological distress as well as referring members to mental health professionals.

Interpersonal: African-American pastors discussed the importance of using group interpersonal psychotherapy (Group IPT) as a part of conducting depression-based health care programs within African-American churches (Hankerson et al., 2013). Pastors equated Group IPT to a support group and discussed "Grief-sharing," a Christian-based support group, as a safe place for congregants to share how they feel if they are going through clinical issues or grief.

2.3.12.2. Health Topic: High Blood Pressure

Intrapersonal: Ministers and church leaders expressed that the role of women should be acceptable to men involved in the program (Carter-Edwards et al., 2018). Pastors and church leaders expressed that some men feel that women should design and implement the program, while others believe that women should be fully involved with the program as the men might not feel as comfortable as they do with women in their life.

Interpersonal: African-American ministers and church leaders discussed the importance of integrating high blood pressure programs within the social context and sphere of influence of African-American male church participants (Carter-Edwards et al., 2018). This included involving those around them, including family, and weaving them into fabric of the church. Pastors and church leaders expressed the need to appeal to those who care for male participants and to those who are concerned for them in order to help these men be successful in the program. This included using the women in the lives of the participants encouraging their support in the program. Moreover, this includes letting the women, in the lives of these men, know how important their role is in helping men participate in a high-blood pressure program. Lastly, pastors shared the importance of using testimonials and peer mentoring as part of the health program. This is because testimonials and peer mentoring allow men to hear real-world stories from men who have improved their blood pressure and weight. Moreover, it is important that peer mentoring occurs as well as black male physician discussions at church forums as well as places like barbershops or other community venues.

Organizational: Pastors and church leaders also expressed several organizational level factors which included having support services and activities as well as having targeted health programs for program participants (Carter-Edwards et al., 2018). Pastors and church leaders shared the importance of using support services within the church, such as, the parish nurse and men's brotherhood network to assist with health programming. In addition, it is important to have health programs that are specific to an intended group (i.e., young adults). Additional organizational factors included having pastors and church leaders as an advocate and role model and churches having leadership advocacy. This includes having senior pastor endorsement for the program as well as the support of men and congregants who are health professionals.

Additional organizational factors included using prayer and scripture as intervention strategies as well as having purposive setting, time, and scheduling. Pastors and church leaders expressed that prayer should be used to encourage making health decisions and scripture to reinforce establishing healthy behaviors. Moreover, the program should be integrated with existing men's activities, using flexible times, and convenient and trustworthy locations for men. Lastly, pastors shared the importance of using technology and social media as part of the health program. By using technology and social media, pastors believe it will help capture men who are on the go.

2.3.12.3. Health Topic: Physical Activity

Intrapersonal: Pastors expressed their belief that pastors should model good health to their congregants as they needed to be the example if they were to tell their congregants to make good health decisions themselves (Gross et al., 2018). In addition, pastors discussed their belief of taking a "holistic" view of health, which included physical and spiritual components of health working together toward a healthier lifestyle. Thus, pastors would share this belief with congregants as they encouraged them to reflect on the physical as well as spiritual.

Interpersonal: Pastors discussed the importance of creating interventions that were specific to women (Gross et al., 2018). This is because women are the backbone of the family and thus investing in women is also investing in family health. Moreover, because women are constantly taking care of others int their family, they sometimes overlook their own well-being. As a result, more programs need to be focused on women.

Organizational: Pastors discussed the importance of a church having a health ministry in place (Gross et al., 2018). Health ministries were viewed as organized health promotion efforts that are faith-based, thus include prayer and foundations in Biblical Scriptures. Thus, by having

these programs it will help increase knowledge and empower congregants to improve their health.

2.3.12.4. Health Topic: Cancer

Intrapersonal: Pastors and faith leaders expressed the importance of addressing physical health as well as spiritual health and appreciate health programs that address both (Markens et al., 2002; Rodriguez et al., 2009). In addition, pastors and faith leaders expressed their support for health programs being conducted within the church as well as support for specifically including faith and spirituality within cancer prevention programs as it is not the will of God for anyone to be sick (Rodriguez et al., 2009). Moreover, pastors and faith leaders also expressed that faith-based health promotion interventions must be inclusive of all (Rodriguez et al., 2009). Pastors recommended involving different nationalities and designing health programs to include men and women when creating health programs (Rodriguez et al., 2009).

Interpersonal: Church leaders discussed the importance of having guest speakers be a part of educational sessions of health programs and as a method of sharing information within the church (Campbell et al., 2000).

Organizational: With regards to organizational factors, pastor involvement is vital when conducting health programs within the African-American church as pastors are the door-keepers to the African-American community (Markens et al., 2002). In addition, pastor support of outside organizations coming into the church and helping in health promotion efforts is also important (Markens et al., 2002). In addition, organizational space is another organizational factor that facilitates conducting cancer health programs in African-American churches (Campbell et al., 2000). This included hosting health programs at church events such as, after-church services, church breakfasts, and events such as homecoming (Campbell et al., 2000).

Moreover, having events such as program kickoffs, tree planting, youth days, and award ceremonies are deemed important (Campbell et al., 2000).

Community: With regards to community level factors, pastors discussed the importance of how health programming within the church enhanced community participation (Markens et al., 2002). Pastors expressed that participation in the Los Angeles Mammography Promotion program encouraged other pastors to implement and institutionalize other health activities within the community such as targeting high blood pressure and diabetes.

2.3.12.5. Health Topic: HIV/AIDS, HIV Testing

Intrapersonal: With regards to intrapersonal level factors affecting HIV/AIDS programs, it is important for a pastor to model positive behavior towards HIV-positive persons when conducting HIV/AIDS programs within African-American churches (Abara et al., 2015; Coleman et al., 2012). In addition, pastors themselves must support the HIV/AIDS or HIV testing program that is being conducted at the church (Stewart et al., 2015; Berkley-Patton et al., 2013). Moreover, it is important for pastors to want to learn about HIV as well as how to discuss it with the congregation (Berkley-Patton et al., 2013). Also, it is important for pastors to attend HIV prevention workshops as well as for them to acknowledge the need for HIV prevention services in order to conduct HIV/AIDS programs within the African-American church (Wooster et al., 2011; Smith et al., 2005).

Another intrapersonal factor facilitating HIV/AIDS programs being carried out within African-American churches, is a pastor's belief that living in an area where there is more information about HIV/AIDS, facilitates HIV/AIDS programming in African-American churches (Foster et al., 2011). Also, pastors discussed that they must have a concern for people as well as an understanding that HIV/AIDS is a major issue in their community in order to conduct

HIV/AIDS programs within the church (Foster et al., 2011). In addition, pastors believe that church members should help facilitate the HIV/AIDS programs being conducted within the church (McNeal & Perkins et al., 2018).

With regards to HIV/AIDS testing within the church, it must be normalized and conversations must take place, within the church, that focus on human sexuality (Nunn et al., 2012). Moreover, pastors believe that people who come into the church wanting to conduct HIV/AIDS work should have the following characteristics if they want to be successful: 1) they should work in a health-related profession, 2) have a desire to help the community, 3) have a desire to do more in the church, 4) should have been personally impacted by HIV/AIDS, 5) should be committed to the church and the fight against HIV/AIDS, and 6) be willing to take chances (Coleman et al., 2012). In addition, ministries should be holistic, which meant not focusing on the spiritual component, but also the health of the individual as well as their financial state (Foster et al., 2011). Lastly, a pastor also expressed the importance of reiterating the importance of using evaluation strategies to church administration as many of them saw process evaluation strategies as too lengthy and cumbersome (Abara et al., 2015).

Interpersonal: With regards to interpersonal level facilitators, pastors discussed that participation in HIV/AIDS programs within African-American churches increased if congregants had HIV-positive relatives, close friends, or members of the congregation (Wooster et al., 2011, Foster et al., 2011). In addition, pastors expressed how having access to HIV/AIDS information through marriage to a healthcare provider or being a health provider increased HIV/AIDS prevention program participation (Foster et al., 2011). Lastly, pastors expressed that pastor-to-pastor support is important when encouraging ministers to conduct HIV/AIDS programs within

the church, especially from more experienced pastors to less experienced pastors (McNeal & Perkins et al., 2007; Berkley-Patton et al., 2010).

Organizational: With regards to organizational level factors, it is important for pastor's and church leaders to support the HIV/AIDS program (Abara et al., 2015; Coleman et al., 2012; Pichon et al., 2016). This included having the support of the national church, as well as ensuring that the program aligned with the church doctrine (Coleman et al., 2012; McNeal et al., 2007). Moreover, having an established health ministry as well as prior HIV/AIDS education activities occur within the church, served as facilitators to conducting HIV/AIDS programs within the church (Abara et al., 2015; Foster et al., 2011; Berkley-Patton et al., 2013). In addition, it would be beneficial for a church to have a specific HIV care team as well as access to technical assistance within church facilities (Abara et al., 2015; Coleman et al., 2012). Pastors expressed that technical assistance included having ongoing workshops and trainings on HIV as well as providing support for materials that were needed. In addition, finances, church space, and human resources are facilitators to conducting HIV/AIDS programs in African American churches (Abara et al.,2015; Stewart et al., 2015; Pichon et al., 2016). Moreover, it is important for HIV/AIDS programs to include the faith-based context of the church and for the program to be delivered within the church (Abara et al., 2015; Coleman et al., 2012; Stewart et al., 2016).

In addition, religious norms as well as progressive leadership and open interpretations of religious beliefs could allow for HIV/AIDS preventions programs to be conducted within the church (Stewart et al., 2015; Foster et al., 2011). Also, pastors expressed that it is important for HIV/AIDS programs to integrate within other programs already in the church (Coleman et al., 2012) as well as for churches to be ready to conduct HIV/AIDS programming (McNeal et al., 2007). Also, pastors expressed the important of using an age, gender and culturally appropriate

message, as well as promoting diverse messages from the pulpit as facilitators to conducting HIV/AIDS programs within the church (Coleman et al., 2012; Nunn et al., 2012) In addition, a pastor expressed the important of including visible HIV-positive people within the church as a facilitator to conducting HIV/AIDS health programs, as this would help congregation members be more accepting of the program (Coleman et al., 2012). Moreover, it is important for a church to view sexual health as part of having a holistic ministry (body, mind, spirit) and that can also facilitate conducting HIV/AIDS programs within the church (Pichon et al., 2016). Also, pastors expressed that churches who seek education about HIV testing could also facilitate conducting HIV/AIDS programming within these churches (Stewart et al., 2016). In addition, increasing leadership, pastoral, and church advocacy about HIV/AIDS could also facilitate HIV/AIDS prevention within the African American church (Stewart et al., 2016; Nunn et al., 2012). This includes educating faith leaders about local epidemics as well as discussing HIV/AIDS with congregants. Also, a pastor expressed the importance of churches being active about HIV testing as it can result in reaching the surrounding community that is affected by HIV (Stewart et al., 2016). Lastly, one pastor also discussed the importance of using educational games amongst congregants to help HIV/AIDS programs be conducted in African-American churches (Berkley-Patton et al., 2010).

Community: With regards to community level factors, one pastor expressed the importance of engaging local religious leaders in order to help conduct HIV/AIDS programs within African-American churches as interfaith collaboration is important (Abara et al., 2015; Nunn et al., 2012). In addition, one pastor discussed using collaborative research or community-based participatory projects as facilitators to conducing HIV/AIDS programs within the church (Foster et al., 2011). Lastly, one pastor mentioned that in order to overcome HIV prevention

stigma within the church, local public health and human rights groups must work with the community in order to help facilitate HIV/AIDS programs within the church (Nunn et al., 2012). Table 2 in Appendix A summarizes the study findings for facilitators of disease/behavior specific health programs.

2.3.13. Facilitators of Health Promotion Activities

Intrapersonal: One pastor expressed the importance of health program staff acknowledging and understanding the spiritual component within African-American churches when working to conduct health programs within this setting (Tuggle, 1995). In addition, Pastor Tuggle (1995) expressed the importance of health program coordinators taking a holistic approach when conducting health programs within African-American churches. This ensures that health program coordinators use church personnel as part of the health programming in the church, which can include ushers or nurses within the church. Also, Pastor Tuggle (1995) expressed that outside health program coordinators need to be committed to the program, even when funding for the program ends and that they need to come to the community ready to serve.

Interpersonal: One pastor expressed the importance of outside health program coordinators establishing contact with the church and pastors before planning on doing health promotion programs within the church (Tuggle, 1995). In addition, Pastor Tuggle (1995) expressed the importance of being visible within the church. This included health program coordinators attending services, graduations, plays, and other community events as he encouraged community involvement. Lastly, one pastor emphasized the importance of the church using targeted communication strategies with intended audiences to ensure that health programs can be adopted and continued within African-American churches (Holt et al., 2017).

Organizational: Several pastors expressed that in order to conduct health programs within African-American churches, there needs to be an interest, willingness, or need from the congregation (Rowland et al., 2013; Berkley-Patton et al., 2018; Maxwell et al., 2019). Moreover, pastors discussed the importance of using the church's organizational space as a facilitator of conducting health programs within the African-American church (Maxwell et al., 2019; Holt et al., 2017). This included using church events, as well as meeting rooms, and the kitchen as spaces to host and carry out health programs. In addition, one pastor discussed the importance of using health service-provision strategies such as providing church-based health screenings, weight loss programs, and access to gyms for program participants (Berkley-Patton et al., 2018). Moreover, one pastor expressed the importance of incorporating health messages into sermons as well as incorporating health messages into weekly Bible studies within the church (Carter Edwards et al.., 2012). Also, one pastor emphasized the importance of churches raising funds to help support health promotion activities (Carter Edwards et al., 2012). In addition, pastors expressed the importance of implementing church-wide sustainability plans for current health services that are offered at the church (Carter Edwards et al., 2012; Holt et al., 2018).

Another organizational factor that one pastor expressed was creating health programs that educate on health-related skills (Berkley-Patton et al., 2018). This includes training participants to prepare meals at home, as well as how to reduce stress, and proper physical activity techniques (Carter Edwards et al., 2012). One pastor also emphasized the importance of a church having leadership capacity and knowledge to carry out health promotion activities within the church (Holt et al., 2017). In addition, having a pastor with strong influence within the church can facilitate participation amongst congregants as well as giving incentives for

participation (Holt et al., 2017). In addition, it is important that churches use established ministry departments such as a men's, women's, or youth's group in order to conduct health promotion activities (Holt et al., 2017). Lastly, one pastor emphasized the importance of health program staff being prepared and planning to provide program materials and resources as well as print materials for the church (Holt et al., 2018).

Community: With regards to community level factors, pastors expressed that health promotion programming within the African-American church was facilitated by outside agencies wanting to collaborate with African-American churches (Rowland et al., 2013; Carter Edwards et al., 2013). Moreover, pastors also expressed the importance of churches collaborating with other community leaders, churches, and schools for sustainable health promotion within the African-American church (Berkley-Patton et al., 2018). Table 3 in Appendix A outlines the summary of facilitators when conducting health promotion activities within the church.

2.3.14. Facilitators of Church Readiness

Organizational: Pastors expressed that churches who allocated a budget for health programming would facilitate a church's readiness to conduct health programs (De Marco et al., 2011; Brand et al., 2017). In addition, pastors expressed that churches who have pastoral support are more ready to conduct health programs (De Marco et al., 2011). Also, one if a church has lay health advisory program in place, they are more ready to conduct health programs (De Marco et al., 2011). Moreover, a church who has resources such as health materials, supplies, equipment, and facilities (classroom) are more ready as a church to conduct health programs (Brand et al., 2017). In addition, churches who have partnerships with organizations, specifically health organizations like the American Cancer Society, clinics, nursing, homes, hospitals, and community health organizations are more prepared to conduct health promotion programs within

the church. In addition, pastors expressed that physical structure is a key factor affecting the readiness of a church to conducting health programs (Brand et al., 2017). Physical structures deemed necessary by African American pastors included classrooms, multipurpose/fellowship hall, a gym, and or/exercise room, and a sanctuary. Pastors saw these structures as places where workout sessions could take place as well as place to conduct health fairs and workshops. Moreover, the parking lot was seen as a space where the church could be more visible within the community during summer months to conduct health programs. Also, the kitchen and food pantry were seen as potential places to have cooking classes and nutrition education sessions. Lastly, conference rooms, office space, and nursing station/rooms were seen as useful places for meetings, planning sessions, counseling sessions, health screenings, testing sites, and places to carry out physical exams.

Another organizational factor that pastors shared was the need for churches to have a person or group of individuals to coordinate and/or direct health activities within the church (Brand et al., 2017). Pastors also shared that the coordinator must be passionate about improving health amongst church congregants and that the coordinator did not necessarily have to be paid since the church was a volunteer-led institution. However, the pastors did mention that they would pay the coordinators as a way to help sustain the quality of their work. Lastly, pastors expressed the importance of taking a faith-based approach (cultural/social support) with regards to health programming (Brand et al., 2017). The cultural and social support elements included prayer, scripture, health-related testimonies, gospel music, as well as health and wellness information being displayed around the church as well as spoken at the pulpit. Also, health and wellness information should come from a Christian point of view, and that pastors support and participate in health activities. Moreover, sermons should include health messages, as well as

having a church service specifically focusing on health and or/healing and having role models to promote good health in the church. Table 4 in Appendix A outlines the summary findings of facilitators that will assist a church's readiness to conduct health programs within the church.

2.3.15. Barriers of Health Topic

2.3.15.1. Health Topic: Depression

Intrapersonal: Pastors described being constrained with time as well as lacking training for counseling congregants who may be depressed (Hankerson et al., 2013). Moreover, pastors felt unequipped to refer parishioners to mental health providers or resources. Lastly, pastors were concerned with what was being done with the data that was collected as well as who the data was being given to about the congregants.

Interpersonal: Pastors expressed that group interpersonal psychotherapy can be a challenge as confidentiality can be an issue as well as protecting the church against liability as a result of privacy issues (Hankerson et al., 2013). Lastly, stigma from fellow church members within the church can also be a challenge. This is because some congregants might judge those who are depressed as it can reflect a poor relationship with God.

2.3.15.2. Health Topic: High Blood Pressure

Intrapersonal: Pastors expressed that men have a lack of understanding of the issue, the causes of hypertension, as well as how to manage it (Carter-Edwards et al., 2018). In addition, a barrier to conducting high blood pressure interventions amongst men in African-American churches are time constraints, as many men are too busy to invest time in church-sponsored health activities.

2.3.15.3. Health Topic: Physical Activity

No socio-ecological level barriers were identified for conducting physical activity programs amongst African-Americans in the church, according to church pastors.

2.3.15.4. Health Topic: Cancer

Intrapersonal: Pastors discussed the lack of time and stress that they are under impedes conducting cancer health promotion programs (Markens et al., 2002). Moreover, there is lack of time that program coordinators also have with regards to running the programs (Campbell et al., 2000). Moreover, pastors expressed their competing time commitments and responsibilities also act as barriers to conducting health programs within their church (Markens et al., 2002). Lastly, pastors expressed that there is too much paperwork involved with regards to conducting health programs within the church (Campbell et al., 2000).

Organizational: Pastors expressed that lack of financial support is a barrier that affects conducting cancer prevention programs within the church (Markens et al., 2002). In addition, pastors also expressed that they lack volunteers to be able to conduct cancer prevention programs within the church (Markens et al., 2002). In addition, churches do not have the time to carry out cancer prevention programs (Campbell et al., 2000).

Community: Pastors expressed their understanding of the history of abuse and exploitation of their community (Markens et al., 2002). This is because pastors shared that they have been researched over and over and many people in their church are also tired of it. Moreover, there is a barrier to participate in health programs within the community.

2.3.15.5. Health Topic: HIV/AIDS

Intrapersonal: Pastors discussed that they are torn about addressing HIV/AIDS as a moral issue or as a societal issue as well as how it fits within a faith context (Foster et al., 2011). In

addition, pastors expressed in one that they were fearful of being viewed negatively by congregants or other church leaders due to the stigma associated with HIV/AIDS (Foster et al., 2011). Moreover, pastors are fearful of being viewed as ignorant or having little knowledge about HIV/AIDS (Foster et al., 2011; Alio et al., 2014; Nunn et al., 2012). They are also fearful of alienating the elderly as they might be individuals in their church who were offended by the topic (Foster et al., 2011).

Another barrier mentioned by pastors is that they feel overworked and that they have too many competing commitments to help conduct HIV/AIDS programs within the church (Alio et al., 2014; Coleman et al., 2012). In addition, pastors mentioned that they were fearful of resistance from other leaders as well as being seen as having abandoned church doctrine (Alio et al., 2014; Coleman et al., 2012; Wooster et al., 2011). Moreover, pastors also mentioned that they found it difficult to balance sexual education with theology (Nunn et al., 2012). Pastors also expressed that the congregation's lack of knowledge about HIV/AIDS can also act as a barrier to HIV/AIDS programs being conducted in the church as they might not be open to hearing about the topic (Coleman et al., 2012). Moreover, lack of apathy amongst congregants is also a barrier expressed by pastors as they might not be open to hearing about HIV/AIDS within a faith setting (Coleman et al., 2012).

With regards to HIV testing, pastors expressed their fear of being discriminated by church members if they tested positive for HIV as they encouraged their congregants to get tested for the disease (Berkley-Patton et al., 2013). Additionally, pastors discussed the barrier of discussing human sexuality within the faith context as well as the stigma against homophobia and being perceived as gay by church congregants (Nunn et al., 2012). Lastly, pastors expressed their concern about being influencer's about faith leaders' responses to HIV/AIDS (Nunn et al., 2012).

Interpersonal: Pastors expressed that lack of knowing HIV-positive or congregants who have AIDS can be a barrier to conducting HIV/AIDS programs within the church (Foster et al., 2011).

Organizational: Pastors expressed that lack of cooperation from the church to participate in HIV/AIDS programs could be a barrier to HIV/AIDS programming occurring within the African American church (Alio et al., 2014). Moreover, limited funding or lack of resources could also act as a barrier to conducting HIV/AIDS programs within the church (Alio et al., 2014; Coleman et al., 2012; Smith et al., 2005; Nunn et al., 2012). These included lack of transportation, and lack of church time. Moreover, a lack of capacity and expertise within the church with regards to HIV/AIDS could also act as a barrier to carrying out HIV/AIDS programs within the African-American church (Alio et al., 2014).

In addition, pastors expressed that a lack of interest or lack of participation amongst congregants can act as an organizational barrier to conducting HIV/AIDS programs within the church (Alio et al., 2014; Coleman et al., 2012). Also, a lack of media usage can also act as a barrier as well as lack of clarity of balancing HIV-related issues and church doctrine (Berkley-Patton et al., 2013). Pastors also noted that and one article noted that opposition to homosexuality and promiscuity within the church can also act as an organizational barrier to conducting HIV/AIDS programs within the church (Smith et al., 2005). Moreover, leadership resistance to HIV/AIDS programs can also be a barrier as well as stigma that exists towards HIV/AIDS, from within the church (McNeal et al., 2007; Berkley-Patton et al., 2010). Also, the lack of sustainability incorporated into HIV/AIDS programs can also be a barrier as pastors noted that programs are often not sustainable (Nunn et al., 2012). Lastly, pastors noted that

churches, as a whole, often struggle to balance theological doctrine and discussing HIV-related issues (Berkley-Patton et al., 2010; Stewart et al., 2016).

Community: With regards to the community level, pastors noted that there is lack of access to prevention materials and information for pastors or church leaders about HIV/AIDS, especially in rural areas (Foster et al., 2011). In addition, there is a lack of culturally competent or culturally sensitive providers in the community that could act as a barrier to conducting HIV/AIDS programs within the church (Foster et al., 2011). Also, there is a stigma associated with sex and sexuality within the African-American community that could act as barriers to HIV/AIDS programs being carried out within the church (Wooster et al., 2011). Lastly, there is a silence about HIV/AIDS within the African-American community that could also act as a barrier (Nunn et al., 2011). Table 5 in Appendix A summarizes the study findings for barriers of disease/behavior specific health programs.

2.3.16. Barriers of Health Promotion Activities

Intrapersonal: Pastors expressed their concern that outsiders do not see the church as a place where education can take place (Tuggle, 1995). In addition, pastors also expressed that they do not have enough time in their schedules to conduct health promotion activities within their church (Carter Edwards et al., 2012).

Organizational: Pastors expressed their concerns that there is a lack of financial resources within the church to conduct health promotion activities (Rowland et al., 2013; Carter Edwards et al., 2012; Holt et al., 2017; Maxwell et al., 2019). Moreover, churches do not have enough physical space or time to also conduct health promotion activities (Rowland et al., 2013; Maxwell et al., 2019). Moreover, pastors mentioned that churches lacked qualified healthcare professionals to conduct health promotion activities within the church (Rowland et al., 2013). In

addition, a lack of interest amongst church members for health promotion activities also acts a barrier for church programming (Rowland et al., 2013; Maxwell et al., 2019).

In addition to these organizational factors, pastors also expressed that a lack of pastor leadership and pastoral commitment acted as a barrier to health promotion activities within the church (Rowland et al., 2013; Maxwell et al., 2019). In addition, pastors noted that not having a health ministry in place also acts as a barrier to health promotion activities occurring within the church (Carter Edwards et al., 2012). In addition, pastors noted that disconnecting physical, mental, and spiritual health from each other, also can act as a barrier to health promotion activities being conducted in the church (Carter Edwards et al., 2012). Other barriers noted by pastors is not having enough volunteers to lead or coordinate the health programs as well as church congregants not having health insurance coverage or provider access (Carter Edwards et al., 2012; Maxwell et al., 2019).

Another barrier mentioned by pastors is not knowing what topics members would be interested in learning more about (Maxwell et al., 2019). In addition, pastors noted that there are too many activities already going within the church that make it hard to participate in health programs (Maxwell et al., 2019). Also, pastors noted that members do not like to participate in what they consider to be research and that the size of a church can impact health promotion activities as small churches are less likely to implement wellness activities as opposed to medium and large churches (Maxwell et al., 2019).

In addition, pastors noted that another barrier to conducting health promotion activities within the church is lacking technological assistance (Holt et al., 2017). In addition, low attendance at previous church events can also act as a barrier as this was discouraging since the events were planned and properly promoted (Holt et al., 2017). Also, time demands amongst

participants was noted as a barrier as many participants cannot attend the event (Holt et al., 2017). Moreover, child care and transportation issues were noted amongst attendees (Holt et al., 2017). Also, pastors noted the lack of sustainability in health programs as programs are seasonal and not all year-round (Holt et al., 2018). Lastly, pastors mentioned that churches themselves do not know how to implement wellness activities (Maxwell et al., 2019).

Community: Pastors noted that lack of building trust is a barrier as many outsiders come into the church without first building trust amongst church members (Tuggle, 1995). In addition, pastors noted that there is a lack of coalition amongst community leaders, churches, and schools that focus on sustainable church health promotion programs (Holt et al., 2018). Table 2 in Appendix A outlines the barriers of conducting health promotion activities within the church.

2.3.17. Barriers of Church Readiness

Organizational: Pastors expressed that churches who lack physical structure were engaged in less health promotion activities (Brand et al., 2018). Physical structure is noted as physical space within the church. Pastors also expressed that lack of personnel to lead health promotion activities can also result in their lack of delivering health promotion activities. Moreover, churches with less funding sources may also have less health promotion activities than a church with high funding sources. Lastly, a church that incorporates less social and cultural elements tends to engage in less health promotion activities. The cultural and social elements that are referred to are the social and cultural elements that make up the church. Table 4 in Appendix A outlines these barriers.

2.4. Discussion

This study sought to understand facilitators and barriers that exist when wanting to conduct health programs within an African-American church, from the perspective of African-

American pastors. Facilitators and barriers were identified based on three categories that were created for the studies included in this study. These categories were disease/behavior specific health programs, health promotion activities, and church readiness. With regards to facilitators and barriers for disease/behavior specific health programs, facilitators were identified primarily at the intrapersonal level as well as the organizational level for most of the health topics included in this study. Moreover, facilitators were also found at the community and interpersonal level. With regards to barriers, similarly to facilitators, barriers were identified primarily at the intrapersonal level as well as the organizational for most of the health topics. In addition, there are some community and interpersonal level barriers that also exist. For example, amongst depression, high blood pressure, and HIV/AIDS focused programs.

In the second category of this study, health promotion activities, facilitators were identified primarily at the organizational level within the church. Although, facilitators also exist within the intrapersonal, interpersonal, and community levels. Similarly, barriers were also identified primarily at the organizational level within studies focused on conducting health promotion activities. Moreover, barriers were also identified at the intrapersonal, and community level. In the last category of this study, church readiness, facilitators and barriers were only identified at the organizational level.

When comparing all three categories, it was identified that not one article was identified that determined policy impacting a health program, health promotion activity, or a church's readiness to conduct health programs within the church. This could be due to researchers not assessing church pastors' beliefs about how policy impacts health programs, health promotion activities, or a church's readiness to conduct health programming within the church. This gap in research is important to address as public health policy, in the form of laws, regulations and

guidelines has had deep effect on health status, as seen in the ten public health achievements of the 20th century. Policies enacted such as seatbelt laws as well as regulations regarding workplace exposures have had a profound impact on public health ("Ten public health achievements of the 21st century," 1999). Therefore, potential policies could be enacted that could help facilitate health programs, health promotion activities, or a church's readiness within the African-American community. However, it is important to understand that research has shown that African-Americans are distrustful of the political system but this distrust, has led to African-Americans expressing stronger support for significant changes in the political system (Avery, 2009). This is important as research has shown the importance of individuals outside of the African-American community, building trust with the community before trying to enact change within the community (Tuggle, 1995). Thus, it is important for policymakers to increase outreach and support within the African-American community as policies could be tailored to the needs of African-American communities in order to promote health equity within the African-American community.

2.5. Further research

As a result, public health researchers and practitioners could further analyze policy level factors within the African-American church as there could be underlying policy-level factors impacting health programs from being conducted within African-American churches. With regards to program and intervention development, researchers should consider organizational and intrapersonal level factors when conducting health programs within African-American churches as they were the levels that were most identified in this study. However, it could be possible that researchers failed to analyze interpersonal, community, and policy level factors in their studies and as a result, organizational and intrapersonal level factors were the only ones

identified. In addition, further research should be done to better understand African-American women pastors and church leaders' perspectives on facilitators and barriers of conducting health programs as differences might exist in what can help or inhibit a health program from being successful within the African-American church. This is important as the percentage of African-American women clergy rose from 3% in 1970 to 19% in 1990 (Barnes, 2006). Moreover, African-American women pastors and church leaders might have unique challenges when leading the church as research has shown that female leaders are often asked to lead a church when the church is on the brink of failure (Cook and Glass, 2004). Moreover, women pastors might be assigned to churches that are facing a lack of financial and organizational support (Barnes, 2006). Thus, it is important for research to also assess facilitators and barriers from the perspective of African-American women pastors who are interested in creating health programs within the African-American church.

2.6. Limitations

Although a robust systematic review of the literature was conducted, it could be possible that a few key terms were omitted from the search and as a result could have impacted the articles included in the study. Moreover, the articles that were included in this study were predominantly conducted on the southeastern coast of the United States and as result might not be generalizable to other areas of the United States. In addition, although factors were blindly coded by each researcher, there could be disagreements by what was considered a factor at a stage of the socioecological model.

2.7. Conclusion

The African-American church is a cornerstone for African Americans and has been noted to be an effective vessel for health promotion activities. Based on the perceptions of African-

American pastors, there are facilitators and barriers that exist within the intrapersonal, interpersonal, organizational, and community levels of the socioecological framework that must be considered when designing health interventions focused within the African-American church. By considering these factors, this will help ensure health equity for participants of these programs and will ultimately advance social justice.

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3. EXPLORATORY AND CONFIRMATORY FACTOR ANALYSIS OF RELIGIOUS-BASED CONSTRUCTS: A STRUCTURAL EQUATION MODEL USING THE RELIGION, AGING, AND HEALTH SURVEY

3.1. Introduction

In research, religion has been challenged as a subject for health research (Lawrence 2002; Sloan and Bagiella 2002; Sloan et al., 1999, Sloan et al., 2000). Despite many critics, research has found that there are benefits of religion with regards to health. Research has found that various religious-based constructs such as, religious attendance, have been associated with longer life, greater life satisfaction, as well as faster recovery from depression (McCullough et al., 2000; Strawbridge, Cohen, Shema, & Kaplan, 1997; Levin, Chatters, Taylor, 1995; Koenig, Pargament, & Nielsen, 1998). In addition to religious attendance, research has also examined factors such as forgiveness, prayer, and religious coping and their effects on physical and mental health (Krause & Ellison; 2003; Koenig et al., 1995). Within the elderly, religious-based factors are important as research has shown that religious faith was seen as the most important factor that allowed the elderly to cope with their illness (Koenig, 1998). In addition, a recent study examined the effect of church-based support on health amongst the elderly and discovered that older people who attend church feel their congregations are more cohesive, and that they receive more spiritual and emotional support from their fellow congregants in highly cohesive congregations (Krause, 2002). Instruments that have been used to measure constructs such as religious attendance, forgiveness, prayer,

religious coping and church-based support include the Duke Religion Index, the Heartland Forgiveness Scale, the Measure of Prayer Activity scale, the Religious Coping Instrument, and the Religious Support Scale (Koenig, Parkerson, Meador, 1997; Thompson, Synder, Hoffman 2005; Poloma & Pendleton, 1991; Pargament, Koenig, Perez, 2000; Fiala, Bjorck, Gorsuch, 2002).

Although some of these religious factors have been studied, it is important for researchers to explore additional religious factors in order to fully understand the effect of religious factors on health amongst the elderly (Koenig, Smiley, & Gonzales, 1988). As a result, this study will re-examine religious based constructs and their items in order to determine if the factor structure identified matches what is in the literature. In addition, it is important for researchers to examine the interrelatedness of religious-based constructs as this has not been previously done. As a result, this study will use the Religion, Aging, and Health survey, as this study examined the effects of religious-based factors amongst older adults, which included spiritual connectedness, positive religious coping, religious music support, religious commitment, private religious practices, and negative religious coping, God-mediated control, and organizational religiousness. Each of these constructs was selected as each has had an effect on health amongst the elderly (Lee, 2014; Krause & Hayward, 2014; Krause & Hayward, 2014; Abu-Raiya, Pargament, Krause; 2016; Krause, 2005; Krause 2006).

3.2. Literature Review

Spiritual connectedness has been defined as one's need to connect with something beyond the self, which provides a sense of purpose (Bellingham, Cohen,

Jones, Spaniol, 1989). As a construct, spiritual connectedness has been theorized as a two-dimensional construct that includes a horizontal as well as vertical dimension (Stoll, 1989). The horizonal dimension assesses one's relationship with a higher power through the beliefs, values, and interactions with other individuals and the vertical dimension assesses an individual's direct experience with a higher power (Stoll, 1989). Spiritual connectedness is theorized differently from religiosity, in that it does not necessarily involve a tangible, observable activity. However, the religious rituals could serve as a way to promote an individual's spiritual connectedness (Lee, 2014). With regards to measurement amongst older adults, Krause (2002) developed six items to measure spiritual connectedness that includes both dimensions of this construct. In a study that used these six items, the researcher noted that the reliability coefficient amongst the six items was 0.961 (Lee, 2014). In addition, the composite score was coded with a higher score which indicated a greater sense of spiritual connectedness and this study's participants were older Whites and African-Americans (Lee, 2014).

With regards to religious music support, religious music has been a concept that has been found to be the most common trigger of deep religious experiences, even more important than reading the Bible or prayer (Greeley, 1974). This is due to the emotion that results from the benefits of listening to religious music. Thus, it has been conceptualized to promote a strong sense of connectedness with other people amongst individuals who are more emotionally involved in religious music (Krause, Hayward 2014). Religious music support has been assessed using four items (Krause, Hayward, 2014). In measurement amongst older White and African-American adults, the reliability

estimate was 0.942 with a M=13.7 and SD= 2.2 (Krause, Hayward, 2014). Moreover, a high score indicates that study participants have a stronger emotional reaction to religious music (Krause, Hayward, 2014).

Religious commitment as a construct has been theorized as a multi-dimensional construct due to Glock's Model of Religious Commitment (Glock, 1962). These dimensions include the ideological, ritualistic, experiential, the intellectual, and the consequential dimension (Glock and Stark, 1970). The ideological dimension focuses on the beliefs religious individuals are expected to keep, and the ritualistic dimension focuses on the many ways that religious individuals are expected to practice in their religion (Glock and Stark, 1970). The experiential dimension focuses on the more or less intimate and emotional relationships religious individuals are supposed to have with a supernatural power, and the intellectual dimension pertains to the idea that a religious individual will be knowledgeable about the basic principles of their faith and scripture (Glock and Stark, 1970). Lastly, the consequential dimension focuses on the secular impacts of religious practice, experience, belief, as well as knowledge (Glock and Stark, 1970).

In addition, the construct of religious commitment is rooted in the work by Allport and Ross (1967) on extrinsic and intrinsic motivation. This is because an individual who is intrinsically motivated is involved in religion because they see religion as a motivating factor in life and thus, they incorporate their faith into everything in their life (Allport & Ross, 1967). However, an individual who is extrinsically motivated is involved in religion because it meets alternate needs (Allport & Ross, 1967). Although

many researchers agree that religious commitment is a multi-dimensional concept, researchers have attempted to capture the most important dimensions that impact health status, which includes intrinsic aspects of the construct. Thus, with regards to measurement, researchers have used 3-items to assess religious commitment amongst older Mexican Americans and reported a Cronbach's alpha of 0.900 for these three items (Krause, Hayward, 2013). In addition, this study reported M=10.0; SD= 1.6, and a range= 5-12 for this measure (Krause, Hayward, 2013).

Religious coping has been defined as efforts to understand and handle stressors in life in ways that are related to what is sacred (Pargament, 1997). The "sacred" refers to the aspects of life that deal with the divine or have divine-like qualities (Pargament, Mahoney, 2005). Pargament's theory of religious coping focuses on the idea that: 1) religious coping serves to search for meaning, control, reduction of anxiety, intimacy with others, transformation, and a search for the spiritual or sacred, 2) religious coping is multi-faceted in that it includes behaviors, emotions, cognitions, and relationships, 3) religious coping changes over time, context, and situations, 4) religious coping is a process that leads to helpful or harmful outcomes, 5) religious coping adds a unique area to the coping process as it focuses on the sacred, 6) and it can help add important information to people's understanding of religion and its impact on health. With regards to measurement, the RCOPE instrument has been developed according to Pargament's theory of religious coping. However, due to its length, its use is limited and thus, led to the development of the Brief RCOPE instrument. After a factor analysis of the full RCOPE was conducted with college students facing stress, it was constrained to two

factors, positive and negative religious coping (Pargament, Koenig, Perez, 2000). Thus, the Brief RCOPE, is divided into two subscales, seven items for positive religious coping and seven items for negative religious coping. This instrument was also tested amongst elderly patients and also concluded a two-factor structure was a reasonable fit of the data (Pargament, Smith, Koenig, Perez, 1998).

With regards to psychometric properties, the Brief RCOPE has been used across many populations and studies (Pargament, Feuille, Burdzy, 2011). In a study that included predominantly older Whites living in residential care facilities, the Brief RCOPE found the internal consistency to be 0.85 for positive religious coping and 0.73 for negative religious coping (Schnowitz, Nicassio, 2006). In addition, the Brief RCOPE has shown to have good concurrent validity, as positive religious coping has been shown to be strongly and consistently related to measures of positive psychological constructs as well as spiritual well-being (Pargament, Feuille, Burdzy, 2011). For example, in a study of predominantly White churchgoing self-identified trauma victims with a mean age of 55 years old, positive religious coping was positively related to post-traumatic growth ($r=0.37$), and unrelated to post-traumatic stress disorder symptoms (Harris, Erbes, Engdahl, 2007). In addition, research has also shown that negative religious coping is tied to indicators of poor functioning, such as anxiety, depression, pain, PTSD symptoms, and negative affect (Pargament, Feuille, Burdzy, 2011).

God-mediated control, as a construct, can be defined as the idea that problems can be overcome, and goals in life can be met by working together with God (Krause, 2005). In addition, God-mediated control has been analyzed to be a construct that can be

theorized in two ways. One being that a person can work collaboratively with God, and the other being that God controls all aspects of an individual's life (Pargament, 1997). God-mediated control has been measured using seven items as identified through factor analysis and a factor score was obtained by summing the items that loaded onto this factor (Berrenberg, 1987). Psychometric properties of this scale showed test-rest reliabilities of 0.97, 0.97, and 0.90 for 1-week, 2-week, and 4-week intervals (Berrenberg, 1987). In contrast, research has measured both dimensions of God-mediated control using three items amongst the elderly, specifically African-Americans and Whites (Krause, 2005). In this study, two items were taken from Berrenberg's work, and a third item was created using the extensive item development strategy from the researcher's previous work (Krause, 2002; Krause 2005). As a result, this study found the internal consistency reliability estimate for the composite of this construct to be 0.907 (Krause, 2005). In addition, the items in this study were coded so that a high score showed a greater sense of God-mediated control and the mean for scale assessing God-mediated control was 10.335 and had a SD= 1.861 (Krause, 2005).

Private religious practices, is a construct that represents behavior and is a part of the larger construct of religious involvement (Levin, 1999). Research has shown that there are three dimensions of religious involvement, which include organizational, nonorganizational, and subjective religiosity amongst older African-Americans (Chatters, Levin, Taylor, 1992). Private religious practices, as a construct, is noted to be different from public religious behavior and is nonorganizational in that they occur outside of what is considered organized religion (Levin, 1999). They are also noted to

be informal as there is not a fixed time or place for them to occur (Levin, 1999). Lastly, they are considered to be noninstitutional as they are private behaviors that do not occur in a formal place of worship and occur at home (Levin, 1999). With regards to measurement, research has shown that there are 45 items that have assessed private religious practices amongst seven known scales (Levin, 1999). Research has noted that the most widely used measures were developed by Glock and Stark, Faulkner and DeJong, and King and Hunt (Levin, 1999; Robinson and Shaver, 1973). Although research has validated items that fit well in a measurement model of nonorganizational religiosity such as frequency of prayer, reading religious literature, or watching religious television or radio, amongst a sample of older African Americans, research is still being conducted to further expand the scales for this construct (Chatters, Levin, Taylor, 1992; Levin, 1999). As a result, researchers have used three items to measure this construct amongst older African-Americans and found the reliability estimate for the composite of these items to be 0.748 (Krause, 2006). In addition, a high score on this measure showed more frequent involvement that is private (Krause, 2006).

Organizational religiousness, is a construct that assesses the involvement of the respondent with a formal public religious institution and also include behavioral as well as attitudinal components (Idler, 1999) Thus, organizational religiousness has been measured by attendance to religious services or membership in a congregation (Idler, 1999). Also, measuring how well an individual fits into the religious church can result in evaluating their involvement in the church (Idler, 1999). Moreover, it can also measure the experience of public religious worship that is behavioral and attitudinal such

as the importance of reading texts, prayer, or music (Idler, 1999). Although items such as attendance to religious services has been used as a reliable item for decades in the Gallup Poll, research has expanded to test other activities such as choir practice, youth group activity, and an individual's fit to a church as a measure of organizational religiousness (Wingrove and Alston, 1974; Strawbridge 1997, Idler, 1999; Pargament, Tyler, Steele, 1979). With regards to measurement, this construct has been measured using three items amongst older African-Americans and its reliability estimate for the composite of these items is 0.791 (Krause, 2006). In addition, a high score on this measure showed greater involvement in formal activities that happen at a church (Krause, 2006).

Although the measures of the various religious constructs have been examined using independent samples, the factor structures of these constructs have not been tested using data from all the measures simultaneously in one sample. Thus, the purpose of this study is to 1) re-examine the factors structure of religious constructs measured by selected items in the Religion, Aging, and Health survey, and to 2) examine the nomological network of the religious constructs. This is because researchers have noted the importance of exploring additional religious factors in order to fully understand the effect of religious factors on health amongst the elderly (Koenig, Smiley, & Gonzales, 1988). In addition, it is important for researchers to examine the interrelatedness of religious-based constructs as this has not been previously done and could result in further exploration of the convergent or discriminant validity of these constructs. Also, it is important to assess if the factor structure identified in this study matches what is in the

literature. These validated religious constructs are: spiritual connectedness, positive religious coping, religious music support, religious commitment, private religious practices, and negative religious coping, God-mediated control, and organizational religiousness. Each of these constructs was selected as each has had an effect on health amongst the elderly (Lee, 2015; Krause & Hayward, 2012; Krause & Hayward, 2014; Abu-Raiya, Pargament, Krause; 2016; Krause, 2005; Krause 2006). In order to identify these latent constructs exploratory factor analysis (EFA) was used to determine the number and nature of factors of the items used in the study. Then, confirmatory factor analysis (CFA) was used to evaluate the hypothesized structures of the latent constructs identified in the exploratory factor analysis, examine the relationship among the latent variables (i.e., the nomological network) and to compare the factor structure of these constructs to what is in the literature.

3.3. Study Population and Data Sources

This study will use data collected from the 2001 Religion, Aging, and Health survey (RAH) that analyzed religion, self-rated health, depression, and psychological well-being amongst older Blacks and Whites (65 and over) within the United States. Participants in this study were noninstitutionalized, English-speaking and were restricted to eligible people in the U.S., except Alaska or Hawaii residents. In addition, questions were asked regarding religious status, activities, as well as beliefs amongst those who used to be Christian but are not now, currently practice Christianity, and those who have never been associated with religion in their life. Participants that practiced other religions were not included as part of this study.

In addition, the sampling frame for the RAH survey consisted of eligible persons contained in the Health Care Financing Administration (HCFA) Medicare Beneficiary Eligibility List (HCFA is now called the Centers for Medicare and Medicaid Services-CMS). The list contains the name, address, sex, and race of virtually every person in the United States. Moreover, people were included in the RAH survey even if they were not receiving Social Security benefits. The study design and survey instrument for the RAH survey was constructed by Neal Krause, and the data was collected by Louis Harris and Associates (Harris Interactive). First contact was made with participants from March-August 2001, by sending them a letter informing them of the purpose and nature of the study. The response rate for the baseline study was 62% and in total, 1,500 interviews were conducted. Participants were compensated $30 for participating in the study and in total 752 older blacks and 748 older whites were sampled. For the purpose of this study, Wave 1 data was the only data that was used as Wave 2 data of the RAH had a loss in participants and did not include all of the religious-based constructs that were in Wave 1 of the data.

3.4. Measures

In total, the RAH survey assessed 1547 items that looked at religion, self-rated health, depression, and psychological well-being within their sample. In this study, only 36 items were included as these items were pertinent to the following religious-based constructs: spiritual connectedness, religious coping, religious music support, religious commitment, God-mediated control, private religious practices, and organizational religiousness. Each construct was selected as each has had an effect on health amongst

the elderly (Lee, 2015; Krause & Hayward, 2012; Krause & Hayward, 2014; Abu-Raiya, Pargament, Krause; 2016; Krause, 2005; Krause, 2006). In addition, these items are derived from various psychometric instruments that are included in the RAH survey which include, the Brief RCOPE instrument, the Multidimensional Measurement of Religiousness/Spirituality instrument, as well as instruments developed by the principal investigator of the RAH survey as previously stated (Krause, 2002; Pargament 1997; Krause, 2002b; Fetzer Institute/National Institute on Aging Working Group, 1999; Berrenberg, 1987, Krause 2002d; Krause, 2003; Ellison, McFarland, Krause, 2011). Table 6 in Appendix B shows the constructs and their items as used in this study.

3.5. Methods

Each item that was included in this study had varying level of responses ranging from 4 to 9 categories. Responses of "No answer" "Not sure" and "Decline to answer" and "Not applicable" (i.e., values such as 99, 98, 97, -9, -8, -7) were changed to missing values. Items were recorded to ensure their order was uniform across all items. All the items were treated as continuous variables.

The 1,500 observations were split into two datasets of 750 observations. Thus, 750 observations were used to conduct the EFA, and 750 observations were used to carry out the CFA. First, the Bartlett test of Sphericity (Bartlett, 1950) and the Kaiser-Meyer-Olkin's Measure of Sampling Adequacy (Kaiser, 1974) were conducted to examine the suitability of the data for factor analyses. Then, exploratory factor analysis was used to determine the underlying factor structure of the items (Brown, 2015). In order to determine the number of factors, factors with an eigenvalue greater than 1 were

retained. Eigenvalues are important to assess as they are a measure of how much of the variance of observed variables are explained by a factor (Kaiser, 1960). Factors with an eigenvalue greater than 1 explain more variance than a single observed variable (Kaiser, 1960). Although scree plots, are also suggested as a method in helping to retain factors, scree plots have been found to underestimate the number of factors, when there are more than two factors and as a result can be unreliable (Streiner, 1998). This is an issue as underextraction in the number of factors can result in factors containing large error components (Comrey & Lee, 1992). As a result, Kaiser criterion was used to extract factors. Although Kaiser's criterion has been questioned to overestimate the number of factors in finite samples, research has also shown that when the sample to variable ratio is large it is an appropriate measure to use (Horn, 1965; Robbins, 1980). Also, items with factor loadings greater than 0.4 were retained as these factor loadings are considered important (Tabachnick & Fidell, 2001). Items that cross-loaded were assessed for their alignment with constructs in the literature. However, if their factor loadings were less than the factor loading criteria they were removed. In addition, promax factor rotations were used to provide a more realistic representation of how factors are interrelated (Brown, 2015). Cronbach's alpha was used to measure how closely related a set of items were as a group (Cronbach, 1951).

In addition, the 36 items included in this study had missing data rate of 3.53%. In order to address the missing data issue, multiple imputation was used as it is a data-based process that occurs as a separate step before estimation of an EFA model and is a strong methodology to handle missing data that is missing completely at random

(MCAR) or missing-at-random (MAR) (Brown, 2015). Once the EFA was complete, confirmatory factor analysis was conducted to examine whether the hypothesized factor structure was supported by the data. In addition, full information maximum likelihood estimation was used in the CFA as it is an estimation method to determine the model parameter estimates that maximize the probability of observing the data if the data was collected from the same population again (Brown, 2015). In addition, an expectation-maximation (EM) algorithm was used to estimate the covariance matrix as this method can be used to compute maximum likelihood estimates from incomplete data (Dempster, Laird, and Rubin, 1977). In order to assess if the model was a good fit, a Chi-Squared test was conducted as well as global fit indices of RMSEA, SRMR, and CFI were analyzed. In addition, in order to improve the model fit, modification indices were examined and residuals of items that had similar wording were correlated. Moreover, paths were not added that would result in cross-loadings or adding correlations between residuals from two items that loaded onto two different factors. All analyses were conducted using Stata 16.

3.6. Results

The Barlett Test of Spherecity ($df=630$, $\chi^2 = 1.02X10^5$, $p<0.05$) and the Kaiser-Meyer Olkin measure of sampling adequacy (0.943) both indicate that the data were suitable for a factor analysis. Six factors were retained as they were the only factors that had an eigenvalue greater than 1. Table 7 in Appendix B below shows the eigenvalues of the six factors retained in this exploratory factor analysis. With regards to the factor loadings, only items with factors loadings greater than 0.4 were retained in this study.

Thus, items “I realize the devil makes hard times happen,” “I rely on God to help me control my life,” “I can succeed with God’s help,” “All things are possible when I work together with God,” “How often do you watch formal church services on TV or listen to them on the radio,” “When you are at home, how often are prayers or grace said at mealtime?” and “How often do you listen to religious music outside church-like when you are home or driving your car?” were deleted. As shown in Table 8, in Appendix B, one item did cross-load on two factors, item, “How often do you listen to religious music outside church-like when you are home or driving your car?” but since its factor loadings were less than the 0.4 it was deleted. Table 8 shows that each factor has at least three items loaded into each factor.

Based on the six factors identified in the EFA, as shown in Table 9 in Appendix B, each factor had an internal consistency greater than 0.7, which shows that items have a high internal consistency (Cronbach, 1951). Based on these results, confirmatory factor analysis was used to evaluate the hypothesized structures of the latent constructs identified in the exploratory factor analysis. Figure 2, in Appendix B, shows the hypothesized structure of the latent constructs and their items. The hypothesized model had a statistically significant Chi-Squared test ($df=362$; $\chi^2 =1143.545$, $p<0.05$) indicating that the model is significantly worse than a perfect fit. Since Chi-Squared test is impacted by sample size, it can in turn cause the model to be rejected when the model could be a good fit (Bearden, Sharma, Teel, 1982). Hence other fit indexes were examined. According to Hu and Bentler (1998), the global fit index of RMSEA (0.066) indicates a fair and SRMR (0.055) indicates a good fit.

3.6.1. Modification of indices

The modification indices suggested correlated the residuals of the following items which had very similar wording in order to improve the model fit.

1) "I feel that God is right here with me in everyday life" (Q603A2) and "When I talk to God, I know he listens to me" (Q603A3),
2) "I look to God for strength in a crisis" (Q1003A1) and "I look to God for guidance when difficult times arise" (Q1003A2),
3) "Religious music lifts me up emotionally" (Q707A1) and "Religious music gives me great joy" (Q707A2),
4) "When you are at home, how often do you read religious literature other than the Bible?" (Q804) and "How often do you read religious newsletters, religious magazines, or church bulletins when you are home?" (Q806),
5) "I have a close personal relationship with God" (Q603A1) and "I feel that God is right here with me in everyday life" (Q603A2),
6) "I have a close personal relationship with God" (Q603A1) and "When I talk to God, I know he listens to me" (Q603A3),
7) "My faith helps me see the common bond among all people" (Q603A4) and "My faith helps me appreciate how much we need each other" (Q603A5)
8) "My faith helps me appreciate how much we need each other" (Q603A5) and "My faith helps me recognize the tremendous strength that can come from other people" (Q603A6)

9) "My faith helps me see the common bond among all people" (Q603A4) and "My faith helps me recognize the tremendous strength that can come from other people" (Q603A6)
10) "When you are at home, how often do you read the Bible? (Q802) and ""When you are at home, how often do you read religious literature other than the Bible?" (Q804),

As a result, these unique variances were correlated with one another. Also, this improved the overall fit of the model. In this model, the Chi-Squared test (df=352; χ^2 =673.71, $p<0.05$) indicates that the model cannot be a perfect fit. However, the global fit index of RMSEA was 0.043 which is less than 0.05, and indicates a good fit. Moreover, this model's CFI was 0.965 which is greater than 0.95 and also indicates a good fit. Lastly, SRMR was reported to be 0.048 which is less than 0.05 and indicates a good fit. Overall, this model's global fit indices show that the model has a good fit.

In addition, Table 10 in Appendix B shows the factors and the factor loadings of the items that loaded onto each factor. Moreover, Table 11 in Appendix B shows the correlations of the six factors included in this study.

3.7. Discussion

The purpose of this study was to 1) re-examine the factors structure of religious constructs measured by selected items in the Religion, Aging, and Health survey, as well as to 2) examine the nomological network of the religious constructs. Based on the factor structures identified through exploratory and confirmatory factor analysis, several religious based constructs were measured, in the Religion, Aging, and Health survey,

with items that matched what is in the literature. Spiritual connectedness, for example, was found to have been measured with the same three items previously noted in the literature (Krause, 2002). Religious music support was also found to have been measured with the same four items previously used in the literature (Krause & Hayward, 2014). Religious commitment was also found to have been measured with the same three items previously used in the literature (Krause & Hayward, 2014).

In contrast, the factor structure of positive religious coping identified in the exploratory and confirmatory factor analysis of this study, differed from what is in the literature as it showed that five items made up this factor as opposed to seven (Pargament, Feuille, Burdzy, 2011). However, it is important to note that only five items that make up the construct of positive religious coping in the literature, were measured in the Religion, Aging, and Health survey. Thus, only five items were tested in this EFA/CFA study and not seven as measured as part of the Brief RCOPE. In addition, the factor structure of negative religious coping from this study's exploratory and confirmatory factor analysis also differed from what it is in the literature as it showed that four items made up this factor as opposed to seven. However, it is also important to note that only five items that makeup the construct of negative religious coping in the literature, were measured in the Religion, Aging, and Health survey (Pargament, Feuille, Burdzy, 2011). Thus, only five items were tested in this EFA/CFA study and not seven as part of the Brief RCOPE. However, item Q1003A9 that has been used to measure negative religious coping, in the literature, had a low factor loading and thus was not used in the CFA model. As a result, the exploratory and confirmatory factor analysis in

this study found four items to make up negative religious copings' factor structure. Thus, further research needs to be investigated to determine if the psychometric properties of the five-item factor structure of positive religious coping, and four-item factor structure of negative religious coping identified through this exploratory and confirmatory factor analysis, are comparable to the Brief RCOPE's psychometric properties.

With regards to God-mediated control, the items for this construct in this EFA/CFA study did not load as their own unique factor. As a factor, God-mediated control has been assessed using seven items in the literature (Berrenberg, 1987). In addition, God-mediated control has been analyzed to be a construct that can be theorized in two ways. One being that a person can work collaboratively with God, and the other being that God controls all aspects of an individual's life (Pargament, 1997). The three items that were included in this EFA/CFA study were meant to be inclusive of both aspects (Krause, 2005). Since, the three items did not load onto one factor, this in turn, could indicate that the aspects are distinct factors and the original seven items needed to be included to measure this construct. Thus, further research should explore trying to measure both aspects of God-mediated control as one construct, or researchers should be cautious of not combining the two aspects of this religious based factor.

Faith itself has been defined as an integral, centering process that underlies the formation of beliefs, values, and meanings that: 1) gives coherence and direction to persons' lives, 2) links them in shared trust and loyalties with others, 3) grounds their personal stances and communal loyalties to a larger frame of references, and 4) enables them to face and deal with the challenges of human life and death (Fowler, Dell, 2004).

In the literature, faith has been noted as a topic that has been neglected in research (Jones, 1994; Kirkpatrick & Spilka, 1989; Plante, 1996). However, researchers have become more aware of understanding the importance of religious faith on human behavior and has even found that individuals who have an open and internalized faith as opposed to those who have a detached faith, had a positive relationship with their mental health (Jones, 1994; Ventis, 1995). In addition, researchers have found that terminally ill cancer patients at more mature stages of religious faith reported overall quality of life, higher quality of family life, and higher quality of psychological and spiritual life (Swenson, Fuller, Clements, 1993).

In this EFA/CFA study, items used to measure private religious practices and organizational religiousness did not load as two separate factors as seen in the literature (Levin, 1999; Ellison, McFarland, Krause, 2011). Instead, items from both constructs loaded onto one factor, faith-building activities. In the literature, private religious practices, is a construct that represents behavior and is a part of the larger construct of religious involvement (Levin, 1999). Research has shown that there are three dimensions of religious involvement, which include organizational, nonorganizational, and subjective religiosity amongst older African-Americans (Chatters, Levin, Taylor, 1992). Private religious practices, as a construct, is noted to be different from public religious behavior and is nonorganizational in that they occur outside of what is considered organized religion (Levin, 1999). It is also noted to be informal as there is not a fixed time or place for them to occur (Levin, 1999). Lastly, they are considered to be

noninstitutional as they are private behaviors that do not occur in a formal place of worship and occur at home (Levin, 1999).

In contrast to private religious practices, organizational religiousness, is a construct that assesses the involvement of the respondent with a formal public religious institution and also include behavioral as well as attitudinal components (Idler, 1999). Thus, private religious practices and organizational religiousness are theorized as being two distinct factors as one occurs publicly within the context of a religious based setting, and the other occurs in private away from the context of a religious based setting. However, this study found that when examined together as in an EFA/CFA study, their items come together as one factor. This is important to note as these items could note the intersection between these two distinct constructs, and thus further research is needed to determine if these two constructs should no longer be theorized separately or instead if items used to assess the two are more related than distinct, specifically within the elderly African-American and White populations.

Although, scales have been used to determine the strength of religious faith, such as the Santa Clara Strength of Religious Faith Questionnaire (Plante & Boccaccini, 1997) and Fowler's (1981) stages of faith, these scales do not focus on measuring the frequency of activities that an individual can do to help build their faith but instead focus on the stages of where an individual's faith is as well as where their faith stands. Although, the faith activities in the home scale (FAITHS) scale does measure the frequency of faith activities, it is a multi-faith-based instrument as it incorporates Judaism, Islam, and Christianity and is not specific to measuring faith-building activities

from a one-faith perspective. Moreover, the FAITHS scale also includes components that are focused on what activities a family does within their home to help build their faith, and does not include what activities could be done within a religious-based institution (Lambert & Dollahite, 2010). As a result, the items that loaded onto the faith-building activities construct in this study could potentially be used to measure the frequency of faith-building activities amongst elderly Whites and African-Americans, but further research needs to be conducted to further analyze the psychometrics of this factor and its items. This is important as research has shown that incorporating faith-building activities into health promotion programs within the church, is important to creating successful health programs, specifically in the African-American community (Gandara, 2020).

In addition to re-examining the factors structure of religious constructs measured by selected items in the Religion, Aging, and Health survey, this study also examined the nomological network of these religious constructs. Although this has not been previously done, the findings indicate that many of the constructs included in this study had a positive relationship with one another. Spiritual connectedness, religious music, religious commitment, faith-building activities, and positive religious coping all had a positive relationship with one another. It is important to also note that spiritual connectedness, religious music support, religious commitment, faith-building activities, and positive religious coping, all had a negative relationship with negative religious coping.

3.8. Practical and Theoretical Implications

The findings of this study are important as practitioners and researchers who are interested in measuring faith-building activities from a Christian faith perspective would be able to do so. This is important as many religious based factors included in this study such as religious coping, religious music support, and spiritual connectedness have been found to have a positive effect on health. Thus, further research could asses the impacts of faith-building activities on health, as the nomological network findings of this study showed it to have a positive relationship amongst the religious-based constructs included in this study with exception to negative religious coping. In addition, churches have noted church doctrine and health program alignment are a facilitator to creating health programs within the church, specifically within the African-American community (Gandara, 2020). By assessing the effect of faith-building activities on health, faith-building activities could be incorporated into the design of faith-based health promotion program curriculum to help improve congregational health, specifically within elderly African-American and White congregants. Moreover, researchers could also further explore the psychometric properties of using five items to assess positive religious coping as well as four items for negative religious coping. Also, research could explore trying to measure both dimensions of God-mediated control in three items or even caution researchers from doing so. Moreover, further research could explore the intersection of private religious practices and organizational religiousness since the items from both factors, in theory, should have been distinct but instead loaded onto one factor, faith-building activities, specifically from a one-faith perspective. In addition,

further research could examine measuring the faith-building activities within other populations as this data only included African-Americans and Whites.

3.9. Limitations

A limitation of this study is that its findings might not be generalizable to other demographic groups as the population of this study was only elderly Whites and African-Americans. In addition, it is important to note that not all of the items from validated instruments, such as Brief RCOPE were collected as part of the Religion, Aging, and Health survey which could impact the factor structure identified through this exploratory and confirmatory factor analysis study.

3.10. Conclusion

This study found that in re-examining religious based constructs' items, using the Religion, Aging, and Health survey, spiritual connectedness, religious music support, and religious commitment, matched what was in the literature. In contrast, three items used to assess God-mediated control did not load onto a factor. Also, five items assessed positive religious coping as opposed to seven, based on the Brief RCOPE, although only five were included measured in the Religion, Aging, and Health survey. In addition, only four items assessed negative religious coping as opposed to seven, according to the Brief RCOPE. Also, items that were included to measure private religious practices and organizational religiousness loaded onto one factor, faith-building activities which is contrary to what it is in literature. This is because theoretically both of these constructs occur in different settings. Private religious practices is theorized as occurring outside of a religious based setting while organizational religiousness is set to occur within a

religious based institution. In addition, this study identified faith-building activities as a potential measure, and is unique to a one-faith perspective amongst the elderly African-American and White population. Lastly, this study noted that the nomological network of spiritual connectedness, religious music support, religious commitment, faith-building activities, and positive religious coping were positive with one another. In contrast, negative religious coping had a negative relationship with each of these constructs. Overall, this study found the importance of re-examining religious based factors in order to re-assess how religious based constructs are theorized and measured in order to help further the work that has been on the impact of religion on health.

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4. FACILITATORS AND BARRIERS RELATED TO CONDUCTING HEALTH PROGRAMS WITHIN AFRICAN-AMERICAN CHURCHES: A PERSPECTIVE OF AFRICAN-AMERICAN WOMAN PASTORS AND CHURCH LEADERS

4.1. Research problem

Racial health inequalities have been a prevalent public health concern for decades (Wasserman et al., 2019). Despite progress in reducing inequities over time, racial gaps in health persist (Wasserman et al., 2019). African-Americans, have historically remained a stigmatized racial group, having disproportionately higher rates of obesity, hypertension and diabetes (Noonan et al., 2016). Faith-based organizations bring people together for positive purposes and can serve as important centers to promote health (DeHaven, 2004). Participants of a study evaluating the health benefits of two biblically-based health promotion programs exhibited weight loss, and other positive health changes (Whisenant et al., 2014). Specifically, within the African-American community, churches have served as the center of African American life as they have laid the foundation of African American identity and culture (Billingsley and Caldwell, 1991; Taylor, Thornton, Chatters, 1987). In addition, they have also played a vital role in the development of the African-American community as they have served as the political, social, and spiritual core of the community (Taylor et al., 1987).

African-American churches have played an important role in providing health programs that address health issues such as: HIV/AIDS, heart disease, breast cancer, nutrition, depression, obesity, diabetes, colorectal cancer, fruit and vegetable intake,

cervical cancer, and physical activity (Campbell et al, 1999; Resnicow et al, 2001; Resnicow et al, 2004; Ammerman et al., 2003; Markens, Fox, Taub, Gilbert, 2002; Matthews, Berrios, Darnell, Calhoun, 2006; Campbell et al, 2004; Yanek et al., 2001; Wilcox et al., 2007; McNabb et al., 1997). Despite the occurrence of these programs, African-American pastors have noted that there are facilitators and barriers that affect health programs being conducted within African-American churches (Coleman et al., 2012). In addition, facilitators and barriers are noted to exist at the intrapersonal, interpersonal, organizational, and community level of the socioecological model (Coleman et al., 2012). However, research has failed to analyze facilitators and barriers affecting health programs from the perspective of African-American women pastors (Gandara, 2020). In addition, research has not yet analyzed facilitators and barriers at the policy level of the socioecological model, that could affect health programming to occur within the African-American church (Gandara, 2020). This is important as the percentage of African-American women clergy rose from 3% in 1970 to 19% in 1990 (Barnes, 2006). Moreover, it is important to assess the perceptions of African-American pastors as pastors are trusted messengers within the African-American community and whose support is necessary for the success of health promotion interventions (Carter-Edwards, Johnson, Whitt-Glover, Bruce, & Goldmon, 2011).

4.2. Purpose statement

The purpose of this study is to assess facilitators and barriers that exist when conducting health programs within African-American churches, from the perspective of African-American women pastors and church leaders.

4.3. Research questions

From the perspective of African-American women pastors and church leaders, what facilitators and barriers exist when conducting health programs within African-American churches? What levels of the socioecological model do these facilitators and barriers exist at within the African-American church?

4.4. Theoretical framework

In this study, the socioecological model (SEM) will be used to stratify facilitators and barriers that were found in the study. The SEM focuses on both individual and social environmental factors that can affect health promotion interventions (McLeroy, Bibeau, Steckler, & Glanz, 1988). It addresses the importance of interventions addressing intrapersonal, interpersonal, organizational, community, or policy level factors that could be impact health. This model assumes that by making changes in the social environment, this will in turn bring about changes in an individual's behavior. Moreover, it assumes that in supporting individuals, this in turn will result in environmental change.

The SEM is a model that is borrowed from previous research and that is made up of various components. The SEM model is variation of Bronfenbrenner's (1979) model and also borrows from the work of Belsky (1980) and Steuart. Within the SEM model, patterned behavior is the outcome of interest and behavior itself is determined by intrapersonal, interpersonal, institutional, community, and policy level factors (McLeroy et al., 1988). In this model, intrapersonal level factors are defined as characteristics of individuals. This includes an individual's knowledge, attitudes, behaviors, self-concept, and skills. In addition, this includes the developmental history of an individual. With

regards to interpersonal level factors, the SEM defines interpersonal level factors as formal and informal social network and social support systems. This includes family members, work groups, as well as friendship networks.

The last three factors within the SEM model include institutional, community, and policy level factors. According to McLeroy et al (1988), institutional, or organizational level factors, are defined by social institutions and their unique organizational characteristics. In addition, they are defined by the formal and informal rules and regulations for which they operate. In contrast, community level factors are defined by the relationships that exists amongst organizations, institutions, as well as informal networks that have defined boundaries. Lastly, policy level factors are characterized as local, state, and national laws and policies that exist within that socio-ecological context.

In the field of public health, the SEM has been applied to a wide range of health topics and health programs. Robinson (2008), conducted a literature review to examine the dietary behaviors, focusing on fruit and vegetable intake, of low-income African Americans from a socio-ecological perspective. The purpose of the review was to offer rationale and guidance on integrating socio-ecological concepts into health promotion programs that are intended to improve dietary behaviors amongst the population. This study found that dietary behaviors and fruit and vegetable intake amongst African-Americans is a result of a complex interplay of personal, cultural, and environmental factors that can be explained by factors within each of the levels of the SEM. In addition, this study concluded that the SEM provided a useful framework for obtaining a better

understanding of multiple factors and barriers that impact dietary behaviors. As a result, this could then help guide culturally appropriate intervention strategies that focus on African-Americans.

With regards to African-American health and churches, the socioecological model has also been used as a theoretical framework. The Faith, Activity, and Nutrition (FAN) program was designed to increase moderate-intensity physical activity, increase fruit and vegetable consumption, and reduce blood pressure amongst African-American church members (Wilcox et al., 2010). This program was conducted within the church as the church was deemed a promising setting to address health disparities. In addition to using the SEM, this program also used community-based participatory approach as the FAN program was built on an already existing partnership. Overall, this study found that partnerships between faith communities and universities are an important avenue to deliver health promotion messages within a culturally and ethnically relevant manner. Moreover, this study also concluded that many research studies have focused on the effects of individual behaviors on physical activity as well as fruit and vegetable consumption, but few have focused on the factors beyond the individual and the FAN program addressed that gap by using a socio-ecological approach.

In addition, the SEM has also been used in studies that assess African-American church pastors and church leaders' influence on health-related issues within their congregation. Baruth, Bopp, Webb, and Peterson (2015) conducted a qualitative study in order to explore the influence of faith leaders on health-related issues within their congregation. The interview guide that was used in this study was based on the SEM

model as it hoped to expand the literature on how individual, interpersonal, and institutional factors influence health and health promotion programming within the church. Overall, this study concluded that pastors and church leaders believed they had influence on their congregation for issues related to health and wellness. In addition, pastors also discussed the importance of being a role model for their congregation and discussed the importance of considering these intrapersonal level factors when conducting health programming in the church.

4.5. Positionality statement

When I was three years old, my family immigrated to the United States. I remember living in a duplex with my brother, sister, dad, and mom and sleeping on the floor with one another as we did not have furniture or a bed to sleep on. We were an undocumented family who had moved to the United States with the hopes of obtaining a better life. For as long as I can remember, my family attended church on Sunday mornings. It was a small, non-denominational Spanish-speaking church that was run by a pastor who had a similar backstory to our family. He had immigrated to the United States when he was 16 years old and started preaching the Good News of Jesus Christ as soon as he got here. He would often share stories of him preaching at neighborhood parks around San Antonio and would also share how this drove him to make disciples of people who came to Christ. Thirty years later, he was now known as one of the most influential Spanish-preaching pastors in all of South Texas. In our family, we could not be happier that he was our pastor and someone who we could trust and learn from.

One hot, humid, summer day in San Antonio, my brother, my dad, and I decided to go to Columbus Park across the street from our duplex to play basketball. I remember walking to the park being excited because we were going to play basketball against my dad, something we enjoyed doing since we had no TV nor cable to watch; we were an undocumented family who had nothing but each other. I remember us playing and my brother saying "mira esto," which means "watch this" in Spanish. As he shot to try and make the basket, the basketball hit the backboard and went rolling into the grass. Quickly, I realized I needed to run for the ball before it fell into the nearby stream. I ran after the ball when I remember tripping and falling to the ground. I tried to get up but my left arm would not let me, it was broken. I immediately started crying as the pain began to overcome the adrenaline. I remember seeing my dad's face as he rushed to pick me up. He had no idea what to do. We had no health insurance, no money, we barely knew English and were undocumented. My dad ran home with me in his arms crying, where my mom and sister rushed outside as they sensed something had gone horribly wrong. My dad grabbed the keys to our old Mercury Cougar and drove my mom, my siblings, and I to the nearest hospital. Unfortunately, they were not able to treat me because we had no insurance but they quickly told my dad to go to CHRISTUS Santa Rosa Hospital down the street because they would be able to see me there. My dad, out of panic, drove into the "Ambulance Only Entry" where a paramedic saw us and quickly brought me into the Emergency Room. The nurses quickly took care of me and the next day I was taken into surgery. My dad was unsure if we were going to get deported, thrown in jail, or how we would pay for the bill to the hospital but through the grace of God, my

hospital stay, and surgery were paid for through a grant that Santa Rosa found for me. It truly was a miracle.

When I look back at this experience, I not only see God's love in my recovery, but I also see how God used others to overlook my circumstances at the time of this ordeal. First, God allowed the healthcare professionals to look beyond my undocumented status, my lack of health insurance, and the fact that I came from low socio-economic status, to help my family and me get through this troubling time. In addition, our pastor and our church congregants became people that my family and I valued and loved even more, as they were prayer warriors throughout this time. Most importantly, it solidified my faith and showed me that God is always with me and my family. As I got older, I carried these truths with me as I continued to get involved in the church and continued to grow my faith in Christ.

Growing up in inner-city San Antonio, my classmates were predominantly Latino and African-American. Despite many of our similar economic struggles, one thing was common to a lot of our lives, and that was our understanding that Christ was with us and that he would not leave us. Through those relationships, I was able to see that church was a safe place for us and a place for fellowship and spiritual development. In addition, at my church, our pastor would often welcome guest pastors that he had gotten to know over his life, and many of them were African-American. There I was able to see the love that African-American pastors had for their congregation as well as their love of giving back to the communities in which they served. Thus, I was able to see that we were all part of God's family and that we were all God's children.

As the years went by, many of the strong prayer warriors that were a part of my church began to get older and many began suffering from chronic diseases. Despite of their strong and diligent faith, many of them recognized that their time on Earth was getting shorter. However, many of them were excited as they knew that they would soon be with the Lord as well as reunited with past loved ones. Although many felt peace, I could see my pastor feel helpless as he was not a doctor or a public health practitioner and felt that he could not do much for his congregants except pray for them. At the time, I thought that this would just be an experience that I would go through, however, I now see it as God planting a seed in me to help lessen this problem within the church.

Overall, I believe that I am passionate about this research as I have seen the great things that God can do and because of the powerful role that I believe God has given to pastors in the church. Overall, I believe that there is no need to separate faith and health and thus, I believe that the church can be a powerful setting where health prevention efforts can be implemented as well as be successful. Thus, I look forward what is to come of this research as I believe in God using the church as a vehicle for improving health in underserved African-American and Latino communities.

4.6. Literature Review

In the U.S., 12.7%, or 41.4 million people in the U.S. are African-American (Data Access and Dissemination Systems, 2017). African-Americans are the second largest minority population in the U.S., following the Latino population (Data Access and Dissemination Systems, 2017). In addition, 58% of the African-American population live in the South with Texas being the state with the largest population for

African-Americans in the U.S (The Black Population: 2010, n.d.). When compared to non-Hispanic Whites 25 years and older, 86% of non-Hispanic African-Americans have earned at least a high school diploma, as compared to 92.9% of non-Hispanic Whites (Data Access and Dissemination Systems, 2017). In addition, 21.4% of non-Hispanic African-Americans have a bachelor's degree, as compared to 35.8% of non-Hispanic Whites (Data Access and Dissemination Systems, 2017). Moreover, 23.8% of African-American women report having at least a bachelor's degree as opposed to 18.5% (Data Access and Dissemination Systems, 2017).

In 2017, the average non-Hispanic African-American median household income was $40,165 as opposed to $65,845 for non-Hispanic Whites (Income and Poverty in the United States: 2017, 2019). Moreover, 22.9% of non-Hispanic African-Americans were living at the poverty level as opposed to 9.6% of non-Hispanic whites (Income and Poverty in the United States: 2017, 2019). With regards to unemployment, the unemployment rate amongst African-Americans was 9.5% as opposed to 4.2% of non-Hispanic Whites (Income and Poverty in the United States: 2017, 2019). In addition, in 2017, 55.5 % of non-Hispanic African-Americans reported using private health insurance as opposed to 75.4% of non-Hispanic Whites (Health Insurance Coverage in the United States: 2017, 2019). Moreover, 43.9% of non-Hispanic African-Americans relied on Medicaid or public health insurance as opposed to 33.7% of non-Hispanic Whites (Health Insurance Coverage in the United States: 2017, 2019). Lastly, 9.9% of non-Hispanic African-Americans report being uninsured as opposed to 5.9% of non-Hispanic Whites (Health Insurance Coverage in the United States: 2017, 2019).

With regards to health outcomes, life expectancies at birth for African-Americans is lower than non-Hispanic Whites. In African-American women, life expectancies at birth are 78.9 years as opposed to 72.9 years for men (Health Insurance Coverage in the United States: 2017, 2019). In non-Hispanic whites, the projected life expectancy for women is 82.0 years and 77.5 years for men (Health Insurance Coverage in the United States: 2017, 2019). In addition, African-American's are disproportionally affected by diseases such as cardiovascular disease, stroke, cancer, asthma, influenza, and pneumonia, diabetes, and HIV/AIDS (Health Insurance Coverage in the United States: 2017, 2019). In 2017, African-Americans were 20% more likely to die from heart disease than non-Hispanic whites (NHIS-Tables of Summary Health Statistics, 2019). In addition, although African-Americans represent close to 13% of the U.S. population, they accounted for 44% of HIV infection cases in 2016 (HIV Surveillance, n.d.). Moreover, African-American men are almost six times as likely to die from HIV/AIDS as non-Hispanic White men, while African-American women are eighteen times more likely to die from HIV/AIDS as non-Hispanic White women (HIV Surveillance, n.d.). With regards to cancer, African-Americans have the highest mortality rate of any racial or ethnic group for all cancers combined and for most major cancers (NHIS-National Health Interview Survey Homepage, 2020). From 2012-2016, African-American men were 1.2 times and 1.7 times, respectively, more likely to have new cases of colon and prostate cancer, as compared to non-Hispanic white men (NHIS-National Health Interview Survey Homepage, 2020). Moreover, African-American men are twice as likely to die from prostate cancer, as opposed to non-Hispanic white men (NHIS-

National Health Interview Survey Homepage, 2020). In African-American women, although they are just as likely to be diagnosed with breast cancer, they are almost 40% more likely to die from breast cancer, when compared non-Hispanic White women (NHIS-National Health Interview Survey Homepage, 2020). With regards to diabetes, African-American adults are 60% more likely than non-Hispanic white adults to have been diagnosed with diabetes by a physician (NHIS-National Health Interview Survey Homepage, 2020). In 2017, African-Americans were twice as likely as non-Hispanic Whites to die from diabetes (NHIS-National Health Interview Survey Homepage, 2020). In addition, African-Americans are 50% more likely to have a stroke when compared to their adult white counterparts (NHIS-National Health Interview Survey Homepage, 2020). Black men, specifically, are 60% more likely to die from a stroke when compared to non-Hispanic whites (NHIS-National Health Interview Survey Homepage, 2020).

Despite facing various poor economic and health related outcomes, faith has been a vital component in the lives of African-Americans. African-Americans are the most religiously committed racial group in the U.S. as 80% of African-Americans state that religion plays an important role in their lives as opposed to 56% of all U.S. adults (Masci, Mohamed, Smith, 2018). In the U.S., 79% of African-Americans identify as Christian and 53% are classified members of the historically black Protestant tradition which includes denominations such as the African Methodist Episcopal Church or the Church of God in Christ (Masci, Mohamed, Smith, 2018). Moreover, more than 45% of African-Americans attend religious services more than once a week and 54% of African-Americans report reading scripture at least once a week (Religion and Public Life,

2020). In addition, 83% of African-Americans are certain that God exists, and 73% pray on a daily basis (Religion and Public Life, 2020). Research has also shown that African-Americans are more likely than other religious groups, to participate in an organized religious service as well as express a higher degree of comfort with religious institutions' engagement in public life as well political life (U.S. Religious Landscape Survey, 2008).

In addition to having faith, within the African-American community, the church has been the cornerstone of this community and has laid the foundation of African-American identity and culture (Lincoln & Mamiya, 1990; Billingsley & Caldwell, 1991; Taylor, Thornton, Chatters, 1987). This is because the church continues to play an important role in community mobilization as well serving as an important political center within the African-American community (Levin, 1984; Pattillo-McCoy, 1998). Since their inception, African-American churches have provided social and support services as well as have played an important role in the Civil Rights Movement (Lincoln & Mamiya, 1990). In addition, African-American pastors, have also played an important role within the African-American church as pastors are seen as trusted messengers within the African-American community (Carter-Edwards, Johnson, Whitt-Glover, Bruce, & Goldmon, 2011). With regards to health, African-American churches have played an important role in providing health programs that address health issues such as: HIV/AIDS, heart disease, breast cancer, nutrition, depression, obesity, diabetes, colorectal cancer, fruit and vegetable intake, and cervical cancer activity (Campbell et al, 1999; Resnicow et al, 2001; Resnicow et al, 2004; Ammerman et al., 2003; Markens, Fox, Taub, Gilbert, 2002; Matthews, Berrios, Darnell, Calhoun, 2006; Campbell et al,

2004; Yanek et al., 2001; Wilcox et al., 2007; McNabb et al., 1997). As a result, the church has become a viable place to conduct health promotion programming within the African-American community.

4.7. Methods

In this study, a basic interpretive qualitative approach was used. According to Creswell (2007), the interpretive qualitative research technique helps the researcher understand the meanings of individuals or groups, as they identify with a social or human problem. Further, interpretive researchers seek to comprehend shared meanings, yet recognize that based on previous encounters and socio-cultural influences, each individual might interpret experiences in their own, unique way (Rubin & Rubin, 2005). From the participant standpoint, multiple versions of a single experience can be true. Specific to this study, we seek to explore a church leader's understanding about the health challenges, barriers and facilitators related to promoting health programs within African-American church ministries.

4.7.1. Study sample

In this study, a snowball sampling technique (Creswell, 1998) was used to recruit the study participants. Snowball sampling allows the researcher to recruit study subjects through referrals and contacts from acquaintances. Specific to this study, the sample comprised of six African-American women. Three of them were executive pastors of their church, one was on pastoral staff, one served as a music coordinator, and one served as a counselor. Five of the church leaders served in Texas, while one served in Georgia. Two of the participants were younger than 35, and four were between the ages

of 35-60. With regards to congregation size, two church leaders served between 75-150 congregants, one served about 250, one served about 250-300 church members, one served 300-500 church members and one served at church who had over 3,000 members. With regards to education, one church leader had H.S. education, three had a Masters, and two had a doctorate degree. Four of the church leaders served at a church that was non-denominational, one was Seventh-Day Adventist, and one served in the United Methodist church. Two church leaders served in an urban setting, and two in suburban settings. One church leader served at a rural, suburban, and urban church and one leader served at a church that was rural and in an urban setting.

4.7.2. Data collection

Creswell (2007), Merriam (1998), and Patton (2002) support the importance of using semi-structured interviews to investigate other people's experiences. As a result, this study used the semi-structured interview method (Merriam, 1998) for data collection. This method allowed for a comprehensive picture of the church pastor's understanding of the potential facilitators or barriers related to conducting adult health programs within the church to be obtained. Due to the COVID-19 pandemic, the semi-structured interview was conducted via Zoom, which is an online platform for video and audio conferencing, chat, and webinars or over the phone. Moreover, a semi-structured questionnaire was used as a moderator guide. This semi-structured interview allowed for a pre-determined set of questions to be created, while providing the flexibility to proceed through the interview in a more conversation-like manner. Since the semi-structured interview could not be done it was in person, it was important to establish a good rapport

as well as to gain the confidence of the participant, in order to obtain substantial information for the study. The interview, overall, was a conversational dialogue rather than a rigid, question-answer type format and lasted about ninety minutes. In addition, the interview questions were segmented into four categories. The first category focused on obtaining an understanding of the pastor's demographic characteristics as well as their journey to their ministries. Moreover, it assessed the relationship that the pastor had with local community members and congregants. The second category focused on the history, evolution, and vision of their ministries as well as current health programs that are taking place within the church. The third category focused on the church leaders' personal health habits and its potential impact on promoting health and wellness within the congregation. Lastly, the fourth category focused on questions about potential facilitators or barriers related to conducting adult health programs within the church, as well as the effect of community members and local/state/federal policies on congregant's health.

4.7.3. Recording data

In this study, participant permission was obtained prior to the interview as well as before the recording of the interview, via zoom's recording feature (Evers, 2011). The interview was recorded and stored in a password-protected file, until it was transcribed. Throughout the interview process, notes and memos were used to record initial impressions of the interview data.

4.7.4. Data analysis

Since the study was qualitative in nature, the data analysis was non-linear. This resulted in revisiting the data as the data was analyzed. After the data was transcribed, a thematic analysis approach was used to analyze the data as thematic analysis emphasizes identifying, analyzing, and interpreting patterns of meaning (Miles et al., 2014). In addition, member checks were carried out with participants to ensure content accuracy (Sandelowski, 2000). Once the participant confirmed the accuracy of the transcribed data, the data was coded independently. Later, they were broken down into more systematic patterns, and used the thematic approach to allocate themes to the participant's responses.

4.8. Results

In this study, ten themes emerged that acted as facilitators and barriers for conducting health promotion programs within the African-American church. These themes were 1) building community relations, 2) established church personnel, 3) congregation-based support, 4) pastor/leader influence, 5) pastoral/leader awareness and knowledge, 6) community-based support, 7) church program development and implementation, 8) church-policy alignment 9) policy influence, and 10) policy awareness A summary of the facilitators and barriers are found in Appendix C's Table 12.

4.8.1. Building community relations

The participants in this study noted that building community relations can act as a facilitator and barrier in creating adult health programs within the African-American

church. Building community relations can be defined as building partnerships in the community as well as with other churches and academic institutions. One pastor noted that in order for people to come and be engaged with the church, the church must go to the community and help where help is needed. The pastor said,

Church is about religion, ministry is about doing as it is about putting hands on. Many churches sit in a building, but here at Church 1, we go out into the community and reach others…For example, we set up at an apartment complex because people did not have meals. If you want to get people into your ministry you have to go out and minister. We are not a ministry that is stabilized we are mobilized. When they have issues, like they can't pay bills or get groceries, we are led by God to do these things. All in all, people in the community know us as hands on and not just as a ministry of word.

This is important to note as church pastors have gone outside of their church to build community relations. Another church leader noted,

I feel like in order for us to be relevant…we need to totally transform the outreach. It is different when you are a church kid like me and you grow up in the church, for all six years, and be told to reach out to the community. But it's like well define that? What do you mean by reaching out to the community? I feel like our church has to have different extensions into the community other than the one or two that we have now. Yes, we are consistent every Friday feeding the community, you know I think that's great. Yes, it's great that during the summer time and you know we offer Vacation Bible School. But if we only have, if right now in 2019 and 2020 we only have two extensions into the community, ten years from now, minimum, we need to have ten

extensions into the community. Because not everybody has to walk into your church anymore, they don't have too anymore. We've been Zooming, we've been Youtubing, we've been Facebook watching church for a year. Not everyone is going to get up, get dressed and physically walk into your church. There are people struggling, there were people struggling before the pandemic, now that we are in the pandemic, there are more people struggling and even at a higher rate. If we still only have two extensions into the community and we have not broadened that, then we will be doing a disservice to our church as well as our community. We need to have more extensions into the community and that can be uncomfortable. We sometimes get into a routine as we know what works. We can do the food pantry, we can do Vacation Bible School, and we can do that with our eyes closed but now we have to go outside of our comfort zone as cliché as it is, we have to think outside of the box. You live in this community for 30 years and the church has been in the community for 30 years. Is there anything else that you know about the church other than that you see them handing out food on Fridays, from a community standpoint.

Another pastor noted,

As new church we have the desire to do it but we just need to build it out and is something is going to help. Almost be a one-stop shop for the members. They can come and get prayer, mental health counseling, they can come and get community assistance. They can come and get housing once it has been built out. They can come have a place to stay, if their family needed for a given time. I think it is going to be a one-stop shop not just tending to the spiritual side of things but also the natural. We're still people, we

have to live. Hardships come and I think that it will be beautiful for the church to be that place. There is a negative within the black community, negative connotations within the church community, that it is all about giving your money, giving, giving, giving, giving, but we can change that narrative if we are also giving back to our members and the rest of community. It is to help all people not just our church members to help feed their natural and spiritual.

These two statements also showed that building community health relations can act as a facilitator for creating adult health programs within the African-American church. Another pastor, noted the importance of building community relations through church-to-church mentorship and through academic partnership. She noted,

We host trainings for other churches. Other churches look at us and say "Hey how did you all get those federal grants? How did you do what you do?" So, we created an organization called, X, where we took 10 churches and we helped them become 501(c)(3) non-profits. Not their church, but to setup another 501(c)(3), just like the same pattern that we have. We took it and cookie cut it for other churches who had an interest. It took them a year, because we took them through every level of training of a non-profit, from finances to your branding, to how to do surveys, to how to obtain an evaluator. We took them through 10-15 different tiers and by the end of that we gave them money, from the grant that we got from the X foundation here in Texas to actually pay for their non-profit paperwork, their 501(c)(3). At the end of it, 9 out of 10 churches are able to function as we function, and that's so cool. We hosted a, this was another really exciting thing that we got involved with, we hosted a conference on sexual assault

with the University of X. Why did we collaborate with them? Because when I put word out that's what I was going to do, a lady from their called me, and she says, "Were here on campus. We have an organization that I created called "X" because the news is not going to report this" but man, so many rapes going on in these college campuses. So much drug abuse going on college campuses. People don't want that information to get out because people then, won't become a student of their school. We put together a huge conference at X. We had victims on board, the city, and the health department involved. This statement notes that building community relations can occur due to mentorship that occurs to other churches and community relations that are built with academic institutions. However, one pastor noted that having building community relations can act as a barrier to conducting adult health programs if a transactional approach is taken within the African-American church. The pastor noted,

Essentially, what's happening, is our services are free and open to all of the public. Male, female, church member, non-church member but we don't say, "Well you're not going to get your food if you don't come to church. You got to come to church." No, we just give because Jesus didn't do that. You know I'm sure His hope was, "If we feed you this good fish fry on Friday night, hopefully we'll see you Sunday." But He didn't do that based on that.

This statement notes that having a transactional approach can act as a barrier for churches to build community relations. In addition, lack of awareness of community resources that are available can inhibit community relations to be built with programs that are already being offered. One pastor noted,

Sometimes people in the community, people in churches, they don't even know that it's available. Just making sure that your community knows that you do offer these programs. Sometimes people don't know what they don't know. If I don't work at doctor so and so's office, if I don't go to such and such hospital, if doctor so and so is not my dentist, I don't know what you offer the community. I mean I pass by your dental office every day, I pass by this urgent care every day, I just assume if I don't need your services, I am not coming in. If I don't need urgent care I'm not going. If I don't need, you know my teeth cleaned, I'm not going, but you could offer something in the community. So, if you have something that you're offering, making sure that it is expectable so that people can know that. I don't know what it is but I see that in some instances where health professionals, or health facilities will say, "Well we have these programs but nobody ever takes advantage of them." And then you also have it on the other side, where people are like, "Well I didn't even know that they offered that over there." Definitely bridging that gap.

This statement notes the importance of awareness of community resources as not knowing what is available can inhibit building community relations.

4.8.2. Established church personnel

In addition to building community relations, the participants in this study discussed the importance of how using church professionals within the church, could act as a facilitator and as a barrier to conducting health promotion programs within the church. Established health personnel can be defined as members of the church who

worked with the health department, or were teachers, nurses, doctors, or educators. One pastor said,

We have people who work with the health department in the church, and others with common degrees and we have teachers. We have a lot of people in the church who have skills and we have used them to build the church. Overall, having experience from those individuals who are in the health field like nurses, doctors, and public health can help the church's health.

Another pastor said,

We do have those people in the church that are certified in different areas of fitness, like a Zumba certification, or other certifications. We also do have a dance team, at the ministry, and so leveraging them to do a fun, type program to get people moving. It doesn't have to be a technical dance class but just hey let's do a dance party type thing to get people interested. I think we can leverage the dance team, we can leverage the senior leadership, and those members who actually have you know Zumba certification or are in the health field. Because I know that there are some but have just not used them yet.

These two statements note that having established health personnel can facilitate creating adult health programs within the church. Another pastor stated,

Yeah, we have one of our elders works in a trauma department at a major hospital here in town. This is so cool because the area where our church and non-profit is and where we have been funded, we've had a lot of gun violence over here. Kids getting shot, kids finding their parent's gun. You know, you could Google the tons of stories.

She setup in our church “Safe 2 Save”, which is a gun lock safety program anybody in the community, anybody anywhere in X, can walk into our church and get gun safety locks for their guns. We are the only church in X to provide that service. Gun safety locks, because I don’t know what’s going on with X, but it’s been a lot of shoot them up, bang bang,

This statement also notes the importance of having church personnel who can assist with creating adult health programs within the church based on their experience. Although pastors have noted that having established health personnel can facilitate adult health programs from being conducted within the church, it has also been noted to be a barrier. One pastor stated,

Sometimes I feel like in the church, people don’t know how to say no because it’s in the church. You know I don’t want to say no because you know I’m doing it for God, or you know doing it for the church, and so I don’t want to say no. But sometimes you have to say no. If you have a lot going on in your personal life you know if somebody asks you to plan a whole program, that might just not be the best time. Yes, you might be the person for it, or you’re organized because you’ve done it in the past, year after year. You’re reliable, you’re dependable, but if it’s not the best time for you right now, then say no. I have seen that time and time again in the church where either a person is guilted into doing it.

This statement notes that personnel in the church who can do work within the church can sometimes be a barrier as they might not know how to say no or be guilted into leading a program.

4.8.3. Congregation-based support

The participants in this study also expressed how congregation-based support could act as a facilitator as well as a barrier to conducting health programs within the church. Congregation-based support can be defined as a congregation member's support and influence on one another. One pastor said,

They promote the Lupus foundation because of my health, as I suffer from an autoimmune disease. Everyone is looking out for one another. They see me in crisis, when I can barely walk, and therefore, it causes them to encourage one another and to seek help regarding their health. People, in general, are not interested until they are affected, but here, we are here to help. It becomes a part of us, even if you are not a member. If we do not know, we seek to know.

In addition, another church leader stated,

I think in the church setting, because it's kind of like a family environment, if you see somebody else struggling, then because you care about them, they are a part of your church family, you want to help them out. You know she just had a stroke, she's struggling with this and as a church family you start hearing that, back-to-back to back, Brother blue over here is struggling with this, Sister grand is having this, well it's like, man what's happening to my church family? What can we do to start making healthier changes together? Sometimes in our church, that is where the health ministry team will come into play, and be like "Hey guys, you know were noticing such and such is happening we just want to give you some tips." Sometimes they'll just through those tips out there, and then see what the response is and if maybe there is an interest, it's like

"Hey let's have a cooking class or hey for those of you who can't do it by yourself". Because the reality is that sometimes people are not motivated by themselves, but as a church family, maybe all 100-200 of us can't go running, but if you can find like-minded people, like look, "Let's be accountable partners, okay." I think that sometimes within the church community, you realize that hey, this person over here is struggling over here just like I am. Let's find like mind people together, and maybe we can both work towards our health goals together. I might not have the strength by myself to do it, because, you know I'll be consistent for two hours and be like man I'm done, I'll try next year. But if I have somebody else that's on this journey with me, keeping me motivated, I motivate you, you motivate me, then hey maybe we can make some positive changes together. Sometimes you just need encouragement.

These two statements are important as they help identify that congregation-based support and its influence can facilitate the creation of adult health programs within the church. Although pastors/leaders have stated that congregation-based support can facilitate health programs within the church, it can also act as a barrier. One church leader stated,

Did you see XXXX workout yesterday, she did all upper body and she's been doing that now for the past five weeks every Monday, Wednesday, Friday. She showed a before and after picture of what she started with at the beginning of the five weeks and now where she is at the end of the five weeks. I want my arms to look like that." I feel like in that sense, it's kind of enticing like I want to do that. Five weeks that's nothing. It can also be frighting like, "Oh my gosh, you know, XXX was already somewhat small,

so of course it didn't take her no time. It will take me double or triple that, I don't have that time." They can get it in their own head and get discouraged…again, what works for me may not work for you. Again, what works for that person may not work for me.

This is important to note as the church leader noted that congregants can potentially discourage one another in an effort to bring about congregation-based support for health programs within the church.

4.8.4. Pastor/leader influence

The fourth theme that emerged from the interviews was that a pastor's/leader's level of influence, can act as a facilitator and as a barrier in conducting health promotion programs within the church. A pastor/leader's influence can be defined by their support, experience, initiative, consistency and accountability to conduct adult health programs within the church. One pastor noted that she feels she has a very strong influence on the health and health behaviors of her congregation. She said,

I have a great level, high influence, a very high level in promoting health and wellness amongst my congregants. It is hard to reach everyone, but if you talk to someone at Church 1, I have a hug that brings healing. I hug with heart and soul and people can feel that. There are people who feel lonely, suicidal, but when I hug them, they call me, I was feeling end of rope and your hug just gave me hope. I feel my hug is influential, it influences.

Another pastor noted,

I think I would have great influence doing it, heavy influence doing it. Typically, if we have an idea of what we think would be good for the church, we just have to create

a plan, create structure, and present it to the senior leadership. Once they approve of it, then we carry it out, so if I truly got something together for a health program, I definitely do not think it would be an issue to get that rolled out to the congregants. You know, create this whole program, and have it actually be implemented and carried out, I do not think that would be an issue right now because I have the influence to do that in other areas.

Another church leader noted,

You are not going to get any health programs in the church if it's blocked by the church leaders, or the church board, or whatever the hierarchy is in the church. You got to have your church leaders willing to be on board to have these programs available, in their church, and available to their church members.

These three statements are important as they note a pastor's influence on facilitating an adult health program within the church. In addition, a pastor stated,

I have learned through my ongoing years of training as a community health worker, as a substance abuse prevention training specialist, as a certified recovery coach, that most of these people had what we call adverse childhood trauma, adverse childhood experiences. We started, a program called, X, where we work with Texas Youth Commission, who is the facility that houses juvenile offenders…and found out that the Texas Youth Commission did not have a program for these girls once they come out. You know it's like you did your time, you just go on back into the community and I'm thinking that ain't cool. That's not cool. What skillset are you giving them? So I created a program called, X. The logo were pearls, and each girl that went through the 10-week

training program, what Texas Youth Commission said for the girls that come through this program, spend ten weeks, we're going to take them off of paper. Do you know how huge that is? Not to have a paper trail of your crime and you spend 10 weeks learning life skills through Gilbert Botvin Life Skills, or Rainbow Days Youth Connection, you know certified and all of that because you have to come with evidence-based programing. When you're writing a grant, people don't want, your personal impact story is good, but what curricula, what certification do you have that has a long trajectory of helping people. Let me say this, your education and my education matters. Everybody's not going to do what we've done, because they have their part. The Bible says, "Every member has a supply." My supply is to come swinging like a Mike Tyson. I have gone to Capitol Hill, I have spoken to Senators about keeping federal dollars in our community."

This statement also highlights the influence that a pastor can have in the creation of health programs. Although participants have noted that pastor/leader influence has been a facilitator in conducting adult health programs within the church, it was also noted as a barrier. One participant said,

Lack of consistency, number one, from leadership within the church. If you decide that you're going to have a health initiative or a health program but you don't follow through, then that's lack of consistency. So if you say, that hey we're going to run five miles every Sunday, and you do it two Sundays, and then you get busy that's lack of consistency. You don't stay consistent, then it fizzles out. It's like an old soda, you don't drink it, it's flat. Definitely lack of consistency from church leaders.

This statement is important as it highlights that lack of consistency can impact a church leader's influence to create a health program within the African-American church.

4.8.5. Pastor/leader knowledge and awareness

The fifth them that emerged in this study, and acts as a facilitator in conducting health programs in the African-American church is pastoral knowledge and awareness. This can be defined as a pastor/leader's knowledge and awareness of the issues in their church as well as in their community. One church leader noted,

I can remember at the beginning of this pandemic, once it got past a week, my dad was like, you know he's such a people person and he had a desire to want to stay connected with his young people as well. So, he's just like, "How do I stay connected? I'm thinking about doing this program and that program, because I want to make sure that however long this pandemic lasts, that I am still connected with my youth. I remember telling my dad like, "Daddy, you can't just ask me." I was like you have ask them. I was like we cannot just come up with a program and say this is what I am going to do to stay connected with the youth if that's not what is going to keep them connected. I was like you have to ask your youth, "Hey how can I stay connected with you? What would you like to see? Are you Zoomed out?" We need to figure out what does my community need? Do we need programs on exercise? Does our community need programs on healthy living? Does my community need a food pantry? Does my community need tutoring? Does my community have a lot of single mothers who may need daycare assistance. You have to figure out what are the needs for your community

so that your church can be equipped to provide those programs. Because if I am up here providing tutoring programs and that is not even needed in my community. If I am looking at the schools, if I am looking at the test scores, and the schools in my community are like A++ it's like I am up here offering tutoring programs and this is why nobody is coming for tutoring programs, it's because it's not a need in my community. Leaders have to figure out what is a need in your community, and the only way to figure out what is a need in your community is to reach out to your community and it has to be consistent.

Another pastor noted,

I've tried to engage in a lot of community service, or where there is a need but I usually try to ask, like hey what is it that you guys need or what is it that I can do to help. Sometimes, I feel like, people want to help, and they may go and step on people's toes and so I'd rather give you what you need then to give you what I want you to have, so I try to do it that way. I know a lot of people sometimes come into the church saying, "Hey, you know, we should do, x, y, and z" and I'm of the belief that you should give the community what it is that they need. Whether that's pulling in members from the community saying, "How can we better serve you guys? You may not attend this church but this church is in your community, you know it's in your environment, so what do you all need. So, kind of like polling the people is what I would call it.

Another pastor noted,

Right now, what do we have right now, a huge social justice issue going on. Anytime we get to watch on TV, social media, the knee to the neck, and the system says,

"And? So? What?" You know, you're creating hatred, and a burden among people that are just wondering when is enough enough. And people come to church, and they ask, "Pastor what do you think about…you know" and we have to have meaningful conversations on that in our men and fellowship times. In our life groups, in our small groups because you cannot ignore that. You can't as the pastor come in and start preaching and not talk about some of the social injustices that are before our eyes every single day. And again, who is it? It's Brown and Black people. For our leader, of our country to say, "All people die every day." Wow, you know that's just another stab in the heart that can make people give up and quit, and not even believe or have hope that things are going to get better or that even God cares. Does God care? He saw that knee to the neck. He saw what we saw because the Bible says, "He looks high, He looks low. His eyes are two and for on the Earth." So, when are you going to help us God? As pastors, we have to be able to provide hope to the most dismal questions that come before us, because we all live in the same world. We all live in the same society. We all have access to the news, whether is on your I-phone, maybe I don't have cable but I know what's going on. Word of mouth or whatever. What an image like that does to people of color who have to wonder, "If I get stopped am I going to die tonight?" It's only our people, that have to sit our sons and daughters now, and say "Hey, if you get stopped this is what you don't do and this is what you do, and you still might die. So be careful. Be in at a certain time. Pull your pants up. No picks in the back of your head. Look as decent as you can and you still could die like the gentleman did in Dallas. The cop said she walked into the wrong apartment, and killed a brother. Just killed him

because she walked into the wrong apartment. So, it's that kind of thing that the church, we're not blind to it, but we have to be able to speak to our congregants in a way that gives them hope and encouragement that things have got to get better. That things are going to get better and we have something to do with that betterment, and it's not just praying. It's not just marching in the street but it's equipping ourselves with knowledge, so that if I do stand before those who can spear mark the change, I've given them the wisdom and the council that I believe will move upon their heart to implement that not just for me, but for everybody involved. Amen, amen.

These three statements note the importance of pastoral knowledge and awareness of what is going on in the community as well as in their church in order to help create health programs within their churches. Moreover, the last statement helps focus on the issues that are occurring within society that are directly impacting African-Americans and thus highlights the importance of pastoral awareness and knowledge of the issues impacting the community.

4.8.6. Community-based support

The sixth theme that emerged in this study, acts as a facilitator and as a barrier in conducting health promotion programs in the African-American church and it is community-based support. Community-based support is defined as support that can come from the community to enhance church programming within the church. In one interview, the pastor noted that she felt that community support is needed in order to help conduct heath programs within the church. One pastor noted,

In order to help health programs be successful at Church 1, finances and grants, and those types of things could be brought into the church to help create health programs. My husband has talked about starting an A.A. (alcoholic anonymous) group, or a drug group, the things that are heavy in the society. In order to do so, we would have to go outside to help people come in and we would have to get people with experience to help setup these programs in the church.

Another pastor noted,

My childhood church, it is a big church in the community and what they would do is do health symposiums for women. Specifically, the first lady of the church would get her gynecologist, and long-time physician to come in and speak, on you know little things women should look out for when it comes to breast health and overall women's health, and those would be very well received. I think similar for my current church, is leverage doctors, and different health specialists in the community that can come in and talk about the risks of different behaviors or letting us know what are some of the warning things that we can look out for because I think that half of the battle is a lack of understanding, or knowledge about health.

These two statements highlight the need for having individuals in the community coming to the church to help create adult health programs within the church. Although community-based support has been noted as a facilitator to conducting health programs, pastors/leaders also noted community-based support to act as a barrier to conducting health programs within the African-American church. One pastor noted,

Sometimes churches, they have a lot of programs, but the programs, you don't have people participating in the programs, because you have not even built a relationship with the people in the community for people in the community to even know that it is there. But a lot of times churches really have to, that's when it comes to getting out of your comfort zone. Yes, I don't know you, yes, they've never come to my church before, but it's about building the relationship because that's a big thing. A lot of people have stigmas when it comes to churches. It does not even matter what denomination it can be. Like sometimes people just have a stigma with the simple word of church. Whether they've been church hurt, whether they just hated going to church to church as a kid, because they were dragged by their grandparents or parents, you know what I'm saying, there's just a stigma attached to church. Maybe our church could have something great for them, but the fact that number one, I have no relationship with you, I don't even know your name, I don't even know that you're in my community number one, and because you have a stigma with church, it's not like you're going to come to my church one Sunday, or one Saturday, or one Wednesday you know, or whatever it is, because you don't have a relationship with anybody there.

Another pastor noted,

I would say trust, it's a huge one. Well, I think that the community doesn't necessarily trust church members, like that means, people like administrative staff, maybe even the pastor, and the members of the congregation because you know, they have again, this perception that people who go to church think that they are better than me or they won't understand me or just all these things they created in their mind. Or

they're going to try to change me, or try to make, you know to be a better person or to think like them. You get in your mind and you just tell yourself, "No I'm not going to do that because they're going to try and change me. "Church folks are the worst folks" is what I would always hear growing up.

These statements are important as they highlight the stigma that communities have towards churches and thus lack of community-based support could act as a barrier to conducting health programs within the church. In addition, one pastor noted the stigma that can exist with mental health programs within the African-American community. She noted,

Programs that focus on mental health I think are huge, and I don't know, I can only speak for myself, in the Black community, I don't know how it is in the Latino community but there is a huge stigma in the Black community on getting and taking care of your brain. Coming from my health background, I always tell anybody, I am an advocate for counseling. Counseling doesn't mean that it's bad, if my ankle is hurting, do you think I am just going to sit here and specifically let my ankle hurt when all of my body weight is on my ankles and my feet every day for me to move around? No, after a while I can't walk, I'm limping, let me go to the doctor and let me figure out what is going on with my ankle. Is it my muscle, is it my ligaments, do I have a fracture? Let me figure out what's going on, I'm tired of all of this pain. But I feel like when it comes to the brain, people don't have that same emphasis. The brain is just as an important muscle as anything else that you could've hurt or pulled, and so you need to take that same emphasis. So, I definitely think that you know mental health is a big thing, in all

capacities, whether someone just needs a therapist to talk to, or whether someone truly needs to take some medications to help them through you know?

This is important to note as some health programs could be more difficult to conduct in the church as lack of community-based support could allow for these programs to be conducted within the African-American church.

4.8.7. Church resources for program development and implementation

Another theme that emerged in this study, acted as a facilitator and a barrier of conducting adult health promotion programs in the African-American church and it is a churches resources for program development and implementation of health programs. This theme can be defined as factors within the church that can assist in the development stages and implementation stages of creating health programs within the church. These factors include church awareness of issues in the church and program organization, as well as church space, time, and human power to do program work. Also, this includes sharing of church-community resources as well as formative research needed to understand the needs of their church and community to create needed programs. One pastor noted,

We can't take the whole city, but what we can do is take the X zip code. That is our target population. We did demographic surveys, we found out what was happening in the schools in this area. We looked at the subsidized housing that is rather in this community. We looked at the charter schools that are in this community and just did a lot of statistical work, to find out where problems, where the headaches, where the gaps in the systems are, and where the needs were.

This statement is important as it focuses on the importance of church's doing formative work as a resource and as a facilitator to help develop programs in the church. In contrary, another leader noted that lack of formative work can act as a barrier to conducting health programs within the church. She stated,

Also, not doing enough research, not doing enough groundwork to understand what types of health programs you need to present with. Where do you need to start and then work towards? Not doing enough research.

This statement helps to note that lack of church resources, through formative research, can deter health programming within the church as there needs to be groundwork done to determine what is needed. In addition to formative work, human power was noted as another church resource that can facilitate the creation of adult health programs in the African-American church. One leader noted,

Of course, man power, I mean especially for those programs that you're putting on from the church, that you know maybe the community individuals are not coming into your church, but you have people from within your church that are putting the programs on. You do have to have man power because one person cannot do it all. They need support and a team, I mean we have a health ministry team, some churches don't have that, so definitely have man power and maybe have an emphasis team. It may not be something that churches have, so if you are wanting to start bringing more awareness to health programs, that could be available to the members, or bringing it in, you may need to get a focus group together, or a health team together to even start that conversation in the church, because it may not even be a department that exists.

Definitely starting, you know, coordinating a health team and saying, “Hey this is something that we have as a goal, of our church. It may be a new department, maybe we’ve never had this before and this is something that we want to introduce and start working towards to make this something that is available to our church members.

This statement also is important as it mentions the intersection between human power as well as formative work by doing focus groups to start health program conversations within the church. Another pastor mentioned the importance of church space and human power. She stated,

We have a whole congregation full of people that will take a Saturday, and come and paint a house. It may not be the color you want but hey you can put lipstick on a pig and make it look mighty good. The thing that the church has, we have space capacity and people power.

This is important as the pastor noted the resources that a church has that can facilitate programming within the church and that is church space, and human power. Another church leader noted the importance of church space and how it can be used to share resources with the community that can facilitate health programming within the church. She mentioned,

I think community centers because I was thinking about the programs in the community centers. I’m just thinking about that relationship and like maybe instead of having community centers the church has gym and facilities, so people in the community, there’s kind of like a shared use agreement. People in the communities are

using the church facilities, as well as they're attending the church, so you have people who are in the community, who live in the community who are using the church.

This statement also notes the importance of using church facilities like gyms in order to create health programming within the church. It also highlights how a church and their community can share resources in order to create health programming within the church. Also, another pastor noted the importance of churches' being aware that there are real needs in the church as this can facilitate or prevent health programs from being conducted in the church. One pastor stated,

The church problems are not very much different from culture problems. Not at all. I think church folks try to hide, because I'm a Christian, or I'm a Catholic, or I'm a Muslim, or you know I go to the Mosque, or the Synagogue. Wherever you're high in your faith, people are people and every kind of people fall. That's what I would say. Just not knowing, again going back to that bullet point of lack of knowledge. You know, not talking to your children about sex. Not talking to your children about how to engage in healthy relationships. Just again, church people tend to isolate and insolate, and doing both of those things puts a muzzle on the mouth and no one wants to talk about it but then we see you at the alter with a black eye. We know somethings going on. You know, we know somethings going on. We smell the liquor on you, or you're pregnant all of a sudden and you're 12, what? You know these things happen to people it's just that the church is just one of the cultural institutions that are supposed to help people live better lives through the knowledge of God, but that takes time too, that takes a lifetime. I think if you're just churching for the sake of churching and not having a realization that there

are real needs among the congregants within your church. Trust me, there are real needs among the congregants in your church. Yes, it's about preaching the Gospel and letting the Word of God change people, but sometimes you've got to help them before you can see that. You got to do the natural, then the spiritual. There's a scripture that says that, "First natural, then spiritual." Don't talk to me about seeing angels, that's spiritual. What's going on with your natural? Why you ain't been to church? Then you get here, and you telling me you saw forty angels at your bed, no you may have a mental health issue. Go see pastor X.

This is important to state as a church's awareness of the issues their congregant's face can facilitate or inhibit the health programs that can be developed or implemented in the church. Pastors also noted several barriers to a church's development and implementation of health programs. One being time. One pastor noted,

Well, you see people's lives change. They can't do it overnight and a lot of the reason people are resistant to change, or what I call resistance to success is because it's not going to happen just like that. You're going to have to be willing to invest some time. This is the same thing that I tell the churches that come and want training what have you, "You are not going to be where we are in a year, you're going to have to invest some time." That's why people fall by the wayside. They fall by the wayside because they don't want to invest the time. You got to be willing to invest the time. Sometimes you'll find out what your talents are and where your treasures are when you're willing to invest the time.

This is important to note as a church's time is vital to the development and implementation of health programs within the church. In addition, another leader noted the importance of accountability from the health leaders involved in health program development and implementation as it can act as a barrier in that process. She stated,

So, if you have a program and then you have twenty-five people come out, and then maybe you have part two and you only have five people come out, well follow-up with those other twenty people and say, "Hey we didn't see you today at Part Two just wanted to make sure was this not a good time for you? Do we maybe need to push the time?" Yes, it could be lack of consistency from the leaders trying to put the program on. And lack of consistency with follow up. If you don't follow up with individuals then your program is going to fall flat. Church leaders also noted the importance of program organization and structure as a barrier to creating health programs within the church. The church leader stated,

I would say if the person who is running the program doesn't have a plan like they're just winging it or you know, they're going with the flow of the people, because if you give people the option, they're going to do the opposite. So, I would say for sure a plan and having, you know, rules within that plan.

Another church pastor also noted how lack of program organization acted as a barrier in the continuation of their physical activity program. She noted,

Well, I know that when the ministry first started, we created a Facebook workout group, and it started off great. It was something that the pastor's mother started, she had just lost a lot of weight by making a lifestyle change with her eating and she lost 100

pounds. So, she started this group and we were all fired up, and actually it was at the same time that I was trying to get the baby weight off, so I was very motivated as well. It was just kind of a group, a FB workout group. Which I believe could have been the start of something so great. It started off really great, with great momentum, and then it just kind of slowed down, because there really was no structure behind it.

These two statements are important as they note the importance of program structure in the program development and program implementation process.

4.8.8. Church-policy alignment

The eight theme that emerged in this study, acts as a facilitator and a barrier of conducting health promotion programs in the African-American church and it is church-policy alignment. Church-policy alignment is defined as local, state, and federal level policies that need to be followed in order to advance a church's work. One pastor stated,

Me and the pastor provide the vision for the program, our sister Pastor, looks into the laws that feed them to us. I think us moving forward, there will be some laws and policies that will need to be followed. Things that we will abide by to help start a shelter for battered women or drug abuse recovery. We have policies that we will have to follow as the more we want to implement in the church, we do not go outside of those guidelines of what the government is saying.

Another leader noted,

Policies that definitely involve funding that's available to nonprofit organizations. I mean most churches kind of follow under that 501(c)(3). Policies that definitely help provide funding to not-profit organizations so that they can do additional

programs. There are somethings that don't necessarily cost a lot of money when it comes to educating, but there are somethings that do cost money, depending on what you're trying to do. So that for sure.

This is important as pastors and leaders have noted that policies that help advance the church and their work (e.g., church-policy alignment) acts as a facilitator to conducting health programming within the church. In contrast, pastors have also noted that policies at the local, state and federal level can act as barriers if they do not help advance the church and their work. One pastor stated,

Laws that would inhibit creating health programs and health ministries within the church are those that inhibit the exercise of wanting to start a ministry or policies that try to regulate what is done within the church to start the ministry as there is a separation of church and state.

Another leader noted,

I think if there were policies that requires you to have only licensed professionals to be able to put on health programs that could be a deterrent. For example, let's just say, cooking classes. If there's some type of policy that says in order for you to have anything related to health you have to have professionals. You can't just have novices come, then that would be a deterrent because that means if you have something as simple as a cooking class, we have to have a licensed chef. If there are policies that require anytime you have something with health, for there to be a license, then I could see that as a barrier. Also, it could be a barrier because it goes back to the finances. A church might not be big enough to be able to pay to have chef come in, or depending on

the amount of people you have, they also have to have security. So, I could see that kind of being a deterrent if there was kind of policy that came through like that. Also, policies that deter partnership between 501(c)(3) and other organizations.

These two statements are important as they show that policies that deter a church from advancing health related work can act as a barrier to conducting health programs within the African-American church.

4.8.9. Policy influence

Another theme that emerged in this study was policy influence, and was noted as a facilitator and barrier to conducting health programs within the church. Policy influence is defined as the impacts that local, state, and federal policies have on a church and their community. One pastor stated that policies have a lot of influence and that they act as facilitators in helping to create health programs. She stated,

They have a lot of influence. A lot of people, for instance, will say something like, “Churches should be taxed. Why aren’t they taxed?” No, everybody knows that the “Points of Light”, that President Bush established he created an organization called “Points of Light,” and he created this organization and by the way established the office of Faith-based Initiative, back in the 90s, which allowed churches to become 501(c)(3) organizations so that they could tap into federal dollars for programming within the community, because everybody knows the church is the first line of defense when something goes on within a community. People will come to the church so it is our responsibility to be equipped when they get here. They come to the church. So, the church isn’t going anywhere because scripture declares the gates of Hell will not prevail

against the church… But to be ignorant and say, "I don't want to know nothing. I'm not voting, I don't care." No, you have to care because everything that's happening at the governmental level affects you. It affects you, and it's going to affect your children's, children's, children's.

This is important as it highlights the importance that policy plays in helping to facilitate health programs and impact on a church and its community. Another church leader noted that policy does have major influence in creating health programs within the church and in the community. She noted,

A major part, I think when you have rules and regulations coming from local, federal, and state, I mean that impacts your entire congregation as we are experiencing now. I mean all of our congregations are impacted, as far as being able to just fellowship and have church. So, when we have federal, local rules, number one, as a church, we need to make sure that we are educated and make sure that we are presenting factual information because it is going to impact all of us. If we're living in the same state, if we're living in the same county, if we are getting rules, it just trickles down. There's no way that it does not impact us because it' not like people in our churches, can just be like that doesn't apply to me. No, it does apply to you, because it impacts our entire, state, and county.

These two statements are important as they highlight that laws and policies do influence a congregation and its community. Another church leader noted the influence that policies has on facilitating access to governmental programs for congregants in the church who might need assistance. She stated,

I feel like the way that some governmental programs are shaped are you know, to be beneficial and helpful for the families. Specifically, I'm talking about WIC, you know for mothers. That program is typically open to anyone whether you are married or not. Although pastors/leaders have noted that policy influence can act as a facilitator in creating health programs within the church, some also discussed the barriers that political influence can have on the creation of health programs within the church. One church leader noted,

I know that the options that WIC has, aren't always the greatest and I think a lot of people say you know, something is better than nothing. So, I think about that, I think that those programs can be tailored. I think that they are outdated and they most definitely need some attention. Let's say you have a mom who is lactose intolerant right, so she really shouldn't be consuming dairy. A lot of the WIC program has dairy items. You have milk, you have cheese. Now I'm not for sure, again, I haven't looked at the program in a while, whether or not, there is a stipulation on what type of milk you receive, but last I checked it was like whole or two percent. Let's say that the mom can have milk, but it needs to be soy, or almond, or oat, I don't know, that may not be an option for her. So, I think about that. In regards to that, maybe that means that you have to spend your own money out of your pocket, instead of the money that you are receiving from the government.

She also stated,

I would say, structuring or zoning, in terms of liquor stores, even convenience stores. I feel like there's some blocks where you may have literally four convenience

stores on the same block. They are just catty corner or you have one at each intersection and I just feel like that's too much. So, I would say the zoning of liquor stores, and convenience stores. There needs to be a ratio of you know, you can only have two within, I don't know, a specific proximity. So, policies that limit the number of potential places that could harm a church communities' congregants. Again, when you go into the white communities you don't see a liquor store on every corner, or a convenience store and I think that's because of their zoning. I think that some of those zone practices need to be carried out here in the cities.

Another pastor stated,

When you look at this issue of this marijuana legislation going forth, there have been communities that have been ravaged. Brown and Black people, particularly, communities for generations that have been torn apart. Families that have been torn apart for three ounces of marijuana. I get 25 years plus for three ounces of marijuana and here you have an opioid epidemic, where it's not necessarily Brown and Black people. It's our Caucasian brothers and sisters and they get an opportunity to go to rehab. They get an opportunity to get fixed at no cost to them, and to go back into their communities as though nothing ever ever happened. So, when I look at policies right now, I think, to redeem the time that has been taken away from so many generations of Brown and Black people for smaller offenses. We have got to look at the unfairness that's going on in our legal system when it comes to crime, for persons of color. NPR radio was just talking about this a couple of weeks ago, and even how lawyers are like "Wait a minute. I had a brown and black brother who did the same crime, why did he get 40 years, and my

Caucasian brother got 2 years?" It's starting at that systemic level, of repairing the breach if I could say it that way out of the Book of Isaiah. Repairing those types of breaches that have existed far too long that do affect the church. That affect, not the church set up but the people that go to church, they lose hope when things like that happen. Every year, you got more states legalizing marijuana. So that is one area. Why marijuana? Because Brown and Black people do their marijuana. You don't murder and kill people behind marijuana. There are other drugs that will cause you to do evils, but man the unjustness of Brown and Black people behind small quantities of marijuana, in past times. It's time to release those people, setup some programming. Do this legislatively, so you're not just throwing them back out into the community, and "I'm looking for a job but how do I tell somebody I spent 25 years for 5 ounces of marijuana? What are my chances of getting employed?" Creating legislation that will say we will coddle this target population and make sure that what we did wrong, we get the wrong right. Healthcare of course, I could go on a healthcare tangent. People need healthcare, if they are not healthy, they cannot work and they've got to be able to do that. Gentrification, that's another issue for communities, for church folk, for community, Brown and Black communities. That's another issue because it's fine to do that, but are you making space, not just to pay off your debt, but are you pushing people out of their community for dollars and cents. It's happening, and it's happening quickly. And again, to uproot people, and not give them a place to go that's affordable. You're creating that vacuum, the possibility of homelessness. So, it's not always people don't want to work, no you took their whole community.

Another pastor noted,

Another obstacle to general wellness in XXXXX is the fact that the city council, is made up of all at large positions. I'm told that political change happened, essentially, to ensure that there won't really be Black people or people of color on the council. Because it's all at large, it's all popular vote and none that's like, "Okay this is for the neighborhood that is primarily…" It's none of that, it's everyone's got to win just from popular vote versus some assigned representation based on geographic areas. That basically keeps Black candidates unable. Well in my five years, I don't know if I've ever seen black candidates but it keeps Black candidates from being able to gain the traction and the momentum that you might need. Where as if it was just by neighborhood, you might stand the chance that there is at least one Black voice in the room or one voice of color in the room. That keeps again the narrative, the monolith. You're only hearing from people like you and maybe people with similar experiences to yours. I definitely think that's a barrier to general wellness in the City of X.

These statements are important as they assess the barriers that policies and their influence have on creating health programs within the church as there have been policies that have gone against the community and do not take into account needs of individuals who are getting out of prison or who might need alternatives as part of governmental assistance. In addition, they fail to assess the needs of the community as policies impede for there to be representation within community power structures.

4.8.10. Church policy awareness and knowledge

The last theme that emerged from this study also acted as a facilitator and as a

barrier to conducting adult health programs within the church. Church policy awareness and knowledge is defined as a church's awareness and knowledge of policies at the local, state, and federal level. One pastor noted that policy awareness is essential and it acts as a facilitator to helping conduct health programming within the church. She noted,

The Office of Faith Based Initiative was created in the 90s and also the Points of Light. The wonderful thing now, every grant that comes out, they always ask this question, who can apply, now faith-based organizations are within most of those grants, that was never there before. President Bush set that up that way. We are putting our hands and feet within the community to say, "Hey we want to be able to help." This is why persons of faith need to be positioned so that as policies are being drafted and crafted, somebody there can say, "Hey don't forget about the faith-based community, and their role and also, their responsibility in helping to transform lives" because that's all policy is saying. We know there's a problem here, let's create a policy to fix it. It's like once you put one fire out, here comes something else. First, we're dealing with plain jane tobacco, now we got e-cigarettes. What's next? You know? So, policy, is something the church needs, this is what I say, the church needs to understand policy. How legislation works, how to stand before a legislative body and give voice to what is happening within your community and why they need to keep this bill alive or why they need to tweak this bill, or why the need to add to this bill, or why they don't need to decrease funding but they need to increase funding. Again, it's knowing the language, it's knowing the system. How do House bills come into effect and how House bills

affect community? How House bills affect people within those communities and people within those communities are people that go to churches within those communities.

In addition, another church leader noted that policy awareness and knowledge can also act as a facilitator as well as a barrier to conducting health programs within church. She stated,

Make sure you know, maybe attend some of these forums that are happening to stay educated, so that you could say, "Hey our church is located in this area. Here's somethings that are potentially going to be happening. Here's somethings that are potentially on the docket. We want you to be aware our church is in this community, some of you guys live in this community. Stay a breath of what's happening, because if such and such happens, this could positively impact our health, or this could negatively impact our health. On a positive aspect, if we are thinking about bringing in another hospital, or an urgent care, or a healthcare liaison into the community, it's good for your church to know. Like "hey did you guys know that there's this plaza that's being built over here, there's going to be two health sites that are going to be over there, that are going to be right here in the community for those of you who may be looking for a job. I think that when it comes to federal, state, and local regulations, we have to be aware. We have to get credible information and that we are participating in things that are directly impacting our community. If it's negative or positive, so that we can inform people. Knowledge is power. You have to be aware of what is happening in your community, what's happening in your county, what's happening in your state.

Another pastor also noted that policy awareness can act as a facilitator and barrier to conducting health promotion programs within the African-American church. She said,

I don't buy the adage of separation of church and state, because I've never been able to find a piece of paper that says that and explains it. So, I don't even go there. "Oh the separation of church and state", no, ain't no separation. The people are in the state, and the state has people that are in the church. How are we going to separate that? We may need to look at changing that terminology because as I've said, I have not seen any document, and maybe this is my ignorance, that talks about that in a way that's understandable because a lot of people will use, "Separation of church and state" to stop from mobilizing within their communities. To stop from getting involved in the voting process. To stop finding out who is my state rep. What does my state rep do? What do the Council people do? How do they affect my day-to-day living? How do they affect matters that concern me and my household? I'm not saying you have to be a lawyer, or a whiz kid on that but you need the basic knowledge of what that means. How it works and how it affects you.

These statements are important as they also highlight that policy awareness and knowledge from churches can allow for them to create adult health programs or inhibit them from doing so.

4.9. Discussion

This study sought to answer two research questions from the perspective of African-American women pastors: 1) What facilitators and barriers exist when

conducting health programs within African-American churches? and 2) What levels of the socioecological model do these facilitators and barriers exist at within the African-American church? Based on the results of this study, facilitators exist at the intrapersonal, organizational, community, and policy levels of the socioecological model. Pastoral influence, and pastoral awareness and knowledge aligns as an intrapersonal-level facilitator since it focuses on a pastor's attitudes and beliefs that their influence can facilitate health promotion programs occurring within the church. In addition, congregation-based support, established church personnel, church resources for program development and implementation, and church policy awareness and knowledge were categorized as organizational level factors as these are organizational characteristics that could help facilitate health programs from occurring within the church. Moreover, building community relations and community-based support were categorized as community level factors as these focused on the relationships that exist outside of the church and can ultimately help conduct health programs within the church. Lastly, church-policy alignment and policy influence were categorized as a policy level facilitator as it was defined by the influence that local, state, and national laws have on conducting health programs within the church. Each of these themes, also emerged as a barrier to conducting health programs within the church, except pastoral/leader awareness and knowledge.

It is important to note that many of themes that emerged in this study reinforce findings that are already in the literature, while some are new. In the literature, pastoral/leader influence has been accounted for as a facilitator in conducting health

programs on physical activity, depression, cancer, as well as HIV/AIDS specific programs (Abara et al, 2015; Rodriguez et al., 2009; Hankerson et al., 2013; Gross et al., 2018). It has also been noted as a barrier in cancer specific programs (Markens et al., 2002). In addition, pastoral/leader awareness and knowledge has also been accounted for as facilitator of HIV/AIDS programs (Berkley-Patton et al., 2013; Wooster et al., 2011; Smith et al., 2005). Although it was not mentioned by pastors in this study as a barrier, it has been noted as a barrier in HIV/AIDS programs that have been conducted within the African-American church (Foster et al., 2011; Coleman et al., 2012).

In addition, at the organizational level, established church personnel has also been cited as a facilitator of HIV/AIDS programs (Abara et al., 2015; Foster et al., 2011). Moreover, it has also been cited as a barrier to conducting health promotion activities within the African-American church (Rowland et al., 2013). Another organizational level factor, congregation-based support, has also been cited as facilitators of various HIV/AIDS programs conducted within the African-American church as well as a barrier (Stewart et al., 2016; Alio et al., 2014). Also, the theme of church resources for program development and implementation, also was found to be a facilitator and barrier to conducting health programs within the church. Studies that found this theme to be a facilitator included studies specific to HIV/AIDS, high blood pressure as well as carrying out health promotion activities and church readiness within the African-American church (Stewart et al., 2015; Carter Edwards et al., 2018; Holt et al., 2018; Brand et al.., 2017). Studies that found this theme to be a barrier included

studies specific to cancer and conducting health promotion activities within the church (Markens et al., 2002; Maxwell et al., 2019; Rowland et la., 2013).

With regards to building community-relations, this theme too has been found in the literature to facilitate health promotion programs in the church, specifically, cancer prevention programs and in carrying out health promotion activities (Markens et al., 2002; Rowland et al., 2013). In addition, this study found that building community relations could act as a barrier to conducting health programs within the church if a transactional approach was taken though a community and church partnership which has not been noted in previous research (Gandara, 2020).

It is important to note that community-based support has also been found in the literature to be a facilitator of conducting health programs within the church, specifically cancer programs (Markens et al., 2002). It has also been noted to act as a barrier in carrying out health promoting activities within the church (Markens et al., 2002; Tuggle, 1995). However, in this study, community-based support, differed from what has been found in the literature as funding has been noted to be an organizational level facilitator as opposed to community level facilitator. This is because previous research has found that churches with funding can facilitate conducing health promotion programs because as an organization, they have the money to do so (Lori-Carter Edwards et al., 2012; Pichon et al., 2016). In contrast, this study found that funding can be a community-level factor, as available grants, can ultimately facilitate whether a church can carry out health promotion programs or not.

Lastly, church-policy alignment, policy influence, and church policy awareness and knowledge are themes that have not been explored in previous research that has analyzed facilitators and barriers from the perspective of African-American pastors (Gandara, 2020). Moreover, this is the first study that has solely focused on African-American women pastors, and as a result, it found that church-policy alignment, policy influence, and church policy awareness and knowledge can act as a facilitator or barrier to conducting health promotion programs within the African-American church. Moreover, this finding has not been mentioned in articles that included solely African-American men pastors, or both African-American women and men pastors (Gandara, 2020). It was only something that was mentioned in a study focused on African-American women pastors. Although these three themes have not been found in the literature, as shown, many of the themes reinforced what was in the literature regarding facilitators and barriers of conducting adult health programs within the African-American church.

4.10. Further research and limitations

Further research that is conducted in this area can focus on examining church-policy alignment, policy influence, and church policy awareness and knowledge and its impact within the African-American church as this could impact the development of culturally competent interventions for African-Americans. Moreover, future studies could also analyze how African-American men pastors perceive policy as a whole as well as its impact on health programming within the church as this has not been conducted. Also, studies could compare the findings between African-American women

pastors/leaders and men to see what similarities and differences exist between both groups of leaders. Moreover, this research could be further explored with other demographic groups such as Latino/a church leaders.

Although this study sought to maximize validity and reliability, a major limitation in this study is that older African-Americans church leaders/pastors were not included in this study. In addition, four of the six women who were interviewed had at least a Bachelor's degree and thus could leave out learning more about facilitators and barriers of African-American women pastors or church leaders who might have a high school education or GED. Although qualitative research is not meant to be generalizable, by adding more participants, this can in turn help ensure that the themes that emerged from the study were more robust. In addition, another limitation of this study was the inability to conduct the semi-structured interview face-to-face. This in turn, impedes the opportunity to visually see body language and other ques that can help guide the semi-structured interview.

4.11. Conclusion

Overall, this study sought to find facilitators and barriers that exist when conducting health promotion programs within the African-American church from the perspective of African-American women pastors. As a result, this study found that intrapersonal, organizational, community, and policy level factors can act as facilitators, barriers, or both, when conducting health promotion programs within the African-American church.

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5. CONCLUSIONS

5.1. Conclusion of Study One

The African-American church is a cornerstone for African Americans and has been noted to be an effective vessel for health promotion activities. Based on the perceptions of African-American pastors, there are facilitators and barriers that exist within each level of the socioecological framework that must be considered when designing health interventions focused within the African-American church. By considering these factors, this will help ensure health equity for participants of these programs and will ultimately advance social justice.

5.2. Conclusion of Study Two

This study found that in re-examining religious based constructs' items, using the Religion, Aging, and Health survey, spiritual connectedness, religious music support, and religious commitment, matched what was in the literature. In contrast, three items used to assess God-mediated control did not load onto a factor. Also, five items assessed positive religious coping as opposed to seven, based on the Brief RCOPE, although only five were included measured in the Religion, Aging, and Health survey. In addition, only four items assessed negative religious coping as opposed to seven, according to the Brief RCOPE. Also, items that were included to measure private religious practices and organizational religiousness loaded onto one factor, faith-building activities which is contrary to what it is in literature. This is because theoretically both of these constructs occur in different settings. Private religious practices is theorized as occurring outside of

a religious based setting while organizational religiousness is set to occur within a religious based institution. In addition, this study identified faith-building activities as a potential measure, and is unique to a one-faith perspective amongst the elderly African-American and White population. Lastly, this study noted that the nomological network of spiritual connectedness, religious music support, religious commitment, faith-building activities, and positive religious coping were positive with one another. In contrast, negative religious coping had a negative relationship with each of these constructs. Overall, this study found the importance of re-examining religious based factors in order to re-assess how religious based constructs are theorized and measured in order to help further the work that has been on the impact of religion on health.

5.3. Conclusion of Study Three

Overall, this study sought to find facilitators and barriers that exist when conducting health promotion programs within the African-American church from the perspective of African-American women pastors. As a result, this study found that intrapersonal, organizational, community, and policy level factors can act as facilitators, barriers, or both, when conducting health promotion programs within the African-American church.

5.4. Conclusion of three studies

This study found that facilitators and barriers exist at the intrapersonal, interpersonal, organizational, community, and policy level when conducting adult health programs within the African-American churches, based on the perspective of African-American church leaders and pastors. This is important as policy level factors had not

been noted as facilitators and barriers of conducting adult health programs within the African-American church. In addition, this study found that it is important to re-examine the factor structure of religious based constructs such as God-mediated control, private religious practices, and positive and negative religious coping as their factor structure differed from what is in the literature. Moreover, researchers who are interested in measuring activities that an individual can do to grow their faith, from a one-faith perspective, could do so using items identified through this study's exploratory and confirmatory factor analysis.

APPENDIX A

FIGURES AND TABLES FOR STUDY ONE

Figure 1. Prisma Flow Chart

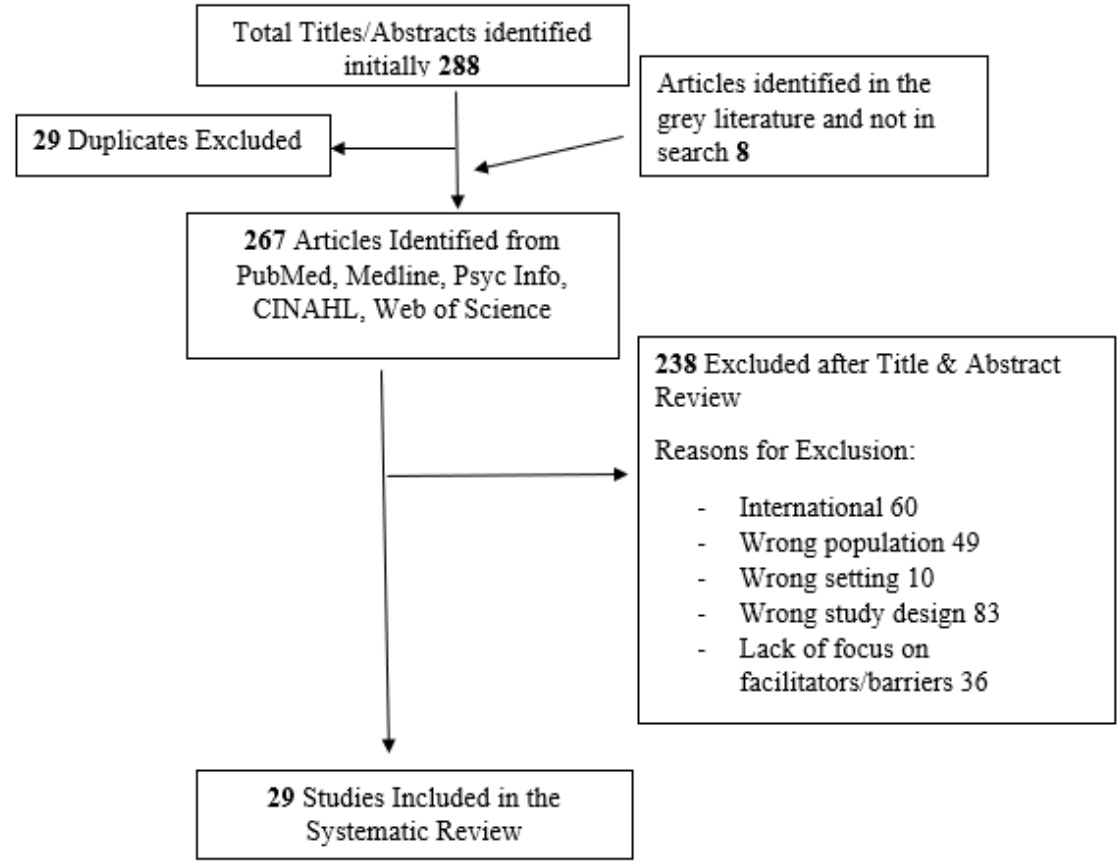


Figure 1. PRISMA flow chart

Table 1. Study characteristics of each article

Author	Disease Topic	Methodology	Church Denominations	Geographic Location	Church setting	Church size	Pastor age	Pastor/Church leader position	Pastor sex	Level of facilitators	Level of barriers
Abara et al., 2015	HIV/AIDS	Qualitative	Not reported	South Carolina	Not reported	Not reported	Not reported	Not reported	Not reported	Individual; Interpersonal; Organizational	Not reported
Stewart, 2015	HIV/AIDS	Qualitative	Baptist, Non-denominational, Pentecostal, Church of Christ	Pennsylvania	Urban	76-150, 226-450	35-60	Pastors (Senior, executive, associate); Health leaders	Male & Female	Individual; Organizational	Not reported
Foster et al., 2011	HIV/AIDS	Mixed-method	Baptists; Non-denominational	Alabama	Urban & Rural	Not reported	35-60	Pastors (Senior, executive, or associate); Church/Faith leaders	Male & Female	Individual, interpersonal, community, organizational	Individual, interpersonal, community, organizational,
Alio et al., 2014	HIV/AIDS	Mixed-method	Not reported	New York	Urban, rural, and suburban	15-2000	Older than 21	Pastors (Senior, executive, or associate)	Not reported	Not reported	Individual, organizational
Coleman et al., 2012	HIV/AIDS	Qualitative	Not reported	South Carolina	Not reported	0-250; >250	26-82	Pastors (Senior, executive, or associate);	Male & Female	Individual, organizational	Individual; organizational

Author	Disease Topic	Methodology	Church Denominations	Geographic Location	Church setting	Church size	Pastor age	Pastor/Church leader position	Pastor sex	Level of facilitators	Level of barriers
								Church/Faith leaders			
Brand et al., 2017	Church readiness	Qualitative	Baptist; Non-denominational; Church of Christ; Protestant; African Methodist Episcopal Zion (AME Zion); Christian Methodist Episcopal	Illinois, North Carolina	Urban, rural, and suburban	1-75;76-150;151-225;226-450;450-699;700-999;1000-2000	35-60	Pastors (Senior, executive, or associate); Heath related	Male & Female	Organizational	Not reported
De Marco et al., 2011	Church Readiness	Mixed-method	Baptist; Non-denominational; Pentecostal; Christian Methodist Episcopal	North Carolina	Urban, rural, and suburban	75-2000	Not reported	Pastors (Senior, executive, or associate)	Not reported	Organizational	Not reported
Carter-Edwards et al., 2018	High Blood Pressure	Qualitative	Baptist	North Carolina, Alabama	Urban	>2000	Not reported	Pastors (Senior, executive, or associate); Church/Faith leaders	Included both males and females	Organizational	Individual; Organizational

Author	Disease Topic	Methodology	Church Denominations	Geographic Location	Church setting	Church size	Pastor age	Pastor/Church leader position	Pastor sex	Level of facilitators	Level of barriers
Holt et al., 2018	Health Promotion Activities	Qualitative	Not reported	Maryland	Not reported	150-500	Not reported	Pastors (Senior, executive, or associate)	Not reported	Community; organizational	Organizational
Berkley-Patton et al., 2013	HIV/AIDS	Quantitative	Baptist	Missouri	Not reported	Less than 100, 100-199, 200-399, 400-999	18-24; 25-39; 40-49; 50-65; 66 or older	Pastors (Senior, executive, or associate); Church/Faith leaders	Included both males and females	Individual, organizational	Individual
Holt et al., 2017	Health Promotion Activities	Qualitative	Baptist, Non-denominational, Church of Christ, Seventh-Day	Mid-Atlantic state	Not reported	50-1000	20-86	Pastors (Senior, executive, or associate), Health related	Included both males and females	Organizational	Individual, organizational
Berkley-Patton et al., 2018	Health Promotion Activities	Mixed-method	Baptist, Non-denominational, Pentecostal, Church of Christ	Missouri, Kansas	Urban	50-750	Over 18	Church/Faith leaders	Included both males and females	Community, Organizational	Not reported
Hankerson et al., 2013	Depression	Qualitative	Methodist	New York	Urban	>2000	35-60	Ministers	Included both males and females	Organizational	Individual, organizational

Author	Disease Topic	Methodology	Church Denominations	Geographic Location	Church setting	Church size	Pastor age	Pastor/Church leader position	Pastor sex	Level of facilitators	Level of barriers
Wooster et al., 2011	HIV/AIDS	Qualitative	Not reported	Illinois, New York, Mississippi, Arizona	Urban	Not reported	Not reported	Church/Faith leaders	Not reported	Individual, organizational	Individual
Maxwell et al., 2019	Health promotion activities	Quantitative	Baptist, Non-denominational, African Methodist Episcopal Zion (AME Zion), United Methodist	California	Urban	50<, 50-99, >100	Not reported	Pastors (Senior, executive, or associate)	Not reported	Organizational	Individual, organizational
Carter Edwards et al., 2012	Health Promotion Activities	Quantitative	Not reported	North Carolina	Urban and rural	<300	33-69	Pastors (Senior, executive, or associate); Church/ Faith leaders	Included both males and females	Organizational	Organizational
Brand et al., 2018	Church Readiness	Quantitative	Baptist, Non-denominational, Pentecostal. Church of Christ, Lutheran, Protestant, African	Illinois, North Carolina	Urban, rural, suburban	1-75;76-150, 151-225, 226-450, 450-699, 700-	Not reported	Pastors (Senior, executive, or associate), Church/Faith Leaders	Included both males and females	Organizational	Organizational

Author	Disease Topic	Methodology	Church Denominations	Geographic Location	Church setting	Church size	Pastor age	Pastor/Church leader position	Pastor sex	Level of facilitators	Level of barriers
			Methodist Episcopal Zion (AME Zion), Presbyterian			999, 1000-2000, >2,000					
Pichon et al., 2016	HIV/AIDS	Qualitative	Baptist, Non-denominational. Pentecostal, Church of Christ, African Methodist Episcopal Zion (AME Zion)	Tennessee	Urban	Not reported	35-60	Pastors (Senior, executive, or associate), Church/Faith Leaders	Included both males and female church/faith leaders or pastors	Organizational	Not reported
Stewart et al., 2016	HIV/AIDS	Qualitative	Baptist, Non-denominational, Pentecostal, Church of Christ	Pennsylvania	Urban, rural, suburban	150-250	44-61	Pastors (Senior, executive, or associate), Church/Faith Leaders	Included both males and female church/faith leaders or pastors	Organizational	Organizational
Rodriguez et al., 2009	Cancer	Qualitative	Baptist, Pentecostal, Church of Christ, African Methodist Episcopal	Maryland	Urban	Not reported	Not reported	Pastors (Senior, executive, or associate), Church/Fa	Included both males and female church/faith	Organizational	Not reported

Author	Disease Topic	Methodology	Church Denominations	Geographic Location	Church setting	Church size	Pastor age	Pastor/Church leader position	Pastor sex	Level of facilitators	Level of barriers
			Zion (AME Zion), Presbyterian, Apostolic					ith Leaders	leaders or pastors		
Gross et al., 2018	Physical activity	Qualitative	Not reported	North Carolina	Suburban	Not reported	Not reported	Pastors (Senior, executive, or associate)	Male	Interpersonal, organizational	Not reported
Nunn et al., 2012	HIV/AIDS	Qualitative	Baptist, Non-denominational, Pentecostal, African Methodist Episcopal Zion (AME Zion), Jewish, Muslim, Methodist, Evangelical	Pennsylvania	Urban	Large but not specified	Not reported	Pastors (Senior, executive, or associate), Church/Faith Leaders	Included both males and female church/faith leaders or pastors	Community, organizational	Community, organizational
Smith et al., 2005	HIV/AIDS	Quantitative	Baptist, African Methodist Episcopal Zion (AME Zion), Methodist, other	Rhode Island	Not reported	Less than 100, 100-499	34-62, mean 48	Pastors (Senior, executive, or associate)	Not reported	Organizational	Organizational

Author	Disease Topic	Methodology	Church Denominations	Geographic Location	Church setting	Church size	Pastor age	Pastor/Church leader position	Pastor sex	Level of facilitators	Level of barriers
Tuggle, 1995	Health Promotion Activities	Qualitative	Not reported	Maryland	Urban	Not reported	Not reported	Pastors (Senior, executive, or associate)	Male	Community	Community
McNeal et al., 2007	HIV/AIDS	Mixed-method	Baptist, Methodist, others	Mississippi	Urban	Less than 500, more than 500	Not reported	Pastors (Senior, executive, or associate)	Included both males and female church/faith leaders or pastors	Interpersonal, organizational	Organizational
Markens et al., 2002	Cancer	Qualitative	Baptist, Non-denominational, Lutheran, Methodist, Catholic, Seventh-Day Adventist	California	Urban	35-400	Not reported	Pastors (Senior, executive, or associate)	Not reported	Community, organizational	Intrapersonal, community, organizational
Berkley-Patton et al., 2010	HIV/AIDS	Qualitative	Baptist, Non-denominational, Methodist	Missouri, Kansas	Urban	50-700	Not reported	Church/Faith leaders	Included both males and female church/faith leaders	Community, organizational	Organizational

Author	Disease Topic	Methodology	Church Denominations	Geographic Location	Church setting	Church size	Pastor age	Pastor/Church leader position	Pastor sex	Level of facilitators	Level of barriers
Campbell et al., 2000	Cancer	Mixed-method	Not reported	North Carolina	Rural	Less than 100, greater than 100	Not reported	Church/Faith leaders	Not reported	Interpersonal, organizational	Intrapersonal, organizational
Rowland et al., 2013	Health Promotion Activities	Quantitative	Baptist, Church of Christ, African Methodist Episcopal Zion (AME Zion), Christian Methodist Episcopal, others	Midwestern states	Urban	100-249, 250-299	50-59	Pastors (Senior, executive, or associate)	Not reported	Community, organizational	Organizational

Table 2. Summary of facilitators by health topic

Facilitators by Health Topic	Levels of the SEM Model					
	Intrapersonal	**Interpersonal**	**Organization**	**Community**	**Policy**	**Author/s:**
Depression	• Pastor responsibility • Pastor counseling	• Group interpersonal psychotherapy	• None	• None	• None	• Hankerson et al., (2013).
High Blood Pressure	• Women's role should be acceptable to men	• Incorporating family and friend • Testimonials • Peer mentoring	• Available support services • Audience-specific programs • Leadership advocacy • Pastor role model • Prayer • Scripture • Incorporating into men's activities • Flexible times • Trustworthy locations • Technology	• None	• None	• Carter-Edwards et al., (2018).
Physical activity	• Modeling good behaviors • "Holistic" view of health	• Incorporating women	• Health ministry	• None	• None	• Gross et al., (2018).
Cancer	• Commitment to holism[1,2] • Incorporating faith and spirituality[2]	• Guest speakers[3]	• Pastor involvement[1,2] • Pastor support of help from outside organizations[1] • Organizational space[3]	• Community-wide support[1]	• None	• Markens et al., (2002).[1] • Rodriguez et al., (2009).[2] • Campbell et al., (2000).[3]

	• Inclusivity in program design[2] • Pastor support[2]					
HIV/AIDS	• Modeling positive behavior[1,4] • Support for testing & programs & evaluation[2,5] • Acknowledgement & desire for prevention assistance[5,6, 10] • Access to information facilitates programming[3] • Concern for people and HIV being perceived as a major issue[3] • Holistic approaches[3] • Personal characteristics of the people leading the program[4] • Pastor's reiterating the importance of evaluation and	• HIV-positive relatives, friends, church members[3] • Married to a health provider[3] • Pastor-to-pastor support[11.12] • Personal ties to congregants[6]	• Pastor, church, & national leader support[1,3,4,7,11] • Program alignment with church doctrine[1,2,4,8,11] • Health ministry[1,3] • Prior HIV/AIDS prevention education[5] • HIV care teams[1] • Technical assistance[4] • Finances[1,2,7] • Church space[2] • Human resources[2,7] • Integration with other church programs[4] • Promoting messages from the pulpit[4,9] • Congregation acceptance[4] • Using visible HIV-positive people within the church[4] • Incorporating sexual health into health ministry[7]	• Engaging local religious leaders[1] • Community-based participatory research projects[3] • Overcoming stigma[9] • Promoting interfaith collaboration[9]	• None	• Abara et al., (2015).[1] • Stewart, (2015).[2] • Foster et al., (2011).[3] • Coleman et al., (2012).[4] • Berkley-Patton et al., (2013).[5] • Wooster et al, (2011).[6] • Pichon et al., (2016).[7] • Stewart et al., (2016).[8] • Nunn et al., (2012).[9] • Smith et al., (2005).[10] • McNeal et al., (2007).[11] • Berkley-Patton et al., (2010).[12]

	evaluation strategies[1] • Normalizing HIV/AIDS testing and conversations about human sexuality[9] • Church members facilitating the program[11]		• Educating faith leaders[8] • Educational HIV/AIDS games for the church[12] • Church activism[8,9] • Congregational readiness[11]			

Table 3. Summary of facilitators and barriers for health promotion activities

Health promotion activities	Levels of the SEM Model					
	Intrapersonal	**Interpersonal**	**Organization**	**Community**	**Policy**	**Author/s:**
Facilitators	• Commitment and understanding the spiritual component[1] • Holistic approach[1]	• Build relationships with pastors and target interest groups as well as being visible to the church[1] • Targeted communication strategies[6]	• Church interest, organizational space, health-service provision strategies[2,5,4] • Serving healthier food at church functions[3] • Health messages as part of sermons and in Bible studies[3] • Church infrastructure (announcements)[6]	• Collaboration with community leaders[3,5] • Interest by agency or health professional outside of the church[2]	• None	• Tuggle (1995).[1] • Rowland et al., (2013).[2] • Carter Edwards et al., (2012).[3] • Maxwell et al., (2019).[4] • Berkley-Patton et al., (2018).[5] • Holt et al., (2017).[6] • Holt et al., (2018).[7]

			• Dedicated volunteers[4] • Church willingness[4,5] • Raising funds[3] • Church-wide sustainability plans[3,7] • Programs focused on health-related skills[5] • Church leadership capacity and knowledge[6] • Pastor with strong influence[6] • Incentives/giveaways[6] • Established health ministries[6] • Program materials and resources, print materials[7] • Prepared health program staff[7]			
Barriers	• Outsiders do not see the church as a place to learn[1] • Lack of time for pastors to address[5]	• None	• Lack of financial resources[2,3,4,5] • Lack of churches' time[2] • Lack of space[2] • Lack of technology[5] • Lack of interest amongst church[2] • Lack of leadership[2]	• Lack of trust[1] • Lack of coalition of community leaders, churches, and schools[6]	• None	• Tuggle, (1995).[1] • Rowland et al., (2013).[2] • Carter Edwards et al., (2012).[3] • Maxwell et al,. (2019).[4] • Holt et al., (2017).[5] • Holt et al., (2018).[6]

			• Size of church[4] • Lack of volunteers[3,4] • Lack of health insurance[3] • Lack of an established health ministry[3] • Lack of provider access[3] • Time demands amongst participants[5] • Disconnecting physical, mental, and spiritual health in the church[3] • Lack of knowing the congregation's interests[4] • Lack of member interest[4] • Lack of qualified healthcare professionals[2] • Competing activities within the church[4] • Church members not wanting to be considered research members[4] • Lack of pastoral leadership and pastoral commitment[4]			

			• Low attendance at other church events[5] • Child care and transportation issues[5] • Lack of physical structure • Not sure how to implement wellness activities[4] • Lack of sustainability in health programs[6]			

Table 4. Summary of facilitators and barriers for church readiness

Church Readiness	Levels of the SEM Model					
	Intrapersonal	**Interpersonal**	**Organization**	**Community**	**Policy**	**Author/s:**
Facilitators	• None	• None	• Allocated budget[2] • Pastoral support[2] • Lay health program[2] • Resources[1] • Partnerships[1] • Organizational space[1] • Personnel[1] • Faith-based approach[1] • Sermons incorporating health messages[1]	• None	• None	• Brand et al., (2017).[1] • De Marco et al., (2011).[2]

Barriers	• None	• None	• Lack of physical structure • Lack of personnel • Lack of funding • Lack of social and cultural element in health promotion activities	• None	• None	• Brand et al., (2018).

Table 5. Summary of barriers by health topic

Barriers by Health Topic	Levels of the SEM Model					
	Intrapersonal	**Interpersonal**	**Organization**	**Community**	**Policy**	**Author/s:**
Depression	• Time constraints • Lack of counseling training • Data collection concerns	• Group IPT confidentiality • Stigma from church members	• None	• None	• None	• Hankerson et al., (2013).
High Blood Pressure	• Lack of understanding the issue • Time constraints	• None	• None	• None	• None	• Carter-Edwards et al., (2018).
Physical activity	• None	• None	• None	• None	• None	• None
Cancer	• Lack of time and stress[1] • Pastor time commitments and	• None	• Lack of financial support[1] • Lack of volunteers[1]	• History of abuse and exploitation[1]	• None	• Markens et al., (2002).[1] • Campbell et al., (2000).[2]

	responsibilities[1] • Lack of time amongst coordinators[2] • Too much paperwork[2]		• Lack of church time[1]			
HIV/AIDS	• Fear of stigma[1] • Fear of having little knowledge[1] • Tension addressing HIV as a moral or social issue and how it fits with religion[1] • Fear of alienating the elderly[1] • Lack of info on HIV/AIDS[2,7] • Feeling overworked[2] • Competing time commitments[3] • Fear of resistance from other leaders[2,3,5]	• Lack of knowing HIV-positive people or congregants[1]	• Lack of church cooperation[2] • Lack of funding[2,8] • Lack of church resources[3,7] • Lack of church time • Lack of church capacity and expertise[2] • Lack of interest amongst the church[2,3] • Congregation resistance[3] • Lack of media usage[4] • Lack of balancing church doctrine and HIV-related issues[6,10] • Opposition to homosexuality and promiscuity[8] • Leadership resistance[9] • Lack of sustainable plans[7]	• Lack of access to prevention services (i.e. rural areas)[1] • Lack of culturally competent providers[1] • Sex and sexuality stigma[5] • Silence about HIV/AIDS[7]	• None	• Foster et al., (2011).[1] • Alio et al., (2014).[2] • Coleman et al., (2012).[3] • Berkley-Patton et al., (2013).[4] • Wooster et al., (2011).[5] • Stewart et al., (2016).[6] • Nunn et al., (2012).[7] • Smith et al., (2005).[8] • McNeal et al., (2007).[9] • Berkley-Patton et al., (2010).[10]

	• Congregation' s' lack of knowledge[3] • Lack of apathy[3] • Fear of discrimination if positive[4] • Fear of doctrine abandonement [5] • Fear of discussing human sexuality[7] • Fear of being perceived as gay[7] • Balancing sexual education with theology[7] • Lack of responding to issues[7]		• Church stigma[10]			

APPENDIX B

FIGURES AND TABLES FOR STUDY TWO

Table 6. Study factors and corresponding items descriptive statistics

Factor:	**Items**	**Mean**	**SD**
Religious coping	"I look to God for strength in crisis" (Q1003A1)	3.60	0.796
	"I look to God for guidance when difficult times arise" (Q1003A2)	3.61	0.792
	"When I'm faced with a difficult experience, I try to think about the good things God has given me" (Q1003A3)	3.55	0.783
	"I try to realize that God never gives us more than we can handle" (Q1003A4)	3.52	0.814
	"When hard times arise, I try to realize that it's just God's way of testing my faith" (Q1003A5)	2.99	1.071
	"I think about how stressful situations are God's way of punishing me for the things I have done wrong" (Q1003A6)	1.83	1.081
	"When problems arise in my life, I wonder whether God has abandoned me" (Q1003A7)	1.48	0.862

	"When I'm faced with stressful situations, I question the power of God" (Q1003A8)	1.48	0.883
	"I realize the devil makes hard times happen" (Q1003A9)	2.57	1.201
	"When problems arise in my life, I question whether God really exists" (Q1003A10)	1.34	0.817
Spiritual connectedness	"I have a close personal relationship with God" (Q603A1)	3.51	0.652
	"I feel that God is right here with me in everyday life" (Q603A2)	3.55	0.618
	"When I talk to God, I know he listens to me" (Q603A3)	3.53	0.621
	"My faith helps me see the common bond among all people" (Q603A4)	3.45	0.644
	"My faith helps me appreciate how much we need each other" (Q603A5)	3.52	0.589
	"My faith helps me recognize the tremendous strength that can come from other people" (Q603A6)	3.44	0.637
Religious music support	"Religious music lifts me up emotionally" (Q707A1)	3.45	0.583
	"Religious music gives me great joy" (Q707A2)	3.45	0.581
	"Religious music helps strengthen or renew my faith" (Q707A3)	3.34	0.654
	"Religious music makes me feel closer to God" (Q707A4)	3.42	0.629

	"How often do you listen to religious music outside church-like when you are at home or driving your car" (Q702A1)	4.98	2.46
Religious commitment	"My faith shapes how I think and act each and every day" (Q1503A1)	3.337	0.671
	"I try hard to carry my religious beliefs over into all my other dealings in life" (Q1503A2)	3.366	0.648
	"My religious beliefs are what lie behind my whole approach to life." (Q1503A3)	3.345	0.686
God-mediated control	"I rely on God to help me control my life" (Q1103A1)	3.319	0.758
	"I can succeed with God's help" (Q1103A2)	3.467	0.621
	"All things are possible when I work together with God" (Q1103A3)	3.481	0.666
Private religious practices	"When you are at home, how often do you read the Bible?" (Q802)	4.511	2.551
	"When you are at home, how often do you read religious literature other than the Bible" (Q804)	3.889	2.435
	"How often do your read religious newsletters, religious magazines, or church bulletins when you are home?" (Q806)	3.696	2.134

	"How often do you watch formal church services on TV or listen to them on the radio?" (Q808)	4.00	2.218
	"How often do you watch or listen to religious talk shows or shows that report the news from a Christian perspective?" (Q810)	2.973	2.217
	"When you are at home, how often are prayers or grace said at mealtime?" (Q812)	6.883	2.199
Organizational religiousness	"How often do you attend adult Sunday School or Bible study groups?" (Q302)	3.664	3.069
	"How often do you participate in prayer groups that are not part of regular worship services or Bible study groups? (Q304)	2.875	2.801
	"How often do you attend religious services?" (Q306)	5.736	2.736

Table 7. Summary of Eigenvalues

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	13.98597	12.58068	0.6509	0.6509
Factor 2	1.40529	-0.32423	0.0654	0.7163
Factor 3	1.72952	0.46417	0.0805	0.7967

Factor 4	1.26535	-0.41229	0.0589	0.8556
Factor 5	1.67764	0.25279	0.0781	0.9337
Factor 6	1.42485	.	0.0663	1.0000

Table 8. EFA model factor loadings

Variable	Spiritual connectedness (Factor 1)	Positive religious coping (Factor 2)	Religious music support (Factor 3)	Religious commitment (Factor 4)	Faith-building activities (Factor 5)	Negative religious coping (Factor 6)	Uniqueness
I look to God for strength in a crisis (Q1003A1).		0.9423					0.1718
I look to God for guidance when difficult times arise (Q1003A2).		0.9987					0.1148
When I'm faced with a difficult experience, I try to think		0.7075					0.3657

about the good things God has given me (Q1003A3).							
I try to realize that God never gives us more than we can handle (Q1003A4).		0.6050					0.4511
When hard times arise, I try to realize that it's just God's way of testing my faith (Q1003A5).		0.4227					0.6710

I think about how stressful situations are God's way of punishing me for the things I have done wrong (Q1003A6).						0.5875	0.6411
When problems arise in my life, I wonder whether God has abandoned me (Q1003A7).						0.7255	0.4662
When I'm faced with stressful						0.7911	0.3641

situations, I question the power of God (Q1003A8).							
I realize the devil makes hard times happen (Q1003A9).							0.7618
When problems arise in my life, I question whether God really exists (Q1003A10).						0.7069	0.4777
I rely on God to help me control my							0.3955

life (Q1103A1).							
I can succeed with God's help (Q1103A2).		0.3151					0.4358
All things are possible when I work together with God (Q1103A3).		0.3020					0.3786
I have a close personal relationship with God (Q603A1).	0.7944						0.2550
I feel that God is right here with me in everyday	0.9111						0.1824

life (Q603A2).							
When I talk to God, I know he listens to me (Q603A3).	0.8925						0.1885
My faith helps me see the common bond among all people (Q603A4).	0.7777						0.2780
My faith helps me appreciate how much we need each other (Q603A5).	0.8636						0.2551
My faith helps me	0.7008						0.3824

recognize the tremendous strength that can come from other people (Q603A6).							
How often do you attend Sunday School or Bible study groups? (Q302)					0.5756		0.6413
How often do you participate in prayer groups that are not part of a regular					0.4326		0.8006

worship services or Bible study groups? (Q304)							
How often do you attend religious services? (Q306)					0.4841		0.5811
When you are at home, how often do you read the Bible? (Q802)					0.7321		0.3584
When you are at home, how often do you read					0.8647		0.2984

religious literature other than the Bible? (Q804)							
How often do you read religious newsletters, religious magazines, or church bulletins when you are home? (Q806)					0.8129		0.3603
How often do you watch formal church services on TV or listen					0.3388		0.6792

to them on the radio? (Q808)							
How often do you watch or listen to religious talk shows or shows that report the news from a Christian perspective? (Q810)					0.4701		0.7142
When you are at home, how often are prayers or grace said at mealtime? (Q812)_							0.9738

How often do you listen to religious music outside church-like when you are home or driving your car? (Q702A1)			0.3026		0.3767		0.5675
Religious music lifts me up emotionally (Q707A1)			0.8642				0.2125
Religious music gives me great joy (Q707A2).			0.8593				0.1628

Religious music helps strengthen or renew my faith (Q707A3)			0.8410				0.1701
Religious music makes me feel closer to God (Q707A4).			0.7995				0.1660
My faith shapes how I think and act each and every day (Q1503A1).				0.7757			0.2478
I try hard to carry my religious beliefs over				0.8517			0.1748

into all my other dealings in life (Q1503A2).							
My religious beliefs are what lie behind my whole approach to life (Q1503A3).				0.7994			0.1662

Table 9. Cronbach's alpha test results

Factor #/Factor Name	Cronbach's alpha
Factor 1 (Spiritual connectedness) (ξ_1)	$\alpha = 0.9461$
Factor 2 (Positive religious coping) (ξ_2)	$\alpha = 0.8971$
Factor 3 (Religious music support) (ξ_3)	$\alpha = 0.9483$
Factor 4 (Religious commitment)	$\alpha = 0.9286$

Factor 5 (Faith-building activities)	α= 0.8518
Factor 6 (Negative religious coping)	α= 0.7637

α>0.7, suggests high internal consistency.

Table 10. Item factor loadings per factor

Factor:	**Items**	**Factor Loading**	**P-value**	**Mean**	**SD**
Spiritual connectedness	"I have a close personal relationship with God" (Q603A1)	0.777	<0.001	3.514	0.657
	"I feel that God is right here with me in everyday life" (Q603A2)	0.827	<0.001	3.555	0.620
	"When I talk to God, I know he listens to me" (Q603A3)	0.795	<0.001	3.522	0.636

	"My faith helps me see the common bond among all people" (Q603A4)	0.839	<0.001	3.430	0.636
	"My faith helps me appreciate how much we need each other" (Q603A5)	0.827	<0.001	3.480	0.605
	"My faith helps me recognize the tremendous strength that can come from other people" (Q603A6)	0.771	<0.001	3.438	0.626
Religious music support	"Religious music lifts me up emotionally" (Q707A1)	0.819	<0.001	3.445	0.580
	"Religious music gives me great joy" (Q707A2)	0.862	<0.001	3.443	0.597

	"Religious music helps strengthen or renew my faith" (Q707A3)	0.906	<0.001	3.354	0.644
	"Religious music makes me feel closer to God" (Q707A4)	0.915	<0.001	3.428	0.620
Religious commitment	"My faith shapes how I think and act each and every day" (Q1503A1)	0.849	<0.001	3.296	0.666
	"I try hard to carry my religious beliefs over into all my other dealings in life" (Q1503A2)	0.897	<0.001	3.317	0.671
	"My religious beliefs are what lie behind my whole	0.900	<0.001	3.289	0.689

	approach to life." (Q1503A3)				
Faith-building activities	"How often do you attend adult Sunday School or Bible study groups?" (Q302)	0.694	<0.001	3.641	3.063
	"How often do you participate in prayer groups that are not part of regular worship services or Bible study groups?" (Q304)	0.552	<0.001	2.859	2.820
	"How often do you attend religious services?" (Q306)	0.647	<0.001	5.722	2.711

	"When you are at home, how often do you read the Bible?" (Q802)	0.675	<0.001	4.389	2.570
	"When you are at home, how often do you read religious literature other than the Bible" (Q804)	0.661	<0.001	3.723	2.407
	"How often do your read religious newsletters, religious magazines, or church bulletins when you are home?" (Q806)	0.647	<0.001	3.496	2.050
	"How often do you watch or listen to religious talk shows or shows that report	0.360	<0.001	2.944	2.225

	the news from a Christian perspective?" (Q810)				
Positive religious coping	"I look to God for strength in crisis" (Q1003A1)	0.695	<0.001	3.613	0.771
	"I look to God for guidance when difficult times arise" (Q1003A2)	0.760	<0.001	3.595	0.784
	"When I'm faced with a difficult experience, I try to think about the good things God has given me" (Q1003A3)	0.760	<0.001	3.556	0.764
	"I try to realize that God never gives us more than we can handle" (Q1003A4)	0.650	<0.001	3.488	0.836

	"When hard times arise, I try to realize that it's just God's way of testing my faith" (Q1003A5)	0.479	<0.001	3.007	1.086
Negative religious coping	"I think about how stressful situations are God's way of punishing me for the things I have done wrong" (Q1003A6)	0.515	<0.001	1.788	1.061
	"When problems arise in my life, I wonder whether God has abandoned me" (Q1003A7)	0.717	<0.001	1.492	0.880
	"When I'm faced with stressful situations, I	0.849	<0.001	1.461	0.877

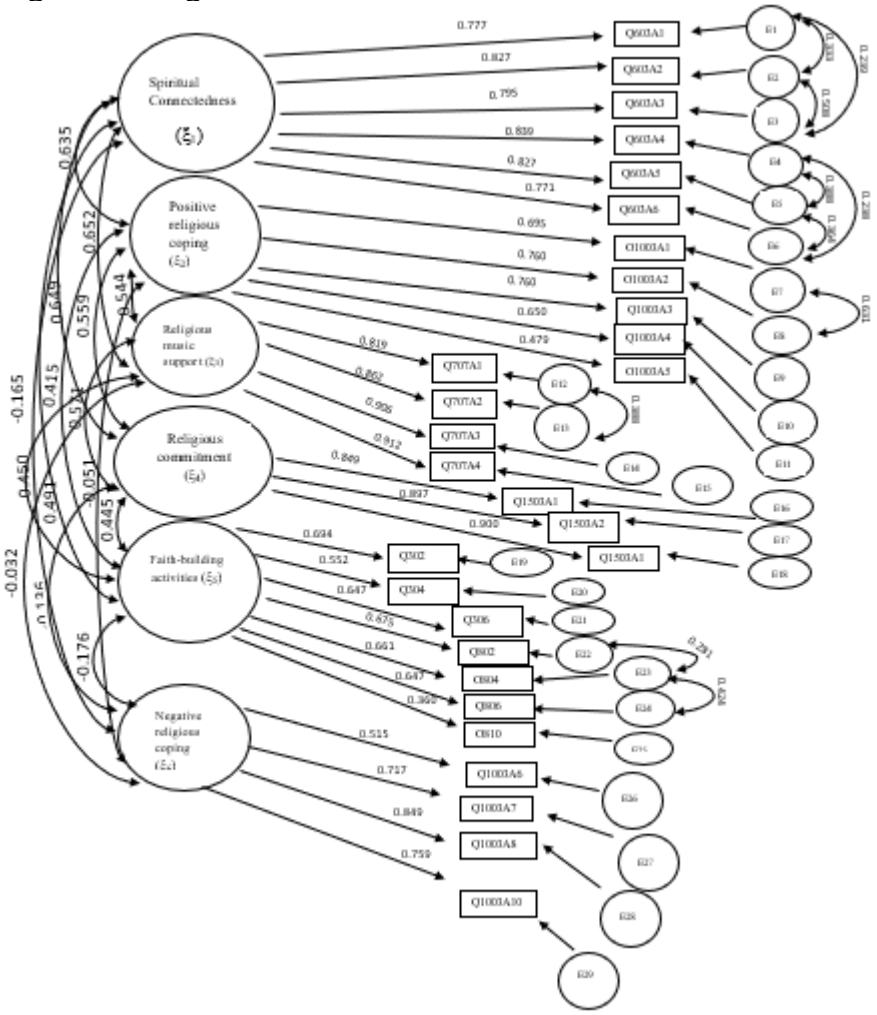
	question the power of God" (Q1003A8)				
	"When problems arise in my life, I question whether God really exists" (Q1003A10)	0.759	<0.001	1.308	0.744

Table 11. Factor co-variance matrix

Factors	**Spiritual connectedness**	**Religious music support**	**Religious commitment**	**Faith-building activities**	**Positive Religious Coping**	**Negative religious coping**
Spiritual connectedness	1	0.652	0.649	0.491	0.635	-0.165
Religious music support	0.652	1	0.571	0.450	0.544	-0.032
Religious commitment	0.649	0.571	1	0.445	0.559	-0.136

Faith-building activities	0.491	0.450	0.445	1	0.415	-0.176
Positive religious coping	0.635	0.544	0.559	0.415	1	-0.051
Negative religious coping	-0.165	-0.032	-0.136	-0.176	-0.051	1

Figure 2. Religious constructs and items with standardized factor loadings



APPENDIX C

FIGURES AND TABLES FOR STUDY THREE

Table 12. Summary of facilitators and barriers in this study

Theme:	**Facilitator**	**Barrier**
Building community relations	**X**	**X**
Established church personnel	**X**	**X**
Congregation-based support	**X**	**X**
Pastor/leader influence	**X**	**X**
Pastoral/leader awareness and knowledge	**X**	
Community-based support	**X**	**X**
Church resources for program development and implementation	**X**	**X**
Church-policy alignment	**X**	**X**
Policy influence	**X**	**X**
Church policy awareness and knowledge	**X**	**X**