ABSTRACT

RUSHING, JILL LAURICH. Using the Social-Ecological Model to Explore Adult Learning in the Faithful Families Program: A Qualitative Case Study in One Church and One Mosque (Under the direction of Dr. Tuere Bowles).

Public health professionals have joined forces with those in the faith community to address the obesity epidemic in the United States. Programs, like Faithful Families Eating Smart and Moving More (Faithful Families), have been offered to faith communities in an effort to promote healthy eating and physical activity. While there is a wealth of information about health programs in Christian settings, there is less information about health programs in non-Christian settings and a paucity of information about the meaning making processes experienced by implementers of these programs and program participants.

The purpose of this qualitative comparative case study was to describe the meaning making processes that unfold during the implementation of Faithful Families in two faith settings: a church and a mosque in North Carolina. The research questions that drove this study were: How do co-instructors, lay health leaders, and participants negotiate learning during the Faithful Families program? and How do personal, social, and environmental factors shape how people experience the Faithful Families program?

In order to answer these research questions, interviews, observations, and document and artifact reviews were conducted. Within case analysis was completed first and then cross case analysis was conducted to identify convergent and divergent themes.

A constructivist framework and the Social-Ecological model (SEM) were used to guide this study. This framework and the SEM are congruent with the construct under study--meaning making--because the framework, the model and the construct all support the idea that meaning is socially constructed and informed by our environments. This study has

implications for theory as the SEM was found to have permeable boundaries between its layers. This study also has implications for practitioners in fields of health promotion and adult education as it uncovered how meaning making occurs during implementation of a health education program in a setting that has not been vigorously studied before. Findings may also inform what program planners and designers understand about the link between self-care and care for others as well as what they know about non-Christian people of faith. With this increased understanding, planners and designers can develop more culturally responsive programs. Findings from this study also contribute to research methods used to study program implementation.

Using the Social-Ecological Model to Explore Adult Learning in the Faithful Families Program: A Qualitative Case Study in One Church and One Mosque

by
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DEDICATION

I dedicate this paper to the memories of Our Three Winners–Deah Barakat, Yusor Abu-Salha, and Razan Abu-Salha--and The Emanuel Nine--Clementa C. Pinckney, Cynthia Marie Graham Hurd, Susie Jackson, Ethel Lee Lance, Depayne Middleton-Doctor, Tywanza Sanders, Daniel L. Simmons, Sharonda Coleman-Singleton, and Myra Thompson.

BIOGRAPHY

Jill's first graduate course at North Carolina State University was in 2007. After one class in Adult Education, she fell in love with the field and decided to pursue her Masters in Adult and Community College Education. She began working in the field of Public Health in 2012 and immediately saw the connection between the two fields. The fields of Adult Education and Public Health are dedicated to educating people and addressing injustices. Both fields have influenced Jill's vocation and given her a sense of purpose.

Jill was baptized as an adult in 2012. Since that time her relationship with God has saved her life and, hopefully, allowed her to enrich the lives of others. She believes there are a variety of paths to God and does not privilege her own for anyone but herself. She knows we are each created in God's image but has struggled with accepting her own body. For this, and many more reasons, she is fascinated by the intersection of faith and fitness. Jill knows that the power of faith can be tapped to sustain motivation and inspire healthy habits for a lifetime. She believes self-care is the ultimate form of resistance and God is the ultimate form of love.

ACKNOWLEDGMENTS

First, I must thank God for my many blessings. Through Him, all things are possible. For unwavering love and for fostering my curiosity, I have to thank Ollie and Donk. I wish to thank Dr. Bowles for her years of guidance and wisdom. I will forever be appreciative for all that you have poured into me. Thanks to Dr. Young, who made me fall in love with evaluation, which sparked a career change and a lifelong passion for evaluative thinking. Thanks to Dr. Hardison-Moody for her vision and always making a place at the table for me. I also wish to thank Dr. Orders for her time and talent and for serving on my committee. Cuz Tom and Nanook, your support has meant the world to me; hope I've done the Rushings up above proud. Jess, I couldn't ask for a better best friend or fellow researcher. Larry and Graham, thanks for all the meals, laughs and advice. Gjorges, thanks for always being there and loving on your little sis! Lance, thanks for supporting my dream. Farnham, thanks for always encouraging me to "just keep swimming". Eleanor, thanks for sharing your love of qualitative research, social justice, and fine teas. Yolanda, I appreciated each text you sent cheering me on. David, thanks for encouraging me to make the transition from qualitative researcher to UX researcher. Tara, thanks for ministering to me. To Drs. Valentine, Lee-Russell, Sullenger, Bojarski and Guido, we did it! Sharon, Twin, KK, and Anna, thanks for supporting my work; I think it's time for a Relish visit. To my new crew at Office of Rural Health, thanks for your flexibility and encouragement. Eddie, thanks for getting me through the home stretch. To the members of Khruangbin, thanks for providing my writing soundtrack. God bless you all!

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CHAPTER 1: INTRODUCTION

Citing alarming obesity trends in the United States, Daniels (2006) claimed, "the current generation of children could suffer greater illness or experience a shorter lifespan than that of their parents—the first such reversal in lifespan in modern history" (p. 61). During his service as United States Surgeon General, Richard Carmona, provocatively stated that the harm caused by obesity could be greater than any terrorist attack faced by this country (Saguy & Almeling, 2008). Such alarm is warranted because obesity is linked to a host of chronic diseases including cardiovascular disease, diabetes, and some forms of cancer (Daniels, 2006). It has been a common topic discussed in the media and a myriad of news stories have highlighted the human and financial costs associated with obesity (Boero, 2007). In the *New York Times* alone there were over 750 articles on obesity between 1990 and 2001 (Boero, 2007). In 2001, the *Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity* was released in order to convey the seriousness of the troubling trend (Office of the Surgeon General, 2001). Nearly a decade later, Surgeon General Regina Benjamin released *The Surgeon General's Vision for a Healthy and Fit Nation* and warned that the "epidemic of overweight and obesity threatens the historic progress we have made in increasing American's quality and years of healthy life" (Office of the Surgeon General, 2010, p. 1). Her successor, Surgeon General Vivek Murthy, listed obesity as a top priority during his confirmation hearing with the United States Senate (Murthy, 2014). In his swearing-in ceremony, the current Surgeon General, Jerome Adams, noted that addressing childhood obesity was a top health priority of our nation (White House, 2017).

While Americans improved health outcomes through behavior changes like smoking cessation, practicing safe sex, and avoiding driving under the influence, obesity continues to

reduce life expectancy (Preston, 2005). But, Americans are not without resources. Over 1,000 weight loss books are available (Dansinger, Gleason, Griffith, Selker, & Schaefer, 2005) and at least 141 commercial weight-loss programs are on the market today (Gudzune et al., 2015). The popular program, Weight Watchers, continues to draw clients who are looking to achieve a healthy weight; in 2015 they had over 1.4 million online subscribers (Weight Watchers International, Inc., 2015). Nearly $60 billion in revenue was generated in 2014 from weight management enterprises in the United States (Weight Watchers International, Inc., 2015). Publishing houses and other for-profit organizations are not alone in the quest to develop weight loss materials and programs. Government agencies, public health officials, and non-profit health agencies have been trying to address the obesity problem as well. The Centers for Disease Control and Prevention (CDC) have been funding the Prevention Research Centers since 1986 (CDC, 2016a). These Centers, located at universities across the country, work to understand obesity and develop prevention efforts (CDC, 2016a).

Since the 1960's adult obesity rates have steadily increased (CDC, 2013a). The most recent CDC estimates indicate that 70.7% of adults (age 20 and over) are overweight or obese (CDC, 2016c). Even though the obesity epidemic impacts all Americans negatively, some citizens bear more burdens. Health disparities related to obesity are dramatic. Over 40% of African Americans in North Carolina are obese compared to fewer than 27% of Whites (North Carolina State Center for Health Statistics, 2014a). While the problem is great, there are opportunities for collaboration and connection to other fields as we address the obesity problem and health disparities.

Faith and Health

There is a long history of intersection between faith and health (Aboul-Enein, 2016; Allicock et al., 2013b; Bopp, 2013; Bopp, 2012; Levin, 2014; Steinman, 2008). Ancient civilizations believed that diseases were brought on by gods; "the healing art of medicine was considered a religious practice" (Koenig & Shohaib, 2014, p. 4). Early texts written about the practice of medicine were developed by those involved in organized religion (Aboul-Enein, 2016). The first hospitals were developed by religious entities (Levin, 2014). Today, the majority of churches in America support at least one type of social service; many times these services focus on health (Steinman, 2008).

Many religious texts and traditions speak to the connection between the mind, body, and spirit (Aboul-Enein, 2016; Prince, 2009). These religious texts are supported by modern scholarly works, which have established a positive connection between practicing faith and health outcomes (Levin, 2015; Prince, 2009; Rosmarin, Pargament & Flannelly, 2009). As Idler (2014) noted, "Researchers have long recognized the role of religious institutions in the health of populations" (p. 3).

The connection between faith and health has been recognized by the federal government as well. President Clinton's 1996 Welfare Reform Bill codified the federal government's support of faith communities providing social and health services (Chaves, 2003; Wineburg, 2007). President George W. Bush formed the White House Office of Faith-Based and Community Initiatives (Wineburg, 2007) and President Obama developed the President's Advisory Council on Faith-Based and Neighborhood Partnerships to provide funding to faith communities that offer social and health programs to their members and others in their communities (Executive Order Number 13498, 2009).

While the federal government allows support for faith-based and faith-placed programs that address obesity and other health issues, the structures for supporting national data collection are limited. In 1976, Congress amended the census law to prohibit mandatory questions about religious affiliations from being included in the Census (Pew Research Center, 2010). Another large, federal data collection method is the annual Behavioral Risk Factor Surveillance System (BRFSS), funded by the CDC. BRFSS is used to generate national- and state-level reports on the health status of adults. It captures information about health behaviors (e.g., number of fruit and vegetable servings consumed, minutes of physical activity, tobacco usage) and demographic information (e.g., race, income, marital status, gender). However, it has never captured information about religious affiliation out of concern that this could be seen as a violation of separation of church and state (J. Cassell, personal communication, March 3, 2017).

The Pew Research Center has filled this void with a number of studies on religion in the U.S. and across the world. Recent studies from the Center show dramatic increases in the number of the "religious nones"—atheists and agnostics— (Lipka, 2015) and Muslims (Lipka, 2017; Mohamed, 2016). While researchers have collected data without the help of the federal government to produce findings on the relationships between religion and health, there have been "relatively few studies [that] have systematically examined religion and body weight" (Cline & Ferraro, 2006, p. 270). When studies have been done in the United States, the findings are mixed and Muslim populations are represented in the non-discrete "other" category (Cline & Ferraro, 2006; Kim, Sobal, & Wethington, 2003). While obesity disparity data exist for race, income and education, there are no universally agreed upon statistics for

obesity rate by religious categories that recognize Muslims as a discrete religious affiliation in the United States.

While there is some information available, access to health data categorized by religious affiliation remains a barrier to understanding the relationship between religion and obesity and potential health disparities. However, collaboration between professional fields can support efforts to address obesity. Areas of potential collaboration for those in the fields of health promotion and adult education are outlined below.

Health Promotion, Adult Education and Models of Change

The fields of health promotion and adult education matured in parallel (Daley, 2011). Health promotion grew out of public health and health education and adult education has its roots in psychology and adult learning (Daley, 2011). However, the fields have a lot in common—both work to change unjust systems and educate the public (Hill, 2011; Hill & Ziegahn, 2010). Adult educators bring valuable information about program planning and learning styles and can assist in developing culturally competent health education programs (Hill, 2011). Adult educators and health professionals have an opportunity to collaborate to empower people to become healthier (Hill, 2011). As Daley (2011) said, adult education practitioners "have long been involved in leadership development, community development, participatory learning, and policy analysis. All types of studies related to these areas within health protection and prevention are needed, and adult educators are uniquely qualified in this area" (p. 240).

Collaboration between adult educators and health promotion staff is just one opportunity to address America's obesity epidemic. Another is changing the model that is used to design, implement, and evaluate health education programs. For decades, the

predominant model for weight management programs focused solely on individual behavior change. But, contemporary programs now consider the ways environmental and policy structures impact health. The Social-Ecological Model (SEM), which was based on Bronfenbrenner's ecological model, has been used to create programs that address obesity and chronic diseases (Glanz, Rimer, & Viswanath, 2015). The SEM has also been used to promote health in a variety of settings, including churches (Allicock, Johnson, Leone, Carr, Walsh, & Ni, 2013a; Campbell, Hudson, Resnicow, Blakeney, Paxton, & Baskin, 2007; Campbell, Resnicow, Carr, Wang, & Williams, 2007).

Statement of the Problem

The connection between faith and health is well established. There is a wealth of information about faith-based and faith-placed health programming in Christian settings (Allicock, Resnicow, Hooten, & Campbell, 2013b; Baruth & Wilcox, 2013; Campbell, Resnicow, Carr, Wang, & Williams, 2007; Resnicow, Jackson, Blissett, Wang, McCarty, Rahotep, & Periasamy, 2005). However, there is gap in literature about health promotion programs in the United States for those who practice other religions (DeHaven, Hunter, Wilder, Walton, & Berry, 2004; Levin, 2015). Others have highlighted the need and stated, "More comparative research is needed to understand differences in structures and belief systems to design and conduct CBHP [community based health promotion] effectively in different types of churches and religious groups" (Campbell et al., 2007, p. 219). Mohamed (2016) wrote, "Since our first estimate of the size of the Muslim American population in 2007, we have seen a steady growth in both the number of Muslims in the U.S. and the percentage of the U.S. population that is Muslim" (n.p.). It is important to expand our understanding of health promotion programs in mosques because, in the coming decades,

Muslims will be “the second-largest religious group in the U.S., after Christians” (Mohamed, 2016, n.p.). Worldwide, Islam is the fasting growing religion and by the end of the century there are projected to be more Muslims than Christians (Lipka, 2017).

In addition to a paucity of information from the field of Public Health about health promotion programs offered in non-Christian faith traditions, there is also a gap in the program planning and implementation evaluation literature in adult education. Studies in this area tend to overlook the importance of meaning making in both of these processes. Lived experiences, previous knowledge, and belief systems inform the implementation of programs and policy (Datnow & Park, 2012; Spillane, Reiser, & Reimer, 2002). Prior knowledge and expectations influence how new information is processed when individuals are learning how to implement a program (Spillane, Reiser, & Reimer, 2002). Although Patton (2008) noted five types of implementation evaluation, he failed to address the role that meaning making played in these types. Quinn (2009) noted that more information was needed about the ways implementers comprehended programs and polices they were responsible for administering.

Purpose of the Study

The purpose of this comparative case study is to describe the meaning making processes that unfold during the implementation of the Faithful Families program in two faith settings: a church and a mosque in North Carolina. Meaning making is generally defined as the central process involved in learning where knowledge is constructed (Merriam, Caffarella and Baumgartner, 2007)

The research questions that focused my study were:

1. How do co-instructors, lay health leaders, and participants negotiate learning during the Faithful Families program?

2. How do personal, social, and environmental factors shape how people experience the Faithful Families program?

I examined the meaning making process using case study, which is a qualitative research method that examines a phenomenon in its natural setting (Yin, 2003). Case studies are appropriate when, like in this study, rich descriptions are needed and when context is important to the focus of the study (Yin, 2003). Case studies allow researchers to conduct detailed analysis of data collected using a number of collection methods including interviews, observations, and document and artifact reviews (Yin, 2003). Cases are typically bound by time and a certain place (Creswell, 2013; Patton, 2015; Yin, 2003). In this study, all cases were within the state of North Carolina and places of faith—either a church or a mosque.

Theoretical Framework

The overarching theoretical framework is constructivist theory, which posits, "learning is a process of constructing meaning" and that meaning is constructed from experience (Merriam Caffarella, & Baumgartner, 2007, p. 291). Constructing knowledge is the aim of the learning process where the "instructor's role [is to] facilitate and negotiate meaning making with the learner" (Merriam et al., 2007, p. 296). This framework is congruent with the construct under study—meaning making—because both understand that meaning is socially constructed and informed by our environments. The constructivist framework is also aligned with a health promotion model that informs modern health promotion programs—the Social-Ecological Model (SEM).

The SEM recognizes what many adult educators understand—learning is influenced by our surroundings (Conceição, Colby, Juhlmann, & Johaningsmeir, 2011). The CDC began

promoting and using the SEM as it started to consider the structural, policy, systems, and physical environment that impacted health. There are now SEM applications for a variety of public health issues including violence prevention, cancer, health equity and obesity. Key components of the SEM are: the *individual, interpersonal, institutions and organization, community,* and *structures and systems* (CDC, 2013b). The SEM has also been used to develop health programs in faith settings (Allicock et al., 2013a; Campbell et al., 2007).

Significance

Findings from this study contribute to the literature on constructivist theory, meaning making and the Social-Ecological model. While there is extensive information on constructivist theory, this study provides real world examples of theory in action and highlighted how the Social-Ecological Model has permeable boundaries between its layers. As Ignelzi (2000) noted, "We may not fully appreciate the extent to which adults can also make meaning in qualitatively different ways from each other" (p. 5). This study benefits the fields of health promotion and adult education by linking the two fields while uncovering how meaning making occurs during implementation of a weight management program.

In addition to theoretical significance, my study has practical significance for those planning, designing and implementing health promotion and adult education programs. Understanding requirements for preventive care is difficult for all but especially for those "people whose cultures do not correspond with the dominant, mainstream culture commonly reproduced within the health care system" (Hill, 2011, p. 100). Findings may inform what program planners and designers understand about non-Christian people of faith so that they can develop more culturally responsive programs. This is increasingly important as the

demography of our country changes and as our Muslim population is projected to grow rapidly in the coming years (Lipka, 2017).

Also, by deepening their understanding of the meaning making processes implementers employ when they provide health promotion programs in various faith settings, program planners and designers can develop materials that more clearly convey program intent and the manner in which the core components should be delivered.

While most implementation evaluation studies examine fidelity to the program model, few investigate the meaning making process implementers undergo when delivering programs. It is important to understand the meaning making processes that occur during implementation because "challenges related to practice, organization, and system changes are both *technical and adaptive*… 'adaptive' refers to challenges that require revising and rethinking values, beliefs, and current ways…" (Blase, Fixsen, Sims & Ward, 2015, p. 3, emphasis in original). This study enhances what is known about implementation evaluation methods that consider the meaning making process. In addition to expanding theory, practice, and methods, findings from this study may also contribute to policies that support public funding of religious entities that intend to provide social and health services.

Limitations and Delimitations

Case studies should be delimited with boundaries so that cases can be identified and studied (Yin, 2003). A delimiting factor for this case study is that it involves religious settings associated with only two of the world's many religions — Christianity and Islam. These two religions were chosen because Christianity is the predominate religion in the United States and Islam is the fastest growing world religion (Pew Research Center, 2017). Another delimitation is the geographic area. Both the church and the mosque were in North

Carolina as the research is being conducted with the constraints of limited time and funding. Since only the Faithful Families program is being studied (and not any other health promotion program), this is another delimitation. A potential limitation of the study is that, given the current anti-immigrant, anti-Muslim rhetoric that is being discussed in our country, potential Islamic research sites may be wary of participating in the study.

Definition of Terms

Church: "A building for public and especially Christian worship" (Church, n.d., n.p.)

Faithful Families Eating Smart and Moving More: A health promotion program for faith communities, which focuses on healthy eating and physical activity and uses a 9-week educational curriculum that is based on North Carolina's Expanded Food and Nutrition Education Program (EFNEP) curriculum (Dunn, C., Hardison-Moody, A., Jones, L., Levine, K., and Thomas, C., 2013).

Meaning making: The central process involved in learning where knowledge is constructed (Merriam, Caffarella and Baumgartner, 2007)

Mosque: "A building used for public worship by Muslims" (Mosque, n.d., n.p.)

Organization of the Dissertation

In the paragraphs above, I introduced my study by highlighting the obesity epidemic in the U.S., the relationship between faith and health, and the fields of health promotion and adult education and an associated model of change (i.e., Social-Ecological Model). I also discussed the gap in the literature related to health promotion programs in non-Christian faith settings and the paucity of information about meaning making in implementation of policies and programs. I then outlined the purpose of the study, the research questions, the theoretical frameworks, the significance, and the limitations and delimitations of the study. I closed this

chapter with a review of key definitions for terms I used during the study. As Levin (2015) noted, “cross-religious and intra-denominational comparisons have been rare, perhaps because of discomfort in the possibility that identifying a significant health impact of religious participation in a respective group may encourage misperceptions that health is the province of a specific faith tradition” (p. 766). Through this research I hope to present information that may lead to better cross-religious understanding and increased intra-denominational dialogue that fosters improved health for us all.

CHAPTER 2: LITERATURE REVIEW

The purpose of this comparative case study is to describe the meaning making processes that unfold during the implementation of the Faithful Families program in two faith settings: a church and a mosque in North Carolina. Constructivist theory frames this study as it holds that adults learn through a meaning making process and that meaning is constructed by interacting with the various people and objects in one's environment (Creswell, 2009; Merriam et al., 2007). This theory acknowledges that people bring their individual histories, cultures, beliefs, and experiences with them as they learn new things (Creswell, 2009; Merriam et al., 2007). Because of this, two different people may understand the same event (e.g., implementing a health promotion program) in two very different ways (Creswell, 2009; Merriam et al., 2007).

Constructivist theory guided the study as it aligned with my philosophical beliefs about adult education and with the topics selected to support this study. An exploration of these topics served as the foundation for this work; they include: obesity in the United States, health promotion theories and models, health promotion in faith settings, and program planning and implementation evaluation of obesity treatment and prevention programs in faith communities. Before detailing these topics, an explanation of the searches that were conducted to identify previous studies related to this investigation is provided.

In order to ground this study, multiple literature searches were performed. In an effort to find empirical works related to health promotion programs offered to adults in Muslim communities in the United States, ERIC, ProQuest, Academic Search Complete, and Google Scholar, were used to search for various combinations of the following terms: *Muslim, Islam, mosque, fitness, physical activity, exercise, nutrition, healthy eating, obesity, health*

education, and adult. None of the materials returned were related to health education programs offered to adult Muslims in the United States. When searches were conducted using *church*, voluminous results were returned that focused on health education for the adult population interested in healthy eating and exercise. This literature often centered around obesity in America, theories and models for health promotion, health promotion in faith settings, and program planning and implementation evaluation. These topics are explored in greater detail below.

Obesity in the United States

Trend of Increasing Obesity

Being overweight has been linked to increased risks for high blood pressure, heart disease, and type 2 diabetes. It has also been linked with decreased life expectancy (North Carolina Institute of Medicine, 2011a; United States Department of Health and Human Services, 2013). Nearly 300,000 Americans die annually due to inadequate physical activity and poor nutritional choices (Office of the Surgeon General, 2001). The healthcare costs associated with obesity are tremendous; health economists have produced estimates that range between $147-210 billion each year (Trust for America's Health, 2013). The cost to employers, because of absenteeism, is nearly $4.3 billion each year (Trust for America's Health, 2013).

Unfortunately, adult obesity rates in the United States have been increasing at an alarming pace over the last several decades — nearly tripling since the 1960's (CDC, 2013a). The Endowment for Human Development (2013) noted that in the early 1990's no states had obesity rates at or above 20%. By 2006, this had changed dramatically; 46 states had obesity rates at or above 20%. In 1992, 7.8 million American citizens had diabetes; by 2012 that

number had climbed to 25.8 million (Trust for America's Health, 2013). Currently, less than 30% of American adults are at a healthy weight (CDC, 2016b). Some projections estimate that if trends are not interrupted, by 2030 the obesity rate in the United States will be 50% (Trust for America's Health, 2013).

Healthy People, a collaborative between eight different federal departments and agencies, helps set the nation's public health priorities and provides revised goals and strategies every decade. Healthy People 2020 aims to increase the number of Americans who are at a healthy weight by 10% before the start of the next decade (United States Department of Health and Human Services, 2013).

A state-specific initiative related to Healthy People 2020 is Healthy North Carolina 2020 (HNC 2020). Various partners, including the North Carolina Division of Public Health and the North Carolina Institute of Medicine, collaborated to develop the objectives and associated strategies for the HNC 2020 plan. The plan notes that North Carolina has also seen increases in obesity rates. In the mid-1990's the obesity rate was less than 17%; by 2009 this had increased to over 30% (North Carolina Institute of Medicine, 2011a). HNC 2020 calls for increasing healthy eating and active living to address the obesity rates in the state. Objectives are to "increase the percentage of adults consuming five or more servings of fruits and vegetables per day to 29.3%" and to "increase the percentage of adults getting the recommended amount of physical activity to 60.6%" (North Carolina Institute of Medicine, 2011a, p. 20). Currently the rate for healthy eating is 20.6% and the rate for active living is 46.4% (North Carolina Institute of Medicine, 2011a). Obesity rates are even more troubling when health disparities are considered. These disparities are discussed in the next section in addition to some of the social determinants that influence them.

Health Disparities and Social Determinants of Health

Because the field of public health is so closely linked with the field of medicine, the medical model, which places the blame for an individual's obesity solely on that individual, has historically been the way the problem with obesity has been framed. This view held that a person was obese because that individual made poor choices with regard to nutrition and physical activity. However, over the last two decades, social determinants of health (e.g., race, economic status, education level) have increasingly been studied and acknowledged for the role they play in individual and community health outcomes (Braveman, Egerter, & Williams, 2011).

The first major report that focused on the social determinant of race in America was in 1985 (U.S. Department of Health and Human Services, 2016a). The *Report of the Secretary's Task Force on Black and Minority Health* became known by the name of the Secretary of the U.S. Department of Health and Human Services — Margaret Heckler. The *Heckler Report* is a foundational document in the area of health equity. The report found significant disparities between people of color and Whites when they examined disease prevalence and related morbidity for cancer, diabetes, and cardiovascular disease (Heckler, 1985). At the time of the study, the average life expectancy for African Americans was 5.6 fewer years when compared to that of Whites (Heckler, 1985). The *Heckler Report* forwarded recommendations in six key areas: *health information and education, delivering and financing health services, health professions' development, cooperative efforts with the non-Federal sector, data development,* and *research agenda* (Heckler, 1985, p. 8). These recommendations led to the formation of the Office of Minority Health two years later (U.S. Department of Health and Human Services, 2016a). In 2000, Healthy People established a

goal to *reduce* health disparities in the United States. By 2010, Healthy People established a goal to *eliminate* health disparities in the country (United States Department of Health and Human Services, 2016b).

With recent acknowledgement of the increasing racial and ethnic diversity of the U.S., federal and state health organizations have refocused their attention on the need to address health disparities and increase health equity. (Centers for Disease Control and Prevention, 2013b; North Carolina Institute of Medicine, 2011b). Within the last few years, many national organizations have put forward various guides and tools to help public health professional begin to resolve health inequities. The Centers for Disease Control and Prevention (CDC) recently released *A Practitioner's Guide for Advancing Health Equity* in which they defined health disparities as "differences in health outcomes and their determinants between segments of the population, as defined by social, demographic, environmental, and geographic attributes" (CDC, 2013c, p. 4). In 2015, the American Public Health Association (APHA) released *Better Health through Equity: Case studies in Reframing Public Health Work*, which detailed five cases of state and county health departments that advanced health equity through their policies and practices (APHA, 2015). The main platform selected by the 2016 President of the Association of State and Territorial Health Officials (ASTHO) was *Advancing Health Equity and Achieving Optimal Health for All* (ASTHO, 2016). APHA then went on to highlight how addressing racism was a key strategy for advancing health equity (Jones, 2016). When examining obesity rates and rates for related chronic diseases, the disparities across racial lines are clear.

The North Carolina State Center for Health Statistics (2014a) reported that in 2012 the percentage of African Americans who were obese was 40.1% compared to the percentage

of White North Carolinians who were obese, 26.5%. African Americans also suffer higher mortality rates from chronic diseases associated with obesity. The 2007-2011 heart disease mortality rate (per 100,000 people) for African Americans was 209.1; for Whites in North Carolina, the mortality rate was 176.1 (North Carolina State Center for Health Statistics, 2012). For the nation, obesity rates of men did not vary significantly by race. However, for women, the obesity rates were significantly different — 51% for non-Hispanic African Americans and 31% for non-Hispanic Whites (Centers for Disease Control and Prevention, 2013a). As noted earlier, obesity rates have increased for all populations, but these increases have disproportionally impacted African Americans.

Health Promotion and Adult Education

Health promotion practitioners concerned with obesity and health disparities have an opportunity to learn from adult educators who have a long history of "working along-side people who have decided to combat the circumstances in which they live to achieve better conditions" (Hill, 2011, p. 100). The field of adult education has its roots in social justice (Johnson-Bailey, Baumgartner, & Bowles, 2010) and health education serves as the nexus between adult educators' social justice activities and health promotion practitioners' aim to increase health equity (Hill & Ziegahn, 2010).

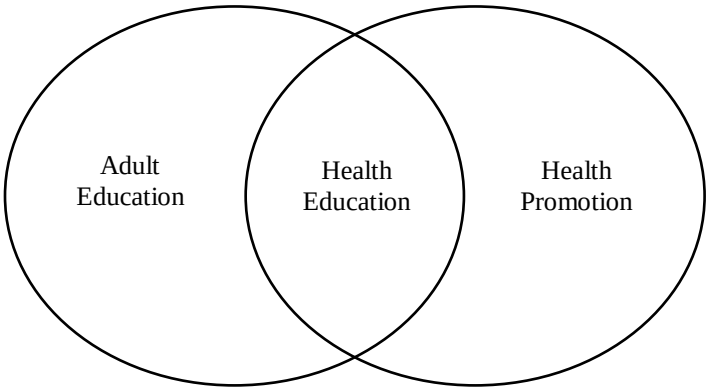

Figure 2.1. Health Education at the intersection of the fields of Adult Education and Health Promotion.

In 2011, Daley shared:

> Adult education and health promotion are two fields that historically have developed along separate tracks. Health promotion has developed within the health care arena, more specifically from the areas of health education and public health, whereas adult education has developed more from education, learning, and psychology. Each has developed a philosophical and theoretical case separate from the other, and yet those philosophies and theories are often complementary. (p. 231)

Practitioners from the fields of adult education and health promotion are both concerned with understanding the systems that cause inequity (Hill & Ziegahn, 2010). Both fields explore learners' needs, developing quality curricula, and fostering positive environments for learners (Hill, 2011; Hill & Ziegahn, 2010). Adult educators are well positioned to aid health promoters in areas such as program planning (Daley, 2011). Those in health care settings understand clinical information about health conditions, however they may not have experience with quality adult education nor an adequate understanding of designing programs that aid in individual or systems change (Conceição et al., 2011). Daley

(2011) said that public health professionals had used common program planning steps like "conducting needs assessment, developing objectives, designing program delivery, and measuring outcomes" but that key components were missing (p. 236). Daley (2011) forwarded that Caffarella's (2002) interactive program planning model could be used to enhance public health practices because it recognized the concepts of transfer of learning, which were missing from many health promotion programs.

In addition to the similarities in practitioners' concerns and interests, adult education and health promotion are mutually reinforcing. There is a long understood indirect relationship between health literacy and chronic disease prevalence (Schecter & Lynch, 2011). Those with low literacy are more likely to be in poorer health compared to those with higher literacy rates (Schecter & Lynch, 2011). Schecter and Lynch (2011) noted that the intersection of "literacy learning and health education" is a "central set of concerns for adult educators" (p. 208). Given this mutually reinforcing relationship, it is important that adult educators understand the evolution of health promotion models. These models, as they related to obesity treatment and prevention, are discussed below.

Health Promotion Theories and Models

At the start of the twentieth century in United States, the three leading causes of death were all communicable diseases (i.e., pneumonia, tuberculosis, and diarrhea). By 1990, the three leading causes were all chronic diseases (i.e., heart disease, cancer and stroke) (McLeroy & Crump, 1994). As the health of the public changed, public health systems also experienced transitions. Public health theories began to focus on health promotion instead of how communicable diseases spread. With this transition and over time, health promotion moved from a focus on individual behavior change to a concentration on how an individual

operates in an ecological system. The history of the theories that undergird the contemporary public health system are outlined below.

History of Health Promotion Theories

For each of the editions of their text on health behavior, Glanz, Rimer, and Viswanath (2008, 2015) have conducted a meta-analysis of trending theories for health promotion. In the 1980's they found the health belief model (HBM), theory of reasoned action (TRA), and social learning theory to be the most frequently cited theories in health promotion literature. Despite its title as a "model," HBM is a theory developed by the U.S. Public Health Service in the 1950s (Glanz, Rimer, & Viswanath, 2015). Through HBM, the U.S. Public Health Service hoped to understand why certain members of the public did not take advantage of tuberculosis screening (Glanz et al., 2015). The TRA was developed in the late 1960's to "better understand relationships between attitudes, intentions, and behaviors" (Glanz et al., 2015, p. 96). Social learning theory was first developed by Bandura in the late 1970's and it outlined how the social environment impacted behaviors (Glanz et al., 2015).

In the early 1990's, Glanz et al. (2008) found HBM and TRA to still be among the most popular theories, but also noted that the Stages of Change theory was frequently being used. Stages of Change, developed by Prochaska and Di Clemente, claimed that behavior change followed a series of stages beginning with "precontemplation" and ending with "termination" (Glanz et al., 2015).

By the turn of the century, Glanz et al. (2008) found that Stages of Change and social cognitive theory (SCT) were the most popular for health promotion. With SCT, Bandura reformulated his social learning theory "in order to emphasize the increasingly important role

of observation and cognitive factors in learning, understanding, and predicting behavior" (Glanz et al., 2015, p.160).

For the fourth edition of their text, Glanz et al. (2008) examined journal articles from 2000-2005 and found HBM, SCT, and Stages of Change to be the most frequently cited theories. Glanz et al. (2008) noted that there were certain themes that were prevalent among many of the popular theories. These included "the importance of the individual's view of the world; multiple levels of influence; behavior change as a process; motivation versus intention; intention versus action; and changing behavior versus maintaining behavior change" (p. 32). In their latest edition of their text, the authors add a constructivist theory, the Social-Ecological Model (SEM) (Glanz et al., 2015). The 2015 version of this critical text was the first time that the SEM was highlighted as one of the most frequently used theories- proving that there continues to be a shift from individual behavior change toward ecological thinking.

Additional information on each of the theories mentioned above is found in the sections below. Theories are divided into those that promote public health through individual behavior change and those that approach health promotion through an ecological lens.

Individual Behavior Change Theories

The earliest health promotion theories focused primarily on individual behavior change. Still today many health professional "focus all or most of their efforts on changing the health behavior of individuals" (Glanz et al., 2008, p. 41). Traditional obesity programs are rooted in a model for individual behavior change as well (McLeroy et al., 1988). Three of these theories, Health Belief Model, Theory of Reasoned Action, and Stages of Change Theory, are discussed below and followed by a critique.

Health belief model. Developed in the middle of the 20th century, the Health Belief Model was developed to counteract people's reluctance to being screened for communicable diseases. Glanz et al. (2015) claimed HBM is "one of the most widely used conceptual frameworks in health behavior research" and intervention development (p. 75). Although the theory had roots in preventing tuberculosis, it was quickly adapted in order to facilitate a better understanding of behaviors regarding screening for other diseases. Before this time, public health professionals had only developed theories, like the Stimulus-Response Theory, related to patients' willingness to adhere to prescribed orders from medical professionals who had already diagnosed the patients with disease (Glanz et al., 2015). Key components of the HBM are based on an individual's perceptions about susceptibility to and severity of diseases and the benefits and barriers to certain health behaviors. The theory also involves "cues to action", which are "internal or external factors that could trigger the health behavior" (Glanz et al., 2015, p. 78).

Theory of reasoned action. Underlying the Theory of Reasoned Action is a continuum for behavior change and that people can be place on that continuum according to their level of anticipated action (Schwarzer, 2008, p. 3). Intention, which is influenced by social norms and attitudes about health behaviors, is a key component of the theory and is seen as the best indicator of future behavior (Glanz et al., 2015). The theory is intended to provide predictions of people's intentions and behaviors related to health — everything from going to the doctor to healthy eating decisions (Glanz et al., 2015). Schwarzer (2008) explains a critique of the theory and says, "To overcome the limitations of continuum models, stage theorists have made an attempt to consider process characteristics by proposing

a number of qualitative stages" (p. 4). One such theory, the Stages of Change Theory is detailed below.

Stages of change theory. Another popular theory for individual behavior change is the Stages of Change Theory or Transtheoretical Model. In the late 1970's Prochaska and his research team wanted to find commonalities between the over 300 theories that were being used in the field of psychotherapy (Glanz et al., 2015). They selected 25 major theories and found that "those theories had much more to say about why people change than about how they change" (Glanz et al., 2015, p. 125). So, the research team started searching for mechanisms for *how* people change. This resulted in the Stages of Change Model, which outlined the different stages that people move through and the different processes associated with each stage (Glanz et al., 2015). The stages included: *precontemplation, contemplation, preparation, action, maintenance, and termination;* the processes included: *consciousness raising, dramatic relief, self-reevaluation, environmental reevaluation, self-liberation, helping relationships, social liberation, counter conditioning, stimulus control, and reinforcement management* (Glanz et al., 2015, pp. 126-127). Unlike the continuum models, the theorists noted that people do not necessarily move through the stages in a linear fashion (Glanz et al., 2015).

Critique of Individual Behavior Change Theories

While these theories can help us understand stages and orders of thinking, the leading individual behavior change theories have not evolved within the last several decades (Glanz et al., 2015). They fail to take into consideration the affective factors that can influence behavior and also ignore strategies that have proven to be effective such as having people set their intentions at the beginning of a program (Glanz, Rimer, & Viswanath, 2015). In

addition to failing to consider the complexities of systems that influence individual behavior change, many of the programs developed from these theories have not provided improved health outcomes (Schecter & Lynch, 2011). Glanz et al. (2008) recognized that individuals are at the primary unit for the study and practice of health education. However, they also realized that while the individual is the primary unit, other forces outside of the individual also influence health behavior (Glanz et al., 2008). Theories that explore other "unit[s] of intervention" are discussed below (Glanz et al., 2008, p. 41).

Social and Ecological Change Theories

With Social Learning Theory, Bandura posited that "the best learning is that which occurs in social context, where actions can be modeled and feedback provided" (Amini, 2010, p. 38). Social Learning Theory highlights the interplay between environmental influences, cognitive processes, and behaviors; it outlined how they had the ability to impact each other (Amini, 2010). Bandura's second iteration of the theory was Social Cognitive Theory and it incorporated ideas from cognitive and humanistic psychology and sociology (Glanz et al., 2008). This included, for the first time, components related to beliefs learners hold about themselves (Amini, 2010). A key component of Social Cognitive Theory is self-efficacy, or "beliefs about personal ability to perform behaviors that bring desired outcomes" (Glanz et al., 2008, p. 171). Another key component is reciprocal determinism, which explains that environments have an impact on people's cognitive processes and behaviors and, in turn, people, through their thinking and action, can have an impact on their environments (Amini, 2010; Glanz et al., 2008).

The next iteration of health promotion theory, ecological theory, went beyond the social nature of behavior change and provided an in-depth examination of the interaction

between individuals and their engagement in various environmental and political systems. As Glanz et al. (2015) said:

> The environmental and policy levels of influence distinguish ecological models from widely used behavioral models and theories that emphasize individual characteristics, skills, and proximal social influences, such as family and friends, but do not explicitly consider the broader community, organizational, and policy influences on health behaviors. (pp. 43-44)

The leading public health agencies in the country (i.e., U.S. Department of Health and Human Services and the Institute of Medicine) and well as the international World Health Organization have promoted the ecological model over individual behavior change models as health promotion programs are seen to have greater impact when they address individual, environmental, and policy issues that can prevent chronic disease (Glanz, Rimer, & Viswanath, 2015). As more modern approaches to public health developed, they examined physical environments, policies and systems and health promotion practitioners gained interest in altering these layers of influence. The Social-Ecological Model adopted by the CDC is based on Urie Bronfenbrenner's Ecological Systems Theory (CDC, 2013b).

In the 1970s and 1980s, Uri Bronfenbrenner suggested that developmental psychology could benefit from a new ecological approach where "real-life settings, with real-life implications" were studied (Bronfenbrenner & Morris, 1998, p. 994). Until then developmental psychology had studied only extreme cases and had largely ignored typical environments. As Bronfenbrenner (1977) noted, his field had been interested only in "the science of the strange behavior of children in strange situations with strange adults for the briefest possible period of time" (p. 513). He fostered the evolution of the study of social

science from observing participants in the same setting to investigating systems of people interacting across multiple environments. In essence, he forwarded the concept that in order to properly study social science, one needed to study systems. He thought that since our environment impacts our activities (and vice versa) that it was important to study individuals within environments that fit the study. That is, if there were interest in studying late night eating behaviors of adults at home, it would not make sense to bring subjects to a lab.

Originally, Bronfenbrenner (1977) explained that the ecological approach is "conceived topologically as a nested arrangement of structures, each contained within the next" (p. 514, italics removed). The structures included the *microsystem* that contained an individual and her closest surroundings. The *microsystem* was nested inside the next larger structure, the *mesosytem* which included multiple *microsystems* so that there was space for an individual, her direct environment and other related *microsystems*. The next largest structure was explained as the *exosystem* that was:

> an extension of the mesosystem embracing other specific social structures… that do not themselves contain the developing person but impinge upon or encompass the immediate settings in which that person is found, and thereby influence, delimit, or even determine what goes on there. (Bronfenbrenner, 1977, p. 515, italics removed)

Bronfenbrenner (1977) described the largest structure as the *macrosystem*, one that reflects the "institutional patters of the culture… such as the economic, social, educational, legal, and political systems" (p. 515). Over time, Bronfenbrenner's theory developed and transitioned to a "bioecological model" where he conceptualized that humans developed through a "proximal process" in which they interacted with other humans and their environments (Bronfenbrenner &d Morris, 1998, p. 996).

While Bronfenbrenner was furthering thought on human development, advances in medicine and public health helped dramatically curb the spread of infectious diseases (McLeroy & Crump, 1994). By the late 1960's the public health system that had been created to combat infectious disease was increasingly concerned with chronic disease instead (McLeroy, Bibeau, Steckler, & Glanz, 1988). By 1976, the CDC created the Office of Disease Prevention and Health Promotion (McLeroy & Crump, 1994). Initially chronic disease prevention programs were designed to address individual behavior changes. But, over time, public health professional began to question programs designed with these theories that concentrated only on changing an individual's life-style. McLeroy et al. (1988) quoted Tesh:

> The life-style hypothesis approaches disease as though ill health is the result of personal failure. It dismisses with a wave of a hand most environmental toxins and it ignores the crucial connection between individual behavior and social norms and rewards. It is, in fact, a victim-blaming approach to disease (page 379). (p. 352)

McLeroy et al. published an article in 1988 that began to change the modern landscape of public health. The article, *An Ecologic Perspective on Health Promotion Programs*, demonstrated how Bronfenbrenner's bioecological model could be applied to public health. Using health promotion programs as the vehicle for change, Bronfenbrenner's systems were reconceptualized as different factors and processes that could serve as the location for health promotion programs; these included *intrapersonal factors, interpersonal processes, organizational factors, community factors,* and *public policy* (McLeroy et al., 1988, p. 356-365). The authors made a distinction between the level of change and level of intervention, noting that public health professionals could design interventions at various levels like media campaigns, worksite wellness programs, or community education efforts.

However, each of these levels of interventions could all focus change at the individual level of change (McLeroy et al., 1988).

For the intrapersonal factors, McLeroy et al. (1988) claimed that health interventions should focus on strategies that would change an individual's behaviors. For interpersonal processes, McLeroy et al., noted that the change level was focused on social norms and the network of relationships. The authors stated that is was not only about recognizing that social relationships could influence individual behavior change but also looking at the "structure and function" of the relationships and being able to change the nature of those relationships and the social norms that were conveyed between them (p. 357). With organizational factors, McLeroy et al. (1988) recognized that organizations could change to create environments that were healthier as well as employees that were healthier. In their conceptualization of community factors, Mc Leroy et al. (1988) forwarded the idea that *community* meant three different things: (1) Bronfenbrenner's idea of a mesosystem with "mediating structures" that are comprised of various people an individual has direct contact with including "family, informal social networks, churches, voluntary associations, and neighborhoods;" (2) "the relationships among organizations within a political or geographic region;" and (3) "power structures in cities, counties, and states [that] often play a critical role in defining community health problems and allocating resources" (p. 363-364). The last component of the Ecological Model was public policy (McLeroy et al., 1988), which the authors explained as "the use of regulatory policies, procedures, and laws to protect the health of the community" (p. 365).

Social-Ecological Model

The next iteration of McLeroy et al.'s model was seen as the Social-Ecological Model (SEM), which the CDC began promoting and using as it started to consider the structural, policy, systems, and physical environment in which all individuals are situated. There are now SEM applications for a variety of public health issues including violence prevention, cancer, health equity and obesity.

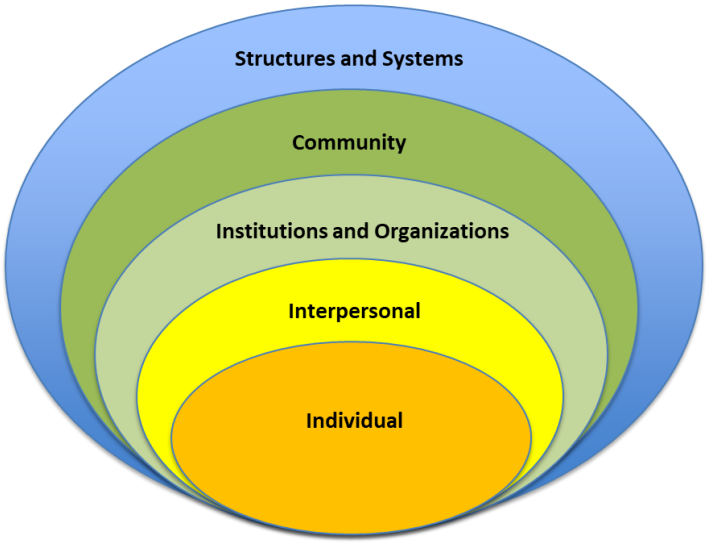

Figure 2.2. Social-Ecological Model showing key components.

Key components of the SEM are: the *individual* which is impacted by all other outer layers of the model and includes "behaviors, knowledge, attributions, and beliefs;" the *interpersonal* which "represents individuals' interactions with one another, or relationships shared within social networks such as families, peer groups, and friendship-based social networks;" the *institutions and organizations* level which, "represents policies and rules specific to assemblies of individuals and their relationships. Common examples of assemblies include schools, religious or faith-based institutions, and the workplace;"

community which is "a larger societal construct comprised, in varying combinations, of the three smaller tiers… [and they may] be defined geographically, politically, culturally, or by other common characteristics;" and, *structures and systems* which "represents the local, state, and federal structures and systems which affect the built environment surrounding communities and individuals" (CDC, 2013b). The SEM recognizes that "adult learning does not happen in a vacuum; learning occurs based on the society in which the learner lives" (Conceição, Colby, Juhlmann, & Johaningsmeir, 2011, p. 20).

For health programming concerned with combating obesity, the CDC (2013c) provided the following examples of how the SEM approach could be used. At the individual level, an appropriate strategy would be to increase people's understanding of the positive results of getting the recommended amount of daily physical activity. At the interpersonal level, social networks could be leveraged through activities like "peer support groups, recipe swaps, and walking groups [that] encourage members to keep each other accountable to nutrition and activity goals" (CDC, 2013b, n.p.). For levels that include institutions and organizations, the CDC provided an example of "a private business park replaces fast food and soft drink options in the cafeteria with water, fresh sandwiches, and salad bars to encourage employees to replace unhealthy options with more vegetables and water" (CDC, 2013b, n.p.). At the community level, the CDC said, "[in] a town with disproportionately low access to fresh fruits and vegetables, a working group of local school officials, community leaders, and business owners [could] help establish an open food cooperative as well as a biweekly farmers market" (CDC, 2013b, n.p.). Lastly, at the structures and systems level, the CDC claims "structural changes [could be] made toward the development of safe parks,

recreational areas, and sidewalks statewide to help facilitate physical activity" (CDC, 2013b, n.p.).

The SEM has also proven effective when used in faith settings. The SEM was used to develop health initiatives including Black Churches United for Better Health, Wellness for African Americans through Churches, and Body & Soul (Allicock et al., 2013a; Campbell, Resnicow, Carr, Wang, Williams, 2007; Campbell et al., 2007). The following section will discuss in greater detail these health programs and focus on obesity treatment and prevention programs that have been offered in faith settings.

Health Promotion in Faith Settings

History of Health Promotion in Faith Settings

Many in the public health field have cataloged how faith communities have contributed to health care and health promotion (Allicock et al., 2013b; Bopp, 2013; Bopp, 2012; Levin, 2014; Steinman, 2008). Religious organizations have been running hospitals for centuries. Aboul-Enein (2016) noted that "much of the motivation of Muslim scholars to advance health and medical knowledge… stemmed from the teachings of the Hadith (the traditions, saying, and deeds of Prophet Muhammad) and the Qur'an (the holy Islamic book of divine revelation)" (p. 821). Modern churches serve as sites for public health interventions including health fairs, cancer screenings, nutrition education classes, group fitness sessions, etc. For almost two decades, the American Public Health Association has a dedicated caucus that examines the intersections of faith and public health (Becker, 2001).

Shortly after his inauguration in 2001, President George W. Bush formed the White House Office of Faith-Based and Community Initiatives allowing federal funds to be funneled to faith-based organizations in order to provide social services (Wineburg, 2007).

This was an expansion of the “charitable choice” clause, which was included in President Bill Clinton’s 1996 Welfare Reform Bill (Chaves, 2003). The clause forwarded that, when states contracted with outside entities for the provision of social services, religious organizations were eligible for these contracts (Chaves, 2003). The aim of President Bush’s new Office was to “lead a determined attack on poverty, disease, and other social ills in partnership with faith-based and other community organizations” (The White House, 2008, p. 1). President Bush also created centers for faith-based initiatives within several national departments (Chaves, 2003). Critics of this Office and the related centers saw this as a political move that would divert federal funding for established welfare and social service programs (Wineburg, 2007). However, supporters believed that this new stream of funding would assist faith communities to further existing efforts to improve the health and welfare of local communities. To continue this work, in February 2009 President Barak Obama changed the name of the office to the White House Office of Faith-Based and Neighborhood Partnerships and formed the President's Advisory Council on Faith-Based and Neighborhood Partnerships (Executive Order Number 13498, 2009). As of the writing of this paper, President Trump has continued the White House Office of Faith-Based and Neighborhood Partnerships. There is a rich history of connection between faith and health--one that pre-dates federal support and one that will most likely continue regardless of the status of future national support. In the passages below, this history is examined.

Churches

Health promotion program developers often work with churches, places that have long been sites for health initiatives to help people eat healthier and exercise. Churches have decades of experience engaging in social services and health promotion (DeHaven, Hunter,

Wilder, Walton, & Berry, 2004; Newlin, Dyess, Allard, Chase, & D'Eramo Melkus, 2012). Steinman (2008) found that 58% of the congregations in the U.S. offer social service initiatives. He also noted that one in nine U.S. congregations focuses on health-related social services.

There are a number of faith-placed and faith-based health promotion programs that have been implemented in churches around the country. In the Carolinas and Georgia alone there have been: North Carolina Black Churches United for Better Health, Body & Soul, Eat for Life, Healthy Body Healthy Spirit, and the Faith Activity Nutrition program. These programs employed a variety of strategies to increase awareness of healthy eating and physical activity recommendations and supported changes in social norms and environmental structures that increased the likelihood of individuals developing healthier habits (Allicock, Resnicow, Hooten, & Campbell, 2013b; Baruth & Wilcox, 2013; Campbell, Resnicow, Carr, Wang, & Williams, 2007; Resnicow, Jackson, Blissett, Wang, McCarty, Rahotep, & Periasamy, 2005).

Another program that has been implemented in the Carolinas, and across the U.S., is the Faithful Families Eating Smart and Moving More (Faithful Families) program. It is an example of a contemporary obesity program that uses the SEM. The program started in 2007 and has served well over 800 participants (Hardison-Moody & Yao, 2019; Hardison-Moody & Stallings, 2012). In addition to teaching individuals about healthy eating and increasing physical activity, the program has resulted in more than 170 policy and environmental changes (Hardison-Moody & Stallings, 2012). These changes reinforce the health behavior changes that the individuals have made; 83% of participants make at least one health behavior change (Hardison-Moody & Stallings, 2012). The 9-week educational curriculum

included with the program is based on North Carolina's Expanded Food and Nutrition Education Program (EFNEP) curriculum, which employs "many educational theories and implementation designs, including Social Cognitive Theory, Stages of Change, Facilitated Discussion and experiential learning within the context of an integrated curriculum" (Willis, Montgomery, & Blake, 2008, p. 8).

Understanding the gravity of the health disparities discussed in an earlier section, public health practitioners, researchers, and scholars have noted the importance of African American churches, in particular, in health promotion activities (Harmon, 2013; Newlin et al., 2012; Steinman, 2008). Steinman wrote, "Compared with other congregations, predominately [B]lack churches may be more likely to support programs addressing mental health and health education" (p. 257). He goes on to note that over the past century, African American churches have been popular sites for public health efforts because of the central roles they play in African American communities. Based on analysis of the 1998 National Congregations Study, Steinman claims that African American churches are more than twice as likely to collaborate with health partners when compared to non-African American churches. In their meta-analysis of health promotion programs in churches, DeHaven, Hunter, Wilder, Walton, and Berry (2004) found that when a priority population was identified, African Americans were most frequently the identified priority population. In another meta-analysis, Bopp, Peterson, and Webb (2012) found that African Americans women were most frequently the prioritized population for faith-based and faith-placed health promotion programs that focused on increasing physical activity.

DeHaven et al. posited that, "It is important to both continue and to expand the work that is currently being done in African American communities among the many successful

and progressive faith–health partnerships. However, we must also recognize that there are significant needs in other racial and ethnic groups...” (DeHaven, Hunter, Wilder, Walton, & Berry, 2004, p. 1034). One of the three recommendations DeHaven et al. (2004) put forth was to “devote more attention to building relationships with racially and ethnically diverse populations that increasingly characterize communities in the United States” (p. 1034). However, they fell short of suggesting that religious populations other than Christians, be prioritized for partnership.

Mosques

While no obesity treatment and prevention programs could be identified that were offered in mosques, Muslims value health and educational pursuits as components of their religious lives (Aboul-Enein, 2016; Caffarella & Daffron, 2013). Many studies have noted ways the Qur’an fostered ideas about medicine (Aboul-Enein, 2016). In his analysis, Aboul-Enein (2016) found 18 verses related to healthy eating, two related to general “healthy lifestyle and behavior choices” and one verse on exercise (p. 823). Aboul-Enein (2016) declared, “Faith-based health promotion interventions and programs could serve as a strong influence in shaping health, behaviors, and well-being particularly in Muslim communities” (p. 827).

While there is a wealth of information about faith-based and faith-placed programming in Christian settings, there is gap in literature (and perhaps in practice) about obesity treatment and prevention programs among Muslims. If health promotion initiatives are to be expanded to other faith settings, it is important that program planning and implementation evaluation be considered as this expansion occurs. Program planning theory and implementation evaluation processes are discussed below.

Program Planning and Implementation Evaluation

Caffarella (1994) outlined the five reasons programs are planned for adults: "to encourage continuous growth and development of individuals," "to assist people in responding to practical problems and issues of adult life," "to prepare people for current and future work opportunities," "to assist organizations in achieving desired results and adapting to change," and "to provide opportunities to examine community and societal issues" (p. 2). These five reasons assume that through education there will be individual, community or societal changes (Caffarella, 1994). In an effort to record these changes, many program planning models include evaluation is a key component (Boone, 1985). Implementation evaluation is a type of evaluation that explores how a program or initiative is actuated in real time (Patton, 2008). Both sets of processes (i.e., program planning and implementation evaluation) are needed to create effective adult education programs and, as such, both have utility for health education focused on obesity prevention and treatment. The passages below highlight a program planning model and framework for understanding implementation evaluation. This model and framework were selected because they align with constructivist theory that guides this study.

Caffarella's Program Planning Theory

Caffarella first introduced her Interactive Program Planning Model in 1994. The non-linear process explained by the model offered a balance of structure and flexibility that is useful to experienced facilitators as well as novice adult educators. The model has 11 components, which are explained below.

The first two components of the model are "Discerning the context for planning" and "Building a solid base of support" (Caffarella, 2013, p. 46). These components are concerned

with knowing "the human, organizational, and wider environmental contextual facets that affect decisions made throughout the planning process", being cognizant of how power is being negotiated, communicating with stakeholders continually to ensure support at every level (Caffarella, 2013, p. 100). Part of understanding the context for planning is understanding which type of adult learning you intend to facilitate—formal, in-formal or non-formal. Formal learning is "learning sanctioned by an institution such as a college or by a business that leads to credits or some form of certification or diploma" (Ginsberg & Wlodkowski, 2010, p. 26). In-formal learning is that which is "usually self-directed, independently pursued, and unregulated, often with the purpose of solving problems" (Ginsberg & Wlodkowski, 2010, p. 26). Non-formal learning is "organized learning such as a workshop or training that takes place at work or in a community organization, but without sanctioning or credit accumulation toward a degree or certificate (Ginsberg & Wlodkowski, 2010, p. 26). Since in-formal learning is usually catalyzed by the individual learner, program planners typically focus on formal and non-formal learning.

The next two components in Caffarella's (2013) theory are "Identifying and prioritizing program ideas and needs" and "Constructing program goals and objectives" (p. 46). The components involve employing various data sources and collection techniques to assess and rank educational needs and transforming those needs into clear goals and objectives that will be met through program implementation (Caffarella, 2013). The next two components are "Designing instruction" and "Devising transfer of learning plans" (Caffarella, 2013, p. 46). The components involve developing learning objectives, selecting teaching methods and associated instructional materials, identifying appropriate assessment

measures, and understanding the facilitators and challenges participants may face when they attempt to apply what they have learned (Caffarella, 2013).

The attention paid to transfer of learning is one of the ways Caffarella's (2013) model differs from other program planning models (e.g., Sork, 2010). Caffarella (2013) defined transfer of learning as "the effective application by program participants of what they learned as a result of attending an education or training program (Baldwin & Ford, 1988; Broad & Newstrom, 1992; Daffron & North, 2011; Merriam & Leahy, 2005)" (p. 211). While most models focus on the learning process, far too few investigate the application of what is learned (Caffarella, 2013). In order to understand transfer of learning, "contextual factors, such as transfer climate, cultural differences, and structural issues" have to be considered (Caffarella, 2013, p. 212).

The next components are "Determining formats, schedules, and staff" and "Preparing and managing budgets" (Caffarella, 2013, p. 47). Caffarella (2013) noted that these components centered on selecting the best format and personnel (i.e., volunteers or paid professionals) for various learning activities and developing, implementing, and monitoring fiscal plans to support the educational program. Other components were "Organizing marketing campaigns" and a component she refers to as "Details, details, details" (p. 47). With these components, program planners were to examine potential target audiences for marketing efforts, develop messaging and branding pieces, and take care of all of the logistics related to program implementation (Caffarella, 2013). The final component is "Formulating evaluation plans" (Caffarella, 2013, p. 47). This component focuses on using systemic data collection methods as well as "informal and unplanned evaluation opportunities to collect formative and summative evaluation data" and selecting and

employing appropriate analytic techniques (Caffarella, 2013, p. 253). Caffarella's model clearly identifies evaluation as a component for program planning. While she uses the term "formative" evaluation, others use the terms "process" and "implementation" evaluation. In the text below, Patton's (2008) framework for implementation evaluation is outlined.

Implementation Evaluation

In addition to being an integral part of program planning, evaluation has been recognized as a tool for answering increasing calls for accountability and use of evidence-based programs. Many federal grants require that program planners dedicate a portion of the program budget to evaluation activities. Although evidence-based programs have been promoted and, in some cases, required by funders, implementation of these evidence-based programs is often done without fidelity (Blase, Fixsen, Sims, & Ward, 2015).

In *Utilization Focused Evaluation*, Patton (2008) presented a case study in which a social service program was deemed ineffective by a reputable research firm. Because of this, funding for the program was cut (Patton, 2008). However, Patton (2008) described that the program was found ineffective because it was never actually implemented. He used this case to highlight the importance not just of outcome evaluation but also of implementation evaluation. Without implementation evaluation, program planners, funders, and policy makers cannot understand if a program was implemented as designed. As Durlak (2013) posited, "Poorly implemented programs can mislead decision-makers into assuming that a program is ineffective when in reality the program might work very well if it were well-implemented" (p. 3). Patton (2008) developed a framework that includes various types of implementation evaluation including: monitoring, process, components, treatment

specification, and effort, input, and access. Each of these types of implementation evaluation is discussed below.

Monitoring. Patton (2008) described several types of implementation evaluation. The first type of implementation study Patton (2008) noted was monitoring. Computer-based management information systems (MIS) are often created to support this function (Patton, 2008). MIS designs are based on accountability efforts and routinely collect information on participant demographics, levels of participation, and rates for program completion (Patton, 2008). The data is then compared to benchmarks that the program hopes to achieve and gaps between the two sets of data are identified as part of the monitoring process. Durlak (2013) claimed, "A good monitoring and feedback system is important so that practitioners receive positive feedback about the good job they are doing, and that efforts to improve implementation can be made quickly if needed" (p. 7). Monitoring ensures that implementation activities can be adjusted if they are found to be straying from the planned design (Durlak, 2013).

Process. Patton (2008) described the second type of implementation research as focused "on the internal dynamics and actual operations of a program in an attempt to understand its strengths and weaknesses" and "an analysis of the processes whereby a program produces the results it does" (p. 324). During process research, the investigator will talk to participants and those running the program and ask "how" and "why" questions; this data helps to determine why certain aspects of the program were successful or challenging. Process evaluations are not only concerned with planned activities and outputs but they also examine communication habits and unplanned events (Patton, 2008). Quality process evaluation also has a temporal component. Planners and evaluators have to recognize that

findings from an initial implementation evaluation will differ from findings of a well tenured program – even when program components and staff remain constant (Durlak, 2013).

Components. The third type of implementation evaluation investigates the various components of a program (Patton, 2008). For example, a diabetes prevention program might have lectures on healthy eating, videos on how to increase physical activity, peer sharing about where to shop for fresh fruits and vegetables, and independent journaling exercises. In order to understand how the program is implemented, each of the components would need to be studied (Patton, 2008). When programs are implemented across various populations and in a variety of settings, often planners are forced to decide the degree to which the program should be adapted to fit their audiences (Durlak, 2013). Durlak (2013) said, "It is possible to adapt an evidence-based program to fit local circumstances and needs as long as the program's core components, established by theory or preferably through empirical research, are retained and not modified" (p. 2). But, coming to agreement on what elements of a program are *core components* can be difficult because most implementation evaluations do not investigate core components separately (Durlak, 2013).

Treatment specification. Patton (2008) noted that the fourth type of implementation study involves understanding program theory and identification of independent and dependent variables. He said that this type of study "reveals the causal assumptions undergirding program activity" (p. 326). In order to come to an agreement about what strategies a program should employ to get the desired outcomes, planners and evaluators will often use logic modeling exercises to uncover the "causal assumptions" Patton (2008) mentions.

Effort, input, access. The last type of evaluation examines human and material resources used in implementation. This includes reviewing staffing patterns, staff-to-participant ratios, program materials and technology resources that were employed. Essentially a researcher engaged in this type of implementation study would create "an inventory of program operations" (Patton, 2008, p. 323, italics removed). With regard to access, a researcher would investigate the degree to which the priority population for whom the program was designed was actually participating in the intervention.

With regard to input and effort, it is important to understand that implementers come to the program with different histories and prior knowledge. This is one reason people will perform differently when implementing a new initiative (Durlak, 2013). Some implementation theorists point to differing motivation as a cause for variety in performance of programs (Durlak, 2013). But others note the motivation could be the same but the understanding of the program and its mechanics may be the thing that causes different outcomes. This phenomenon is referred to as sense-making or meaning making and has an impact on both program planning and implementation. It is discussed in the section below along with cultural competency, another concept that is important to both planners and evaluators.

Links between Program Planning and Implementation Evaluation

Since evaluation is a key component of program planning, it is no surprise that there are many links between the two processes. Program planners and evaluators both have to consider the role of meaning making in implementation and both need to be cognizant of the cultural context surrounding programs. These concepts are discussed in greater detail below.

Meaning making. There is a gap in the literature regarding the study of how implementers comprehend the programs and policies they are implementing (Quinn, 2009). The predominant Heath Behavior and Health Education text in the field of Public Health does not speak to the concept of meaning making (i.e., there is no entry in the index for the terms) (Glanz, 2015). Meaning making processes are not frequently examined as part of implementation evaluation (Schmidt & Datnow, 2005; Spillane, Reiser, & Reimer, 2002). But, understanding how implementers are constructing meaning out of directions from planners and program materials (e.g., implementation guides) is necessary if program integrity is to be upheld (Quinn, 2009).

Implementers arrive with varying experiences, traditions, attitudes, and cultural norms which impact their meaning making processes and how they will interpret instructions and program policies and materials (Schmidt & Datnow, 2005). Lived experiences, previous knowledge, and belief systems inform the implementation of programs and policy (Datnow & Park, 2012; Spillane, Reiser, & Reimer, 2002). Prior knowledge and expectations influence how new information is processed when individuals are learning how to implement a program (Spillane, Reiser, & Reimer, 2002). The variety in meaning making can cause variety in implementation activities (Schmidt & Datnow, 2005). “From this perspective, what a policy [or program] comes to mean for implementing agents depends to a great extent on their repertoire of existing knowledge and experience” (Spillane, Reiser, & Reimer, 2002, p. 393). This is important because it has a great influence on the way programs are implemented.

Meaning making is not only an individual process it is also a social one (Merriam et al., 2007). Implementation staff learn from each other and through group processes like team

meetings where new ideas and thoughts that may not occur to an individual develop within the group and can be shared (Spillane, Reiser, & Reimer, 2002). Spillane, Reiser, and Reimer (2002) claimed that meaning making is "distributed in the interactive web" of various programmatic stakeholders (p. 412). "Meaning making is a physical activity (grasping, seeing), a social activity (it requires another), and a survival activity (in doing it, we live)" (Love & Guthrie, 1999, p. 65).

In the 1980's and 1990's Kegan outlined how people develop and learn as they move through six stages of consciousness (0-5) (Ignelzi, 2000; Love & Guthrie, 1999). Each order involves a different type of meaning making (Ignelzi, 2000) that focuses on the "organization of one's thinking, feeling, and social relating" (Love & Guthrie, 1999, p. 67). As a person moves through the orders, their "meaning-making undergoes changes that affect the person's view of the self, relations to others, and understanding of experience" (Ignelzi, 2000, p. 7). Each order is progressive and it more complex and inclusive of the former orders (Love & Guthrie, 1999).

Children and adolescents make meaning in Orders 0 – 2 (Love & Guthrie, 1999). Most adults make meaning at Order 3 or Order 4 (Ignelzi, 2000). In Order 3, a person's meaning making is situated within herself and with others (Ignelzi, 2000). While the person can synthesize many points of view and "create a shared reality with others," she is "limited in the ability to reflect on that shared reality and how it is influencing or determining [her] own view" (Ignelzi, 2000, p. 8). In Order 4, meaning making is associated with self-authorship where the individual considers, synthesizes, and reflects upon many points of view but ultimately constructs her own theory about her experiences and herself (Ignelzi, 2000). In this order, "meaning-making is influenced by but not determined by external

sources" (Ignelzi, 2000, p. 8). It is rare that people move beyond Order 4; when they do, it is never before the age of 40 (Love & Guthrie, 1999).

Cultural context. Boone (1985) claimed, "Planners need to understand the sociocultural context within which they are endeavoring to plan and implement educational programs" (p. 44). The same is true for those evaluating the programs (American Evaluation Association, 2011). The American Evaluation Association (AEA) stated that a "culturally competent evaluator (or evaluation team) must have specific knowledge of the people and place in which the evaluation is being conducted—including local history and culturally determined mores, values, and ways of knowing" (AEA, 2011, n.p). Over two decades ago, Stafford Hood began developing Culturally Responsive Evaluation (CRE) (Center for Culturally Responsive Evaluation and Assessment, n.d.). With CRE, those creating and evaluating programs examine power, privilege and how evaluation can impact those from communities that may experience marginalization. Developing cultural competence is a way planners, implementers, and evaluators can better understand the sociocultural context in which they work.

The initial release of Caffarella's seminal text, *Planning Programs for Adult Learners*, has been updated to reflect the importance cultural competence plays in program planning. The first edition of the text does not mention any assumptions related to diversity or cultural differences (Caffarella, 1994). The second edition of the text assumed that adult educators already engaged in culturally competent practices and asserted, "People who plan programs for adults *are sensitive* to diversity and cultural differences in many forms" (Caffarella, 2002, p. 21, emphasis added). This assumption was called to question and the latest edition reflected, "People who plan programs for adults *need to be sensitive* to cultural

differences in their many forms" (Caffarella & Daffron, 2013, p. 33, emphasis added). The edition acknowledged that planners must not only appreciate cultural difference, but also be able to facilitate learning of adults who may hold diverse beliefs and backgrounds (Caffarella & Daffron, 2013). The authors recognized "cultural differences" as an "area of foundational knowledge" that adult educators must have in order to develop and implement programs (Caffarella & Daffron, 2013, p. 52).

As part of understanding those cultural differences, those involved with adult education should consider how differences in spirituality and religion can influence learning (Conceição et al., 2011; Ziegahn & Ton, 2011). Although spirituality and religion are rarely considered in program planning, today's multi-cultural contexts demand that religion and spirituality be recognized for the roles they play in both informal and formal adult education and social justice activities (Caffarella & Daffron, 2013). Caffarella and Dafron (2013) cite Kamis and Muhammad (2007), who explain, "Islam, for example, calls for a lifelong learning mandate that has two major purposes. The first is to obtain knowledge that leads one to God, the source of all knowledge. The second purpose requires that this knowledge be used for the good of society, which dictates their actions with humankind" (p. 61). In order to be culturally competent, program planners, implementers, and evaluators need to recognize the ways spirituality and religion can influence adult education practices, including health promotion activities aimed at reducing obesity.

Chapter Summary

As is outlined above, the increasing obesity trend in the U.S. is troubling because of the economic and health costs to Americans. The issue of obesity is compounded for many African Americans, who experience health disparities. The fields of health promotion and

health education have an opportunity to work together as both are concerned with social justice issues such as inequities in health. Trends in health promotion theory have moved from a focus on individual health behavior change to focusing changing entire systems in order to combat obesity. Many obesity prevention programs have been created using the relatively new Social-Ecological Model and have been implemented in churches. There is a long history of connections between faith and health and many studies have examined health promotion programs in churches. Contemporary obesity prevention programs, like Faithful Families, use the SEM to guide their practices and strive to be more culturally competent. However, very little research exists regarding implementation of health promotion and health education programs in mosques. Two processes that are useful for framing the connections between adult education and health promotion are program planning and implementation evaluation. Two concepts that are important to both processes when considering obesity treatment and prevention programs are cultural context and meaning making. The next chapter explores the methods employed by the researcher.

CHAPTER 3: METHODOLOGY

Chronic diseases are impacted by our access to and understanding of opportunities for healthy eating and physical activity. One way chronic diseases are being addressed is through weight management programs that are offered in partnership with faith communities. While there is a wealth of information about health promotion programming in Christian settings, there is little information about health programs offered in Muslim faith settings (DeHaven et al., 2004; Levin, 2015). The purpose of this research is to describe the meaning making processes that unfold during the implementation of the Faithful Families program in a church and a mosque in the Southeastern United States. The research questions in this comparative case study are:

1. How do co-instructors, lay health leaders, and participants negotiate learning during the Faithful Families program?
2. How do personal, social, and environmental factors shape how people experience the Faithful Families program?

In this chapter, I provide details on study design, sample selection, data collection, data analysis, validity and reliability, researcher bias and assumptions, and limitations. The chapter will close with an outline of the timeline for the study.

Design of the Study

"Qualitative inquiry cultivates the most useful of all human capacities: The capacity to *learn*" (Patton, 2015, p. 1). I chose qualitative inquiry for this study because it allowed me to learn about the meaning making processes of co-teachers of the Faithful Families program. Qualitative research is naturalistic and sensitive to context; this aligns with my study that examined program implementation in various faith settings (Patton, 2015). Qualitative

inquiry is also reflexive and flexible; this is congruent with my desire to share my authentic voice and to be nimble in the face of unexpected opportunities or challenges (Patton, 2015).

The complex and context-specific meaning making process was examined using case study, which is qualitative research method that examines "a contemporary phenomenon within its real-life context" (Yin, 2003, p. 13). There are many strengths to the case study method. These include an ability to provide an in-depth analysis of cases and an "ability to deal with a full variety of evidence—documents, artifacts, interviews, and observations" (Yin, 2003, p. 8). Case studies are especially helpful when context is important to the focus of the study and when detailed description of complex cases is needed (Yin, 2003).

In many instances, cases are bound by time and a certain place (Creswell, 2013; Patton, 2015; Yin, 2003). The cases in this study are bound by the time associated with planning and implementation of the Faithful Families program and the time limitations of the researcher. Cases are also be bound by place. All cases are within the Southeastern United States and are places of faith – either a church or a mosque. In addition to their bounded nature, another hallmark of case studies is that they are in-depth and provide great detail about the cases being examined (Creswell, 2013; Patton, 2015). This study provides rich detail on the meaning making processes that people experience while implementing the Faithful Families program.

This is an intrinsic comparative case study as it seeks to describe cases that are exemplary in some way–that is, each case is set in the context of a different world religion (Creswell, 2013). Case studies can center on one case (i.e., a single case study) or multiple cases (Creswell, 2013; Yin, 2003). When conducting a study involving multiple cases, researchers will typically choose five or fewer cases using purposeful sampling (Creswell,

2013). This study focuses on two cases — a church and a mosque. The details on selecting these cases are highlighted below.

Sample Selection

Faithful Families is a healthy eating and physical activity program offered across the United States. The Faithful Families program is comprised of nine classes that are co-taught by a lay leader from the faith community and a local public health professional. Class sizes range from 10-20 participants. In addition to the classes, each site is expected to make a policy or environmental change that will help the faith community become healthier.

There are many Christian faith communities that have offered the program across the Southeastern United States. However, there has only been one mosque that offered the Faithful Families program in North Carolina. The researcher approached the Faithful Families Program Director over four years ago and began discussing ideas for this study. The Program Director was supportive of this study and helped identify study sites.

Purposeful sampling was used in this study; it is a type of non-probability sampling used frequently in qualitative studies (Patton, 2015). Criterion-based sampling is a form of purposeful sampling that is used when researchers are interested in comparing and contrasting cases (Patton, 2015). The criteria used for this study include sites that were in the Southeastern United States and ones that offered the program more than once. The case set in the mosque was compared and contrasted to a case from a Christian faith setting in the same city as the mosque. The Southeastern United States was selected as the geographic location to study, as this is where the Faithful Families program office is located and where the program was developed.

Since the phenomenon being studied is meaning making during implementation, the people directly involved with the implementation of the program were interviewed — this includes the co-instructors (from local public health or cooperative extension offices), lay health leaders, and participants. Worship services at each of the sites were observed. Documents and physical artifacts associated with the program were also examined. The case study approach was best suited for this research because there were clearly bounded cases that provided in-depth information on meaning making in implementation (Creswell, 2013). A variety of tools were needed to collect data on these cases (Creswell, 2013). These tools are discussed below.

Data Collection

Case studies use multiple sources, including interviews, observations, documents, and physical artifacts (Creswell, 2013; Yin, 2003). The variety of sources of information allows case studies to gain an in-depth understanding of a person, group, components of a program, a whole program, or process (Creswell, 2013; Patton, 2015).

Interviews

I carried out semi-structured interviews, which allowed me to ask probing questions, and afforded me some consistent structure across interviews (Johnson & Turner, 2003). I asked open-ended questions about co-teachers' perceptions of their successes and challenges with regard to implementation of the Faithful Families program. At each site, I interviewed lay health leaders and participants about their experiences during implementation. Interviews were audio recorded and transcribed for data analysis. Directly after the interviews, I wrote field notes to record additional pertinent information. Since most co-instructors, lay health

leaders, and participants in the Faithful Families program are women, all but one interview was with women. All participants were adults.

Observations

I conducted three observations at each site. I attended Friday Prayers (at the mosque) and Sunday Services (at the church). During these observations, I noted references to healthy eating or physical activity. These observations gave me an opportunity to be exposed to the contexts of each faith community. I used the observation guide (Appendix G) to record and document relevant activities.

Documents and Physical Artifacts

I also reviewed the websites of each of the faith communities (see Appendix H). This allowed me to gain a better understanding of the faith communities. As part of the Faithful Families program, faith communities agree to create a policy or environmental change that assists faith community members in sustaining healthy behavior changes. For this reason, it was important for me to review physical artifacts associated with these changes. Artifacts that were reviewed included flyers related to health within the faith communities' buildings, weekly bulletins, and informational pamphlets distributed by the faith community.

Although a researcher may have a plan for data collection in the beginning of a project, the plan has to be flexible and will be iterative (Yin, 2003). Data collection did not go as planned (e.g., my primary contact at the mosque move out of the state, collection was interrupted by observance of Ramadan at the mosque and fall revivals at the church, etc.) and data analysis was iterative and shifted as well. Details on this process appear below.

Data Analysis

The Qualitative Case Study approach was used to analyze the data. It was guided by Stake's phases of analysis, which involve "description, categorical aggregation, establishing patterns, and naturalistic generalizations" (Boblin, Ireland, Kirkpatrick, & Robertson, 2013). Stake's framework aligns with this study as it is constructivist; the other leading case study methodologist (i.e., Yin) uses a postpositivist lens (Boblin et al., 2013). MAXQDA software was used to organize, store, and analyze the data.

In order to analyze using this method, the researcher employed a variety of coding techniques. Deductive coding was used first. The deductive code matrix was based on key concepts from health promotion and adult education literature, conceptual frameworks (e.g., meaning making), and tools for identifying significant events (e.g., turning points, epiphanies, critical incidents, and identifiers of salience). An initial coding list was developed for each of the research questions.

Inductive coding occurred during second cycle coding and used eclectic coding that encompasses many types of coding like descriptive coding that "summarizes in a word or short phrase… the basic topic of a passage of qualitative data" and in vivo coding, which uses direct quotes from interviewees that exemplify the meaning of the passages (Saldana, 2013, p. 88). Focused coding was also used and allowed the researcher to develop categories and subcategories of data, which were further analyzed into themes (Saldana, 2013).

Although this study used cross-case analysis to uncover themes across cases, within-case analysis was used initially to provide deep descriptions of each case individually (Creswell, 2013). As a result of this comprehensive analysis, clear descriptions of the cases and themes identified while examining the cases, have been created (Creswell, 2013).

Patton's (2015) keys to qualitative analysis were also observed. He noted that researchers should:

- begin analysis during fieldwork;
- inventory and organize the data;
- fill in the gaps in the data;
- back up the data;
- thank participants;
- reaffirm the purpose of [the] inquiry;
- review exemplars;
- make use of software support;
- schedule intense, dedicated time for analysis;
- clarify and determine [the] initial analysis strategy;
- be reflective and reflexive;
- keep an analysis journal (Patton, 2015, p. 523).

Ensuring Validity and Reliability

Several techniques were employed to assure validity and reliability in this study. These included: triangulation, member checking with co-instructors and the Program Director, providing a thick and rich description, and producing an audit trail of coding and other analytic choices. Triangulation of data, collected from interviews, observations, and document and physical artifact review, assisted with internal validity and reliability (Merriam, 2002; Patton, 2015). The Program Director was also integral to the study as she sits on the committee overseeing this research. She was asked to provide feedback on initial and final findings. External validity was bolstered by the thick and rich descriptions that were

generated for each of the cases (Merriam, 2002; Patton, 2015). Other researchers are now able to decide if applying the findings from this research to other studies is acceptable. Reliability was fostered as the researcher maintained an audit trail, in the form of a journal, to track coding and other analytic decisions. This study is grounded in constructivist theory and it important for both the research *and the researcher* to be trustworthy (Patton, 2008). For these reasons, my bias and assumptions are made explicit below.

Researcher Bias and Assumptions

Yin (2003) notes that in order to conduct a good case study, a researcher must "*ask good questions*," "*be a good 'listener,'*" "*be adaptive and flexible*," "*have a firm grasp of the issues being studied*," and "*be unbiased by preconceived notions*" (p. 59, emphasis in original). I meet all of these qualifications except the last one. I believe, as a qualitative researcher, I have bias and assumptions that I bring with me as I design, implement, and reflect upon the study. I am a constructivist and believe that people learn through their interactions with others and their environments. While I am a proud Christian, I believe that other paths to God are valid. While I have had a long-held interest in understanding God, I have a novice understanding of religious scriptures and traditions. I am conducting this study in the United States where research on religion and health is done through a protestant lens. I am also a realist, a government worker, and a public health professional. So, I understand the constraints of implementing health promotion programs. I also understand that every study has certain limitations. The limitations of my study are listed below.

Study Limitations

Limitations include the narrow geographic and programmatic focus of the evaluation. Because of the limited resources associated with this study, only Faithful Families programs

in the Southeastern United States were examined. Findings from this evaluation may have limited transferability to other parts of the United States. Since the lay health leaders incorporate messages from their faith communities' sacred texts into their Faithful Families sessions, transferability to secular (i.e., non-religious) obesity programs may be limited as well. Two additional limitations related to site selection exist. The two sites selected were faith communities that had a number of resources (e.g., paid staff, volunteers, meeting space) and offered the program over five years ago. Transferability to faith communities with fewer resources and those that are implementing newer versions of the curriculum may be limited.

As there are many strengths to case study, there are also challenges with this type of method. A major challenge researchers face is which case to select and how narrow or broad of a case to select (Creswell, 2013). Another major disadvantage to case study, as a method, is that it is difficult to reach consensus about the definition and function of a case study (Patton, 2015). Analysis is also difficult (Yin, 2003). Yin (2003) said that the analysis stage is the hardest part of conducting a case study and admitted, "none of these [analytic] techniques is easy to use. None can be applied mechanically, following any simple cookbook procedure" (p. 139). A common limitation associated with case studies is the length of time it takes to complete them (Yin, 2003).

Chapter Summary

This chapter opened with a restatement of the problem and research questions. Then it provided information on the case study method, which is the study design most appropriate for this research. Then, details were given on purposeful sample selection; data collection using interviews, observations, and document and artifact reviews; and, data analysis. The

chapter ends with plans for ensuring validity and reliability, notes on researcher bias and assumptions, and the study's limitations and timeline.

CHAPTER 4: FINDINGS

During my research, I studied the Faithful Families program in one church and one mosque. While many implementation evaluation studies investigate fidelity to the program model, few examine the meaning making processes that unfold during implementation. This type of examination is needed in order for modern planners to develop culturally responsive health programs that go beyond traditional behavior change models to ones that incorporate change in systems (Ziegahn & Ton, 2011).

The research questions addressed in this study were:

1. How do co-instructors, lay health leaders, and participants negotiate learning during the Faithful Families program?
2. How do personal, social, and environmental factors shape how people experience the Faithful Families program?

In the following pages, I will outline the findings of this study. After I review study procedures, I will describe each case and provide participant profiles, findings related to each of the research questions and any additional relevant findings. After each case and set of findings is described, I will detail the cross case comparison between cases. This chapter will be concluded with a broad summary of the findings.

Study Procedures

The Program Director discussed potential study sites for a retrospective examination of program implementation. The two sites selected were in the same city in the Southeastern United States; both sites offered the program during the same time period and both offered the classes multiple times. The Program Director connected me with the contacts for each of the sites and I worked with each of the contacts to recruit participants. Purposeful and

criterion sampling was used to select participants who: (a) were 18 years of age or older and (b) participated in the Faithful Families program at the selected sites. Recruitment was difficult because the most recent version of the program was offered more than five years ago and the pool of potential study participants was relatively small (i.e., typical class participation was no more than 15 people). Recruitment was also difficult because the contacts were extremely busy, as were potential study participants. In the case of the mosque, the contact (i.e., Pam) moved out of the state before interviews at the mosque could start.

Each potential participant was contacted by phone or email at most four times (i.e., once initially by the contact at the site and three more times by me). There were a number of potential study participants who never responded to calls or emails. I visited the church frequently so that potential participants would become more familiar with me and feel more at ease participating in my study. In at least four services, the contact at the church (i.e., Tanya) introduced me to the congregation.

Once participants agreed to take part in the study, I reviewed the consent and demographic forms, which they signed prior to completing an interview (See Appendices E and J). The demographic forms captured basic information like age, marital status and race/ethnicity. In addition to this information, a few questions from Pew Research Center's 2014 Religious Landscape Study (RLS) were added. This study was first completed in 2007. Both rounds of the study each involved over 35,000 phone interviews across the United States. The purpose of the RLS is to capture data on American's "religious affiliations, beliefs and practices and social and political views" (Pew Research Center, n.d.). The RLS questions I included in my demographic survey captured data on how important religion was to participants and the frequency with which they attended religious services. The semi-

structured interviews were designed to elicit information that would address the three research questions. Interviews were done in person at the church and mosque or over the phone. The protocol had 19 prompts and the average interview lasted 30 minutes. Interviews lasted from 19 to 58 minutes. The original plan to use a separate interview guide for program facilitators was abandoned because only one facilitator was interviewed and she held dual roles as a facilitator and lay health leader (see Appendix F). Each interview was audio recorded and transcribed using a popular, yet secure, transcription service.

Case 1: The Church

The church is a Baptist church with membership in the state's convention for Black Baptist churches. It was founded in 1946. The current pastor is only the fourth in the church's history and has been serving this community for 37 years. The church has three services each Sunday and hundreds of active members. One Sunday a month the congregation engages in physical activity for approximately 10 minutes during each service. Members are encouraged to "dress down" and wear comfortable clothing during these services. Most members take part in the physical activity portion of the service, which is led by the two co-chairs of the church's wellness committee. Even some of those who remain in their seats, move their arms along with the rest of the congregation.

During one visit in September 2018, I observed these special monthly services. The pastor introduced the two co-chairs and reminded members that they are encouraged to walk laps in the parking lot after each service. The co-chairs arrived on the elevated pulpit and made brief statements about monthly health observations (e.g., it is Heart Health Month and people should choose healthy foods and exercise). Images of the two co-chairs were projected on large screens and upbeat, pre-recorded Gospel music is played.

Typically, during these services the physical activities involve light aerobic movements like stepping side-to-side and overhead stretching of the arms. The physical environment supports this activity. There are banquet-style chairs that are arranged in rows of 10 throughout the sanctuary. The sanctuary holds approximately 250 worshipers in addition to those seated with and behind the pastor on the elevated pulpit (e.g., choir seating). The pastor does not "dress down" but does take part in the physical activity. Although he opens this part of the worship by encouraging members to walk laps in the parking lot after service, I never observed people doing this. Most observations occurred in winter months when the outside temperatures were quite cold. In warmer months, congregants may take part in this activity.

This once-a-month segment of worship is an outgrowth of the church's participation in the Faithful Families program. The church began participating in the program in 2013. During this time, the congregation went through the Faithful Families program at least three times. The number of participants varied from class to class and between sessions but was never greater than 15.

Participant Profiles

Table 4.1 summarizes basic demographical information about the participants and includes role in the program, gender, age, race/ethnicity, and time the person has been a member of the church. I interviewed one man and three women program participants. Their ages ranged from 33 - 69 years and they had been members of the faith community for a range of 4 - 25 years. All program participants identified as African American/Black. The lay health leader was 40 years old, had been with the faith community for six years, and identified as African American/Black.

Table 4.1.

Participant Demographics from Case 1: The Church

Pseudonym	Role	Gender	Age	Race/Ethnicity	Years at Site
Brandy	Participant	F	50	African American/Black	4
Mae	Participant	F	69	African American/Black	15
Olivia	Participant	F	56	African American/Black	25
Ron	Participant	M	33	African American/Black	14
Tanya	Lay Health Leader	F	40	African American/Black	6

Brandy. Brandy is a 50-year-old Christian woman who identifies as African American/Black. She is divorced and has a two-year degree. She attends religious services once a week and says religion is very important in her life. She has been attending religious services at this site for four years. Brandy had previous exposure to healthy eating and physical activity programs as she has participated in Weight Watchers since 2005. She was motivated to participate in Faithful Families because she is "always looking for ways to improve [her] health as well as helping others". She did not note any barriers to participation and regularly attended because she "was one of the facilitators from [the] church". With regard to healthy eating and physical activity, she would tell her younger self, "start now…you'll thank yourself later!!" As for her ongoing meaning making related to the program, Brandy noted that she wished the classes would continue and said,

> To maybe run it, I don't know, once a quarter, twice a year at [the church], but, and I don't know what it looks like at other churches, but then to definitely see it grow to other churches so that more people are getting this information. There [are] a lot of people out there who don't understand how to eat healthy, and that's not a good thing.

Mae. Mae is a 69-years-old. She is divorced and has a four-year degree. She attends church once a week and says religion is very important in her life. She has been attending church here for 15 years. Mae "had quite a bit of knowledge" about healthy eating and physical activity because she's "a retired Social Worker with over 30 years' experience as a patient and board member at federally qualified community health centers". She was motivated to participate in Faithful Families because she is "committed to enhancing [the] physical and mental health of [her] family, [her] community and [her]self". Mae said, "I don't always practice what I preach, so this program is a way to engage on a positive level." A barrier she noted was that she did not drive at night. With regard to healthy eating and physical activity, she would tell her younger self, "Do it now; it won't be so difficult later!" As for her ongoing meaning making related to the program, Mae noted that she wished that the church had "a larger percentage of our members actually participate, because it was frustrating to see just ten or 20 families being impacted when there are another 300 families that needed that information."

Olivia. Olivia is a 56-years-old. She is married and has a four-year degree. She attends religious services once a week and says religion is very important in her life. She has been attending religious services at this site for more than 25 years. Before starting the program, Olivia "knew about the importance of portion size and the impact that starches/sweets [have] on people with diabetes". She was motivated to participate in Faithful Families because of the disease and because three generations of her family have experienced obesity. She was also interested in "doing something different at [her] church with [her] church friends." Barriers included other previously scheduled activities like "after-school events" and "Bible study". The "hope" of weight loss motivated her to keep coming to the

program. Olivia also noted several incentives that she appreciated -- “cooking tools, recipes, food tasting, [and] friends”. With regard to healthy eating and physical activity, she would tell her younger self, “Drink water. Walk. Cook your own food at home, strongly avoid eating out.” As for her ongoing meaning making related to the program, Olivia said that at the time of the program she had hoped for “weight loss” and that after reflecting on the program she realized that through the program “we’ve got all those tools and then we had to choose, make a decision to use.”

Ron. Ron is a 33 year-old Christian man who identifies as African American/Black. He is separated and has a four-year degree. He attends religious services once a week and says religion is very important in his life. He has been attending religious services at this site for 14 years. Ron “knew the importance of healthy eating and physical activity due to [his] degree in kinesiotherapy and group fitness certification.” He was motivated to participate in the program because he “knew that [he] could help others along with gaining more knowledge of the program.” “Creating time in [his] busy schedule” was a barrier to his participation. But, “being around people who desired to make a difference in the community” was a facilitator of his continued participation. He considered his role to be that of a “supporting cast member.” With regard to healthy eating and physical activity, he would tell his younger self, “Find time, make time and do it. You will appreciate it later!” As for his ongoing meaning making related to the program, Ron shared how he viewed his and other churches, their role in creating healthier communities, and the impact of Faithful Families.

He said:

> Because I strongly believe in community, so when something was piloted here, great! Because the size of the church, the location, it is kind of a staple in the community. A lot of the time churches are. So, my greatest hope would be more people catch on, and it sticks in the faithful and the faith community, because I think a lot of the times, for me, and I've seen where we'll touch on the spiritual part of the church, and now we have to get into that, if you're really concerned about a person, it's not just the spiritual. You have to look a little bit broader and get out there and get into it, and Faithful Families definitely took that and made that happen, and it brought awareness, and sparked other things within our church.

Tanya. Tanya is 40-years-old. She is separated and has a high school degree. She attends religious services more than once a week and says religion is very important in her life. She has been attending religious services at this site for six years. Tanya had "limited knowledge about healthy eating and physical activity" before the program. She noted she "always thought as long as [she] did a little physical activity [she] could eat bad. This was a lie." Tanya was motivated to get involved with the program because she wanted "to help [her] community gain the knowledge and resources needed to live a healthy life." She did not experience any barriers to participation and felt that the "knowledge provided and resources" facilitated her to "continuously attend." Tanya was the lay health leader who helped co-facilitate the program at the church. She would tell her younger self, "Exercise, eat right and educate yourself on the effects of being healthy. You don't have to deprive yourself to be healthy." As for her ongoing meaning making related to the program, Tanya shared:

> The feedback that I've gotten from it that was like, it was very helpful. It was very beneficial… a lot of folks tell me even today that you know, "Tanya, when I go into the grocery store I don't always pick up the junk." Because it really is lifestyle for them. They realize that... I don't need all this cake. I don't need all these potato chips. I don't need those things that could potentially kill me. That, guess what? When I go into the supermarket, my things have changed.

Findings Related to Case 1: The Church

The table below lists the findings related to both research questions. Details on each of the finding follow the table.

Table 4.2.

Findings Related to Case 1: The Church

I. Ways of negotiating learning
A. Learning through demonstration and access
B. Sharing beliefs and experiences
II. Personal, social and environmental factors
A. Individual: Stretching faith to bolster previous health knowledge
B. Individual: Connecting with God to "do our part" and practice self-care
C. Social: Caring for others to improve health
D. Social: Connecting with others to increase healthy behaviors
E. Environmental: Securing resources to address needs

Findings related to research question 1. Church participants negotiated learning in the Faithful Families program by engaging in demonstrations and sharing beliefs and experiences. Participants learned about healthy eating through on-site demonstration and produce delivery. Their lessons were bolstered by their shared belief in the Bible and experiences they had within the church.

Learning through demonstration and access. Tanya, the lay health leader for the church, discussed what she saw as the most memorable class for participants and recalled it involved demonstrations about produce. She said:

> I think the stand out activity was when we had Grocers on Wheels come. When he came during that session, that session they did I think some smoothies and stuff like that, but he came with a lot of fresh fruits and vegetables and then they ... A lot of people really didn't know how to pick ripe vegetables, ripe fruits. And so they asked a lot of questions. I think that was the most interactive session that we had there. Because it was like, okay this is what a ripe apple looks like and this is how we need to pick these greens and this is what we [are] looking for. And so I think that was the most enjoyable one for most.

Mae remembered the increased access to healthy foods and noted:

> If you were a busy working mom or dad and didn't necessarily have extra time to stop at the grocery store on the way home from work that you could just stop by and come a few minutes early to bible study and buy a fresh cabbage, and some fresh tomatoes, and onions, and that kind of thing.

Sharing beliefs and experiences. All study participants shared beliefs with regard to their perception of what the Bible says about self-care. Brandy said, “Well, scripture does say that our bodies are a temple, and we need to take care of the temple in which Christ dwells, where the Holy Spirit dwells. So anything we can do on our own to make our temple healthy is important.” Olivia noted, “It goes back to the scriptures. We are a temple, like Christ lives in us, so we're supposed to take care of ourselves.” Mae revealed:

> Well first, it's scriptural that our bodies are a temple. Our bodies are a temple, and I think that we should treat our bodies as such. We should not defile our bodies, we should not ingest or consume foods or substances that would harm our bodies, 'cause that would be the total opposite of what the bible tells us to do.

Ron quoted a different scripture and shared, “You look in the Bible and it does talk about being physically ... what's the scripture? Romans, it's in Romans. Yeah, that one.”

Tanya said, “So one thing is the Bible talks about our bodies belonging to God. Okay. And so the Bible teaches us that our bodies belong to God and we ought to present our bodies back to Him presentable and acceptable.” Tanya also noted the power the church had to educate people because they were in the same place and sharing the same beliefs and experience. She noted:

> Cause everyone comes to church on Sunday. If they don't do anything else, you know that you're [going to] get a large amount of people that will congregate and fellowship at church. And there's no better way to educate them than to say, "Hey, number one, you [want to] be able to live long and you [want to] live healthy. But you also [want to] make sure that, guess what, when you die and your body goes where it's [going to] go that you want it to be in the best possible shape it can possibly be in."

Olivia noted that while she had been attending church with the same people for years, it was the Faithful Families program that allowed them to identify their shared experiences with regard to health priorities for their families. She said, “we had known each other, been going to the same church for a minute and it was amazing what this concern for our families and our commitment to do something about it. How that bonded us together and gave us a mission and a focus that has lingered.”

Findings related to research question 2. Individual, social and environmental factors influence participants' experience of the Faithful Families program by bolstering previous knowledge, enhancing self care, improving health, increasing healthy behaviors and addressing community needs.

Individual: Stretching faith to bolster previous health knowledge. Components of the individual level of the social ecological model include beliefs and values. For the purpose of this study, beliefs were defined as "convictions that we generally believe are true; mention of religious texts, explicit statement of 'believe.'" Values were defined as "traits we believe are important such as honesty, integrity, faithfulness, etc.; these things generally stem from our beliefs." Through the Faithful Families program, participants' beliefs and values were used to enhance their understanding of health information they had previously received. Lay health leaders co-teach the classes and share linkages between the Faithful Families curriculum and the sacred texts of their faith community. Tanya, the lay health leader at the church said:

> If you can believe it, and you can stretch your mind that far, you can attain anything. Trust God. It all starts with that sense of belief… And once you believe it then you have to have faith that everything is [going to] work out, regardless of what the situation is. Be it good, bad, or indifferent. Once you believe it, and that's where it all starts with, then your belief is actually what allows you to be able to stretch your faith.

Brandy admitted, "In my brain, I know how important it is to be healthy and to do things that are good for me. And sometimes I stray away from that."

Individual: Connecting with God to "do our part" and practice self-care. Many participants discussed their relationship with God and how this relationship reminded them that they should practice self-care. For the purpose of this study, self-care was defined as "expressing concern about a personal health issue; wanting to be or being healthy; or, need to take care of oneself." Brandy said:

> Well, scripture does say that our bodies are a temple, and we need to take care of the temple in which Christ dwells, where the Holy Spirit dwells. So anything we can do on our own to make our temple healthy is important… I mean, we can only do what we can do, and then if we believe that Christ is going to take care of us, he's going to do his part, but we've got to do ours.

When asked about the relationship between faith and health, Ron made the connection between his relationship to God and practicing self care, "Bodies being a holy ... present your bodies ... yeah that one. Holy and acceptable to God! A living sacrifice. That's what it is. So that scripture right there definitely rings out when I think of being healthy."

Social: Caring for others to improve health. Of the social factors, "care for others" was a stand out factor highlighted by participants. Of the 81 coded segments related to social factors, 28% of these represented "care for others." This was defined as "expressing concern with others' health, best interests or well-being; it includes assessment of what others don't know or aren't doing (e.g., they don't know how to eat healthy)." Caring for others was an important social factor that was linked to wanting to improve one's own health and the health of others in the community. When asked why she participated, Mae said she thought the program "would benefit me personally, and that would benefit my family, and then of course I'm never shy about passing on good thoughts and good information to people around me. So

I do that." Many times "care for others" was related to family members. Olivia shared, "I mean, I pretty much went in full-fledged like, '[I'm going to] get this weight off. [I'm going to] keep my kids from getting weight on them like I got weight on me'." Ron discussed how he wanted to use his experience to help others improve their health and his own:

> I was doing a lot with physical fitness, and then, wanting to do something with that, and I do consider the church a part of the community, so helping out the community, and how that impact may filter out and help beyond the community, and so, I just wanted to help others. Because the knowledge that I had, along with what the program was doing, maybe I could bring something into the program, and I can get something out of the program.

Social: Connecting with others to increase healthy behaviors. As part of the social-ecological model, relationships are a key factor. Tanya noted how the program fostered connection with others. She said, "The social aspect of it was a really good experience as well because I realized that when we put the classes together and everyone got to see who their neighbors were, it gave them a sense of accountability." Olivia shared how important the social aspect of the program was to her:

> And then a probably really big, big thing was the friendship. Being able to do something different at church other than, walk in, look pretty, sit down and be quiet. You know? It was a different way to get to know the people that you shared your faith with, that's outside of sitting there and being taught, or you know at back then, of being preached a lifestyle to.

Mae revealed her concerns for herself and her family and that sometimes the choices she makes in isolation are not the healthiest choices:

> You know, every year older that I get I realize the importance of reducing my risk for heart attack, reducing my risk for diabetes, you know, my risk for cancer. Some of those are issues that family members of mine have suffered with, so I think that's why I thought ... I don't exercise the best discipline on my own if I'm out and about and I [want a] snack.

Environmental: Securing resources to address needs. The Faithful Families program was able to help the church secure resources to serve the community. Tanya was the lay health leader for the church and the only person to discuss health disparities and social determinants of health and how the Faithful Families program addressed them. She said,

> There are a lot of health disparities here. I mean there are financial disparities as well, but there are a lot of health disparities here. And there are a lot of resources that I found out through Faithful Families [that were] available to them that wouldn't cost them anything it just only required time. And participation.

Olivia discussed why the church was willing to partner with the Faithful Families program, "Okay, well we had a little history with the [agency]… events and so, they had already proven themselves as caring about community and really doing what they said they were going to do. So I was happy to have a chance to do something with them."

Case 2: The Mosque

The mosque was founded in 1981 but a physical structure was not built until 1985. The current imam has been leading the faith community since 2015. The mosque has three prayer services each Friday and thousands of active members. While I was able to observe several "workout worships" at the church, no such program was available at the mosque. There were no visible relicts of the mosque's participation in the Faithful Families program.

The mosque began participating in the program in 2013. During this time, members went through the Faithful Families program at least three times. The number of participants varied from class to class and between sessions but was never greater than 15. Members wanted female-only classes so that participants would feel more comfortable. Another unique feature about implementation in the mosque was that a lay leader served as a translator for several classes that were led in Arabic. While Pam (the facilitator) spoke Arabic, she asked for a lay leader to provide translation to ensure information was being provided to those with limited English skills. Muslims adhere to dietary restrictions that prohibit the consumption of pork products and support Halal practices (i.e., food preparation guided by Muslim law). The women who participated in the Faithful Families program discussed the importance of incorporating this information into the program.

Participant Profiles

Table 4.3 summarizes basic demographical information about the participants and includes role in the program, gender, age, race/ethnicity, and time they have been with the faith community site. The four women ranged in age from 32-41 years and had been members of the faith community for a range of 5-12 years. There was one participant who identified as African American/Black, one who identified as White, one who identified as Asian/Asian American, and one who identified as Middle Eastern. The facilitator was 43 years old, had been with the faith community for nine years, and identified as African American/Black. One participant, Hidaya, did not complete a participant profile.

Table 4.3.

Participant Demographics from Case 2: The Mosque

Pseudonym	Role	Gender	Age	Race/Ethnicity	Years at Site
Aaliyah	Participant	F	35	African American/Black	5
Cora	Participant	F	33	White	10
Fatima	Participant	F	41	Asian/Asian American	12
Hidaya	Participant	F	--	--	--
Nadia	Participant	F	32	Middle Eastern	11
Pam	Co-Instructor	F	43	African American/Black	9

Aaliyah. Aaliyah is a 35-year-old Muslim woman who identifies as African American/Black. She is married and has a four-year degree. She attends religious services once a week and says religion is very important in her life. She has been attending religious services at this site for five years. Aaliyah was motivated to participate in Faithful Families because she "love[s] to eat well and [she] believe[s] in the power of food – food heals the body." Her work schedule would sometimes be a barrier to participating in the program. She kept coming to classes because she wanted to "learn more on how to eat well" and to "help others to eat well." With regard to healthy eating and physical activity, she would tell her younger self, "do more on physical activity." As for her ongoing meaning making related to the program, Aaliyah admitted, "people tend to forget things. I wanted the program to continue, even if it's not the way it is, every weekend they would have the program. Probably once in a month, people need reminders. Sometimes we tend to forget, I'll say back slide."

Cora. Cora is a 33-year-old Muslim woman who identifies as White. She is married and has a four-year degree. She attends religious services more than once a week and says religion is very important in her life. She has been attending religious services at this site for 10 years. Before attending Faithful Families, Cora knew that healthy eating and physical

activity led people to “live longer.” She did not experience any barriers and was motivated to continue attending classes because of the “motivation of the teacher” and in order “to help translate [for] the non-English speakers.” Cora would tell her younger self, “eat healthy and stay active.” As for her ongoing meaning making related to the program, Cora said that she wanted to share information with others and noted, “I am a very active person, so once I learn something I want everybody, I will teach it to everybody.”

Fatima. Fatima is a 41-year-old Muslim woman who identifies as Asian/Asian American. She is married and has a four-year degree. She attends religious services more than once a week and says religion is very important in her life. She has been attending religious services at this site for 12 years. With regard to previous experience with healthy eating and active living, Fatima said, “my mom had raised me to always eat healthy homemade food and be active.” She was motivated to participate in Faithful Families because she “wanted to learn with other sisters how to read labels and what additives are in our foods.” A barrier she experienced was “making [her] family understand how important it is to eat healthy despite the taste being different.” “Having a group of sisters to learn with and mak[ing] new friends” were two facilitators to Fatima’s participation. She would tell her younger self, “eat less meat.” As for her ongoing meaning making related to the program, Fatima discussed the importance of the lessons on reading food labels and wanting to share this information with others. She said:

> Because, you know, we come from countries where everything we eat is fresh. We don't really buy packaged foods. So we're not used to reading labels. And so, when you come here, and, you know, my just start picking stuff off the shelf because it looks like what you're used to, but you don't really read the label and you don't realize

> how much harm you're doing to yourself. So, yeah, reading that program and teaching people how to read labels, I think, is a very important thing.

Hidaya. Hidaya is a Muslim woman who attends services at the mosque. Further demographic data is not available. Hidaya engaged in meaning making as she detailed buying fresh produce from roadside stands in her home country and imagined what that would look like in the United States. She joked, "Can you imagine going on [interstate] 95 and there are a bunch of farmers on the road trying to flag you down with their oranges and bananas?"

Nadia. Nadia is a 32-year-old Muslim woman who identifies as Middle Eastern. She is married and has a four-year degree. She attends religious services a few times a year and says religion is very important in her life. She has been attending religious services at this site for 11 years. Nadia wanted to participate in Faithful Families in order "to get in shape and be healthy." She did not experience any barriers and felt that "group encouragement" was a facilitator of her participation. With regard to healthy eating and physical activity, Nadia would tell her younger self, "eat healthy and exercise more." As for her ongoing meaning making related to the program, Nadia noted:

> My greatest hope was hoping that I wouldn't forget everything that she would teach us in class. That I would implement it in my life. And I actually did, not everything, I didn't implement every single thing but most of them I did. That was one of the greatest hopes.

Pam. Pam is a 43-year-old Muslim woman who identifies as African American/ Black. She is married and has a master's degree. She attends religious services more than once a week and says religion is very important in her life. Before she moved out of state, she had been attending religious services at this site for nine years. Pam served as the facilitator

for the mosque. Before starting the program, Pam "majored in Public Health Nutrition in college. So, [she] was already exposed to healthy eating habits and physical activity education." She was motivated to facilitate the program because it was a "faith-based program" and she "saw it as an opportunity to implement healthy initiatives at the [mosque]". She did not experience any barriers related to program implementation. With regard to healthy eating and physical activity, she would tell herself, "The human body is both a miracle and a gift. Every part of [the] body has the right to be taken care of." Pam reflected on the meaning making process of others and that the Faithful Families program was powerful "because it connects the faith and the health together. And each lesson we read through, we always use the Qur'an as our guide. Like, okay, this is the curriculum, this is lesson one, talking about what can somebody tell me about the verse, about this verse, that verse?"

Findings Related to Case 2: The Mosque

The table below lists the findings related to both research questions. Details on each of the finding follow the table.

Table 4.4.

Findings Related to Case 2: The Mosque

I. Ways of negotiating learning
A. Learning through engaging in demonstrations
B. Sharing beliefs and experiences
II. Personal, social and environmental factors
A. Individual: Practicing self-care to obey God
B. Social: Helping family to improve health
C. Social: Connecting with others to increase healthy behaviors
D. Environmental: Learning skills to enhance health in new places

Findings related to research question 1. As was true in the church, mosque participants negotiated learning in the Faithful Families program by engaging in demonstrations and sharing beliefs and experiences. Participants learned about healthy eating through on-site demonstrations and gardening. Their lessons were bolstered by their shared belief in the Qur'an and experiences they had within the mosque.

Learning through engaging in demonstrations. Many of the participants negotiated learning in the program by engaging in demonstrations on understanding food labels and food preparation. Reading food labels was new to many of the participants who, in their home countries did not have a lot of experience with packaged and processed foods, which are staples in the American diet. Fatima shared how important learning this new skill was and said:

> We come from countries where everything we eat is fresh. We don't really buy packaged foods. So we're not used to reading labels. And so, when you come here, and, you know, my just start picking stuff off the shelf because it looks like what you're used to, but you don't really read the label and you don't realize how much

> harm you're doing to yourself. So, yeah, reading that program and teaching people how to read labels, I think, is a very important thing.

In addition to learning about food labels, the ladies also negotiated learning through demonstrations of food preparation. Aaliyah shared, "[Pam] gave us a chopping board, where you use one side for the veggies, the other side for the meats." Nadia remembered:

> Pam used to actually implement whatever she was teaching. For example, she would actually cook for us and bring the meal to the mosque for everybody to try. And she would use the healthy ingredients and cut down an old unhealthy ingredient in her meal. And she would let everybody try it and you know, taste it and try it. And she would give us… the ingredients and step-by-step how to cook that meal.

Sharing beliefs and experiences. Another way participants negotiated learning was to tap their shared beliefs on what the Islamic faith says about healthy eating. Pam noted:

> My Qur'an has already given me a pictorial of foods that I can see when I'm within the Qur'an. Talking about vegetables and fruits, they are mentioned in the Qur'an. So even before personally deciding doing the scientific research, I already know the foods mentioned in the Qur'an. And any food that is mentioned in the Qur'an is beneficial for our body.

When talking about the Muslim faith, Aaliyah shared that "it teaches you to eat well, take care of yourself. Take care of your children, take care, it's a responsibility. It's a big one. You have to eat well, take care of yourself, make sure you're healthy." Hidaya explained the two sources that guide the Islamic faith and said:

> The main one is the Qur'an, which is the Holy Book. Then we have what's called the Hadith, which is like the saying of the Prophet. There is a saying of the Prophet that

> says that cleanliness, your health, it will be like half of your faith. The saying cleanliness is godliness, sort of. Also the Qur'an emphasizes taking good care of yourself, because if you're not it's considered harming your body, and part of Islamic faith is the body does belong to you… that's why certain things we can't eat.

Fatima noted she was surprised by how much her faith had to say about eating. She said:

> I was just blown away because there's so much in our faith that talks about food and how to eat and how much to eat. There's this one tradition where the Prophet had told eat up to 1/3 of your stomach if you have to. Leave 1/3 for air and leave 1/3 for water. So 1/3. And that's 1/3 if you need to. Always eat less than the 1/3. Then I thought to myself, I was like, "Oh my god. I'm definitely not eating 1/3. I'm eating a full stomach all the time."

Nadia also referenced the 1/3 tradition and shared that her faith "taught us that whenever you're eating, you always have to divide it. For example, 1/3 for water, 1/3 for food and 1/3 for breathing. If you're hungry, you don't just, you know, you don't just pig out on food and stuff your stomach so you can't breathe." Cora also noted the 1/3 tradition and said, "Technically, it is teaching us that when you eat, you should not fill your stomach too full… So that's another thing that the Islamic faith has actually taught us. How to stay healthy."

Findings related to research question 2. Individual, social and environmental factors influenced participants' experience of the Faithful Families program as they made the connection between self-care and God's will, helped family members to improve health, increased healthy behaviors, and learned skills to enhance health in new places.

Individual: Practicing self-care to obey God. Many participants discussed Allah's call to practice self-care and how the Faithful Families program reflected this message. Aaliyah said, "If you read the Qur'an very well, Allah wants you to take care of your body. So one of the things of taking care of your body is eating well." Hidaya shared:

> I think what was really neat for me was seeing how much it actually tied into our faith. It wasn't just the nutrition, the eating organic, but like it's almost like an Islamic thing. You have to stop, think about what you put in your body, because those things can either make or break you in your worship of your creator.

Pam claimed, "This human body is a miracle. And for God to bring us to this world, he can take us whenever he wants to, and we hope that he takes us when we keep our body the way he gave our body. And we have to treat this body nicely."

Social: Helping family to improve health. Caring for family members was an important social factor within the Faithful Families program. Nadia reflected on the lessons on reading food labels and how she questions food choices for her family. She said, "I mean is this worth going into my body and my children's body? Or should I look into other products that's more healthy for my kids?" Fatima described how what she learned in Faithful Families encouraged her to seek more information to help her dad. She shared, "I can see my dad, who's lost so much weight, which he never could before. His diabetes has come down. His gut issues have resolved." Pam discussed her hopes for the Faithful Families program in the future and noted the potential impact on families. She said, "… my other hope was that the women who have gone through the Faithful Families program continue the legacy of eating right and passing on that training to their children."

Social: Connecting with others to increase healthy behaviors. As in Case 1, the social aspect of the program influenced healthy behaviors. Participants expressed how having others around encouraged their practice of healthy eating and physical activity skills. Aaliyah's comments exemplify this. She said, "I would just say working together. I mean like work together, everybody try to work together. Share what you know and try to encourage people to eat well and all that. Everybody flying together, I'll just say it that way." Cora shared this sentiment of people benefiting from going through the program together when she said, "Sometimes you might slack, sometimes lag behind when it comes to food and fitness. But when you can see other people around you, that's teamwork. It's actually motivates you more. You actually end up doing a whole lot more." Hidaya expressed how she began the program just to support a friend but then ended up benefiting herself; she said:

> First honestly was just to support a friend, to just go see what it's all about. Okay, okay, I'll be there. Then went, found out that it was very informative. Found out that it's a good program. It went from just going there to support a friend, and okay, stop bugging me. I'll be there. Finding out that it's really helpful in the future.

Environmental: Learning skills to enhance health in new places. The Faithful Families program was able to help many new immigrants at the mosque who were visiting new places to secure food for their families. As noted above, many program participants were unaccustomed to processed and packaged foods; in their home countries, they shopped at fresh markets and took produce from their gardens. The Faithful Families program provided an opportunity for participants to learn about reading food labels and shopping in U.S. grocery stores. Pam, who was herself an immigrant, described the food environments participants were used to in their home countries when she said:

> So I understood where they were coming from because the majority of them, some of them even had farms of their own, the women. Some of them had farms, some of them had gardens, so everything was from the garden, it's just from the garden, it's just from the farm. So they didn't know how to read food labels, it was new to them.

Hidaya shared a story of her trip to the grocery store and a near mishap with reading labels. She recalled:

> I remember this particular incident and I called Pam. She was the one that made me very conscious about when you use vanilla, it contains alcohol. So I think either Pam or somebody told me if you go to Whole Foods you can get organic vanilla. Then I went and… it said non-alcoholic, so I was happy. I got it, and I was going. When I got to the cashier, she's ringing up the other stuff… I saw…alcohol [in the ingredient list]. I'm like, it's non-alcoholic, how can it have that? So I went to look for one of the cashiers, and I'm like, "I don't understand. This is non-alcoholic, and it has this [amount of alcohol]." She's like, "Yeah, yeah, it's non-alcoholic," I'm like, "No, no, but it has alcohol." I explain, I said, "I'm looking for ... Because I don't do alcohol." They were like, "Oh, you have to look for alcohol-free."

Cross Case Comparison between the Church and the Mosque

Similarities

With regard to the ways people negotiated learning in the program, there were a number of similarities between the church and the mosque. In both sites, participants learned new skills through demonstration, which is part of the Faithful Families curriculum. The demonstrations that were the most memorable were those associated with healthy eating. Within the church, the memorable demonstrations involved produce selection. Within the

mosque, it was reading labels and food preparation. Participants in the church and in the mosque also negotiated learning by sharing beliefs and experiences within their faith communities. The Faithful Families program has prompts in each lesson for lay health leaders. This allows lay health leaders in each site to search for ways to connect the health lesson with messages from the faith community's sacred texts or religious practices. For church participants, important passages from the Bible were referenced and this allowed health messages to take on deeper meaning. For mosque participants the references were different (i.e., the Qur'an and Hadith not the Bible), but the impact was the same. The concept that we have to take care of our bodies through healthy eating and active living because our bodies are not completely our own, was shared by the two faith communities. This concept was an important one for participants as they negotiated learning in the Faithful Families program. With regard to the way personal, social and environmental factors shaped people's experiences during the program, there were also similarities. Both communities were able to increase healthy behaviors by connecting with others.

There were also similarities regarding how participants reflected upon their experiences and logistics. In both sites, participants reflected more frequently on healthy eating versus active living and less frequently on health behavior changes at work than at home or within the faith community. Participants from both faith communities said the program was great and that there were not any confusing or negative parts of the program. People were really reluctant to offer critical words about the program. As Nadia said, "No, there wasn't anything that was confusing. [Pam] was pretty much on explaining everything in details. She was making it very interesting and fun for everybody to enjoy. The point that a lot of people attended it cause it was just so interesting and so fun." Another similarity was

the way in which self-care and care for others was intertwined. Cora described her reason for participating in the program this way:

> And I was like, why not support Pam. She is doing good for the community. At the same time it's always motivation and encouraging. Sometimes you might slack, sometimes lag behind when it comes to food and fitness. But when you can see other people around you, that's teamwork. It's actually motivates you more. You actually end up doing a whole lot more.

Participants in both sites had an affinity for the program and would still be interested in supporting the program. Brandy described wanting to offer the program to more people:

> You know, the hope would be that we would get more people, that it would be the people who went would talk about it and say, "This was a really good program. You need to go." And by word of mouth, maybe some of the old people would come back, but new people would come in and it would just spur us to be able to do it even more or combine with another church and say, "Okay, well we're not doing a series right now, but XYZ church is, so we can work with them," and just to see it grow in that way. That would be the hope. The reality might not look like that, but that would be the hope, that it would just become contagious.

Regarding similarities in logistics, both sites took part in piloting early versions of the curriculum, which is now in its third edition. Both sites also had a number of resources (e.g., funding, volunteers, building, etc.).

Differences

While the ways people negotiated learning in the program were very similar, there were many differences regarding how personal, social and environmental factors shaped the

experience of the program. Regarding the personal level of the Social-Ecological Model, those in the church were more likely to articulate knowing about healthy behaviors but not abiding by them. As Brandy noted, people do not always choose the healthiest foods available. Those from the church used the program to tap into their faith to bolster adoption of healthier choices. As Mae said, she used the program to "learn some tactics to help [her] make healthier choices." While those in the church felt that God wanted them to "do [their] part" to practice self-care, those in the mosque had a more stringent interpretation of what is needed for self-care. As Pam shared, "I go by what the book says. Eat in moderation, eat of the good and clean foods. They have to be clean, they have to be good foods."

There was also a difference at the social level. Within the mosque, participants were much more likely to focus on improving the health of family members than on the generic "other" that was a frequent reference in the church. Lastly, the findings associated with the environmental level of the Social-Ecological Model varied across the sites. In the church, a common theme was that the Faithful Families program helped the participants secure resources for community members. In the mosque, environmental factors associated with new shopping environments were more likely to be mentioned.

There were also differences in logistics regarding program implementation. This included time, attire and practices of worship, security measures, translation, and how participants learned about the Faithful Families program. Across the two sites, worship services took place at different times during the week. While the church's most attended service is the 12 p.m. service on Sunday (the third of the three offerings), the mosque's most attended service is the 1 p.m. service on Friday (the second of the three offerings). In the mosque, worshipers removed their shoes. This was not part of the practice in the church. In

the mosque, women and men attended services and prayed in separate parts of the sanctuary. Most of the women and children went to the second floor of the mosque, while the men remained on the first floor. In the church, women and men worshiped together in the same space. The church does not have to have a security office or post an "Official Statement on Terror" on its webpage. Another logistical difference between implementation across the two sites was that translation of program materials was needed in the mosque and not in the church. As Cora described:

> [Pam] asked me if I could also help out recruiting, especially those non-English speakers, women, such as the Arab speaking ones. I did help out, I was actually her translator. Because they were excited and they wanted to ... it was just that language barrier that they couldn't understand. So I was there to help out and pass out the translation information that Pam would actually pass out.

Within the mosque, there was much more conversation about the facilitator and lay health leader, Pam. When asked about hearing of the program for the first time, those in the mosque all cited conversations with Pam. However, in the church, participants referred to a wide variety of ways they learned of the program including the church bulletin, the pastor, another church member, and a community meeting.

Chapter Summary

This chapter revealed the findings of the case study that examined the Faithful Families program in an effort to describe the meaning making process of participants. Using a constructivist framework and the Social-Ecological Model, I investigated research questions about how participants negotiated learning and how personal, social and environmental factors shaped their experiences.

This chapter offered a description of the two cases, participant profiles from the church and the mosque, and highlighted the findings of the study. Through this study, I found similar ways of negotiating learning at the church and the mosque. In both sites, people learned through demonstration and by sharing beliefs and experiences. Personal, social and environmental factors shaped peoples experience during Faithful Families in different ways. The cross case analysis revealed similarities and differences between the two sites and noted important logistical issues.

CHAPTER 5: CONCLUSIONS, DISCUSSION, IMPLICATIONS, & RECOMMENDATIONS

This comparative case study examined the Faithful Families program in an effort to understand the meaning making processes of co-instructors, lay health leaders, and participants in one church and in one mosque. Using a constructivist framework, I investigated the following research questions:

1. How do co-instructors, lay health leaders, and participants negotiate learning during the Faithful Families program?
2. How do personal, social, and environmental factors shape how people experience the Faithful Families program?

This chapter contains five sections. The first section provides a summary of the study. The second section highlights the conclusions based on the findings and notes how they relate to the literature. The third section discusses the implications for theory and practice. The fourth section provides recommendations for future research. The fifth section offers a summary of the chapter.

Summary of the Study

A qualitative study that employed a comparative case study approach was used as two sites were selected using purposeful sampling. The first site, the church, was founded in the 1940's and is part of the state's convention for Black Baptist churches. The church has hundreds of active members and three Sunday services each week. The pastor has been with the church for nearly 40 years. The church participated in multiple rounds of the Faithful Families program and started the program in 2013. Four participants and one lay health leader were interviewed. Three services were observed and formally documented; I made

five additional visits and reviewed content and artifacts, which contributed to the data collection process. The second site, the mosque, was founded in 1981, but a physical structure was not built until 1985. There two imams and three Friday prayer services. The mosque has thousands of active members. This faith community started the program in 2013. Five participants and one co-instructor (who also acted as a lay health leader at times) were interviewed. I observed one Friday service and two Sunday prayer services, attended two two-hour Introduction to Islam classes, and reviewed website content. All of these things contributed to my ability to understand the context of the site.

The comparative case study approach was helpful in determining the themes associated with research question one, which examined how people negotiated learning in the Faithful Families program. The same two themes were uncovered in both sites – one regarding learning through engaging in demonstrations and one regarding learning through sharing beliefs and experiences.

With regard to learning through engaging in demonstrations, participants at both sites found demonstrations related to healthy eating impactful. For those in the church, the focus of the demonstration was selecting fresh fruits and vegetables. They had a mobile grocer visit the site and program participants gained knowledge through demonstration as well as direct access to purchase fresh produce. For those as the mosque, the focus of the demonstration was on reading food labels and on healthy food preparation. Participants noted how they shared experiences in their home countries of shopping for produce in fresh markets. Many did not have previous experience reading food labels because their previous exposure to processed and packaged foods had been minimal. They also deepened their learning about food preparation through healthy recipe exercises where the facilitator brought in food for

them to sample that had been made with healthy ingredients. The demonstrations reinforced the prescribed messages they were receiving about healthy eating behaviors.

With regard to learning through sharing beliefs and experiences, the sacred texts in both site served as a centering point for beliefs. With each site, all participants mentioned passages from sacred texts related to self-care and health. There were passages about proper nutrition and the body as being a sacred vessel. The Faithful Families program's ability to incorporate these sacred messages on self-care with the secular health behavior information, allowed participants across both sites to have a learning experience that resonated with them years after participating in the program.

For research question two, personal, social, and environmental factors that shaped people's experience of the program were examined. In the church, themes about tapping into faith in order to spark healthier behaviors, participants "doing [their] part" to practice self-care, caring, and connecting with others as well as securing resources were all uncovered. In the mosque, similar themes were found. In this faith community, participants discussed factors that resulted in themes around self-care, helping family members to improve health, connecting with others to increase healthy behaviors, and learning skills that can be practiced in new environments.

Conclusions and Discussion

There are three major conclusions from my research. The first is that individual learning can translate to care for the community. The second is that there is power in connecting religious texts to health promotion messages. The third is that lessons on healthy eating resonate more than lessons on active living.

Individual Learning Translates to Care for the Community

The findings imply that when participants engage in learning about healthy eating and active living, they are not only concerned about improving their own health but they are also interested in enhancing the health of others. When discussing what they learned during the Faithful Families program, most participants noted that they shared this information with others they had direct contact with (e.g., family members, friends). Many discussed the need to continue the program because they identified that others, who they may not have direct contact with (e.g., other faith community members, members of the general public), would also benefit from the program.

This conclusion is confirmed by scholarly literature. Merriam (2007) notes the power of adult education and how it has remained a force in social change. This type of social change comes about when individuals take their learning experiences and are motivated to use these to help others. Cervero and Wilson (2005) claim that adult educators must acknowledge the social nature of program planning. MacKeracher (2004) says that adult learners engaged in spiritual learning "move beyond the limits of our self-system to connect to others in meaningful ways" (p. 176). Walker-Barnes (2014) posits that African American women, who made up the vast majority of the participants in the church, typically engage in relational identities and focus on how they can help others. As she describes the concept of the *StrongBlackWoman*, Walker-Barnes (2014) notes how societal forces, including the Christian church, foster the idea that women should be giving and focus on others.

Power in Connecting Religious Texts to Health Promotion Messages

Many participants understood their involvement with their faith community not just as their religious affiliation, but instead as an integral part of their lifestyle. When

participants are attempting to move through a change situation (e.g. learning new health behaviors), having lay health leaders link health information with sacred texts, that represent and inform their lifestyles, contributes greatly to their affinity for the program and, ultimately, their successes.

The conclusion is confirmed by scholarly literature. As Boone (1985) notes, "Adult learners' response to a change situation is affected by their perceptions of their degree of success in achieving the new behavior and its relevancy to their life-styles" (p. 164). Hill (2011) says that some health programmers are "disconnected from the individuals and communities they are intended to serve" and should "create curricula that resonate with people's life experiences" in order to have effective interventions and programs (p. 102). Idler (2011) recognizes that "religion, like public health, has an essentially social character and cannot be understood apart from the groups of people who form themselves into groups for the purpose of practicing their faith" (p. 3). By understanding and linking the sacred texts to secular health behavior information, program developers can gain a better understanding of the participants they are trying to serve and, at the same time, create more effective interventions.

Lessons on Healthy Eating Resonate More than Lessons on Active Living

For these Faithful Families classes, the lessons on healthy eating were more memorable compared to the lessons on physical activity. Faithful Families participants who were part of the study were three times more likely to mention healthy eating when compared with discussions of physical activity. While it is true that the Faithful Families curriculum has more content dedicated to healthy eating compared to physical activity, this conclusion is supported by scholarly literature. Many researchers who have studied the implementation of

healthy eating and active living interventions in churches have found more positive outcomes associated with healthy eating when compared to active living or physical activity (Baruth & Wilcox, 2013; Resnicow, Jackson, Blissett, Wang, McCarty, Rahotep, & Periasamy, 2005).

Implications

Implications for Theory

The Social-Ecological Model is widely recognized by the CDC and other health program designers as a primary model for developing public health interventions. Issues from violence prevention to obesity are examined with the SEM in order to identify areas of impact at the *individual*, *interpersonal*, *institutions and organizations*, *community*, and *structures and systems* levels. The SEM recognizes that adults make meaning as they interact with the various levels of the model (Conceição, Colby, Juhlmann, & Johaningsmeir, 2011). While the CDC has provided the examples of how the SEM approach could be used to combat obesity, it has not discussed the permeability of the layers and how interactions at the interpersonal level can influence activities at the institution or organizational level. Typically, the SEM is viewed examined with an individualistic lens (i.e., each layer only considers its impact on the individual). This study shows that there is permeability between the various layers of the SEM and that the layers are not only each impacting the individual but also impacting the other layers.

The CDC gives the example of an individual being impacted by increased knowledge about recommendations for daily physical activity, walking groups, and recipe exchanges, or programs such as a large employer replacing unhealthy food with healthier options, the development of food cooperative that increases access to fresh fruits and vegetable for community members, and increasing safety at parks and recreational areas so that people

exercise more (CDC, 2013b). However this example does not convey the interaction between the various levels of the SEM and its recursive nature. This study found that there was a link between self-care (at the individual level) and care for others (at the interpersonal, institutions and organizations, and community levels). While the SEM has proven effective when used in faith settings, there has not been a detailed explanation of how these various levels interact with each other or the degree to which they reinforce each other (Allicock et al., 2013a; Campbell, Resnicow, Carr, Wang, & Williams, 2007; Campbell et al., 2007). The SEM could be expanded to incorporate the permeability of the levels and detail possible interactions between instead of focusing just on the individual at the center of the model.

Another framework associated with health programming is that of social determinants of health. Within the last 20 years, social determinants of health have increasingly been examined and identified for their impact on individual and community health outcomes (Braveman, Egerter, & Williams, 2011). Typically, social determinants of health are identified as things such as economic status, education level, race and ethnicity, and access to transportation and housing.

Those within health promotion circles rarely recognize the immigration experience as a social determinant of health. While arguing for religion to be considered as social determinant, Idler (2014) said, "Although the term 'social determinants' suggests a wide and inclusive set of determinants, it is specifically the political and economic conditions of life that have been seen as most central" (p. 8). Many of the study participants from the mosque share the immigration experience—they came from countries where their food shopping environments supported healthy eating (i.e., they purchased produce from roadside markets or gathered items from gardens), and now they find themselves in a new country where they

face completely new food shopping environments that promote processed and packed foods. This positions the immigration experience as a social determinant of health that should be regularly recognized.

Implications for Practice

Although the Faithful Families program provided enough flexibility for facilitators to play multiple roles, there are implications for practice associated with each of the roles. This includes distinct implications for program designers, clerical leaders, co-instructors, lay health leaders, and participants. Adult education and public health program designers should consider the power of the Faithful Families model. By training lay health leaders to incorporate passages and practices from their religious traditions into the lessons, the intervention was able to engage participants in ways that non-faith-based programs had not.

Program designers. Program designers interested in developing and refining faith-based health interventions should also consider how important it is to link self-care with care for others. The Faithful Families program has a clearly identified policy and environmental change component. Program designers should consider how this component of change could be framed to leverage people's desire to care for others. Also, program designers could consider expanding the frame and breadth of policy changes. In Public Health, there is discussion about "little p" policies (e.g., a mosque's policy that allows non-members to visit the monthly blood pressure check event) and "big P" policies (e.g., Medicaid expansion). Since many participants are interested in care for others, program designers may consider how programs can do more to support "big P" policy changes.

Clerical leaders. With regard to clerical leaders, the conclusions of this study confirm previous research that indicates that having the support of the leader of the faith

community is integral in the success of the intervention (Bopp, Peterson, & Webb, 2012). Church leaders and Imams who wish to host faith-based health programs in their faith communities, should be sure to publicly support such programs by announcing them and encouraging participation within their major sermons.

Co-instructors. In this study, the trained co-facilitator also had to serve as the lay health leader at times (e.g., when those designated as lay health leaders could not attend sessions). The implication for co-instructors who are members of the faith community they are serving is that they need to be prepared to play blended roles. Co-instructors also need to be familiar with the model for change used by program designers. This will allow them to know which components of the model can be changed and which must be adhered to. The co-instructor at the mosque knew the components enough to understand that fulfilling the faith community's request of having gender-specific classes (i.e., women only) would not interfere with the model for change (i.e., SEM).

Lay health leaders. Lay health leaders play a vital role in the program as they are members of the faith community and familiar with the sacred texts. Since there is such power in connecting the texts to the health behavior information, lay health leaders should be prepared to make the connections between the two streams of information.

Participants. After they complete the Faithful Families program, participants have opportunities to make healthy choices and adapt their shopping habits. Given that individual learning translates to care for the community, participants may also reflect on their motivation for joining such a program and consider how their involvement may benefit others outside of the walls of the church or mosque.

Researchers. This study began with a focus on sensemaking, which is an understudied concept in implementation evaluation that centers on "bracketing cues in the environment" and "cycles of interpretation and action" (Maitlis & Christianson, 2014, p. 67). As the study progressed, I realized that this concept was not appropriately aligned with the temporal structure of the research method because I engaged in a retrospective study. To study sensemaking in program implementation, researchers should couple any retrospective methods with data collection that occurs during implementation. Because sensemaking focuses on the implementers of programs (e.g., co-instructors in the Faithful Families program), researchers should focus on real-time observations and interviews with those who hold these roles.

Recommendations for Future Research

This study involved two faith communities that were had significant resources (e.g., financial, human, structural). Future research should be conducted with faith communities without such resources, as these are certainly more numerous than the type of sites selected for this study. As a White female Christian, I took an etic approach in both the Black Church and in the Islamic community. Research conducted with an emic approach in both of those communities would be valuable. I recognize my inadequacy in analyzing the data from various perspectives because I was not a member of either of these sites. Future researchers who find themselves in similar positions could engage in methods like Community Based Participatory Research in order to bring a variety of perspectives into research design, data collection and analysis. In addition to this, other non-Christian faith communities should be considered. Lastly, the intersectionality of immigration, race, socio-economic status and age should be explored in the future.

Chapter Summary

This chapter contained a summary of the study as well as a details about the conclusions derived from the findings. These conclusions included: individual learning translates to care for the community; that there is power in connecting religious texts to health promotion messages; and that lessons on healthy eating resonate more than lessons on active living. The implications for theory and practice were noted along with recommendations for future research.

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APPENDICES

Appendix A: Letter Request for Participant Nominations

Date

Organization
Attn: First Name, Last Name
Street Address
City, State Zip Code

RE: Nominations for Lay Health Leaders, Public Health Professionals, Cooperative Extension Agents, Faith Community Leaders and Past Program Participants to Participate in a Research Study on the Implementation of the Faithful Families Eating Smart Moving More Program.

Dear Sir/Madam:

Greetings! As a doctoral student at North Carolina State University, I am embarking on a research study to describe the personal, social and environmental factors that shaped implementation of the Faithful Families program in a church and a mosque in North Carolina. Thus, I am seeking your help in identifying individuals from your faith community, local health department, and/or local Cooperative Extension office who would possibly be interested in participating in a brief survey and an interview (in person, by phone, via Internet as determined by the researcher for a total of 45 minutes). Specifically, I am looking for members of your community who meet the following criteria:

- Participated in the Faithful Families program when it was offered at your church or mosque
- Age 18+

Thus, I need your assistance in identifying and nominating members of your community who have been involved with the implementation of Faithful Families who may be interested in participating in this research study. Based on your nominations, I will send a formal letter providing more detail about the study and follow-up with a phone call to all possible participants.

Please submit your nominations via telephone (xxx.xxx.xxxx) or by e-mail at jlrushin@ncsu.edu. Thank you so much for your assistance in this endeavor.

Sincerely,

Jill Rushing, Doctoral Student

Appendix B: Response Form for Nominations

I / We, _____ nominate the following persons to be considered for the research study the personal, social and environmental factors that shaped implementation of the Faithful Families program in a church and a mosque in North Carolina.

Name: _____

Affiliation: _____

Address: _____

Telephone: _____

E-mail: _____

Name: _____

Affiliation: _____

Address: _____

Telephone: _____

E-mail: _____

Name: _____

Affiliation: _____

Address: _____

Telephone: _____

E-mail: _____

Please return form to: Jill Rushing
E-mail: jlrushin@ncsu.edu
Mail: xxxxx xxx., xxxxxx, xx xxxx

Appendix C: Recruitment Flyer

Research Study Participants Needed for Faithful Families Eating Smart and Moving More Program Implementation in One Church and One Mosque

Participate in research that will help us understand how we can create healthier communities of faith.

Criteria for Participation

- **Participated in the Faithful Families program when it was offered at your church or mosque**
- **Age 18+**

Time Commitment

Each person will be asked to complete a brief survey and interviewed for no longer than 45 minutes. The interview will be done in person, telephone or electronic media (as determined by researcher).

Note: Research participants will not receive any compensation for participating in this study.

For more information, please contact:
Jill Rushing
(xxx) xxx-xxxx
jlrushin@ncsu.edu

About the Research Study

The purpose of this study is to describe the personal, social and environmental factors that shaped implementation of the Faithful Families program when it was held in a church and in a mosque in North Carolina.

Faithful Families uses a 9-session curriculum that is taught in various faith communities in order to promote healthy eating and physical activity.

About the Researcher

Jill Rushing is a doctoral student at North Carolina State University. My research interests include:

- Adult Education
- Relationships between Health and Faith
- Interfaith Dialogue

Appendix D: Text of LISTSERV and Social Networking Sites

Subject: Faithful Families Eating Smart and Moving More Program Past Participants and Implementers Needed!

Lay health leaders, public health professionals, Cooperative Extension agents and faith community members who have participated in the Faithful Families Eating Smart Moving More Program are needed to share their experiences. Jill Rushing, a doctoral student at North Carolina State University, is conducting a study to describe the personal, social and environmental factors that shaped implementation of the Faithful Families program in a church and a mosque in North Carolina.

The interview will be 45 minutes or less and will be conducted in person, by telephone or electronic media (as determined by researcher and/or follow-up via telephone or electronic media).

For more information, please contact Jill Rushing at jlrushin@ncsu.edu.

Appendix E: Informed Consent

Revised 6/16

North Carolina State University
INFORMED CONSENT FORM for RESEARCH

Title of Study: Faithful Families Eating Smart and Moving More in One Church and One Mosque: An Implementation Comparative Case Study

Principal Investigator: Jill Rushing Faculty Sponsor (if applicable): Tuere' Bowles, Ph.D.

What are some general things you should know about research studies?

You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. The purpose of research studies is to gain a better understanding of a certain topic or issue.

You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above.

What is the purpose of this study?

The purpose of the study is to describe the personal, social and environmental factors that shaped implementation of the Faithful Families program in a church and a mosque in North Carolina.

What will happen if you take part in the study?

If you agree to participate in this study, you will be asked to:

1. Complete a brief survey;
2. Participate in one 45-minute interview in person, by telephone or electronic media;
3. Understand that this study is expected to conclude within two years or less from the date of the first interview;
4. Understand that interviews will take place in quiet area with minimal interruption such as conference room, library study room, coffee house or similar location; and
5. Understand that interviews will be recorded and transcribed.

Risks and benefits

There are minimal risks associated with participation in this research. There are no direct benefits to your participation in the research. The indirect benefits are the opportunity to: share experiences; benefit other Faithful Families Program implementers and potential implementers of the Program; and, help add information to what is known about the personal, social and environmental factors that shape implementation of the Faithful Families program.

Confidentiality

The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely in a locked filing cabinet and a password protected computer. No reference will be made in oral or written reports which could link you to the study.

Compensation

There will be no compensation for your participation in this study.

What if you are a NCSU student?

Participation in this study is not a course requirement and your participation or lack thereof, will not affect your class standing or grades at NC State.

What if you are an employee of a local health department, cooperative extension office, or faith community?

Participation in this study is not a requirement of your employment at a local health department, cooperative extension office, or faith community, and your participation or lack thereof, will not affect your job.

What if you have questions about this study?

If you have questions at any time about the study itself or the procedures implemented in this study, you may contact the researcher, Jill Rushing at jlrushin@ncsu.edu or 919-828-4194.

What if you have questions about your rights as a research participant?

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator at dapaxton@ncsu.edu or by phone at 1-919-515-4514.

Consent to participate

"I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled."

Subject's signature_____ **Date** _____

Investigator's signature_____ **Date** _____

Appendix F: Interview Guide

Participant's Pseudonym:_____ Place: _____
Researcher/Interviewer:_____ Scheduled Time: _____
Date: _____ Start time ____ End time _____

The research questions for this study are:

How do co-instructors, lay health leaders, and participants **negotiate learning** during the Faithful Families program?

How do **personal, social, and environmental** factors shape the implementation of the Faithful Families program? (Personal factors may include: prior knowledge, emotions, personal identity, values; Social factors may include: relationships, conversations; Environmental factors may include: physical environment of faith setting, political environment, policy environment)

To ensure alignment between the research questions and the interview prompts, many of the prompts below are followed by parenthetical codes. These codes correlate to the bolded words in the research questions above.

Researcher: *Throughout the interview I may ask you to elaborate or clarify answers or statements. Please feel free to ask me for clarification at any point during the interview if questions are unclear. To begin the inquiry phase of the interview I will ask questions that will help me understand your experiences with the Faithful Families Eating Smart and Moving More Program. I will refer to this program as "Faithful Families" during the interview.*

Opening Background Questions:

1. Tell me about your background with this community of faith. **(personal/social)**
    a. Length of time practicing faith
    b. Length of time with this specific faith community

2. Tell me about how practicing the (Christian, Islamic) faith is associated with your identity. **(personal)**

3. Tell me about your thoughts on health and how they relate to faith. **(personal)**

4. Tell me about the first time you heard of Faithful Families.
    a. How did you hear about it?
    b. How long ago was this?
5. Why did you decide to become involved with Faithful Families? **(personal/social/environmental)**

6. Describe your role in the Program. **(personal)**

Reflecting on Implementation

7. Thinking about the implementation of the Faithful Families Program, please describe something you expected to happen that did not happen. **(personal)**

8. Please describe the biggest unexpected challenge during implementation. **(negotiate learning)**

9. Think about who you expected to participate in the sessions and who actually participated. Were you surprised? If expectations were not met, describe how you handled it. **(negotiate learning)**

10. Think about the types of questions participants asked during implementation of the Program. To what degree were you surprised by the questions that were asked? To what degree did this influence implementation? **(negotiate learning)**

11. Thinking about what you expected people to learn or do differently because of the Program. To what degree were these expectations met? **(negotiate learning)**

12. Describe the process for getting the environmental or policy change to support health adopted. To what degree did this process differ from what you expected? **(negotiate learning; social/environmental)**

13. Describe an instance when something good happened that you were not expecting with the Program. **(negotiate learning; social)**
    a. How was this different from what you expected?
    b. How did you move forward after this?
    c. What role did others play in this instance?

14. Describe an instance when there was a mishap or something went wrong. **(negotiate learning; social)**
    a. How was this different from what you expected?
    b. How did you move forward after this?
    c. What role did others play in this instance?

15. Describe a time when you were confused during the Program. **(negotiate learning; personal)**
    a. How was this different from what you expected?
    b. How did you move forward after this?
    c. What role did others play in this instance?

Closing Questions

16. What was your greatest hope for the Faithful Families Program? **(personal/social/environmental)**

17. Since Faithful Families promotes physical activity, think of a type of exercise that could be used to represent the Program. Please describe the exercise and how it represents how the Program was implemented.

18. Please finish this prompt, "The Faithful Families Program has been like…"

19. What else would you like to mention that has not been covered?

Thank you for sharing your thoughts and expectations and participating in this interview!

The following are probes that will be employed as suggested by Bogdan and Biklen (2003):

What do you mean?	What were you thinking at the time?
I'm not sure that I am following you.	Give me an example.
Would you explain that?	Tell me about it.
What did you say then?	Take me through the experience.

Appendix G: Observation Guide

Observer: _____ Date of Observation: _____

Time: _____ Place: _____

Purpose of Observation: _____

Actors (participants present and how many): _____
_____

Activities: _____

1. What were the main issues or themes that struck me in my observations at this setting, with regard to the ways to Faithful Families program was discussed and/or enacted?

2. What were the main issues or themes that struck me in my observations at this setting, with regard to how health content was discussed and/or enacted?

3. What other issues of themes struck me during this observation?

4. What questions could be asked concerning the place I observed?

5. What questions could be asked concerning the actors I observed?

6. What questions could be asked concerning the activities I observed?

7. For each of the elements of the social situation (i.e., place, actors, activities) I observed, identify the main information I acquired (or failed to acquire) for the questions above.

8. Was there anything else that struck me as salient, interesting, illuminating or important?

9. If I were to undertake another observation in this setting, what new questions would I consider?

Adapted from:
Miles, M. B. &Huberman (1994). Qualitative *data analysis: An expanded sourcebook* (2nd Ed.). Thousand Oaks, CA: Sage (p. 53)

Appendix H: Document and Artifact Analysis Guide

Document Title: _____

Document/Artifact Creator
Who created the document/artifact?
Why was the document/artifact created?
What was the creator trying to be accomplished?
How might that affect the document/artifact content/composition?

Timeframe
When was the document/artifact created?
Does it contain time-specific language?
Is the document/artifact typical for the dime during which it was produced or is the format/style unusual?
Was the document/artifact created immediately after the event?
If time elapsed before the event was recorded, how much time had elapsed – did that affect the recording?

Content & Background
How did the creator procure the information?
Was the creator a witness to or a participant in the event?

Motivation
Why is the creator making the document/artifact?
Does he/she have something to gain or lose by relaying the information or creating this artifact?

Audience
Who is the target audience?
For whom was the document/artifact intended?
Was the document/artifact for public or private use?

Reliability and Cross Referencing:
Are there other sources that deal with this topic?
How do they compare to this record?
Do they corroborate or contradict things in this record?

Availability
What enabled the document/artifact to survive?
Who has handled/owned/used it?
Has it been modified?

Adapted from History Worksheet:
(See http://www.ebrpss.k12.la.us/lessons/tahil/analyze/documents/document.htm)

Appendix I: Faithful Families Implementation Curriculum and Faith Community Assessment

Lesson One	Plan: Know What's for Dinner
Lesson Two	Shop: Get the Best for Less
Lesson Three	Shop for Value, Check the Facts
Lesson Four	Fix it Fast, Eat at Home
Lesson Five	Choosing More Fruits & Vegetables
Lesson Six	Fix it Safe
Lesson Seven	Making Smart Drink Choices
Lesson Eight	Choosing to Move More throughout the Day
Lesson Nine	Making the Connection

Appendix J: Participant Demographics Form

Directions: The purpose of this form is to gather information that might be utilized in relation to the study. For all the information that you'll be providing, the researcher will ensure that it will be protected at the highest confidential level. It should take you less than 10 minutes to complete this form.

1. Name (First and Last): _____

2. Please check one.
   I consider myself: __ Christian __ Jewish __Muslim __Other (please specify)_____

3. Please briefly describe what you knew about healthy eating before you participated in the Faithful Families program.

4. Please briefly describe what you knew about physical activity/exercise before you participated in the Faithful Families program.

5. What motivated you to get involved in the Faithful Families program?

6. What were barriers to you participating in the Faithful Families program?

7. What helped you to keep coming to Faithful Families classes?

8. What advice would you give to your younger self with regard to healthy eating and physical activity?

Appendix K: Research and Fieldwork Calendar

2017	
November	Content review of mosque's website and writing in analytic journal
	Observed Friday service at mosque
	Intro to Islam Class for Non-Muslims offered by mosque (2 hours)
December	Review of *Great World Religions: Islam* (audiobook)
2018	
February	Content review of church's website and writing in analytic journal
February	First interview with Cora from mosque (on phone)
March	Second interview with Nadia from mosque (on phone)
April	Listen to *Thoughts on America's Next Generation of Muslims Insists on Crafting its Own Story*
April	Attended International Conference on Religion and Culture at ECU Theme was "Religion and Health" (2.5 days)
May & June	Third interview with Felicia from mosque (½ in person and ½ on phone; only interview that took place during Ramadan, which was May 15-June 14)
June	Organized and participated in Health-Faith Collaboration for local health departments across NC (speakers from Faithful Families and Council of Churches)
June	Fourth interview with Aaliyah from mosque (in person)
June	Fifth interview with Pam from mosque (on phone)
July	Visit to mosque for observation and attended Intro to Islam Class for Non-Muslims (2 hours) for the second time. Interview with Hidaya (in person)
August	Summer Research Workshop on Spirituality and Health (5 days)

September	Visit to church (first); Conducted three observations, one at each of the day's services
October	Second visit to church, met with Tanya to discuss interview schedule and talk with other member of wellness committee
October	First church interview with Tanya and second church interview with Ron (in person)
October	Church was involved in several fall revivals, which made scheduling interviews more difficult
October	Third visit to church; on this visit found the "Health Tips: What You Can Do After Your Heart Attack" handout from American College of Physicians Foundation
October	Interview with Olivia from church (third church interview; via phone)
November	Fourth and fifth visits to church
November	Interview with Mae from church (fourth church interview; via phone)
December	Interview Brandy (fifth church interview; via phone)
December	National Faithful Families Training (one day)
2019	
February	Observation at Muslim Student Association "Ask an Imam" Session
February	Sixth visit to church

Appendix L: Coding Systems

1st Coding System

Parent Code	Subcode	Memo	#
			214
POWER QUOTES		These are quotes that are powerful and striking. There is no one theme other than the fact that they are all striking in some way. These were selected to follow Maietta's Sort and Sift, Think and Shift method. Taken together, these power quotes may help me refine my coding scheme.	59
Environmental/ Orgs-Communities-Systems			0
	Environmental changes @ faith community	Faith community discusses/implements environmental changes at faith community location (e.g., creating a community garden; painting a walking track in the parking lot; posting signs about taking the stairs)	5
	Policies	policies that were implemented by the faith communities (e.g., water and unsweetened beverages options available at all functions with food/beverage; no fried foods at potlucks)	4
Social/Interpersonal			0
	Relationships with non-specified/other individuals		1
	Relationships with family members		1
	Relationships with non-participant faith community members		4
	Relationships with instructors		3
	Relationships with other participants		12
	Conversations with non-specified/other individuals		2
	Conversations with family members		0
	Conversations with non-participant faith community members		4
	Conversations with instructors		12
	Conversations with other participants		6

	physical activity with others	participating in exercise with family, friends, faith community members	5
	healthy eating with others	healthy eating with family members; healthy eating with others in the faith community; shopping with and cooking for family, friends, faith members	9
Personal/Individual			0
	Relationship with God		4
	Physical activity alone		8
	Healthy eating alone		14
	Emotions		4
	Beliefs		16
	Values		17
	Past experiences		10
	Prior knowledge		7
	Perception of self/role	identity	7

original code system based on research question format (i.e., what are the environmental, social, personal factors…)
environmental, social, personal factors identified through framework of ---- and -----
coded all transcripts with power quotes/pulse quotations
coded only Tanya, Ron, Nadia and Cora with original codes based on research question format

2nd Coding System

Parent Code	Subcode	Memo	#
			576
Belonging		belonging with a group (as part of a group); feeling included; also, belonging (the possession of) God; God's property	0
Setting			0
	outdoors	in nature, not inside a building	2
	Market-Roadside Stand	vendor or farmer selling fresh foods (not grocery store with packaged foods)	4
	car		0
	Gym		2

	Grocery store	also super market, enclosed store (NOT roadside stand or farmers' market)	6
	Home		1
	Mosque		5
	Church		11
	Work	mention of job, work, workplace, etc	8
POWER QUOTES		These are quotes that are powerful and striking. There is no one theme other than the fact that they are all striking in some way. These were selected to follow Maietta's Sort and Sift, Think and Shift method. Taken together, these power quotes may help me refine my coding scheme.	60
Environmental/ Orgs-Communities-Systems			0
	Social Det of Health	income, transpo, racial inequities, housing, etc.	1
	Health Inequities	mention of health disparities, health inequities	0
	Environmental changes @ faith community	Faith community discusses/implements environmental changes at faith community location (e.g., creating a community garden; painting a walking track in the parking lot; posting signs about taking the stairs)	6
	Policies	policies that were implemented by the faith communities (e.g., water and unsweetened beverages options available at all functions with food/beverage; no fried foods at potlucks)	11
Social/Interpersonal			0
	Care from/for others	includes assessment of what others don't know or aren't doing (e.g., they don't know how to eat healthy)	35
	Relationships with non-specified/other individuals	including membership	6
	Relationships with family members	mention of family members or family members' habits/activities	20
	Relationships with non-participant faith community members		7
	Relationships with instructors		11
	Relationships with other participants	includes "working with"	24
	Conversations with non-specified/other individuals	sharing info with others	9
	Conversations with family members	sharing info with family members	8
	Conversations with non-participant faith community members	sharing info with non-participant faith community members	4

	Conversations with instructors	sharing info with instructors	24
	Conversations with other participants	sharing information with other participants	14
	physical activity with others	participating in exercise with family, friends, faith community members	10
	healthy eating with others	healthy eating with family members; healthy eating with others in the faith community; shopping with and cooking for family, friends, faith members; also includes gardening/planting; my concept for this code is the actual breaking of bread with others NOT individuals' thought of others' eating habits - this concept is covered in the code "care for others"	39
Personal/Individual			0
	Beliefs	convictions that we generally believe are true; mention of religious texts, explicit statement of "believe"; examples: God is my savior, there is a heaven, my body is a temple	56
	Prior knowledge		10
	self care		14
	Relationship with God		21
	Physical activity alone	including thoughts of PA or monitoring PA	13
	Healthy eating alone		34
	Emotions		7
	Values	traits we believe are important such as honesty, integrity, faithfulness, etc; these things generally stem from our beliefs	31
	Past experiences	including past knowledge (or lack of knowledge)	26
	Perception of self/role	identity	36

Second coding system evolved from open-coding process. Added parent and subcodes in GREEN during this round of coding.
Coding the remaining 7 interviews with additional codes from 2nd coding system