THE HEALING STATION: THE ROLE OF THE AFRICAN AMERICAN CHURCH AS A
CHANGE AGENT FOR HEALTH

BY

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DISSERTATION

Submitted in the partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Community Health
in the Graduate College of the
University of Illinois at Urbana-Champaign, 2011

Urbana, Illinois

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ABSTRACT

Despite many efforts to address chronic conditions within the African American (AA) population, the rates of disease, disability and death, still remain disproportionate in AAs compared to other racial/ethnic groups. Historically, AAs have been exploited in health care which has garnered a mistrust of the health care system. To effectively improve health outcomes, it is necessary to implement culturally-tailored programming within a trusted institute. Such an institute within the AA community has historically been the church. While churches have the potential to play an important role in impacting health among AAs, it is unclear what attributes within churches are necessary for health promotion. The purpose of this study was to create a survey to predict the readiness of the AA church to engage in health promotion programming by examining the relationship between church infrastructure (physical structure, personnel, funding, and social/cultural support) and readiness to engage in health promotion programming. To accomplish this goal, 36 key informant interviews were conducted with pastors, health leaders and congregants to identify key infrastructure attributes necessary for health programming. Data collected from the interviews were used to develop a survey that was administered to 108 churches to identify the presence or absence of infrastructure and church readiness. Readiness was assessed by the amount of infrastructure present within churches along with the frequency of health activities. The study findings revealed that infrastructure, namely, physical structure, personnel, funding and cultural/social support were all associated with and able to predict the readiness of churches to engage in health programming. Churches with more infrastructure tended to engage in more health promotion programming. Churches with less infrastructure tended to engage in less health promotion programming. Overall, the infrastructure components of the African American church were noted to be very instrumental in the

implementation and success of church-based health promotion programming. Hence, the AA

church has the potential to help improve the health of the AA community and become a leading

change agent for health. In turn, this can prove effective for health program planners and

researchers, in partnership with churches, for developing, implementing and evaluating health

promotion programming within the AA community.

ACKNOWLEDGEMENTS

I give all glory and honor to God who has strengthened me through this journey. He has

bestowed upon me wisdom, knowledge, and understanding to accomplish this task. His grace

and favor was unmerited and beyond that I could ask or think. O Lord, thou art my God; I will

exalt thee, I will praise thy name; for thou hast done wonderful things (Isaiah 25:1a).

I give special accolades to my advisor and dissertation committee chair, Dr. Reginald J. Alston,

for his unwavering support, guidance and instruction throughout my graduate program of study.

A special thank you is given to Dr. Shevon Harvey, Dr. Susan Farner and Dr. Jerry Ogbudimkpa

for serving on my dissertation committee. I appreciate Dr. Weimo Zhu for his expertise and

assistance in my data analysis. I thank Dr. Melicia C. Whitt-Glover for extending her resources

to help me accomplish my goal. Last, but not least, I want to express appreciation to the

National Heart, Lung and Blood Institute of the National Institutes of Health because this

dissertation research was based on a separate project funded by the agency.

I thank my family in its entirety for their encouragement through this rigorous stage in my life. I

appreciate my King of Glory Tabernacle family for all of their prayers. I especially thank my

sister, Dadriane Julia Brand Taylor, and brother, M. Cleveland Brand, Jr., for their excitement,

support and love that kept the wheels turning. Most of all, I give honor to my parents, Matthew

Cleveland and Dorothy Jean Brand for their undying love, support, encouragement and prayers

throughout this process and my tenure as a student. Without them, I would not be where I am

today.

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STATEMENT OF THE PROBLEM

Despite many efforts to address chronic conditions within the African American (AA)

community, the rates of disease, disability and related death, particularly from preventable

diseases, still remain disproportionate in AAs compared to other racial/ethnic groups. Thus, it is

necessary to identify mechanisms that will effectively address poor health outcomes and

facilitate healthy lifestyles among AAs. Historically, AAs have been exploited in health care as

evidenced by various past events (ie. Tuskegee syphilis study). Consequently, exploitation has

garnered a mistrust of the health care system within the AA community. To effectively promote

change for improved health outcomes, it is necessary to implement culturally-tailored

programming through a trusted institution, such as the AA church. While churches have the

potential to play an important role in positively impacting health among AAs, it is unclear what

attributes are necessary to predict success or failure for health promotion within these

institutions.

PURPOSE OF THE STUDY

Historically, the AA church has served as an institution for religion, education,

empowerment, political involvement, economics, social reform and as a support system and

network within the AA community. The church has played a vital role in the existence and

sustainment of the AA community serving as a place of refuge, empowerment and resources.

The church has had a unique ability of being able to reach hard-to-reach populations, previously

inaccessible to the mainstream (Goldmon & Roberson, 2004). In the past, the AA church has

been an agent of change and instrumental in the advancement of AAs dating back to slavery.

The church was the main resource for the Underground Railroad helping to free countless slaves

(Billingsley, 1999), establishing and supporting schools (Lincoln & Mamiya, 1990; Billingsley, 1999), and spearheading the Civil Rights Movement. Since the AA church has possessed a catalytic changing power within the past, it may also be able to use that same power to be a change agent for health within the present.

Churches have the potential to play an important role in health promotion efforts among AAs "because of their central role in spiritual guidance, communication, social support, and networking. Faith-based interventions among blacks have been successful for smoking cessation, reducing [cardiovascular disease] risk factors and increasing fruit and vegetable consumption" (Whitt-Glover, Hogan, Lang, and Heil, 2008, p. 1). Though many of these interventions were conducted by research institutions, involving the church in a partnership role could improve impact and sustainability.

(Goldmon and Roberson, 2004) state that:

(1) churches share a mutual concern with public health institutions about the issues that impact the health knowledge, attitudes, behavior, access, and outcomes of racial and ethnic minority, low-income, and other underserved populations, (2) the faith tenets of most churches encourage the promotion of holistic health, healing, and living, (3) churches are the historical center of comfort, guidance, and inspiration, particularly in African American communities, (4) churches offer a variety of resources (human, intellectual, capital, social, and spiritual), and (5) churches are uniquely situated to facilitate participation of people from hard-to-reach populations. (p. 368)

In order for churches to be actively involved and engaged in health promotion, it is necessary to identify key attributes needed to develop and sustain active organized groups (e.g.,

health ministries [HM]) within churches that have the potential to become successful partners in

collaborative research and/or to successfully initiate health promotion programs themselves.

For this reason, the purpose of this study is to create a survey to predict the readiness of the AA

church to engage in health promotion programming by examining the relationship between

church infrastructure (physical structure, personnel, funding, and social/cultural support) and

readiness to engage in health promotion programming. Therefore, this study will answer the

following research question: What is the relationship between the infrastructure of AA churches

and their readiness to engage in health promotion programming within the Midwest and South

regions of the United States?

OVERVIEW OF THEORETICAL MODEL FRAMEWORK

The Community Readiness Model (CRM), developed by Plested, Edwards, and Jumper-

Thurman (2006) will inform this dissertation through a modified version to specifically assess

the readiness of the AA church to engage in health promotion programming. "The CRM is an

innovative and easy method for assessing the level of readiness of a community to develop and

implement prevention and/or intervention" (Thurman, Plested, Edwards, Foley, Burnside, 2003,

p. 29). It is a "model for community change that integrates a community's culture, resources and

level of readiness to more effectively address an issue, allows communities to define issues and

strategies in their own contexts, builds cooperation among systems and individuals" (Plested et

al., 2006, p.3). The CRM is also a theory-based model that utilizes a step-by-step process to

determine the level of readiness by examining different dimensions of a community. Plested et

al. (2006) provides a six step process of using the CRM to assess readiness: 1) identify the issue

2) define the community 3) conduct key informant interviews 4) determine the readiness level

through the use of scoring 5) develop strategies to address the issue and 6) see the change occurring in the community.

Due to its unique properties and process of assessing the readiness of a community, this model was chosen to inform the dissertation process of assessing the readiness of the AA church. The CRM will help guide the dissertation to conduct key informant interviews specific to assessing the infrastructure resources, score the readiness of churches and determine the stage of readiness. Though there are additional components to the CRM, this dissertation will only be informed by the components specific to this study resulting in a modified version of the CRM.

SIGNIFICANCE OF STUDY

The African American State of Health

As previously stated, disease, disability and related death, particularly from preventable diseases, still remain disproportionate in AAs compared to other racial/ethnic groups. However, "the leading causes of death and disability are primarily the result of behavioral risk factors. Society can make major progress in reducing premature death and improving quality of life by changing everyday behaviors such as diet, tobacco use, and low physical activity" (University of Illinois at Chicago, 2009, para. 1). Additional health risk factors such as hypertension, diabetes, overweight and obesity often translate into chronic conditions, such as cardiovascular disease (CVD), which share all of the aforementioned behaviors and risk factors. CVD is the most prominent leading cause of adult death among AA adults (American Heart Association, 2009c) with death rates among AA men and women of 438.4 and 319.7 per 100,000 respectively in comparison to 278.9 for all American adults (American Heart Association, 2009b). Additionally, AA adults carry the burden of high rates of risk factors in comparison to other racial groups. Among AAs, 31.7% have hypertension or high blood pressure (HBP) in

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comparison to 22.2% whites (American Heart Association, 2009b). The 2005 overall death rate

per 100,000 for hypertension for AA men was 52.1 in comparison to 15.8 for white men. The

same rate for AA women was 40.3 in comparison to 15.1 for white women (American Heart

Association, 2009b).

"The prevalence of HBP in blacks in the United States is among the highest in the world,

and it is increasing. From 1988–94 to 1999–2002, the prevalence of HBP increased from 35.8%

to 41.4% among black adults, and it was particularly high among black women (44.0 %)"

(American Heart Association, 2009b, p. 17).

"Compared with whites, blacks develop HBP earlier in life and their average blood

pressures are much higher. As a result, compared to whites, blacks have a 1.3-times greater rate

of nonfatal stroke, a 1.8-times greater rate of fatal stroke, a 1.5-times greater rate of heart disease

death and a 4.2-times greater rate of end-stage kidney disease" (American Heart Association,

2009b, p. 17).

Among other risk factors, 14.9% and 13.1% of non-Hispanic (NH) AA men and women,

respectively, have physician-diagnosed diabetes compared to 5.8% and 6.1% NH white men and

women. The 2005 death rates for diabetes per 100,000 for AA men and women were 50.8 and

43.8 in comparison to 26.5 white men and 19.3 white women (American Heart Association,

2009a). The majority of AA adults, as reported in 2005, were overweight or obese with 73.7%

of men and 77.7% of women fitting in this category (American Heart Association, 2009e).

Additionally, 16.7% NH AA adults were more likely to report physical inactivity, compared to

10.7% of NH white adults (American Heart Association, 2009f). In 2005, only 5-9% of AAs

consumed four or more fruit servings daily. In comparison, consumption of the four or more

fruit servings per day among whites was 8-10% (American Heart Association, 2009d). Also,

only 3% of AAs consumed five or more servings of vegetables per day. In comparison, consumption of five or more vegetable servings per day among whites was 5-6% (American Heart Association, 2009d).

Despite many efforts to address health disparities across races, health professionals continue to experience difficulty reaching minority populations with sustainable research, education, and service initiatives. Obstacles include, but are not limited to, mistrust due to past misuse and abuse, culturally insensitive methods and materials, and one-way research and intervention efforts that benefit academic and public health institutions, but fail to provide tangible benefits to church and community members. These obstacles hinder progress in addressing health disparities. (Goldmon & Roberson, 2004, p. 368)

The Distrust of the Health Care System: The Exploitation of African Americans

As a subculture of the American society, African Americans have experienced something that others have not: the unique combination of racism, slavery and segregation. It has caused African Americans to develop not only different behavioral patterns, values, and beliefs [compared to mainstream America] but also different definitions, standards, and differences in value systems and perspectives. Distrust of the health care system by African Americans runs from the feelings of ill gains for participation in clinical trials to being used only as guinea pigs. In addition, there are feelings by African Americans of whether the physician, intentional or not, do treat minority patients differently than White patients. (Kennedy, Mathis and Woods, 2007, p. 57)

Blacks' distrust of physicians and the health care system may also contribute to health care disparities. Studies have demonstrated that Blacks exhibit less trust in the

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health care system. There are a variety of mechanisms through which this distrust may occur, including Blacks' personal experiences with racism, their knowledge of a history of racism in the health care system and social and cultural distance between Black patients and White physicians.   Taken together, these individual experiences constitute a broader cultural memory of abuse that may contribute to belief in conspiracy theories among Blacks. (Musa, Schulz, Harris, Silverman and Thomas, 2009, p. 1293)

Though exploitation of AAs today is not as evident as it was in the past, there are inequalities that still exist for this vulnerable population.

Millions of Americans are under-insured; a disproportionate number of these under-insured people are minorities. The lack of access directly correlates with the quality of health care received by African Americans and other minorities. African Americans are more likely to require health care services, but are least likely to receive appropriate care. Lack of quality care and access to this care, in turn, imparts a mistrust of the system. Recent studies have shown that when minorities receive access to the health care system, and even have the comparable ability to pay for the service, they are still less likely than whites to receive the appropriate therapies. A critical concern to African American clients is that many of them access medical care through large public hospitals. Mistrust of the health care system also manifests itself in the fact that those who receive care in public clinics or hospitals are the "material" on whom students practice and on whom medical research is done. (Kennedy et al., 2007, p. 58)

Trust plays a central role in all medical relationships and is an important contributor to positive therapeutic outcomes. Lack of patient trust is associated with less doctor–patient interaction, poor clinical relationships that exhibit less continuity, reduced

adherence to recommendations, worse self-reported health, and reduced utilization of

health care services; thus, Blacks' relatively lower trust in the health care system puts

them at greater risk of all these negative outcomes. (Musa et al., 2009, p. 1293)

This dissertation is very relevant because it addresses a significant public health issue of

disproportionate rates of chronic conditions and risk factors among AAs whom also hold a

distrust of the very system that delivers health. A potential resolution of this issue is using the

church to deliver health programming. It is a trusted institute with the AA community, culturally

sensitive and can utilize faith-based tenants to deliver health promotion and/or services. Though

this may seem to be a feasible solution, it is uncertain if the church has the infrastructure capacity

and readiness for this delivery. Therefore, this study aims to identify infrastructure resources and

readiness of the AA church to engage in health programming. The ability to identify readiness

early on will be useful for developing, implementing, and evaluating faith-based interventions, in

partnership with churches, which is a key factor for sustainable and effective programs. This

study will also serve as the first step toward developing and testing a training program to

improve the ability of churches to act as change agents for health. Additionally, this study will

add to and create a body of literature that addresses health disparities among AA through faith-

based organizations using culturally-tailored programming.

RESEARCH QUESTIONS

The following is the overall research question: What is the relationship between the

infrastructure of AA churches and their readiness to engage in health promotion programming

within the Midwest and South regions of the United States? This overall research question is

further detailed into four specific research questions:

Research Question 1: Is there an association between physical structure and readiness to engage

in health promotion programming?

Research Question 2: Is there an association between personnel and readiness to engage

in health promotion programming?

Research Question 3: Is there an association between funding and readiness

to engage in health promotion programming?

Research Question 4: Is there an association between social/cultural support and readiness to

engage in health promotion programming?

HYPOTHESES

The following is the overall hypotheses of this study: Church infrastructure has an association with and will predict the readiness of a church to engage in health promotion programming.

Hypothesis 1: Physical structure has an association with readiness.

Hypothesis 2: Personnel have an association with readiness.

Hypothesis 3: Funding has an association with readiness.

Hypothesis 4: Social/cultural support has an association with readiness.

If these findings are accurate, this study will be instrumental in identifying the necessary infrastructure components and predicting readiness to engage in health promotion programming within the AA church.

DEFINITION OF TERMS

African American: "A person having origins in any of the black racial groups of Africa. It

includes people who indicate their race as "Black, African American, or Negro," or provide

written entries such as African American, Afro American, Kenyan, Nigerian, or Haitian" (U.S.

Census Bureau, 2001c)

The African American or Black church: "Those independent, historic, and totally black

controlled denominations [or churches], which were founded after the Free African Society of

1787 and which constituted the core of black Christians" (Lincoln & Mamiya, 1990, p. 1).

Protestant: Individuals or group of individuals that proclaim Christianity as their religion and

adopts the Holy Bible as the final authority while protesting or rebelling against the Roman

Catholic Church's authoritativeship of the Pope as being the universal authority.

Infrastructure:

- Physical structure-components of a church building consisting of classrooms,
  sanctuary, fellowship hall, kitchen, office, conference room, parking lot/outdoor
  area, etc.

- Personnel-individual, team, staff or board that is responsible for health and
  wellness activities/programs

- Funding-financial or donated tangible resources to support health promotion
  programming, (e.g. tithes/offerings, grants, donated supplies, etc)

- Social/Cultural support-the inclusion of AA church-related culture, beliefs,
  customs, traditions, and behaviors in health and wellness activities/programs. It is
  put into practice by providing information (e.g. health information placed in
  church bulletin), goods and/or services (e.g. health materials, gospel aerobics,
  etc.), encouragement or approval (e.g. pastor participating in health events),

providing support (e.g. buddy systems) and inclusion of church tenants (e.g. incorporating health-related scriptures in health activity).

Readiness: Having the capacity or preparedness to take a certain action, behavior and/or address a certain issue.

Engagement in health promotion programs/activities: The number of activities (e.g. health fair) a church does within a certain time frame (e.g. within past year) as indicated by the church.

CHAPTER 2: REVIEW OF THE LITERATURE
"A BRIDGE OVER TROUBLED WATERS"

HISTORICAL PERSPECTIVES OF THE AFRICAN AMERICAN DISTRUST OF THE HEALTH CARE SYSTEM

The role of mistrust is an important aspect in the African American experience of [health] care. African American history in the United States includes a protracted period of slavery, post-Emancipation "Jim Crow" discrimination and persecution in the South, and an extended period of socioeconomic disadvantages during ghettoization in northern cities. Health care during these periods was often unavailable to African Americans or the quality and quantity of the care was deficient. Specific medically related discrimination included hospital ward segregation, which at one time was common, and the well-known U.S. Public Health Service–sponsored Tuskegee syphilis study in which informed consent was not used and indicated treatment was withheld without the patients' knowledge. (Eiser and Ellis, 2007, p.177)

Medical exploitation endured by AAs has been justified as being "for the greater good" dating all the way back to slavery. Many AAs were used as involuntary subjects to test new concocted remedies, unproven medical equipment, exploratory and experimental surgeries, examining the course of an untreated disease, as well as other deliberate medical injustices.

Some whites took advantage of southern blacks by testing new techniques or remedies in the name of medical progress. In several instances physicians purchased blacks for the sole purpose of experimentation: in others the doctors used free blacks and slaves owned by others. Though white subjects were included in one or two cases of experimentation, blacks always made up the overwhelming majority of patients. (Washington, 2006, p. 57)

Though whites were privileged with legal protection and were able to discontinue participation at freewill, blacks were not seen as human beings and therefore were not given these rights and privileges to withdraw from the dreadful experimentations.

One specific occurrence of exploitation is seen with the use of AA slave girls to advance the knowledge and reputation of Dr. James Marion Sims, a highly esteemed physician due to his opening of the first women's hospital in New York and his dedication to addressing women's gynecological disorders, specifically vesicovaginal fistula (VVF). VVF was a disorder in which an involuntary continuous seepage of urine flowed into the vaginal canal causing many complications including laborious and many times fatal childbirth. VVF also was accompanied by an undesirable odor that oftentimes resulted in a poor emotional well-being. Sims understood how devastating VVF was to bear. He knew that curing it would bring him great financial gain and that it was unthinkable to use white women to experiment with various painful and dreadful surgeries. Therefore, Sims obtained 11 slave women from their owners and performed four years of experimental surgical techniques to address VVF which entailed repetitively closing and opening the vaginal canal, experimenting on other functioning reproductive organs while denying the use of anesthesia (Washington, 2006).

One may think that the dark history of America's inhumane past was uncovered and contained to that era. "A common apology for experimental abuse insists that we should not apply present-day medical ethics to the medical behaviors of yesterday, which were governed by less enlightened medical standards for everyone, not just African American" (Washington, 2006, p. 73). However, can we honestly say that it is medical behaviors of yesterday?

Fast forwarding to the early 1930s, a notable event of exploitation of AAs in medical research was the Tuskegee Syphilis Study which persisted for 40 years, from 1932 until 1972

conducted by the federal government, specifically, the U.S. Public Health Service (PHS). The

PHS conducted an unconsented study of syphilis on approximately 600 sharecropping men who

were infected with syphilis living in Macon County, Alabama. The PHS promised free medical

care (as well as burial coverage) to these men. However, these men were denied treatment

when it was available. The PHS justified their attempt to advance their knowledge by

monitoring the long-term effects of syphilis on these black men as being for the "greater good"

and benefiting society at large. This study was finally halted by an article publication in the

Washington Post by an investigative journalist.

It may be believed that there were no ethical laws in place to protect these black

subjects. However, during this time period, there were hospital restrictions and American

Medical Association regulations for physicians to follow prior to and during the course of

human experimentation. Also, enacted were laws for the PHS to follow. However, as seen

from the slavery era AAs again, as a vulnerable population, were not protected, treated

inhumanely and continued to be exploited.

In agreement with Simmonds (2008):

The unfortunate part is not so much that the study was started, but that it was allowed to

continue with the full knowledge and support of the United States Public Health Service,

simply stated "the government" for forty years. This prolonged mistreatment of over

600 black human beings fostered a continued great deal of mistrust by AAs of the health

care system. (p. 69)

"The cumulative effect of [exploitation] continues to foster distrust of health care

providers and the health care system within the African American community. Many African

Americans today…still carry lingering mistrust as the result of this legacy of mistreatment"

(Eiser and Ellis, 2007, p.177). For this reason, "many health care organizations have enlisted the support of the black church in efforts to reach black communities, employing church members and buildings in the delivery of health services" (Hatch & Derthick, 1992, p. 4).

HISTORICAL PERSPECTIVES OF THE AFRICAN AMERICAN CHURCH

The African American Church Origin

"Distrust of institutions and authority figures is rooted in the African American history of racial discrimination, including slavery, post-Emancipation persecution, and persistent racial discrimination" (Eiser and Ellis, 2007, p.179). In the absence of available institutions to willfully provide resources to the AA community, the AA church was the main source of aid and salvation for the soul and body (Eiser and Ellis, 2007).

> From the beginning, African Americans were involuntary adhesions to a "host" society in which their creative participation was severely limited by law, by tradition, and by caprice. Accordingly, the critical urgencies of the host society were inimical to the most compelling concerns of the black bondsmen, and vice versa. In consequence, black religion takes its origin not from established religion in America, but from the *black experience in America,* which was and is a very singular illustration of the complexities of the human predicament, and of the spiritual resources available to the black church's mission to overcome." (Billingsley, 1999, p.xx)

In the early 1700's, enslaved Africans were partially and reluctantly introduced to Christianity. Though some Africans now had an opportunity to receive Christianity in their lives, they were not able to fully embrace its dogmatic taught doctrine. When black Christians were allowed to attend white churches, this "new" religion was used to reinforce African inferiority and racial conformity. "Though they were finally "in church," it was demonstrably

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not "their" church, a communication that spoke pointedly and consistently through the sermons, the prayers, the spiritual suppression, and the absence of fellowship (Billingsley, 1999, p.xxi). Though Christianity was a religion to "set a soul free", it was used to offer Africans "a God who had cursed them and ordained their travail and debasement in perpetuity" (Billingsley, 1999, p.xxi).

To spiritually liberate themselves and provide a place to call their own, Africans established their own churches where they were able to learn of the Christian faith in their own style. The first black churches were established in South Carolina and Georgia. "Black churches were one of the few stable and coherent institutions to emerge from slavery" (Lincoln & Mamiya, 1990, p. 7). "It was in the church that the newly freed slaves found support and courage to create nurturing communities in spite of the obstacles and injustices of a segregated society" (Langley, 2000, p. 31). As blacks began to gain a greater understanding of Christianity and their own identity, blacks became part of assemblies that were Baptist, Methodist and Pentecostal. As a result, seven major historical black denominations were formed that are still in existence today. They include the African Methodist Episcopal (AME), the African Methodist Episcopal Zion (AME Zion), the Christian Methodist Episcopal (CME), the Church of God in Christ (COGIC), the National Baptist Convention, USA, Incorporated (NBC), the National Baptist Convention of America (NBCA), and the Progressive National Baptist Convention (PNBC).

As a newly self-erected organized body of black Christians, the first thing on the agenda of the early church was to get to know God intimately which would cause them to experience the true love God and nullify the notion that they were cursed and condemned by their creator (Billingsley, 1999). The second focal point of the early church was to "destroy the evil slave

system by refusing to cooperate with it" (Billingsley, 1999, p.xxiii). The church was the main resource for the Underground Railroad, a secretive system to deliver slaves to freedom, in which it facilitated the escape of tens of thousands of slaves to their freedom (Billingsley, 1999). After the end of the slavery system, an acclamation to freedom and empowerment to live as a free person was needed. Therefore, as Billingsley (1999) states, the church established and sponsored many organizations including clubs and societies, schools, savings societies, a variety of social services and improvement clubs, "to speed up the day when full freedom would come to a cadre of people who were among America's oldest residents but her newest and least recognized citizens" (Billingsley, 1999, p.xxiii). Of the many black organizations established, "black churches…proved to be the most viable and inclusive. From their earliest beginnings in the 1790's, black churches became and have continued to be the focal point of virtually every movement for change that affects their communities." (Billingsley, 1999, p.xiii)

The African American Church Role as an Institute

The Black church gave "birth to new institutions such as schools, banks, insurance companies and low income housing, it also provided an academy and an arena for political activities, and it nurtured young talent for musical, dramatic, and artistic development" (Lincoln & Mamiya, 1990, p.8). "Only in the church [would] you find a conglomerate of much-needed talent, training, education, and resources to address the critical array of problems confronting…African American communities" (Langley, 2000, p. 4). In his book, Billingsley speaks of an expert sociologist of the black church, E. Franklin Frazier as noting the black church as a "multifaceted religious, social, economic, educational, cultural, political institution with a broad range of social structures and social functions" (Billingsley, 1999, p.9).

Frazier saw the black church as "a nation within a nation," and he credited it for being "the chief means by which a structured or organized life came into existence among the Negro masses" after emancipation. He also believed that this social cohesive or social integration function of the black church was a radical departure from the role played by the "invisible institution" under slavery. (Billingsley, 1999, p.8)

The black church has served as a religious institute for the AA community. It has been noted as a place of religious gathering, of spiritual refuge, guidance, growth and comfort. It served as a place of "security of God's love and redemption into the hopelessness of abject dereliction" (Billingsley, 1999, p.xxiii). The black church allowed AAs to experience God in their own style. "The black response-the prayer and the preaching, the singing, the moaning, the shouting…kept human spirit alive and the presence of God an assured consolation" (Billingsley, 1999, p.xxiii).

The AA church has also served as a social institute within the AA community. "Since its inception, the AA church has primarily been involved in responding to the needs of people that are not taken care of by other organizations or governmental agencies" (Langley, 2000, p. 4). In this regard, the black church has been an "agent of social control…responding to the changes in its social environment" (Billingsley, 1999, p.8). The response of the AA church as a social institute can be seen in many ways including the facilitation of the freeing of slaves through the Underground Railroad and the fight for civil rights within the Civil Rights Movement. To add on, the black church leaders helped and supported the establishment of secular organizations that addressed social issues within the AA community, such as the National Association for the Advancement of Colored People (NAACP), black college fraternities and sororities, the National Urban League as well as others. These organizations worked in sync with the black church often

times having membership that overlapped with the church membership (Lincoln & Mamiya, 1990).

A partial differentiation of these institutions, spheres, and functions occurred, which did not require a complete separation from the black church. These black secular organizations also allowed clergy and church members to influence the institutions and political processes of the larger society without raising questions about the constitutional separation between church and state. (Lincoln & Mamiya, 1990, p.9)

Another capacity in which the church has served the AA community is as an economic institute. They "established Mutual Aid Societies after emancipation and throughout the 19th century, and these evolved into black-owned insurance companies. They created and organized black fraternal organizations, which served both social and economic functions" (Billingsley, 1999, p.8). AA churches have built and purchased their own buildings, parishes, community centers, and other community facilities within their own community. In turn, by owning their real estate, they have been able to economically invest into their own community while sustaining and replenishing resources within their community (Billingsley, 1999).

The AA church has also served as an educational institute. AA churches sponsored and organized schools, provided and paid for teachers and materials, and provided funding (e.g. scholarships) for students to attend school (Billingsley, 1999). The AA church was uniquely instrumental in the establishment and development of schools, especially historical black colleges and universities (HBCU). Within the basements of black churches, were two notable colleges, Morehouse and Spellman established (Lincoln & Mamiya, 1990). "Like their famous counterparts, Fisk and Howard universities,…were also the training grounds for the religious

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professions, such as the [ministers] in the case of Morehouse and for missionaries and teachers at Spellman" (Lincoln & Mamiya, 1999, p. 10).

In addition to the previously mentioned institutes, the church has also served as a political institute. Lincoln and Mamiya (1990) note the initial establishment of the black church was not established out of a religious intent, but with a political agenda to rebel against the white church political attempts to sustain slavery.

The initial impetus for black spirituality and ecclesiastical independence was not grounded in religious doctrine or polity, but in the offensiveness of racial segregation in the churches and the alarming inconsistencies between the teaching and expressions of the faith. It was readily apparent that the white church had become a principal instrument of the political and social policies undergirding slavery and the attendant degradation of the human spirit. Against this the black Christians quietly rebelled, and the Black Church emerged as the symbol and substance of their rebellion. (Lincoln & Mamiya, 1990, p. 47)

Black churches offered their resources, membership, and facilities to lobby for political representation. The black church's political association during this period reinforced it as the center of black social and political life. Social structures of justice that protected the disadvantaged from the abuse of unjust laws shaped the political agenda. Theologically, black churches saw themselves as supporting the politics of compassion and divine justice. (Langley, 2000, p. 41)

Additionally, the church has served as an institute of empowerment and identity. When blacks were demoralized, devalued and depreciated, the church countered and minimized the destructive and powerful potential of an intended embedment of negative self-image. The black church nurtured a sense of achievement, accomplishment and self worth among blacks (Eng,

Hatch, Callan, 1985). At the end of the day of black men being called "boy" and black women serving as maids, they were able to attend church and be honored, respected, and appreciated; for the church created a sense of worth in them. "In circumstances where nearly all black people were semi-literate, poorly paid and holders of unskilled jobs, some held positions of high prestige and esteem within their communities and their churches" (Eng et al, 1985, p. 85). Among the many Black institutions including fraternities and sororities, civil rights groups, schools, mutual aid societies, insurance companies, etc., "the black Church has been the most successful in rejecting the labels and roles assigned to Black Americans by the wider society" (Eng et al, 1985, p. 85).

> In essence, the Church has provided an important alternative for black people to develop and nurture positive and individual and group images essential for psychological survival. Moreover, the Church has offered a range of options for exercising leadership and organizational skills that have not been available to black Americans elsewhere in the wider community. (Eng, et al., 1985, p. 85)

The church has also served as a social support system and network. As Billingsley (1999) mentioned, Frazier's research supported a link between the black family and the black church as a support system provided to both the community and the family. "In the African American church, social support is provided to the congregation and surrounding community to assist overcoming social and political barriers to unequal access to health resources" (Peterson, Atwood, and Yates, 2002, p. 407). The church is an incubator of individuals with similar interests, morals and values therefore providing a defined community of a supportive network. "Individuals belonging to a defined community or organization, such as a church, are networked to provide influence in behavior change through support systems. The church and church-based

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programs within a social influence framework can exert a positive effect on health promotion behaviors" (Peterson et. al., 2002, p. 407).

> As the only stable and coherent institutional area to emerge from slavery, black churches were not only dominant in their communities but they also became the womb of black culture and a number of major social institutions. While the social processes of migration, urbanization, and differentiation have diminished aspects of this centrality and dominance, black churches have continued their interactions within the spheres of politics, economics, education, and culture so that only a partial differentiation has occurred and not a complete separation. (Lincoln & Mamiya, 1990, p. 17)

As one can see, the AA church has played a vital role within the AA community. "During periods of severe and sustained crisis in the African American community, people tend to turn to their church for guidance and support and leadership" (Billingsley, 1999, p.11). As in the early church, "the Negro's status as an outsider in the American community deepened his loyalties to one place where he felt safe and accepted: the church" (Billingsley, 1999, p.9). For these reasons, the AA church has become a trusted institute with the AA community. "It is the center of social life within the Black community and the most characteristic expression of African character" (Billingsley, 1999, p. 7). The AA church is the foundational structure in which the AA community has been built upon and the threads which have kept this community woven together through the most adverse times. "As governmental resources are reduced and social problems increase in the AA community, the AA church is the…institution in both urban and rural communities with a mission to keep hope alive and promote efforts to find…solutions for AA problems" (Langley, 2000, p. 4-5). The black church has preserved, developed and nurtured the AA community for growth. It has made the AA community who it is-a survivor.

The African American Church Perspective on Health

The black church has played many roles within the AA community and has exemplified its efforts through social, political, educational, religious, economic, etc. spheres to address issues faced by the AA community. Though much is documented about the church's perspectives on the previously mentioned issues, there is limited knowledge of its view on health. The AA church's perception of the origin of disease and illness comprises of various views, including both spiritual and natural perspectives.

As documented in historical secular literature, the origin of disease and illness has previously been equated with judgment or as an act of God to punish the poor, filthy, and sinner (Duffy, 1992). Synonymous with the secular world, the AA church viewed some diseases and illnesses as a form of punishment, judgment or chastisement from God. The church believed that God protected and avenged his believers. Therefore, if believers were unjustly treated (e.g. accused falsely, physically harmed, murdered, etc.), God would avenge the believer by judging and punishing those who were responsible for the maltreatment.

The AA church would also contribute some illnesses to the result or consequence of sin. The illness may not be a consequence of sin in which a person may have committed, but due to the state of sin in the world. The church declared sin, according to the scriptures, as the result of Adam's disobedience to God in the Garden of Eden. As a result of this disobedience or sin, his judgment or punishment from God subjected all mankind to the same penalty. Included in this penalty was illness. Therefore, if a person was ill, it could be contributed to this "first sin". The church would also refer to sin as fetters, bondage, and/or captivity in which deliverance was needed in order to be set free from the penalty of sin. As a result, some people who had not received deliverance from sin, or received salvation, would seek help from the believers to obtain

this salvation. Therefore, if they were ill, oftentimes they would be healed or freed from the fetters of illness.

Another root of illness, as believed by the church, was a result of being oppressed by the devil. It was believed that the cause of the illness was due to the devil afflicting illness upon an individual. Therefore, believers would intervene and pray for the ill. "Hundreds have been healed by…laying on hands and praying to God to rebuke the enemy (the devil)" (Mason, 1924, p. 31). Many times, preachers would express this type of healing in their sermons. "I met with an Elder who had hemorrhages of the lung…God, through prayer, rebuked the bleeding, and today he is blessed of the Lord and is preaching the gospel and saving souls" (Mason, 1924, p. 31).

The AA church also believed that disease and illness was present to glorify God. At times, the individual would suffer from some type of ailment, pray for healing and miraculously be healed from the illness. This miracle of healing would be attributed to God and serve as a testament of God's infinite healing power. "The enemy afflicted my body; I suffered day and night with heart trouble…my soul reached out and touched [God]. Immediately the Lord healed me…I shall give God the glory" (Dabney, reprinted 1987, p. 89). For this reason, many people would tell their testimonies to others and express their thankfulness while giving God all the glory for their miracle.

Though the previous origins of disease and illness were related to spiritual implications, the AA church also believed that disease and illness could be a result of natural reasons such as unhealthy behaviors. Many leaders within the church specifically spoke out against the usage of tobacco products, habitual use of alcohol and illegal drugs. They believed that medical reports,

conclusions of research studies, and doctor's statements confirmed that these behaviors, specifically tobacco usage, were main contributory factors to lung cancer.

The church, therefore, of necessity must accept what is stated by doctors and others, concerning the use of tobacco in the form of cigarettes and also what is stated concerning the habitual use of alcoholic liquors…cigarettes and cancer of the lung. (Pleas, reprinted 1991, p. 51)

As evident in the above passage, the church relied on science as a foundation to promote their stand against the engagement of unhealthy behaviors that resulted in disease. Though the church functioned on many spiritual principles, it still utilized medical or secular principles to promote their stand.

Overall, the AA church viewed disease and illness through various perspectives. Synonymous to historical secular views, the church believed disease and illness was due to many spiritual reasons such as the judgment of God. It also believed that disease and illness was a result of sin and oppression of the devil. Contrary to secular views, the church also believed that illness was not always equated to negativity. It could be viewed through a positive light because God could get glory from the illness. In addition to spiritual origins, the church also attributed illness to natural causes such as unhealthy behavior practices. Though the AA church believed that disease and illness was a product of both spiritual and natural causes, more emphasis was placed on the spiritual origins as the root of disease and illness.

THE AFRICAN AMERICAN CHURCH RESPONSE TO HEALTH

As the AA church has addressed religious, social, political, economic, and educational issues within the AA community, it has not neglected to address the health dilemma within this community. For this reason, the church has created and implemented many church-based health

programs (CBHP) to address health disparities within the AA community. Most of these programs focus on primary prevention, cardiovascular health, general health maintenance, and cancer (DeHaven, Hunter, Wilder, Walton, Berry, 2004). Many AA faith-based health programs have positive and significant effects resulting in improved health outcomes (DeHaven et al, 2004). Improvements have been evident in readiness to change, "reductions in cholesterol and blood pressure levels, weight, and disease symptoms and increases in the use of mammography and breast self-examinations" (DeHaven et al, 2004, p. 1030).

Though many church health programs have been successful, some have also encountered barriers, particularly when programs are implemented with a research intent. Lasater, Becker, Hill, and Gans (1997) described several of these barriers. The issue of separation of church and state impeded the facilitation of governmental and private funding to churches based on the idea of "proselytizing for religion". Therefore, religious organizations were not able to receive funding as needed to facilitate health programming. Additionally, due to the nature of the church to holistically address issues of all its members, an experimental design consisting of an intervention and control group did not seem ethical in the eyes of the church. Therefore, the church shunned research interventions with these properties. Also, injustices of the past from the wider society, such as the Tuskegee Syphilis Study, maintained a current underlying scrutiny at the mentioning of "research" within the AA community. Lasater et al. (1997) also mentioned another barrier of the intervention as not fully supporting the mission of the church and therefore not a good fit for the ministry. The aforementioned barriers are consistent with faith-placed properties in which the intervention originates from an external organization that places tenets of its intervention within a church utilizing it as a setting while faith-based interventions and programs generally emanate out of the church.

Willing to overcome the barriers presented by programming utilizing faith-placed properties, several research and health-related organizations have adopted the properties of faith-based interventions when partnering with churches. Lasater et al. (1997) explains that pastors and church leaders are included in the design of the intervention. Volunteer and paid staff, from within the church, are used to facilitate some or all activities of the intervention. Church tenants are incorporated into the intervention to adequately tailor the program to the culture of the church while still using the church as the setting for the intervention. Power, such as budgetary authority, is transferred or shared with the church (Goldmon & Roberson, 2004). Additionally, governmental entities have come into the recognition of the efficacy of churches to facilitate health promotion programming and have released funding for CBHP (Lasater et al., 1997). With new partnerships being formed between the church and health/research organizations along with the incorporation of faith-based principles, the success of program implementation have been seen in improved health outcomes (Lasater et al., 1997).

The previously mentioned faith-based incorporated principles (e.g. transfer of budgetary power, using volunteers from within the church, incorporating church leaders in the design of programs to create culturally adapted activities, etc.) are related to the infrastructure of the church-that is the physical structure, personnel, funding and cultural/social support. These elements of the church seem to be very instrumental in the success of the implementation of CBHP. Therefore, it is important to explore these attributes of the church which supports the success of health programming. "The availability of church resources may help to sustain and expand health services stemming from a sense of independence and commitment to others within the church" (Peterson et al., 2002, p. 405). For this reason, the infrastructure elements of the AA church are examined.

THE AFRICAN AMERICAN CHURCH INFRASTRUCTURE

"The structural facilities of churches make it ideal for holding meetings, educational programs, and in some situations, exercise sessions" (Peterson et al., 2002, p. 405). They tend to have resources, such as kitchens and meeting rooms, available to conduct health activities (Campbell et al, 2007). According to the Black Church Family Project, a study examining characteristics of northern black churches with community health outreach programs, congregation size, church economic composition, church age, church ownership, and denomination had an influence on participation in community health outreach programs. However, congregation size was one of the strongest predictor of involvement of these programs (Thomas, Quinn, and Billingsley, and Caldwell, 1994). It was noted that churches with medium sized congregations (176-400) and larger congregations (>401) participated in outreach programs in a greater proportion than little congregations (1-70) and smaller sized congregations (71-175). Among churches with an economic composition of middle class, working class and both middle and working class, 80% of those mainly comprised of middle class sponsored outreach programs while 71% of both the middle and working class and 41% of the working class trailed behind in sponsorship of outreach programs. Church age was also an important factor in participation in outreach programs. Churches that were over 75 years old had a 78% participation rate in community health outreach programs in comparison to churches that were 41-75 years old with a 72% participation rate and churches that were less than 41 years old with a 62% participation rate. Church ownership was also influential in outreach program participation. Seventy percent of churches with paid mortgages participated in community health outreach versus 41% of churches that rented. Last, but not least, the sample population was primarily comprised of Baptist, Methodist and Pentecostal denominations. However, the study concluded that more

Methodist churches (77%) were involved in these programs than Pentecostal (65%) and Baptist (62%) churches (Thomas et al., 1994).

In addition to physical structure, personnel is a very important attribute to consider. "Lay leaders and staff [personnel] are key to the successful implementation of health programs in African American churches" (Carter-Edwards, Jallah, Goldmon, Roberson, Hoyo, 2006, p. 346). According to Thomas et al (1994), the Black Church Family Project noted that the number of paid clergy, minister's education level and additional paid staff had influence on the participation in community health outreach programs. Of the churches that had two paid clergy, over 86% sponsored CBHP as opposed to 49% of churches that had no paid clergy and did not sponsor programs. The higher the education level of minister, the more the church sponsored programs. Eighty three percent of churches that had ministers with a graduate degree offered programs as opposed to 40% of churches that had ministers with less than a high school degree. Minister's education level was one of the strongest predictor of involvement in these programs. Also, 78% of churches that had additional paid staff engaged in community health outreach programs versus 56% of churches with no paid additional staff (Thomas et al, 1994).

In addition to paid staff, CBHP are oftentimes sustained through volunteerism. In CBHP, it has been noted that lay volunteers and/or lay health advisors (LHA) are essential in sustaining a program (Campbell et al, 2000). Many times congregants will be selected by the pastor to serve as a lay volunteer or LHA on health committees, task forces and/or to implement program activities (Campbell et al, 2000; Carter-Edwards et al, 2006). Most times, these individuals have limited or no health knowledge and are trained to deliver health-related activities. However, having a healthcare professional from within the congregation to facilitate the health program/ministry can also be vital to the success of health activities (Carter-Edwards, et al,

2006). Both types of personnel are important because they can provide coordination and implementation of programs, recruit within both the congregation and community, be a support to participants and serve as liaisons in collaborative partnerships (Campbell et al, 2000). These volunteers and church leaders demonstrate a unique level of commitment and insight of how to implement CBHP than outsiders (Peterson et al., 2002). They can "provide the enthusiasm, dedication, and insider knowledge of how to make programs succeed in organizations such as churches" (Campbell et al, 2000, p.252).

In agreement with Thomas et al (1994):

Although the institution of the black church has traditionally been sustained largely by volunteers…the availability of paid clergy and other paid staff to provide consistent leadership to various programs is a necessary factor that will determine the extent to which the church can continue the provision of community health outreach programs. Additionally, health professionals who belong to churches could provide a critical source of expertise and could be mobilized as volunteers to guide and implement community health programs. (p. 578)

Funding is a very important aspect of a church to launch and sustain CBHP. Carter-Edwards et al. (2007) list the following attributes that prepares a church to fund and/or secure funding for CBHP. The church should be willing to receive both foundation and government funding for health programming. It should have internal funds specifically allocated for health programming. The church should also be willing to establish a separate 501(c)3 for outreach ministries. Having these attributes can be very instrumental in the effort to "reach a large number of people at one time and/or open up financial and collaborative opportunities for

gathering and using information to help sustain church-based or church-sponsored health programs" (Carter-Edwards et al, 2006, p. 347).

Cultural/social support is another attribute of successful CBHP. "Health programs that focus on behaviors that can be reinforced by social support are a natural arena for churches (Thomas et al, 1994, p. 576). "The functional dimensions of social support can be informational (providing information and guidance), emotional (providing acceptance and concern), instrumental (providing goods and services), and self esteem (promoting self worth)" (Peterson et al, 2002, p. 407). "Church-based health promotion programs rely on [informational], emotional, and instrumental support for effectiveness" (Peterson et al, 2002, p. 407). "Social and emotional support offered through church programs is perceived as an essential means to prevent the isolation that results from illness (Thomas et al, 1994, p. 576). In CBHP, many churches offer cultural/social support by incorporating spiritual and/or scriptural references within health programs (Carter-Edwards et al, 2006), addressing health issues within sermons (Campbell et al, 2000, Carter-Edwards et al, 2006), incorporating health testimonies within services, having congregant survivors (e.g. breast cancer survivor) attending a health program and share their experience with participants (Peterson et al, 2002), pastors expressing their approval and support of health programming across the pulpit and within their sermons (Campbell et al, 2000), culturally tailoring church bulletin boards (Campbell et al, 2000) that display health information within/around the church (Campbell et al, 2000; Carter-Edwards et al, 2006), providing program activities during or directly following church functions (as permitted), incorporating health messages in the church announcements and newsletters (Campbell et al, 2000; Carter-Edwards et al, 2006), hosting health fairs for congregants and community, most times as a kick-off or follow-up event (Carter-Edwards et al, 2006), health program/ministry collaborating with other

church groups to deliver health (Campbell et al, 2000; Carter-Edwards et al, 2006) and having internet access to retrieve health information (Carter-Edwards et al, 2006) .

In a study conducted by Campbell et al (2000), Black Churches United for Better Health (BCUBH) project, cultural/social support was a very important factor in the outcome of the study of increasing fruits and vegetables consumption among church members. The project incorporated and provided the servings of fruits and vegetables at church functions, congregants were chosen to coordinate, plan and implement project activities and serve as LHAs within their church, and culturally tailored health education information (e.g. posters, bulletin inserts, brochures, etc) was distributed and posted. Pastors were also asked to verbally support the program through sermons and announcements. Overall, more than 60% of participants were served fruits and vegetables at church functions. More than 50% of participants who received culturally tailored bulletins, acknowledged hearing the verbal support/announcements of the pastor, and reading the health education materials distributed (Campbell et al., 2000).

Understanding the infrastructure resources used to deliver church-based programming, CBHP that focused primarily on increasing physical activity or physical fitness (and in some cases improving other health behaviors in conjunction with physical activity (e.g. increasing fruit and vegetable consumption)) through a physical activity intervention among African Americans were examined to identify these infrastructure attributes. These programs were identified through an overall review of the literature and by reviewing two systematic reviews of the literature ranging from 1985 to 2006. These reviews focused on health programs in faith-based organizations as well as interventions to increase physical activity and physical fitness in AAs. The systematic reviews included a scope of various program settings and ages. Therefore, only

programs with church-based settings that involved adults were reviewed. The examination of these CBHP is described below.

The Fitness through Churches project was a nonrandomized uncontrolled church-based pilot study with three objectives to accomplish: 1) to train 30 individuals from 10 AA churches to be instructors/organizers of exercise classes, advisors on "heart healthy" nutrition education and advocates for smoking cessation; 2) assist churches in initiating their own health promotion program, and 3) create and test a culturally sensitive and appropriate model for the promotion of cardiovascular health within AA communities (Hatch, Cunningham, Woods, and Snipes, 1986). Following participation in an exercise class demonstration, pastors selected fourteen females from 6 churches, ages 24 to 57 years old, to become trainers for their church. The females attended a 3-hour class, twice a week, to participate and receive training in aerobic exercise, cardiopulmonary resuscitation (CPR), and nutrition. The training lasted for 7 weeks. At the conclusion of the study, the participants also became a part of the oversight board that provided guidance for the development of the full-scale intervention study. The outcome of the study revealed that approximately 85% of the participants increased their flexibility by 2 inches, over 50% of the females decreased their systolic blood pressure by 5mm Hg, 90% of the sample significantly improved their body circumference and about 40% of the women had a 2 point improvement in their resting heart rate (Hatch et al., 1986).

The infrastructure attributes identified within this study are as follows: the pastor approval and engagement in the health activity, training congregants without previous health knowledge to deliver health activities, and congregants participating in the planning and implementation of the primary intervention to be designed.

The Baltimore Church High Blood Pressure program was a AA church-based weight control program which included eight weekly 2-hour nutrition counseling and exercise classes for 184 AA and 3 white women, ages 18-81 years old (Kumanyika & Charleston, 1992). At each session, participants had their blood pressure checked, weighed in, spoke with a dietician, participated in activities related to group behavioral modification (e.g. sharing testimonies, setting goals, etc.) and exercised for 30-45 minutes. At the conclusion of the project, the findings revealed that participants experienced significant weight loss and a decrease in both systolic and diastolic blood pressure.

The infrastructure elements used in the current study included the following: training and using lay volunteers (lay health advisors) without previous health knowledge to deliver project activities, allowing congregants to participate in the scheduling of the project events, scheduling activities to coincide with other church functions, sharing testimonies, creating teams to offer social support, placing announcements in the church bulletin and holding all events on the church premises.

PATHWAYS was a church-based randomized controlled study designed to test the effectiveness of a former hospital-based PATHWAYS program that was translated into a community (church) setting with the aim to reduce the weight of 39 AA women within 3 churches who were at risk for diabetes (McNabb, Quinn, Kerver, Cook, Karrison, 1997). The intervention consisted of 14 weekly group sessions led by trained lay volunteers who helped participants set weekly goals for improved eating habits through self-directed culturally structured learning activities. Each participant was also instructed to engage in a home-based exercise program which often resulted in recreational walking. The control group was "wait-listed" for the program. The difference in weight loss between the intervention group and the

"wait-listed" control group was statistically significant where the intervention group lost weight and the "wait-listed" control group gained weight on average (McNabb et al, 1997).

The infrastructure attributes noted in the PATHWAYS study consisted of the training and use of two lay volunteers to facilitate the program within their respective churches and utilizing culturally specific learning activities to address behavioral and non-specified sociocultural issues.

Project Joy was a church-based randomized controlled study "to determine the impact of active nutrition and physical activity interventions on one-year measures relating to lifestyle risk factors and CVD risk profiles compared with a self-help (control) group" (Yanek, Becker, Moy, Gittelsohn, Koffman, 2001, p. 69). This study took place within 16 churches with a total of 529 AA women enrolled. The three intervention strategies included 1) a standard group behavior model with weekly nutrition and physical activity sessions, 2) the same standard group behavior model coupled with church cultural and spiritual context and 3) a control self-help group of non-spiritual context. The study's secondary aim was to "determine the extent to which a strong spiritual component and elements of church culture strengthen the impact of standard behavioral group interventions in the church" (Yanek et al, 2001, p. 69). The spiritual component within the spiritual intervention strategy was self-implemented in the standard group behavior intervention by its participants. Therefore, results for both the active intervention groups, standard and spiritual, were similar and collectively compared to the control group. Contrary to the control group, the intervention strategies made significant improvements in nutrition (sodium intake, dietary energy, dietary total fat), waist circumference, body weight, and systolic blood pressure (Yanek et al, 2001).

The infrastructure attributes identified in the Project Joy study consisted of the following: pastoral support of the program, announcements made from the pulpit by the pastor and lay leaders, other church sessions (i.e. Bible study, choir rehearsal, etc.) also receiving recruitment announcements, using volunteer church lay leaders assigned by the pastor to facilitate the program (with the number of lay leaders varying according to church size and preference of the pastor and church staff), using church culture with the incorporation of praise and worship dance and gospel music within physical activity sessions, incorporating scriptural context and prayer in sessions, using church bulletins to post health messages and recruitment announcements, sending out Project Joy newsletters entitled "From the Pastor's Desk" along with letters sent out from the pastor to encourage attendance to follow-up sessions. All intervention activities took place at the church utilizing its facilities.

The WATCH (Wellness for African Americans Through Churches) Project was a randomized church-based research study that aimed to increase physical activity, fruits and vegetable consumption and colorectal cancer screening among 587 AA congregants within 12 churches (Campbell et al, 2004). Two intervention strategies were employed that consisted of the following: 1) utilizing tailored print newsletters and video and 2) using LHAs. The tailored print newsletters and video intervention strategy significantly improved physical activity, the consumption of fruits and vegetables and increased fecal occult blood testing screening of those 50 years and older. However, the LHA intervention did not have a significant effect. The LHA strategy was assumed not to be effective due to the prolonged time of diffusion of the intervention as well as a suboptimal reach within the study population (Campbell et al, 2004).

The infrastructure elements utilized in the WATCH study were as follows: using tailored print newsletters and videotapes to improve outcomes, utilizing the church facilities to host

intervention sessions, utilizing trained volunteer LHAs, and churches receiving foundational and governmental funding for implementation of the study.

An uncontrolled walking intervention study was piloted to test the feasibility of a community-based walking program, test its impact on steps per day and BMI and to integrate walking in the everyday lives of 24 AA breast cancer survivors within a church and community center setting (Wilson, Porter, Parker, and Kilpatrick, 2005). The eight week intervention consisted of 75-minute sessions that focused on cancer and physical activity education, self assessment for motivation and walking on their own while counting steps per day. There were statistically significant improvements in steps per day, BMI, and other anthropometric (weight, body fat, waist/hip circumference, etc) and attitudinal measurements (Wilson et al, 2005).

There was very limited information on the infrastructure elements within this walking intervention study. However, it is known that part of the intervention took place within the church, hence utilizing the church facilities.

A randomized uncontrolled church-based weight-loss study was piloted to compare two different intervention methods and test the effectiveness of a 6-month weight loss program conducted entirely by two paid trained lay health educators who were members of the church in which the intervention took place (Kennedy et al, 2005). Forty AAs were randomized into either 1) a group setting intervention or 2) an individual setting intervention. The group setting intervention consisted of 6 monthly sessions that focused on nutrition education and group discussion with an emphasis on the increase of physical activity. The individual setting intervention also consisted of similar nutrition education with an emphasis on increasing physical activity. However, the individualized sessions covered additional topics within 15 sessions. The additional topics included dietary behavior topics. The participants in the individualized sessions

kept a 7-day food diary after learning how to conduct a basic dietary assessment. Both intervention groups yielded fairly small, but similar significant mean weight loss results. The difference between the two intervention groups did not prove statistically significant (Kennedy et al, 2005).

The infrastructure attributes of this weight loss program consisted of both interventions taking place on site at the church and utilizing 2 trained and paid lay members with minimal previous training in nutrition and/or health education to implement the intervention activities in its entirety.

The Healthy Body Healthy Spirit Trial was a church-based randomized controlled study aimed at increasing physical activity levels and the consumption of fruits and vegetables among 1,056 AAs within 16 churches (Resnicow et al, 2005). Different interventions were implemented among three groups. Group 1 received non-tailored standard education materials focusing on physical activity and nutrition. Group 2 received culturally tailored self-help materials focusing on physical activity and nutrition. Group 3 received the intervention of Group 2 but with an addition of 4 telephone motivational interviews across the span of one year. Contrary to Group 1, both Groups 2 and 3 showed significant improvements in physical activity and fruit and vegetable consumption with a greater improvement in the latter. There was a distinct additive impact of the motivational interviews on the fruit and vegetable consumption (Resnicow et al, 2005).

The infrastructure attributes identified in the Healthy Body, Healthy Spirit Trial included the following: a nutrition video that incorporated scriptural and biblical themes to encourage healthy eating, an AA cookbook with recipes created by members of the church, and an exercise video hosted by 2 local AA celebrities. The exercise video included a documentary of

participants' efforts over 4 weeks to maintain or increase their physical activity level, clips of two pastors' sermons that focused on maintenance of a healthy body and the significance of exercise, along with health-related scriptures. Additional attributes consisted of an exercise guide that incorporated scriptures and biblical themes, a gospel music audiocassette to accompany workouts, health fairs held in the churches for recruitment, a hired liaison from each church (to assist in recruitment, planning of the health fairs and retention of participants), pastoral support of the program and announcements placed in the church bulletin. Churches also received governmental donations as an incentive for congregant participation.

A randomized controlled church-based physical activity trial was conducted to determine if an aerobic exercise treatment would increase physical activity compared to a Stretch N' Health lecture treatment among 196 AA women in 11 churches over a 6-month period (Young, 2006). The aerobic exercise intervention consisted of a 1-hour weekly aerobic class that incorporated gospel music. The participants were paired up with a buddy and asked to call regularly to provide support along with praying for other exercise participants. The participants also received weekly handouts, motivating monthly newsletters and information and strategies on topics centered on physical activity within discussions before or during the workout sessions. Toward the end of the intervention period, volunteers were trained to continue exercise classes at their church. The comparison group, the Stretch N' Health lecture intervention consisted of one week of low-intensity stretching classes and the following week of a health lecture alternating throughout 6 months. Health lectures focused on general health topics. Additionally, non-motivating newsletters were distributed that also centered on general health topics. At the end of the 6 months, a one-month aerobic class was provided. Sessions for both interventions were conducted by a member of the AA community. Results indicated that there was no difference

between the two interventions in increasing physical activity. Both groups decreased physical inactivity (Young, 2006).

The infrastructure elements identified in this study to increase physical activity included the use of making announcements during church services, placing inserts in the church bulletins, posting flyers around church property, using the word of mouth method among church members to publicize study-related information, holding intervention sessions at the church during convenient times (e.g. directly following choir rehearsal) and when church space was available, using a member of the AA community to facilitate sessions, incorporating gospel music within aerobic classes, and creating a buddy system to provide social support among participants through prayer, contact and encouragement to those who were decreasing their attendance to these events.

The Health-e-AME faith-based physical activity initiative was a 3-year randomized study that trained 98 African American Methodist Episcopal (AME) churches to implement physical activity programs within their churches (Wilcox et al., 2007). Three action-oriented physical activity programs, namely, praise aerobics, chair exercises, and walking programs, were developed and implemented within these churches. In addition, an 8-week program, "8 steps to Fitness," was designed and implemented specifically for those who were in the contemplation and preparation stages of change (Wilcox et al., 2007). This additional program consisted of weekly educational sessions in addition to exercise classes. Results suggested that 54% of the churches implemented at least one physical activity program, 28% of the congregants were regularly active, 55% were underactive and 17% were sedentary (Wilcox et al., 2007).

Infrastructure characteristics presented in the study consisted the following: collaborating with AME leadership (e.g. pastors, presiding elders, etc) to design the project and apply for

funding, incorporating scriptural perspectives within promotional messages and names of events, using gospel music in physical activity classes, including health messages in sermons, giving out health information in church bulletins, newsletters, church/study website and displayed around the church, training congregants without previous health knowledge to deliver physical activity components, and church leaders participating within events while using them as role models.

A nonrandomized uncontrolled faith-based physical activity study was piloted to evaluate the effect of a 3-month intervention of moderate and vigorous physical activity along with daily walking among AAs who were sedentary (Whitt-Glover et al, 2008). Eighty-seven AAs with a mean age of 52, participated in 8 group sessions that included a 30-minute physical activity session, a 60-minute discussion of topics relating to physical activity along with weekly incentives provided to promote physical activity. Study findings concluded that participants significantly increased in moderate and vigorous physical activity by 67 +/- 78 and 44 +/- 66 minutes per week, respectively, along with an increase in daily walking by 1373 +/- 728 steps per day (Whitt-Glover et al., 2008).

The infrastructure elements noted in this study are as follows: physical activity sessions held at the church, religious incentives (e.g. gospel exercise CD) given to participants, sessions opening and closing with prayer, health information delivered from biblical perspectives, having a church member to serve as a liaison between the church and study staff and using instructors from the same ethnic background as participants.

The WORD (Wholeness, Oneness, Righteousness, Deliverance) faith-based 8-week weight-loss program, a two-group quasi-experimental delayed intervention, was designed to evaluate a community-based participatory research approach for weight loss in AA rural churches (Kim et al, 2008). Seventy-three participants from 4 AA churches (36 in treatment

group and 37 in control group), ages 23-83 years old, attended 2-hour group meetings conducted by lay health advisors. These meetings consisted of a 10-minute measurement and mingle, 10-minute review of the previous week's lesson, a 15 minute exercise tape physical activity session, 15-minute Bible study about health, a 5-minute prayer and a 30-minute learning module that included the following topics: calories, low fat, physical activity, fruits and vegetables, portion sizes, eating out, and healthy cooking. The findings of the study demonstrated a mean weight loss of the treatment group of 3.60 +/- .64 pounds compared to .59 +/- .59 pounds loss by the control group (Kim et al., 2008).

The infrastructure elements identified within this study are as follows: training congregants without previous health knowledge to deliver intervention activities (lay health advisors), incorporating prayer and a bible study about health within the study and allowing a mingling time between church participants which is conducive to establishing support among the participants.

A culturally-specific dance intervention was conducted to improve functionality of 126 women, aged 36-82 years old, within two African American churches (Murrock and Gary, 2008). The intervention consisted of a 45-minute dance session twice a week for a duration of 8 weeks. After 8 weeks, participants received a dance video to continue their dance activities. The experimental group was observed for 18 weeks. The comparison group continued their day-to day life activities and was mailed health education materials on heart disease at 2 weeks, obesity at 6 weeks, Type 2 diabetes at 10 weeks, and hypertension at 14 weeks during the study. After the 18th week observation, the comparison group also received the same dance video (Murrock and Gary, 2008). At 8 weeks, both groups experienced a significant improvement in functionality. However, "there was a significant difference in functional capacity at 18 weeks

for those women who received the culturally-specific dance intervention compared to the women who did not receive the intervention" (Murrock and Gary, 2008, p.171).

The infrastructure attributes utilized in this study consisted of the following: the study announcements being placed in the church bulletin, study details announced from the pulpit, gospel music selected by the participants and used in the sessions, intervention activities held at the church, and a respected female from the participants' community was chosen to instruct the sessions.

The BLESS project was a comprehensive health promotion program designed to increase knowledge about stroke, encourage healthy eating habits, promote physical activity and encourage the use of health screenings (Williamson & Kautz, 2009). This 2-year program took place within one AA congregation with a membership of approximately 325 and weekly Sunday attendance of 125. The overall program consisted of educational sessions about stroke, health screenings for blood pressure, cholesterol and diabetes conducted every 6 months, a 10-week free "Weight Watchers" program, exercise classes once a week, healthy eating education workshops, and a "Go Red" Sunday health service. At the end of the first year, 50% or more of the congregants were able to define stroke, name at least 4 risk factors, and knew the warning signs and symptoms. Sixty percent of the congregation had their blood pressure, cholesterol and glucose checked at least 3 times. Thirty congregants attended the "Weight Watchers" program. From as little as 6 to 20 congregants attended the exercise class as the class continued after the completion of the program (Williamson & Kautz, 2009).

The infrastructure characteristics identified within this program consist of the following: the pastor and church leaders supporting the program, congregants participating in the planning and implementation of the program, training congregants without previous health knowledge to

deliver health activities, health information given out on Sunday prior to service, using biblical perspectives to name specific health activities, incorporating prayer and gospel music within program components, having a church service specifically focusing on health, using a person from the AA community to instruct the exercise class, and holding all program activities at the church.

The Genesis Health project was a culturally-based and community-designed 12-week intervention aimed to reduce obesity through an exercise-fitness and nutrition education program among 55 participants from 6 African American churches (Cowart, Biro, Wasserman, Stein, Reider, and Brown, 2010). The intervention consisted of a 3-hour session that started off with a "Share 'n Praise" session where participants gave their testimonies of their eating and exercise challenges and victories from that week. Afterwards, a 1-1/2 hour exercise class followed with a cooking demonstration and presentation from the instructor that allowed space for questions, discussion, and feedback from the participants. The study findings revealed that "participants reported weight loss, lower blood pressure, improved cholesterol, better diets, increased physical activity, more energy, higher self-esteem and greater well-being" (Cowart et al, 2010, p.9).

The infrastructure elements incorporated within this study are as follows: including participants in the design and implementation of the program, using "lay health advocates" within the church to deliver intervention activities, health messages given over the pulpit, the pastor participating in health activities as well as serving as a role model, using a buddy system, and including prayers, scriptures and testimonies within events.

After examining these physical activity related studies in relation to infrastructure attributes of the AA church, it was noted that many of these CBHP were successful. All of the intervention activities took place within the physical structure of the church. Most studies

utilized lay volunteers as personnel from within their congregation. Some churches received foundational and/or governmental funding. And all studies used some form of cultural/social support. Overall, infrastructural attributes, consisting of physical structure, personnel, funding and cultural/social support, are all essential elements in the implementation and success of church-based health programming.

APPLICATION OF THEORETICAL MODEL FRAMEWORK: COMMUNITY READINESS MODEL

As previously mentioned, the Community Readiness Model, developed by Plested, Edwards, Jumper-Thurman (2006) is a theory-based model used to determine the level of readiness of a community to make change. To initiate this assessment, the model examines six dimensions of a community including, community efforts, community knowledge of the efforts, leadership, community climate or attitude of the community, community knowledge about the issue and resources related to the issue (Thurman et al, 2003). Therefore, semi-structured key informant interviews are conducted to gain information and responses to question within the six dimensions. The interviews are then scored within each dimension and anchored by specific statements that are used to classify the community into one of the nine stages of readiness (Thurman et al, 2003). The nine stages of readiness consist of the following: 1) no awareness, 2) denial/resistance, 3) vague awareness 4) preplanning, 5) preparation, 6) initiation, 7) stabilization, 8) confirmation/expansion, and 9) high level of community ownership/professionalism (Plested et al, 2006). The CRM then provides general strategies for mobilization on each level of readiness in which the researcher/programmer tailors to fit the specific need and culture of the target community.

According to Thurman et al (2003), the CRM was initially developed to address drug abuse and alcohol prevention efforts. However, due to its applicability to address other problems, it has been used to assess readiness in other issues "ranging from health and nutritional issues (such as STD, heart disease and diet), to environmental issues (such as water and air quality, litter and recycling) and other social issues (such as poverty, homelessness and violence)" (Thurman, 2003, p. 29).

The CRM application has been successfully used in assessing many communities for their readiness to change while providing strategies within each stage to address the community's issue(s) and to advance to the next stage. "Utilizing anchor rating statements and key informants provides a way of measuring community readiness without incurring the costs of more comprehensive and time-consuming needs assessments" (Donnermeyer, Plested, Edwards, Oetting and Littlethunder, 1997, p. 81). "The model could be readily adapted…[and] it provided a simple method for gauging community readiness relative to this issue (Findholt, 2007, p. 568).

The CRM will be used as a framework to inform this dissertation. Since this dissertation focuses on the prediction of readiness of churches to engage in health promotion programming, this research will focus primarily on the readiness assessment phase of the CRM. As a part of the CRM, key informant semi-structured interviews will be conducted. Though the CRM has six dimensions of readiness, the "resources related to the issue" dimension is more specific to this dissertation. It focuses on the availability of people, time, money, space, etc. to assess readiness for a community. These elements are synonymous with the infrastructure variables examined in this study. The development of the interview guide will be influenced by this CRM dimension along with the review of the literature and recommendations from mentoring researchers.

Using the CRM as a guide, the concept of scoring will be applied to the collected data to assess the level of readiness of the churches. Since the main intent of this research is to predict and determine readiness of churches to engage in health promotion programming, the assessment phase will only be used and applied to this research. The second phase of the CRM, application/mobilization, is expected to be implemented in a follow-up study to develop and test a training program to improve the ability of churches to act as change agents for health.

CHAPTER 3: METHODOLOGY
"THE HEALING STATION TREATMENT"

As previously stated, the objective of this study was to create a survey to predict the readiness of the AA church to engage in health promotion programming by examining the relationship between church infrastructure (physical structure, personnel, funding, and social/cultural support) and readiness to engage in health promotion programming. Hence, the overall research question is as follows: What is the relationship between the infrastructure of AA churches and their readiness to engage in health promotion programming within the Midwest and South regions of the United States? This study involved two phases and locations. Phase1 included qualitative data collection while phase 2 included quantitative data collection. Data collection took place within both Illinois (IL) and North Carolina (NC).

LOCATION OF THE STUDY

The two locations of this study were unique to this dissertation. Illinois was chosen because of its proximal convenience to the researcher's university. Also, the researcher has previously facilitated and participated in faith-based health promotion activities within this area. According to the US Census Bureau (2001), the state of Illinois has a population of 12,419,293 with 49% being male and 51% being female. The median age is 35 years old. The population is composed of 73.5% White, 15.1% African American, 0.2% American Indian and Alaska Native, 3.4% Asian, 5.8% other and 1.9% mixed race. Twenty-eight percent of residents aged 25 years and older completed high school, 17% earned a bachelor's degree and 10% attained a graduate or professional degree. Fifty-four percent of the population aged 15 years and older is married, but separated. Sixty-one percent of the population aged 16 years and older is employed (excluding armed forces). Of those working, 34% are employed by management, professional, and related occupations, followed by 27% in sales and office occupations and 16% in production,

transportation, and material moving occupations. The median household income is $46,590 with 8% of families and 11% of individuals living in poverty.

The second location, North Carolina, was chosen because of the prominence of faith-based research conducted within this state. Also, mentors for the researcher were also conducting similar studies within North Carolina. North Carolina has a population of 8,049,313 with 49% being male and 51% being female according to the US Census Bureau (2001). The median age is 35 years old. The population is composed of 72.1% White, 21.6% African American, 1.2% American Indian and Alaska Native, 1.4% Asian, 2.3% other, and 1.3% mixed race. Of the population 25 years and older, 28% completed high school, 15% earned a bachelor's degree and 7% acquired a graduate or professional degree. The majority of the population aged 15 years and older is married, but separated (56%). Sixty-one percent of the population aged 16 years and older is employed (excluding armed forces). Of those with jobs, 31% are employed by management, professional, and related occupations, 25% are in sales and office occupations and 19% are employed in production, transportation, and material moving occupations. The median household income is $39,184 with 9% of families and 12% of individuals living in poverty.

VARIABLES

This study sought to find an association between the AA church infrastructure and readiness to engage in health promotion programming. The independent variable, church infrastructure, was comprised of physical structure, personnel, funding, and social/cultural support. The dependent variable consisted of frequency of health promotion programming or health activities. These variables would then be used to predict readiness of the church to engage in these programs. Other variables provided descriptions of the interviewees (e.g. education level) and churches (e.g. church size).

STUDY DESIGN

This research study was explorative in nature and utilized a mixed-method design to collect cross-sectional data separated into two phases. Phase 1 employed the qualitative approach to collect data from key informant interviews with pastors, health leaders, and congregants. Phase 2 used the quantitative approach to collect survey data from churches and to further refine the survey.

Phase One

Sample and Recruitment

The sample for phase 1 consisted of individuals who were African American pastors, health leaders and congregants that have participated in their church's health programming. It was the goal of the study to collect qualitative data from 36 individuals including 12 pastors, 12 health leaders, 12 congregants within Phase 1. Each pastor, health leader and congregant attended the same church (three people from each church; 12 churches total) and all interviews were conducted separately. The three types of individuals, pastor, health leader and congregant, all play different roles within the church. Therefore, varied responses were expected due to their different roles. Eighteen individuals were from Illinois and eighteen from North Carolina. The rationale for the number of participants to be interviewed was influenced by sample sizes seen in other studies that employed the qualitative approach (Campbell et al, 2000; Thurman et al, 2003; Findholt, 2007; Donnermeyer et al, 1997).

Recruitment for phase 1 used the criterion and snowball sampling methods. Key informant interviewees was recruited from churches that engage(d) in health programming in which the researcher has had previous relationships and/or past involvement. Key informant interviewees were also recruited from churches in which the investigator was affiliated through

collaborations with other researchers. Those that participated was also asked to refer individuals

from other churches that engage(d) in health promotion activities. Additionally, interviewees

that met the following criteria were recruited: AA, attending a Protestant predominantly AA

church, church location was either in IL or NC, and church engage(d) in health promotion

activities. Both male and female participants were recruited.

Key Informant Interview Guide

Within Phase 1, the instrument that guided the data collection process was the key

informant interview guide (see Appendix A). The CRM was used to inform the development of

this interview guide. The guide contained questions that were influenced by the 'resources for

prevention efforts' dimension of the CRM in which the researcher tailored to the AA church

resources related to engaging in health promotion programming. In addition to the CRM, the

interview guide was also constructed by exploring previously published literature on faith-based

health promotion interventions in which key factors within AA churches were identified that

may have impacted program implementation and outcomes. Literature summarizing attributes of

churches that have been shown to influence health promotion programs was also explored.

Phone interviews were conducted with accessible lead authors of key articles to glean additional

insight.

The aforementioned steps helped establish a general direction of questioning for the

interviews. The responses of the interviewee were then used to help shape subsequent questions

that followed. At the conclusion of the interviews, it was expected that the information gained

would help confirm and/or identify additional key attributes that facilitate or hinder health

promotion activities, specific to church infrastructure.

To ensure the credibility or validity of the data collected from the key informant interviews for the development of the survey, participant checks were conducted. To elaborate, interview data collected was formulated into a questionnaire format (for the purposes of collecting quantitative data). The researcher returned to the interviewed participants-the pastors, health leaders and congregants-and asked them to check the questionnaire to make sure it was representative of the information they provided during their interview and to assure that the researcher's interpretations reflected the interviewee's meanings. Interviewees discussed whether the survey items were clear, relevant and inclusive of major concepts suggested during the interview. They also noted if the items were written in a manner in which respondents would be able to clearly understand. Revisions were made to the questionnaire per the interviewees' recommendations. The survey was then pilot tested among the interviewees who provided comments, edits and suggestions regarding the facilitation and completion of the survey. Upon their review, revisions were made again to reflect their suggestions.

To establish dependability or reliability, an audit trail of research activities, emerging themes, categories, and special effects on data collection and data analysis was kept. The researcher's advisor examined the audit trail and provided special recommendations to ensure reliability.

Data Collection and Procedures

Key informant interviews, which lasted approximately 1 hour, were conducted in person, on a one-on-one format, and guided by the key informant guide. The interviews took place at the participants' church or a convenient location for both the participant and researcher. After participants were consented, interviews were recorded with a digital recorder. At the completion of the interview, each participant received a $25 incentive check.

Data Analysis

To analyze the qualitative data collected within phase 1, the digitally recorded interviews were downloaded into the computer. The researcher transcribed, reviewed, coded and categorized the data into themes. Afterward, concept mapping was employed to establish plausible relationships between concepts. Concepts retrieved from the interviews relating to infrastructure was examined to determine their relationship with readiness and graphically mapped on paper. Those concepts that were related were included in the survey along with information collected from the literature review and author interviews of key manuscripts.

Phase Two

Sample and Recruitment

The sample for phase 2 consisted of predominately AA Protestant churches that engage(d) in health programming. The churches were of various congregation sizes and consisted of nondenomination or denomination churches including the historical AA denominations, namely Church of God in Christ (COGIC), National Baptist Convention of America, Inc. (NBCA), National Baptist Convention, USA, Inc (NBC), Progressive National Baptist Convention (PNBC), Christian Methodist Episcopal (CME), African Methodist Episcopal (AME) and African Methodist Episcopal Zion (AME Zion). It was the goal of the study to collect quantitative data from 100 churches: 50 churches in IL and 50 churches in NC. The rationale for the sample size was influenced by budgetary constraints.

Recruitment of the churches within phase 2 used the criterion and snowballing sampling methods. Churches were recruited from the AA religious community which included direct contact with churches, religious leaders' gatherings (i.e. ministerial alliance meetings), conferences (e.g., conference mailing list), church networks, etc. They also were recruited using

existing lists of AA churches. A letter was sent to churches explaining the purpose of the study.

A follow-up phone call was made to determine interest and availability to participate. To

participate, the church must have met the following criteria: predominately AA Protestant

church, church located in IL or NC, and engage(d) in health promotion activities.   Upon

determining eligibility and depending upon current enrollment of churches, the prospective

church was asked to refer other churches that facilitate(d) health activities, thus using the

snowballing method.

Survey Instrument

Within Phase 2, the instrument used to guide the data collection process was a survey.

The survey was constructed by utilizing the data collected from the literature review, author

interviews and key informant interviews to create the questionnaire. After the interviewees

reviewed and provided recommendations for the survey, members of the dissertation committee

also examined the questionnaire. They assessed question stems, response formats, readability of

the instrument and survey item relevance. Items for revision were identified, discussed and

modified.

The final version of the survey included a series of questions related to infrastructure,

including physical structure, personnel, funding, and social/cultural support, health promotion

programming, and church characteristics (see Appendix B). The instrument was designed to

assess the amount of church infrastructure, frequency of health activities and predict the

readiness of a church to engage in health promotion programming.

To check for validity of the survey, construct validity was used. Within this method, it

was hypothesized that the measures of infrastructure would determine the frequency of

programming and predict the readiness of churches to engage in health promotion. These

measures were analyzed to determine the level of correlation between these variables consequently assessing the validity of the instrument.

To ensure reliability of the survey instrument, internal consistency and test-retest reliability were employed. For internal consistency, questions that were similar and intended to measure the same concept were grouped together in the survey. After responses were collected, a correlation between the questions was conducted to determine the degree to which the questions measured the same construct. In regards to test-retest reliability, this method was used to measure temporal stability of the survey. In other words, this type of reliability assessed if the survey consistently collected the same data or information after multiple administrations.

Data Collection and Procedures

Surveys, constructed from qualitative data collected in phase 1, along with informed consents, were mailed/e-mailed to 217 churches (119 in IL and 98 in NC) that engage(d) in health promotion that resulted in a response rate of 50%. Churches that participated in the development of the survey (e.g. churches in which key informant interviewees attended) were not eligible and did not participate in phase 2. The survey was completed by a person who was knowledgeable about his/her church's health programming (e.g. pastor, health coordinator, church officer, church staff, etc.). Surveys were either completed online or through mail. Depending on the type of survey, a web link was e-mailed to the participant to complete the online survey or the survey was mailed to participants with a self-addressed stamped envelope to return the completed survey. If a participant did not respond to the survey, the researcher followed-up with a phone call. The web link was e-mailed again or another survey was mailed, if necessary. The researcher followed-up with phone calls and e-mails for up to 5 times before refusal to participate was acknowledged.

Data Analysis

To analyze the quantitative data within phase 2, data collected from the surveys were coded and entered into the PASW (SPSS) 18.0 statistical software program that is used to analyze quantitative data. Frequencies, means, standard deviations, were utilized to present descriptive statistics (e.g. church age) Chi-square was used to explore associations between variables (e.g. frequency of health programs and church membership size). Correlations were employed to determine the strength of association between variables. The one-way analysis of variance (ANOVA) was used to determine whether infrastructure was able to distinguish frequency of health activities and hence predict readiness to engage in health programming.

After analyzing the results of the questionnaire, readiness scores were assigned. Churches received a score according to the total number of infrastructure elements (physical structure, personnel, funding and cultural/social support) present within their church. Therefore, those with more infrastructure in their church received a higher score. Respectively, those with fewer infrastructure received a lower score.

After the readiness score was determined, churches were placed into a stage of readiness according to their score. It was anticipated that churches with more infrastructure and increased health activities would rank higher in the readiness stages. On the other hand, it was also presumed that churches with less infrastructure and decreased health programming would rank lower in the readiness stages. Hence, the researcher would be able to predict the readiness of a church to engage in health promotion programming.

CHAPTER 4: RESULTS
"THE HEALING STATION DIAGNOSIS"

The purpose of this study was to create a survey to predict the readiness of the AA church to engage in health promotion programming by examining the relationship between church infrastructure (physical structure, personnel, funding, and social/cultural support), frequency of health promotion programming and readiness to engage in health promotion programming. This study utilized a mixed-method design to collect cross-sectional data separated into two phases. Phase 1 used qualitative methods consisting of key informant interviews to 1) identify key attributes within African American churches that would facilitate or hinder health promotion activities and 2) inform the development of the survey. Phase 2 used quantitative methods consisting of the administration and further development of the survey that was designed to elicit information from African American churches to determine the presence or absence of infrastructure and its relation to readiness to engage in health promotion programming. As discussed in the literature review, infrastructure was explored due to its continued incorporation within church-based health programs which seemed to be very instrumental in the implementation and success of these programs.

PHASE ONE-QUALITATIVE RESULTS

Description of Sample

The sample within Phase 1 consisted of 36 African Americans who completed key informant interviews (see Table 1). Thirty-three percent were male and 67% were female. The mean age of the sample was 58 years old. Thirty-one percent completed a master's degree, 22% completed high school, 17% completed college, 14% completed a doctoral degree (e.g. Ph.D.), 8% completed a professional degree (e.g. MD, JD, etc), 5% completed trade school, and 3% had

Table 1: Demographic Characteristics of African American Interviewee Participants (n=36)

	n	%
Sex		
Male	12	33
Female	24	67
Age *(Mean)*	58 (30-73 years)	
Highest Grade Level Completed		
Less than 12th grade	1	3
High School	8	22
Trade School	2	5
College	6	17
Master's degree	11	31
Doctoral Degree (e.g. Ph.D.)	5	14
Professional Degree (e.g. MD, JD, etc)	3	8
Employment Status*		
Employed (full time or part-time)	26	72
Self-employed	4	11
Retired	11	31
Church Role		
Pastor	12	33
Health Leader	12	33
Congregant	12	33
Religious Affiliation		
African Methodist Episcopal Zion (AME Zion)	3	8
Christian Methodist Episcopal (CME)	3	8
Church of God in Christ (COGIC)	9	25
National Baptist Convention, USA (NBC)	12	34
Non-denomination	9	25
Location		
Illinois	18	50
North Carolina	18	50

Note: *Total exceeded 100% due to reported multiple statuses.

less than a high school education. The majority of the sample was employed (72%). (The total

percentage of the employment status exceeded 100% due to individuals occupying more than

one status.) The interviewees, recruited from 12 churches (6 in Illinois and 6 in North Carolina),

consisted of 12 pastors, 12 health leaders and 12 congregants. Each pastor, health leader, and congregant was recruited from the same church. The religious affiliations of these individuals were 34% National Baptist Convention, USA (NBC), 25% both Church of God in Christ (COGIC) and Non-denomination, and 8% both African Methodist Episcopal Zion (AME Zion) and Christian Methodist Episcopal (CME).

Data Themes

Key informant interviews were facilitated in-person and on a one-to-one format guided by a key informant guide (see Appendix A). Each interview was digitally recorded and its files transferred to a computer. The information gained from the interviews was then transcribed by the researcher for analysis. To initiate the analytical process, the transcribed notes were reviewed and coded. Using the method of open coding, the notes were coded and categorized according to the topical areas implicated by the interview questions. To identify thematic variables, the researcher used frequency and magnitude of statements along with contextual structures. Consequently, the researcher was able to examine the data, interpret participants' views regarding infrastructure, readiness and health promotion programming and formulate probable relationships between the concepts.

To help formulate plausible relationships, the method of concept mapping was employed. This provided a graphically interpretation of the thematic variables and its relationships to one another. As Figure 1 implies, four variables identified through the literature review and interviews, namely, physical structure, personnel, funding and cultural/social support, were identified as primary components of church total infrastructure that influenced readiness to engage in health promotion programming.

Figure 1. Concept map of the relationship between infrastructure, readiness and health promotion programming

```
                    ┌─────────────────┐
                    │  Total Church   │
                    │ Infrastructure  │
                    └─────────────────┘
         ┌───────────────┼───────────────┐
         │               │               │
┌──────────┐  ┌──────────┐  ┌──────────┐  ┌──────────────┐
│ Physical │  │Personnel │  │ Funding  │  │Cultural/Social│
│Structure │  │          │  │          │  │   Support    │
└──────────┘  └──────────┘  └──────────┘  └──────────────┘
         │         │            │              │
         └─────────┴──────┬─────┴──────────────┘
                    ┌──────────────┐
                    │  Readiness   │
                    └──────────────┘
                          │
                    ┌──────────────────┐
                    │ Health Promotion │
                    │  Programming     │
                    └──────────────────┘
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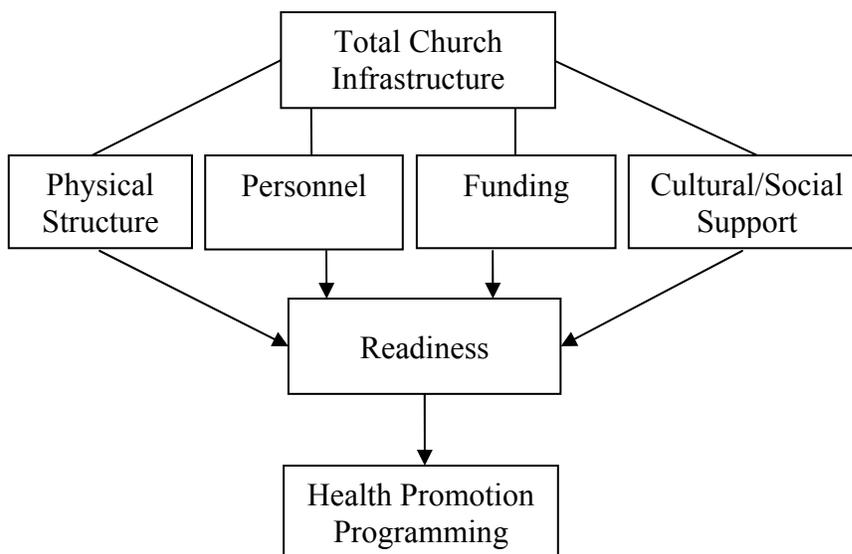
Theme 1: Church role in health engagement in the AA community

"What role, if any, do you think the church has in engaging in health programming within the African American community?"

To initiate the conversation between the researcher and participant, each interview began with the question listed above. Asking this question opened the dialogue with the intent to 1) initiate thinking about the African American church in relation to health programming and 2) allow the interviewee to become comfortable conversing with the interviewer.

The main consensus of interviewees (32 out of 36) noted that the church played a major role in engaging in health programming in the AA community. It was seen as the single most influential institution in the AA community in which the pastor is revered as the leader. Therefore, the church addressing the total well-being of congregants through a holistic approach (mind, body, and spirit) was conveyed as important to address health issues within the community. One participant expressed, "The church teaches that human beings are trichotomous

beings, body, mind, and spirit, and we have a holistic approach to the human being. And so, we are of course, concerned about those things of the body, of the mind and of the spirit. So that means that health education is [a] natural part of that role." The church was also described as the resource center and social hub of the community to gain information, publicize available resources, and receive guidance and support.

Theme 2: Resources to prepare the church to facilitate health promotion

> *"What types of resources do you think are needed in a church to make ready or prepare a church to facilitate health promotion activities?"*

Participants expressed many types of resources in which they felt were needed within a church for preparation to facilitate health promotion activities. Among these resources, funding and personnel were the most prominent responses as being needful to the church. "Definitely the staff and the execution of the actual function would cost money and that would have to be paid for," an interviewee conveyed. Additionally, health materials, supplies, equipment, and facilities (e.g. classrooms) were noted as necessary for the implementation of health activities. Partnerships with organizations, specifically health organizations, were also seen as necessary.

Theme 3: Physical Structure

> *"What types of physical structure do you think is needed in a church to facilitate or run health activities?*

"You got to have space, classroom space, so you know, you can have like didactic presentation by professionals....And then I think you have to have even larger space for like maybe exercise, or demonstrations, I'm thinking, like exercise demonstrations, or you know relaxation kind of techniques, demos things like that. So an open space in addition to maybe small classroom space for smaller groups workshops," exclaimed one participant. Interviewees

listed a variety of physical structures deemed necessary in a church to facilitate health activities. These included classrooms, multi-purpose room/fellowship hall, sanctuary, gym and/or exercise room. These structures were seen as suitable places to hold events such as health fairs, workshops, workout sessions, etc. Outdoor space and/or a parking lot were noted as ideal places to hold events during the warmer months and increase visibility within the community. The kitchen and food pantry were seen as places to facilitate cooking demonstrations and nutrition education sessions. A conference room, office space and nursing station/room were described as useful for meetings, planning sessions as well as for privacy for counseling sessions, health screenings, testing, physical exams, etc.

Theme 4: Personnel

"Do you think having a person, staff or team members to coordinate health activities is necessary for the success of health activities?"

Participants expressed the necessity to have a person or group of individuals to coordinate and/or direct health activities for the success of health promotion programming in the church. One participant shared, "It is definitely necessary because it's a lot of work. Somebody has to be able to be the hub, you know. Somebody has to be able to be coordinate. Somebody has to be able to follow-up, make sure things are getting done, answer questions, be the place for/where people can get the information about what's going on. You have to make sure that paperwork is getting done. So you definitely have to have somebody to do that."

It was noted that it would be ideal for the health coordinator(s) to have health-related knowledge, training or background. However, it was not necessary as long as the coordinator(s) were willing and had a passion to improve health among the congregants. Interviewees also expressed that the coordinator(s) did not necessarily have to be paid since the church was a

volunteer led institution. However, pay would be helpful in sustaining the quality of work and time used to facilitate the programming.

Theme 5: Funding

"Do you think it is necessary to have funding to facilitate health activities?"

Opinions varied among participants regarding the necessity of funding for the facilitation of health programming. Some interviewees believed that funding was not necessary, but helpful for the enhancement and effectiveness of programming. One participant said, "I don't think it's necessary. I think it enhances what you're trying to do. It helps you to reach more people. It helps you to have more resources to get the job done." Another participant declared that "where there is a will, there is a way". Therefore, they believed that health programming could still be implemented through other means without the use of funding. Alternative methods included donated materials (e.g. brochures) and resources in which the church already retains (e.g. volunteers). Therefore, funding was not seen as necessary.

On the contrary, other participants felt that funding was very needful. They communicated that it would be very instrumental in purchasing supplies and equipment, providing stipends or salaries for staff, copying materials to disseminate among congregants and for the overall sustainment of health activities. One participant said, "Definitely the staff and the execution of the actual function would cost money and that would have to be paid." The different types of funding described included church funds (tithes, offerings, etc), fundraisers, grants, participant fees, as well as monetary donations.

Theme 6: Cultural/Social Support (Faith-based approach)

"Do you think it is important to include a faith-based approach to the delivery of health activities?

Cultural/social support elements of the church, also known as a faith-based approach, was seen as very important to include in the delivery of health programming. A participant declared that "we're a Christian church so it's going to be something related to spirituality and to health issues." The cultural/social support elements suggested by participants included prayer, scriptures and testimonies related to health; gospel music (e.g. played during aerobics); health and wellness information displayed around the church, passed out and spoken over the pulpit; health and wellness information presented from a "Christian point-of-view"; support and participation of the pastor in health activities; sermons with health messages; collaboration of two or more ministries and/or churches to sponsor activities; having a church service specifically focusing on health and/or healing; using someone as a role model to promote good health and wellness habits such as a cancer survivor, pastor, celebrity, etc.

Overall, Phase 1 included interviews of pastors, health leaders and congregants who provided useful information to inform the development of the survey to be used in Phase 2. All interviewees openly shared information regarding the infrastructure (physical structure, personnel, funding and cultural/social support) of African American churches deemed useful for the facilitation of health programming within the African American community. The data were then translated into survey items to be used in the next phase. Phase 2 describes the implementation and further development of the survey through the use of quantitative methods.

PHASE TWO-QUANTITATIVE RESULTS

Description of Sample

Phase 2 consisted of a sample of 108 predominately African American churches where 50% were located in Illinois and 50% in North Carolina (see Table 2). The religious affiliations of the churches consisted of 28% Baptist, 6% Methodist, 51% Pentecostal, 12% Non-

Table 2: Demographic Characteristics of African American Churches (n=108)

	n	%		n	%
Religious Affiliation			Church Age		
Baptist	30	28	1-20 years	31	29
Methodist	7	6	21-40 years	20	18
Pentecostal	55	51	41-60 years	17	16
Non-denomination	13	12	61-80 years	13	12
Other	3	3	81-100 years	9	8
			More than 100 years	12	17
Congregational Predominate Gender			Church Location		
Male	1	1	Illinois	54	50
Female	82	76	North Carolina	54	50
Equal ratio of both male and female	25	23			
Church Residential Main Composition			Church Community		
Community resident (1-3 miles of church)	10	9	Urban	74	68
Non-community resident	22	21	Suburban	19	18
Mixture of both community and non-community residents	76	70	Rural	15	14
Predominate age of congregants			Church Ownership		
Under 18 years	3	3	Rents	17	16
18-34 years	16	16	Pays on a mortgage	39	37
35-54 years	56	54	Owns	49	47
55-74 years	28	27			
Church Weekly Attendance			Church Membership		
1-75	43	40	1-75	27	25
76-150	21	20	76-150	24	23
151-225	12	11	151-225	8	7
226-450	10	9	226-450	16	15
450-699	4	4	450-699	9	9
700-999	8	7	700-999	2	2
1,000-2,000	5	5	1,000-2,000	5	5
More than 2,000	4	4	More than 2,000	15	14

denomination and 3% Other. The Baptist affiliation consisted of National Baptist Convention, USA (NBC), National Baptist Convention of America (NBCA), Progressive National Baptist Convention (PNBC), and non-specified Baptist. The Methodist affiliation was comprised of African Methodist Episcopal Zion (AME Zion) and United Methodist. The Pentecostal affiliation included Church of God in Christ (COGIC) and non-specified Pentecostal/Holiness.

The other religious affiliations were composed of the Evangelical Lutheran Church of America, Presbyterian, and United Church of Christ.

Twenty nine percent of these churches were between 1-20 years old, 18% were 21-40 years old, 17% were more than 100 years, 16% were 41-60 years old, 12% were 61-80 years old and 8% were 81-100 years old (see Table 2). Most churches had a membership consisting of 1-75 (25%), 76-150 (23%) 226-450 (15%) and more than 2,000 (14%). Most churches had a weekly attendance of 1-75 (40%), 76-150 (20%), 151-225 (11%) and 226-450 (9%). Forty-seven percent of churches owned their edifice while 37% were paying a mortgage on its property and 16% were renting. The majority of churches were located in an urban community (68%). Seventy percent of churches had a membership consisting mainly of a mixture of both community (living within 1-3 miles of the church) and non-community residents. The congregations were primarily comprised of females (76%), with 54% of the congregants being between the ages of 35-54 years old.

Survey Development Analysis

After administering the survey and collecting data from 108 churches, the refinement process of the survey began. To further develop the survey, a series of analysis were conducted to assess the reliability and validity of the survey. The first analyses conducted were point-biserial correlations also known as item-total correlations, a measure of reliability. These analyses are used to determine the usefulness and consistency of an individual item in relation to the rest of the scale. More specifically, a correlation is measured between the score of a specific item and the total score of the remaining items that make up that scale. Depending on the correlation, an individual item may be deleted or maintained within that scale. The second test used to assess reliability was the Cronbach's alpha, a measure of internal consistency. The third

analysis was the test-retest analysis conducted to measure the temporal stability or consistency of the survey instrument over time. Finally, analysis of variance, (ANOVA), was used to examine the validity of the survey.

The survey used an overall scale, total infrastructure, to measure the amount of infrastructure within the churches. The total infrastructure scale was made up of 4 individual subscales. They included the following: physical structure subscale, personnel subscale, funding subscale and cultural/social support subscale. Each scale is further described in the following analysis.

Reliability Analysis

Point-Biserial Correlations

The first point-biserial correlation assessed the correlation between an item score of the physical structure subscale and the total score of the remaining items of the physical structure subscale. Within the first run of this analysis, the "sanctuary" item fell below .15 which implied a "poor" item. All churches possessed a sanctuary, in turn, this item would not prove to be useful in the physical structure subscale. Hence, the "sanctuary" item was deleted from the scale. From the lowest correlation of .34 for the "parking lot/outdoor area" item to the highest correlation of .59 for the "classroom(s)" item, all items were above .25 (see Table 3) which were considered "good" items. They were statistically significant ($p<.01$) and hence maintained for the physical structure subscale.

The second point-biserial correlation tested the correlation between an item score of the funding subscale and the total score of the remaining items of the funding subscale. The lowest correlation was .30 for the "funding from national denominational office" item (see Table 4). The highest correlation was .70 for the "monetary donations from businesses, community

Table 3: Point-Biserial Correlations for Physical Structure Subscale (n=106)

	Total Sum of Physical Structure
Classroom(s)	.59
Kitchen	.49
Fellowship hall/multipurpose room	.53
Gym	.43
Exercise room	.43
Office space(s)	.41
Conference/meeting room(s)	.74
Parking lot/outdoor area	.34
Nurse/health room	.57
Food pantry	.46

Note: All correlations are significant at p<.01.

Table 4: Point-Biserial Correlations for Funding Subscale (n=89)

	Total Sum of Funding
Church funds *(e.g. tithe, offerings, church budget, etc.)*	.69
Fundraisers *(e.g. selling fruit, etc.)*	.40
Grants *(e.g. private, government, etc.)*	.55
Monetary donations from businesses, community organizations, individuals, etc.	.70
Funding from national denominational office	.30
Donated services and/or materials *(e.g. brochures, printing, use of staff, etc.)*	.50
Participant fees/dues, etc.	.44

Note: All correlations are significant at p<.01.

organizations individuals, etc." item. All funding items were above .25, statistically significant (p<.01), and considered "good" items for the funding scale and hence maintained.

The third point-biserial correlation examined the correlation between the score of an item of the cultural/social support subscale (also known as the faith-based approach subscale) and the total score of the remaining items of the cultural/social support subscale. After running the

analysis of this subscale, the "planting a church garden where congregants can pick fresh vegetables" item had a value of .17 (see Table 5). Though this item was much lower than the other items, it was not considered a "poor" item, but "marginal" and thus could still benefit the subscale. Therefore, it was maintained. All other items ranging from .47 for the "co-sponsoring with any other church(es) to deliver health and wellness activities/programs" item to .75 for both "using church-tailored health messages/information on bulletin boards, newsletters, handouts, e-mails, etc." item and "scheduling health and wellness activities around other church functions" item were considered "good" items, statistically significant ($p<.01$), and maintained within the subscale.

A point-biserial correlation was not conducted for the personnel subscale because the scale consisted of 1 item. Hence, the correlation would be a perfect 1.00 correlation. However, this subscale is a component of the total infrastructure scale and is still included within the point-biserial correlation between the subscales and the total infrastructure scale.

The fifth point-biserial correlation assessed the correlation between the score of a subscale of the total infrastructure scale and the total score of the remaining subscales that make up the total infrastructure scale. All subscales, physical structure, personnel, funding and cultural/social support, were considered "good" items with correlations of .67, .72, .63, and .93 respectively (see Table 6). They also were statistically significant ($p<.01$) and maintained.

Cronbach's Alpha

The Cronbach's alpha was used to test the internal consistency of the items of the physical structure, funding, cultural/social support and total infrastructure scales. After running the Cronbach's alpha analysis for the physical structure subscale, 2 more items were deleted with a total of 8 items remaining. This resulted in a Cronbach's alpha coefficient of .70 (see Table 7).

Table 5: Point-Biserial Correlations for Cultural/Social Support Subscale (n=99)

	Total Sum of Cultural/ Social Support
Including <u>prayer related to health</u> within health and wellness activities/programs	.70*
Using <u>health scriptures</u> within health and wellness activities/programs	.72*
Using <u>gospel music</u> within health and wellness activities/programs	.58*
Including <u>testimonies related to health</u> within health and wellness activities/programs and/or worship services	.67*
Health and wellness information <u>displayed</u> around the church *(e.g. bulletin board, health and wellness table/corner, flyers, posters, etc.)*	.66*
Health and wellness information <u>given out</u> *(e.g. within church bulletin, newsletter, tv/radio/newspaper ads, e-mails, church website, etc.)*	.69*
Health and wellness information given <u>over/from pulpit</u> during service *(e.g. church announcements, sermon, etc.)*	.68*
Pastor supporting health and wellness activities	.61*
Church leadership <u>participating in</u> health and wellness activities *(e.g. pastor, deacon, trustee, auxiliary head, etc.)*	.67*
Using church-tailored health messages/information on bulletin boards, newsletters, handouts, e-mails, etc. *(e.g. including church symbol/slogan in health literature, providing health information from a Christian point of view, etc.)*	.75*
Scheduling health and wellness activities around other church functions	.75*
Two or more ministries within your church working together to deliver health and wellness events	.67*
Co-sponsoring with any other church(es) to deliver health and wellness activities/programs	.47*
Congregants participating in the planning, coordination and/or implementation of the health and wellness activity/program	.58*
Training congregants without previous health knowledge to deliver health and wellness activities/programs *(e.g. lay health advisors)*	.56*
Using a buddy/support system (similar to a prayer partner)	.57*
Having a church service specifically focusing on health and/or healing	.62*
Planting a church garden where congregants can pick fresh vegetables	.17**
Giving religious-based incentives *(e.g. bibles, bible covers, church t-shirts, etc.)* at health and wellness events	.54*
Using someone as a role model to promote good health and wellness habits *(e.g. pastor, cancer survivor, celebrity, etc.)*	.64*

<u>Note</u>: *Correlation is significant at $p<.01$, ** Not significant.

Table 6: Point-Biserial Correlations between Total Infrastructure Scale and Physical Structure, Personnel, Funding, and Cultural/Social Support Subscales (n=84)

	Total Infrastructure
Physical Structure	.67
Personnel	.72
Funding	.63
Cultural/Social Support	.93

Note: All correlations are significant at p<.01.

Table 7: Cronbach's Alpha Reliability Analysis of Church Infrastructure Scales

	M	SD	Cronbach's Alpha	N of Items
Physical Structure Subscale*	4.91	1.6	.70	8
Funding Subscale**	1.86	1.11	.57	4
Cultural/Social Support Subscale***	10.85	4.75	.92	16
Total Infrastructure Scale****	24.05	8.11	.60	4

Note: *n=108, **n=102, ***n=99, ****n=84. Personnel category was excluded b/c it only used 1 item to measure personnel.

The funding subscale also had items deleted after the Cronbach's alpha analysis. Three items were deleted that resulted in a total of 4 items remaining with an alpha coefficient of .57. The cultural/social support subscale initially had 20 items. However, after the analysis, 4 items were deleted. This resulted in a Cronbach's alpha coefficient of .92. The total infrastructure scale had a total of 4 items with a Cronbach's alpha coefficient of .60.

Test-retest Reliability

The test-retest reliability analysis was conducted with 12% of the sample that retook the same survey resulting in 13 surveys being completed. As reported in Table 8, the survey is consistent over time with a perfect measure of 1.00 for the physical structure and personnel subscales along with the total infrastructure scale. The funding and cultural support subscales

Table 8: Test-Retest Reliability Analysis of Church Infrastructure Scales (n=13)

Test	Physical Structure	Personnel	Funding	Cultural/Social Support	Total Infrastructure
			Retest		
Physical Structure	1.00				
Personnel		1.00			
Funding			.986		
Cultural/Social Support				.997	
Total Infrastructure					1.00

Note: All correlations are significant at p<.01.

also had high measures of temporal stability suggesting that these scales have strong reliability.

Validity Analysis

Analysis of Variance (ANOVA)

After conducting analyses to measure the reliability of the survey, the validity of the survey was measured using ANOVA. The survey was designed to measure the amount of infrastructure (independent variable) and frequency of health programming (dependent variable) to predict the readiness of the church. The frequency of health programming was divided into three groups, namely, inactive, active and very active (see Table 9). Churches that facilitated programming every 6 months, once a year or none at all were considered inactive. They represented 36% of the sample. Churches that engaged in health programming monthly, every other month or quarterly were considered active. This group represented 32% of the sample size. Churches that conducted programming daily, weekly or twice a month were considered very active. These churches also constituted 32% of the sample. Thus, to measure the validity of the

Table 9: Church Health Programming Activity Groups (n=108)

	n	%
Inactive	39	36
Active	35	32
Very Active	34	32

survey, ANOVA was conducted to determine if the instrument was able to distinguish group differences.

A one-way ANOVA was computed comparing the amount of church infrastructure and activity groups. It included a comparison of physical structure and activity groups, personnel and activity groups, funding and activity groups, cultural/social support and activity groups, and total infrastructure and activity groups. Table 10 describes the results. A significant difference was found among various activity levels within each category: physical structure $(F(2,105)=18.21$, $p<.01$, personnel $(F(2,105)=18.20$, $p<.01$, funding $(F(2,105)=8.33$, $p<.01$, cultural/social support $(F(2,105)=41.17$, $p<.01$, and total infrastructure $(F(2,105)=45.51$, $p<.01$.

Table 10: Means, Standard Deviations, and One-Way Analyses of Variance (ANOVA) for Activity Groups and Church Infrastructure

	Inactive (n=39)		Active (n=35)		Very Active (n=34)		ANOVA
	M	SD	M	SD	M	SD	F(2,105)
Physical Structure	7.95	3.03	9.83	2.76	11.94	2.63	18.21*
Personnel	5.03	5.41	10.17	4.98	11.53	4.15	18.20*
Funding	5.03	3.64	8.34	4.27	8.59	4.74	8.33*
Cultural/Social Support	6.92	4.86	12.69	2.42	13.65	2.20	41.17*
Total Infrastructure	24.92	10.73	41.03	9.74	45.71	8.84	45.51*

*p<.01.

Tukey's *HSD* was used to determine the nature of the differences between activity levels. Within the physical structure category, the analysis revealed that all 3 groups differed significantly. Churches that were inactive (m=7.95, sd=3.03) had less physical structure than churches that were active (m=9.83, sd=2.76), p<.01 and churches that were very active (m=11.94, sd=2.63), p<.01. Please see Table 10 for a comparison of means and standard

deviations. Churches that were active (m=9.83, sd=2.76) had less physical structure than churches that were very active (m=11.94, sd=2.63), p<.01.

Within the personnel category, the analysis demonstrated that only 2 groups differed significantly. Churches who were inactive (m=5.03, sd=5.41) had fewer personnel than churches who were active (m=10.17, sd=4.98), p<.01 and churches that were very active (m=11.53, sd=4.15), p<.01. Churches that were very active (m=11.53, sd=4.15) did not differ significantly from churches that were active (m=10.17, sd=4.98), p>.05.

Within the funding category, the analysis showed that only 2 groups differed significantly. Churches who were inactive (m=5.03, sd=3.64) used fewer funding sources than churches who were active (m=8.34, sd=4.27), p<.01 and churches that were very active (m=8.59, sd=4.74), p<.01. Churches that were very active (m=8.59, sd=4.74) did not differ significantly from churches that were active (m=8.34, sd=4.27), p>.05.

Within the cultural/social support category, the analysis illustrated that only 2 groups differed significantly. Churches who were inactive (m=6.92, sd=4.86) used less cultural/social support elements within their health activities than churches who were active (m=12.69, sd=2.42), p<.01 and churches that were very active (m=13.65, sd=2.20), p<.01. Churches that were very active (m=13.65, sd=2.20) did not differ significantly from churches that were active (m=12.69, sd=2.42), p>.05.

Within the total infrastructure category, the analysis revealed that again only 2 groups differed significantly. Churches who were inactive (m=24.92, sd=10.73) had less total infrastructure than churches who were active (m=41.03, sd=9.74), p<.01 and churches that were very active (m=45.71, sd=8.84), p<.01. Churches that were very active (m=45.71, sd=8.84) did not differ significantly from churches that were active (m=41.03, sd=9.74), p>.05.

Overall, ANOVA provided validity evidence that this survey instrument was sensitive enough to distinguish group differences. Though most categories only contained 2 groups that differed significantly, a trend of increased infrastructure, denoted by mean scores, can be seen across all groups as activity levels increased. This finding provides additional information as supporting evidence that churches with more infrastructure will be more active than churches with less infrastructure. For this reason, it is important to consider mean scores in addition to significance.

<u>Independent Samples T-test</u>

Significant differences were found between inactive and active churches along with inactive and very active churches. The active and very active churches were not significantly different between one another across all infrastructure categories except within the physical structure category. Therefore, both active and very active groups were compressed to be a combined active group and then compared to the inactive group. To confirm and support my first finding of group differences, the relationship between the new two groups, inactive and combined active, was then examined through the use of another statistical test, the independent samples t-test.

An independent samples t-test comparing the physical structure mean scores of inactive and combined active churches found a significant difference between the means of the two groups ($t(106)=-4.97$, $p<.01$) (see Table 11). The physical structure mean score of inactive churches ($m=7.95$, $sd=3.03$) was significantly lower than the physical structure mean score of combined active churches ($m=10.87$, $sd=2.88$). When the personnel mean score of inactive and combined active churches were compared, a significant difference between the means of the two groups were found ($t(106)=-5.91$, $p<.01$). The personnel mean score of inactive churches

Table 11: Group Differences for Church Infrastructure Between Inactive and Active Churches

	Inactive (n=39)		Combined Active (n=69)			
	M	SD	M	SD	df	t
Physical Structure	7.95	3.03	10.87	2.88	106	-4.97*
Personnel	5.03	5.41	10.84	4.61	106	-5.91*
Funding	5.03	3.64	8.46	4.47	106	-4.09*
Cultural/Social Support	6.92	4.86	13.16	2.35	48	-7.54*
Total Infrastructure	24.92	10.73	43.33	9.53	106	-9.21*

*$p<.01$.

(m=5.03, sd=5.41) was significantly lower than the personnel mean score of combined active churches (m=10.84, sd=4.61). A significant difference was also found among funding mean scores between inactive and combined active churches (t(106)=-4.09, p<.01). The funding mean score of inactive churches (m=5.03, sd=3.64) was significantly lower than the funding mean score of combined active churches (m=8.46, sd=4.47). The cultural/social support mean scores between inactive and combined active churches were significantly different (t(48)=-7.54, p<.01). The cultural/social support mean score of inactive churches (m=6.92, sd=4.86) was significantly lower than the cultural/social support mean score of combined active churches (m=13.16, sd=2.35). A significant difference was found among total infrastructure mean scores of inactive and combined active churches (t(106)=-9.21, p<.01). The total infrastructure mean score of inactive churches (m=24.92, sd=10.73) was significantly lower than the total infrastructure mean score of combined active churches (m=43.33, sd=9.53).

The element that makes the difference between activity groups is the amount of infrastructure within churches. In general, as the amount of infrastructure increases, the activity level also increases. When looking at the original three inactive, active and very active groups, churches with 0 physical structures (excluding a sanctuary) tend to be inactive, churches with 3 physical structures tend to be active, and churches with 8 physical structures tend to be very

active (see Table 12). In regards to personnel, churches with 0 personnel tend to be inactive, churches with 5-6 personnel tend to be active and churches with 7 or more personnel tend to be very active. In terms of funding, churches with 0 funding sources tend to be inactive, churches with 3 funding sources tend to be active and churches with 4 funding sources tend to be very active. In the same regard, churches with 0 cultural/social support elements tend to be inactive, churches with 9 cultural/social support elements tend to be active and churches with 16 cultural/social support elements tend to be very active.

This same trend is also seen between the two inactive and combined active groups. As Table 12 displays, churches with 0 physical structures tend to be inactive while churches with 8 physical structures tend to be combined active. Churches with 0 personnel tend to be inactive while churches with 7 or more personnel tend to be combined active. Churches with 0 funding sources tend to be inactive while churches with 4 funding sources tend to be combined active. Churches with 0 cultural/social support elements tend to be inactive while churches with 16 cultural/social support elements tend to be combined active.

While observing the pattern of increased activity levels with increased infrastructure, it is helpful to note the type of infrastructure within the more active churches. Table 13 describes the type of infrastructure present within churches according to activity level. Among the original inactive, active and very active groups, churches that have more of specific infrastructures tend to be very active churches. To illustrate, among churches that have an exercise room, 67% tend to be very active. Of the churches that have a nurse/health room, 59% tend to be very active. Of the churches that have 7 or more personnel, 54% tend to be very active churches. Among the churches that have grants and donated services as funding sources, 52% and 36% respectively, tend to be very active churches. Of the churches that use cultural/social support

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Table 12: Amount of Infrastructure and Activity Groups (n=108)

	Inactive	Active	Very Active	Inactive	Combined Active
		%			%
Physical Structure*					
0	100	0	0	100	0
1	100	0	0	100	0
2	60	20	20	60	40
3	53	47	0	53	47
4	58	25	17	58	42
5	41	34	25	41	59
6	19	33	48	18	82
7	0	44	56	0	100
8	0	0	100	0	100
Personnel					
0	82	18	0	82	18
1	50	17	33	50	50
2-4	30	31	39	31	69
5-6	22	56	22	22	78
7 or more	11	35	54	11	89
Funding					
0	69	23	8	69	31
1	45	23	32	45	55
2	34	29	37	34	66
3	19	75	6	19	81
4	0	20	80	0	100
Cultural/Social Support					
0	100	0	0	100	0
1	100	0	0	100	0
2	100	0	0	100	0
3	100	0	0	100	0
4	100	0	0	100	0
5	100	0	0	100	0
6	100	0	0	100	0
7	75	25	0	75	25
8	83	0	17	83	17
9	14	57	29	14	86
10	0	67	33	0	100
11	37	50	13	37	63
12	30	40	30	30	70
13	9	45	46	9	91
14	21	36	43	21	79
15	12	38	50	12	88
16	0	36	64	0	100

Note: *All churches had a sanctuary so it was removed from this scale

Table 13: Activity Groups and Type of Infrastructure Present within Churches (n=108)

	Inactive	Active	Very Active	Inactive	Combined Active
		%			%
Physical Structure					
Exercise room	0	33	67	0	100
Nurse/health room	13	28	59	13	87
Gym	26	27	47	27	73
Conference/meeting room(s)	27	31	42	27	73
Classroom(s)	30	34	36	30	70
Fellowship hall/ multipurpose room	31	33	36	32	68
Kitchen	32	35	33	32	68
Office Space(s)	35	32	33	35	65
Personnel					
7 or more	11	35	54	11	89
5-6	22	56	22	22	78
2-4	30	31	39	31	69
1	50	17	33	50	50
0	82	18	0	82	18
Funding					
Grants	10	38	52	10	90
Monetary donations from business, etc.	12	44	44	12	88
Donated Services	30	34	36	30	70
Church funds	29	39	32	29	71
Cultural/Social Support					
Gospel music	22	31	47	22	78
Buddy/support system	18	38	44	18	82
Health and/or healing service	17	39	44	17	83
Role model to promote health	21	36	43	21	79
Church-tailored health information	14	44	42	14	86
Scheduling activities around other church functions	19	39	42	19	81
Congregants participating in planning, coordination, implementation of events	25	34	41	25	75
Health information given out	18	42	40	18	82
Health scriptures	22	38	40	22	78
Health information displayed	22	39	39	22	78
Two or more ministries working together to deliver events	20	41	39	20	80
Health information given from pulpit	26	36	38	26	74
Health testimonies	26	37	37	26	74
Health prayer	25	39	36	25	75
Church leadership participating in activities	28	37	35	28	72
Pastor supporting activities	31	35	34	32	68

elements consisting of gospel music, a buddy/support system, and a health and/or healing service, the majority of the churches tend to be very active (47%, 44%, 44% respectively).

As anticipated, the distinction between the inactive and combined active groups appears that there is an even greater difference within the prevalence of particular types of infrastructure between the two groups. The combined active churches seem to have a higher prevalence of particular types of infrastructure. For example, of the churches that have an exercise room, 100% tend to be combined active churches (see Table 13). Among the churches that have a nurse/health room, 87% tend to be combined active. Of the churches that have 7 or more personnel, 89% tend to be combined active churches. Among the churches that have grants, monetary donations, donated services and church funds as a funding source, 90%, 88%, 10% and 71% respectively tend to be combined active churches. Of the churches that use cultural/social support elements consisting of gospel music, a buddy/support system and a health and/or healing service 78%, 82%, 83% respectively tend to be combined active.

Readiness Stages

The intent of developing this survey was to predict the readiness of churches to engage in health promotion programming. Hence, after examining the relationship between the number of infrastructure and activity levels, readiness scores were assigned to churches according to their amount of infrastructure. To ensure that physical structure, personnel, funding and cultural/social support subscales were all weighed equally, the subscales were multiplied by a product of 16. The multiplier was determined by the number of items in each subscale. Physical structure was multiplied by 2, both personnel and funding were multiplied by 4, and cultural/social support was multiplied by 1. Therefore, the highest possible score for each subscale was 16. In turn, the total possible score for total infrastructure was 64. The score from each subscale was then added

together for a sum total to represent the readiness score.

After scores were determined, churches were then placed into one of the three readiness stages. Stage 1 was comprised of a readiness score between 0-22 and represents limited infrastructure capacity for health promotion programming. Stage 2 was composed of a readiness score between 23-40 and represents moderate infrastructure capacity for health promotion programming. Stage 3 was made up of a readiness score between 41-64 and represents substantial infrastructure capacity for health promotion programming.

When examining the readiness stages and the three inactive, active and very active groups, Table 14 depicts 95% of inactive churches, 5% of active churches and 0% of very active churches categorized in stage 1. Forty-six percent of inactive churches, 31% of active churches and 23% of very active churches are in listed in stage 2. Four percent of inactive churches, 45% of active churches and 51% of very active churches are classed in stage 3. When considering the two inactive and active groups, 95% of inactive churches and 5% of active churches are categorized in stage 1. Forty-six percent of inactive churches and 54% of active churches are grouped in stage 2. Four percent of inactive churches and 96% of active churches are listed in stage 3.

Table 14: Readiness Stages (n=108)

	Inactive	Active	Very Active	Inactive	Combined Active
	%			%	
Stage 1 Limited infrastructure capacity for health promotion programming	95	5	0	95	5
Stage 2 Moderate infrastructure capacity for health promotion programming	46	31	23	46	54
Stage 3 Substantial infrastructure capacity for health promotion programming	4	45	51	4	96

Church Characteristics

After conducting the reliability and validity analysis of this survey, an examination of the

churches' characteristics was conducted to provide further insight into the churches' health

programming and explore possible moderators for health activity levels. To preface the series of

church infrastructure questions, the survey began with a few questions that related to the African

American (AA) global church (see Appendix B). The first three questions used a likert scale

with "0" representing "No Extent" and "4" representing "Great Extent". Means and standard

deviations were used to compare responses. The mean score to which the AA church could be a

source of health education and health information for the AA community was 3.71 (see Table

15). The mean score for which the AA church is perceived to use a holistic approach (mind,

body, spirit) to address health issues was 2.45. The mean score for the extent in which the AA

church could improve the health of AAs was 3.54. The last question used a likert scale with "0"

representing "Unimportant" and "4" representing "Very important". The mean score for the

importance of the role of the AA church to engage in health and wellness programming within

the AA community was 3.81.

Table 15: Means of African American Global Church Questions (n=108)

	M	SD
AA church can be source of health education and health information for the AA community?*	3.71	.63
AA church use holistic approach (mind, body, spirit) to address health issues?*	2.45	.89
AA church can improve the health of AAs?*	3.54	.72
Importance of role of AA church to engage in health and wellness programming within the AA community?**	3.81	.50

Note:*Scale ranged from "0" representing "No Extent" to "4" representing "Great Extent";
**Scale ranged from "0" representing "Unimportant" to "4" representing "Very important".

Churches were asked if different types of health and wellness activities/programs were provided for their congregation. These activities/programs were divided into three categories, namely, health education, direct services, and research study participation. Within these groups, 81% of churches provided health education brochures, newsletters, flyer, etc., 73% provided health education talks, seminars, workshops, etc., 65% provided health screenings, 61% provided use of the internet to retrieve health and wellness information, 58% provided health/wellness/community fairs, and 52% provided physical activity-related activities (see Table 16). A low percentage of churches participated in research studies designed by an external researcher (14%) and designed by researchers and congregants (7%).

Table 16: Health Promotion Programming Activities (n=108)

	n	%
Health Education		
Health/wellness/community fair	62	58
Health education talk, seminar, workshop, etc. (e.g. weight management, etc.)	78	73
Health education brochures, newsletters, flyers, etc.	87	81
Nutritional cooking demonstration	27	25
Special training class (e.g. CPR, first aid, etc.)	33	31
Use of internet to retrieve health and wellness information	64	61
Direct Services		
Health screening (e.g. blood pressure checks, glucose testing, weigh-ins, etc.)	70	65
Immunizations, physical exams, etc.	22	21
One-on-one counseling	52	49
Physical activity-related activities (e.g. aerobic class, walking group, etc.)	56	52
Support groups (e.g. cancer support group)	29	27
Research Study Participation		
Participation in a research study designed and conducted by an external researcher (e.g. University professor)	15	14
Participation in a research study in which congregants helped researchers design and/or conduct study	7	7

When asked about the barriers that would prevent the churches from engaging in health

and wellness activities/programs, the lack of the following was measured: space or facilities,

personnel, funding, use of a faith-based approach (cultural/social support),

materials/equipment/supplies, and interest from the pastor and congregation.   These questions

used a likert scale with "0" representing "Never" and "4" representing "Always". As seen in

Table 17, the lack of funding was the most prominent barrier with a mean score of 2.44. The

least prominent barrier reported was the lack of interest from the pastor with a mean score of .58.

Table 17: Barriers to Engaging in Health and Wellness Activities/Programs (n=108)

	M	SD
Lack of available space or facilities	1.35	1.23
Lack of available personnel	2.02	1.17
Lack of funding	2.44	1.19
Not using a faith-based approach	.91	1.09
Lack of materials/equipment/supplies	1.81	1.18
Lack of interest from the pastor	.58	.96
Lack of interest from the congregation	1.43	1.18

Note: Scale ranged from "0" representing "Never" to "4"representing "Always".

Moderating Characteristics

While further examining the churches, other characteristics may deem to have an effect

on health programming activity levels. When looking at the three activity levels, inactive, active,

and very active, some differences are seen among the levels. As seen in Table 18, there is a

significant association between activity level and church membership. Compared to inactive

churches, churches with more membership, in general, tend to report an active and very active

status. Among churches with a membership of 1-75, 67% were inactive, 29% were active and

Table 18: Moderating Church Characteristics

	Inactive %	Active %	Very Active %	χ^2 (df)	p
Church Membership*					
1-75	67	29	4	33.43 (14)	p<.01
76-150	42	37	21		
151-225	50	37	13		
226-450	19	37	44		
450-699	11	22	67		
700-999	0	50	50		
1,000-2,000	0	20	80		
More than 2,000	20	33	47		
Weekly Attendance**					
1-75	56	35	9	33.86 (14)	p<.01
76-150	38	24	38		
151-225	17	50	33		
226-450	20	20	60		
450-699	0	0	100		
700-999	25	50	25		
1,000-2,000	20	20	60		
More than 2,000	0	25	75		
Paid clergy***					
None	54	29	17	17.73 (8)	p<.05
1	47	33	20		
2-5	12	40	48		
6-10	0	0	100		
More than 10	0	100	0		
Paid staff other than clergy****					
None	36	25	13	20.99 (8)	p<.01
1	75	25	0		
2-5	31	41	28		
6-10	20	33	47		
More than 10	0	43	57		

Note: *n=106, **n=107, ***n=96,****n=93.

4% were very active. In comparison to churches with a membership of more than 2,000, 20% reported being inactive, 33% reported active and 47% reported very active. The association between activity level and church membership was statistically significant with a moderate association (Cramer's V=.40).

Similar to church membership, there is a significant association between activity level and weekly attendance to services. Among churches with a weekly attendance of 1-75, 56% reported being inactive, while 35% were active and 9% were very active. On the other hand, considering churches with a weekly attendance of more than 2,000, 0% reported being inactive, 25% were active and 75% were very active. Activity level and weekly attendance to service was statistically significant with a moderate association (Cramer's V=.40).

There is also a significant association between activity level and paid clergy. Churches with more paid clergy tend to report being more active than those with less paid clergy. Among churches with no paid clergy, 54% were inactive, 29% were active and 17% were very active. In comparison to churches that had 2-5 paid clergy, 12% were inactive, 40% were active and 48% were very active. The association between activity level and paid clergy was statistically significant with a moderate association (Cramer's V=.30).

When comparing activity level and churches with paid staff other than clergy, there is a significant association. Among churches with no paid staff, 36% reported being inactive, 25% reported being active and 13% reported being very active. Compared to churches with more than 10 paid staff, 0% reported being inactive, 43% reported being active and 57% reported being very active. The association between activity level and paid staff other than clergy was statistical significant with a moderate association (Cramer's V=.34).

As previously mentioned, the infrastructure components of the African American church have been noted to be very instrumental in the success of the implementation of church-based health promotion programming. For this reason, the relationship between church infrastructure (physical structure, personnel, funding, and social/cultural support), frequency of health promotion programming (denoted by activity levels) and readiness to engage in health promotion

programming was examined in this study. The research questions and hypotheses are addressed below.

Response to Research Questions and Hypotheses

Overall Research Question:

What is the relationship between the infrastructure of AA churches and their readiness to engage in health promotion programming within the Midwest and South regions of the United States?

Overall Hypothesis:

Church infrastructure has an association with and will predict the readiness of a church to engage in health promotion programming.

This study aimed to understand the relationship between church infrastructure and readiness to engage in health promotion programming. To reemphasize, readiness is having the capacity or preparedness to take a certain action or address a certain issue. Therefore, infrastructure and activity levels were examined. A one-way ANOVA was used to compare the amount of church infrastructure and activity groups. This analysis revealed a significant difference between groups (see Table 12). As infrastructure increased, activity levels also increased. Consequently, the infrastructure of a church has an association with the capacity or readiness to engage in health promotion programming. Therefore, the overall hypothesis is supported.

Research Question 1:

Is there an association between physical structure and readiness to engage in health promotion programming?

Hypothesis 1:

Physical structure has an association with readiness.

This study aimed to understand the relationship between physical structure and readiness to engage in health promotion programming. Therefore, physical structure and activity levels were examined. A one-way ANOVA was used to compare the amount of physical structure and activity groups. The analysis revealed a significant difference between groups (see Table 12). As physical structure increased, activity levels also increased. Thus, the physical structure of a church has an association with the readiness to engage in health promotion programming. Therefore, hypothesis 1 is supported.

Research Question 2:

Is there an association between church personnel and readiness to engage in health promotion programming?

Hypothesis 2:

Personnel have an association with readiness.

This study aimed to understand the relationship between personnel and readiness to engage in health promotion programming. Therefore, personnel and activity levels were examined. A one-way ANOVA was used to compare the number of personnel and activity groups. The analysis revealed a significant difference between groups (see Table 12). As the number of personnel increased, activity levels also increased. Therefore, personnel have an association with the readiness to engage in health promotion programming. For this reason, hypothesis 2 is supported.

Research Question 3:

Is there an association between funding and readiness to engage in health promotion

programming?

Hypothesis 3:

Funding has an association with readiness.

This study aimed to understand the relationship between funding and readiness to engage in health promotion programming. Therefore, funding and activity levels were examined. A one-way ANOVA was used to compare funding and activity groups. The analysis revealed a significant difference between groups (see Table 12). As the number of funding sources increased, activity levels also increased. Hence, funding has an association with the readiness to engage in health promotion programming. Therefore, hypothesis 3 is supported.

Research Question 4:

Is there an association between social/cultural support and readiness to engage in health promotion programming?

Hypothesis 4:

Social/cultural support has an association with readiness.

This study aimed to understand the relationship between social/cultural support and readiness to engage in health promotion programming. Therefore, social/cultural support and activity levels were examined. A one-way ANOVA was used to compare social/cultural support and activity groups. The analysis revealed a significant difference between groups (see Table 12). As the usage of social/cultural support elements increased, activity levels also increased. Consequently, social/cultural support has an association with the readiness to engage in health promotion programming. Therefore, hypothesis 4 is supported.

Overall, multiple statistical analyses were conducted to explore the relationship between church infrastructure of AA churches, frequency of health promotion programming and readiness

to engage in health promotion programming. The statistical tests included frequencies, point-biserial correlations, Cronbach's alpha and test-retest reliability analysis, ANOVA, t-tests, means and standard deviations, and chi-square analysis (crosstabs). A discussion of these results is presented in the following chapter.

CHAPTER 5: DISCUSSION
"THE HEALING STATION PRESCRIPTION"

The rates of disease, disability and death are disproportionate within the AA population

compared to other racial groups. "Underserved populations may have limited access to

traditional health promotion and preventive services located in educational and medical

facilities" (Peterson et al., 2002). Additionally, AAs hold a distrust of the system that delivers

healthcare (Goldmon & Roberson, 2004; Kennedy et al, 2007; Musa et al., 2009). A potential

solution to this dilemma is the utilization of the AA church to deliver health programming.

"Church-based community health promotion programs demonstrate sensitivity to language and

cultural barriers in vulnerable populations" (Peterson et al., 2002, p. 404). The church is viewed

by AAs as a trusted institute and is prominent in delivering a multiplicity of services to the

community (Billingsley, 1999; Langley, 2000; Lincoln and Mamiya, 1990; Thomas et al. 1994).

Though this seems to be a feasible solution, it is unclear if the church has the infrastructure

capacity and readiness to deliver health programming. Therefore, the purpose of this study was

to create a survey to predict the readiness of the AA church to engage in health promotion

programming by examining the relationship between church infrastructure and readiness to

engage in health promotion programming. The Community Readiness Model, developed by

Plested, Edwards, and Jumper-Thurman (2006), was used as a guide to inform this dissertation

for the development of the survey instrument used to examine the relationship between

infrastructure and readiness of African American churches. This chapter discusses implications

of the findings, study limitations and suggestions for future research.

RESEARCH CONTRIBUTION

Previous research has suggested that AA churches can be a suitable environment to

facilitate health promotion programming for the AA community (Campbell et al., 2000;

Campbell et al., 2004; Campbell et al., 2007; Carter-Edwards et al, 2006; DeHaven et al, 1997; Kennedy et al, 2005; Lasater et al, 1997; McNabb et al, 1997; Peterson et al, 2002; Resnicow et al, 2005; Thomas, et al, 1994; Whitt-Glover et al, 2008; Whitt-Glover and Kumanyika, 2009;Wilson et al, 2005; Yanek et al, 2001; Young 2006). Carter-Edwards et al. (2006) suggest that there may be key attributes of AA churches to facilitate health outreach and contribute to the likelihood of a church successfully engaging in health promotion programming. However, more research is warranted to identify these elements that would make the church an ideal change agent for health within the AA community. Research is also necessary to understand how to best equip churches to effectively facilitate and engage in health promotion programming. Currently, there is no published research that has designed and validated an instrument to assess a church's capacity and readiness to be a change agent for health. This dissertation study makes a unique contribution to the body of science because it offers a mechanism that AA churches can use to determine if they have the ability to deliver effective health programming for their congregation.

RESEARCH FINDINGS AND IMPLICATIONS

As noted in the previous chapter, churches with more physical structure tended to engage in more health promotion programming. Churches with less physical structure tended to engage in less health promotion programming. The amount of physical structure signified a difference in the level of activity and hence readiness to engage in health. Though churches without adequate physical structure seemed to engage in less health programming, this barrier can be remedied. Churches can co-sponsor with other organizations that have the adequate amount of facilities to host the health events. Such organizations may include, but are not limited to Park Districts, YMCA/YWCA, the public library, community centers, as well as other churches (Lasater et al., 1997). To illustrate, the researcher observed a situation where a health

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coordinator of an AA church desired to offer a health fair to its congregants. Due to the lack of space within the church, the coordinator identified organizations within the community that had an adequate facility to host the event. The coordinator contacted and met with the director of a specific Park District location, explained the details of the health fair, and highlighted the benefits both organizations would receive. Consequently, the Park District provided the facility to host the event and the church conducted all other programmatic details concerning the event. At the conclusion, the church was able to provide this health service to its congregants as well as community while the Park District was able to benefit from the advertisement and visibility in delivering programs to the community.

Research findings suggested that churches with more personnel engaged in more health programming than churches with fewer personnel. Despite the fact that fewer personnel may pose as a hindrance to engaging in health programming, this can be turned into an occasion to form partnerships with entities that have staff to deliver health promotion activities. Prospective partners can be students enrolled in a health academic program such as public health, allied health and/or medical school (Hatch et al., 1986; Williamson & Kautz, 2009). Other partners can be health professionals (e.g. nurses, dietitians, health educators, etc.) from local hospitals, private medical practices, community agencies, and neighborhood health centers to name a few (Goldmon & Roberson, 2004; Williamson & Kautz, 2009; Cowart et al., 2010). Additional partners may consist of certified personal trainers, aerobic instructors, and health and wellness specialists who are often located in fitness centers and community agencies that usually have a working knowledge of health awareness (Cowart et al, 2010).

The analysis in this present study revealed that churches that used more funding sources were more likely to engage in health promotion programming than churches that used less

funding sources. Churches with less funding sources may considerate co-sponsoring events with organizations that already have the resources (e.g. finance, equipment, supplies, etc.) and that also may be looking for collaborators to implement health programs within the community (Cowart et al., 2010; Hatch et al., 1986). Such organizations may include corporations, colleges and universities, and local health departments. Churches can also use free and available online tools, obtainable for public printing, from health organizations such as the American Heart Association. It sponsors the "Search Your Heart" program that offers tools and resources specifically for AA churches to promote physical activity, nutrition and decrease risk of heart disease and stroke (American Heart Association, 2011).

Further study results demonstrated that churches that used more cultural/social support elements within the delivery of their health and wellness programming tended to be more active than churches that incorporated less cultural/social support elements within their programs. This imparity may be the least difficult to modify within churches. Peterson et al. (2002) stated that support and social networks of the church provides an effective approach in implementing interventions. Hence, churches with less health promotion programming may consider the inclusion of more cultural/social support elements within their health activities. For instance, disseminating church-tailored health bulletins and other health materials, incorporating health messages into the sermon, and the pastor showing support of the programs are all elements that have been noted to improve health behaviors (Campbell et al., 2000). Additionally, if the pastor and church leaders participate in the health programs, they will influence the congregants to also participate.

"Engagement of pastors and other church leaders is critical to program acceptance and success. Pastors in the AA church can play a pivotal role in the adoption of health

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promotion and research activities. The pastor's introduction and endorsement of a

program to his or her congregation is essential to any such effort." (Ammerman et al.,

2003, p. 1720)

Overall, churches with more infrastructure (physical structure, personnel, funding and

cultural/social support) tended to engage in more health promotion programming. Churches with

less infrastructure tended to engage in less health promotion programming. Churches that were

very active in engaging in health promotion programming tended to have substantial

infrastructure capacity for health promotion programming. Churches that were inactive limbered

between having limited infrastructure capacity for programming to having moderate capacity for

health promotion programming. While bearing in mind the size and affluency of churches, it

would be beneficial for smaller churches to partner with larger and more affluent churches to

overcome the lack of infrastructure within their churches. For example, the COGIC

denomination is composed of local churches of various sizes. These churches make up a district.

Multiple districts comprise a jurisdiction. In general, jurisdictions host monthly events (e.g.

meetings, trainings, services, etc.). Due to these monthly occasions, church leaders become

familiar with one another and, in turn, ofttimes become allies. In such cases, smaller churches

desiring to implement their health program can ask an "allied" church to co-host the event.

Partnering with an ally can minimize the opportunity of competition over members and

collaborate for the greater good to provide health services for AAs. The smaller church can use

their developed program and provide their existing resources, while the larger church can make

available their space for the delivery of the health program. In turn, both churches can benefit

from this collaboration. The smaller church will be able to provide their congregants with a

health program, but in a facility that accommodates their activities. The larger church can

benefit from this partnership by having a program to offer to their congregants without having to commit the time and effort necessary to design and implement this health program.

When considering the type of programming facilitated within AA churches, the dissemination of health materials, health education seminars, health screenings, online health information, aerobic activities, and health fairs were described by the churches in this study as the most prominent types of health programs provided to congregants. This finding can help direct health program planners and researchers to the type of collaboration that can be most useful and common among AA churches. Additionally, collaborators should take in account that the lack of funding, personnel and equipment/materials/supplies were seen as the most notable barriers. For this reason, health program planners and researchers should be prepared to provide these resources to ensure successful health programming. For example, the researcher have noted that hospitals in both North Carolina and Illinois provide resources, through their parish nursing program, to churches that deliver health programs for their congregation and that have a registered nurse as a member of the congregation. In an effort to promote holistic wellness, reduce healthcare cost and improve the health of the community, these hospitals have provided equipment (e.g. automatic blood pressure machine), funding, printing of materials, speakers for seminars, training classes (e.g. CPR), etc. to these churches to facilitate health and wellness activities. In cases where a church was interested in providing these programs, but did not have a registered nurse as a member, the hospital provided initial funding for a congregational nurse for period of time and asked the church to contribute funds to sustain the presence of the congregational nurse.

Additionally, clergy of AA churches can also play a more active role in health promotion programming within the AA community. Since AA pastors are revered as leaders within the AA

community and has historically provided religious, social and political leadership, individuals

ofttimes seek guidance from clergy (Thomas et al., 1994). Congregants also consult clergy to aid

in their decision-making process regarding their health decisions. Hence, it would be profitable

for clergy to receive some form of training in health to offer effective counsel and be able to help

congregants make informed decisions. Therefore, theological programs that offer a curriculum

in health would greatly benefit clergy. Such a program is offered at North Park University in

Illinois. The Certificate in Faith and Health program is managed through the North Park

Theological Seminary and designed to provide core concepts of ministries of health to support

parish nurses, health ministers and clergy in ministries of health. A similar program is offered at

Shaw University in North Carolina. The Divinity School of Shaw University offers several

courses relating to health and the AA community to prepare clergy to use a holistic approach

(mind, body and spirit) when addressing the needs of congregants. These programs "could train

a cadre of ministers who could expand their sphere of influence to provide leadership on public

health issues" (Thomas et al., 1994, p. 579).

In view of the findings of this study, the development of health policy guidelines or

initiatives for a church denomination, fellowship or individual church, are encouraged. This can

position the church to successfully address health issues among its congregations. One way of

doing so is by establishing a health office in which all associated churches can access. This

office can provide a manifesto or framework for all affiliated churches to follow as a guide to

effectively provide health programming for their congregants. This framework can include health

goals and objectives for that year, prevalent health conditions that warrant attention within the

AA community, training and a step-by-step guide to set up an active health ministry, and a

directory to access resources (e.g. health materials, funding, etc) available for churches to

implement and sustain their health programming. A website of the health office would also be

beneficial for quick retrieval of information. This office can also serve as a liaison between the

church organization and research community. In this manner, the health office can be a gate

keeper and ensure the integrity of research studies conducted by researchers that have a desire to

collaborate with churches.

Using the information provided within this study, researchers can also benefit in their

efforts to design and implement church-based health studies. Researchers can identify and

prioritize churches that would make up a pool of prospective participants (Goldmon & Roberson,

2004). Researchers would assess infrastructure of churches to identify those that would seem to

be most promising for a successful partnership. In turn, this would minimize failed interventions

due to insufficient infrastructure capacity.

LIMITATIONS

A limitation of this research is that this study is cross-sectional, collecting information at

one point in time. Due to this "snapshot", the researcher would not be able to affirm the same

results if collected within a different time period. Additionally, this study is unable to establish

causality or a temporal relationship. The amount of infrastructure can not be explained as the

definitive predictor of readiness for AA churches to engage in health promotion programming.

Other factors (e.g. membership size, affluence of congregation, etc) may also influence the

readiness of AA churches which are not thoroughly explored within this study. Therefore, the

researcher can only make a claim that a relationship exists between infrastructure and readiness.

Another limitation of this study is that the data collected was self-reported. Information

reported may have been provided to make the church look favorable or to match the perceived

expectations of the researcher. This may result in under-reporting, over-reporting and/or misreporting of information. Hence, these biases may have an effect on the results.

This study collected information on African American churches within Illinois and North Carolina using non-probability sampling. Therefore, participants were not randomly selected to be a part of the study. In turn, this may present a selection bias where the sample may not be representative of the overall population of African American churches in Illinois and North Carolina. Additionally, this study does not include data from churches that are in other regional areas. Therefore, the findings of this study can not be generalized to all African American churches.

FUTURE RESEARCH

Based on the findings of this study, factors of church infrastructure, namely, physical structure, personnel, funding and cultural/social support can be viewed as a paradigm through which one can predict the readiness of AA churches to engage in health promotion programming. However, another study is warranted for the inclusion of AA churches within more regions. This future study would examine differences between activity levels and locations along with other factors, such as climate variations, that may influence the frequency and type of programming. For example, churches in warmer climates may facilitate exercise programming more often than churches in colder environments. Consequently, the churches' activity level would be attributed to climate instead of the amount of infrastructure.

Further research would be required to apply this assessment tool to a larger sample of churches for revalidation. This study would be done to confirm the reliability and validity estimates acquired within this dissertation study. The future study will examine if the tool is still effective within other contexts of regions.

As noted above, the presence or absence of infrastructure within a church can be predictive of the activity level and, hence, readiness to engage in health promotion programming. Thus, another potential study should focus on equipping inactive churches with infrastructure in which they were lacking. Consequently, it is anticipated that these churches would become more actively engaged in providing health promotion programming.

CONCLUSION

Overall, it has been observed that the AA church has a great concern for the welfare of the AA community. The church has provided many types of programs, including health and wellness, to improve the well-being of AAs. Though there has been an effort to engage in health and wellness programming, there still persists a lack of infrastructure within churches and knowledge as how to facilitate health programs. For this reason, this dissertation is very useful in providing an antidote to this problem. The findings of this study confirmed the personal observations of the researcher in which infrastructure is associated with readiness to engage in health programming. Churches that lack the infrastructure capacity to engage in successful programming can overcome this barrier by applying many of the recommendations offered in this study. This study can serve as an impetus for AA churches to develop and adopt policies and procedures to position itself to address health disparities within the AA community. The church has helped AAs overcome many educational, economical, political and social obstacles in order to secure upward mobility for AAs. In the same regard, the AA church has the potential to help improve the health of the AA community and become a leading change agent for health.

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APPENDIX A: KEY INFORMANT INTERVIEW GUIDE

Overall
What role, if any, do you think the church has in engaging in health programming within the AA community?
What types of resources do you think are needed in a church to make ready or prepare a church to facilitate health promotion activities?
Physical Structure
What types of physical structure do you think is needed in a church to facilitate or run health activities? Physical structure consists of classrooms, open space, kitchen, etc.
Personnel
Do you think having a person, staff or team members to coordinate health activities is necessary for the success of health activities? If yes, please describe a typical individual for this task (e.g. volunteers, paid, health background, etc?). If not, then please describe how these activities would be coordinated.
Do you think it is necessary for the (pastor, program facilitator, program staff, etc) to have health training/background?
Funding
Do you think it is necessary to have funding to facilitate health activities? If so, what type of funding (e.g. funding from the church, outside the church, etc.)? If not, how do you think the facilitation of health activities can be supported?
Cultural/Social Support
Do you think it is important to include a faith-based approach to the delivery of health activities? A faith-based approach consists of applying spiritual/scriptural reference within health activities, addressing health issues within sermons, placing health announcement in the church bulletin, etc. If so, what types of cultural/social support do you think should be included? If not, what other ways do you think will help adapt health activities to the population the church serves?
Other
How would you define a health ministry? How would you define an active health ministry? What is an ideal number of activities for an active/inactive health ministry?
What do you think would motivate a person attend a health program/activity?
Is there anything else that will help churches facilitate health promotion programming that have not been mentioned today?

You are being asked to complete a survey that will help us understand how African American churches think about and participate in health and wellness promotion programs in the church. Please answer the following questions. **Circle the number** next to the answer that best fits your response to each question. **Please choose ONE answer for each question.**

GLOBAL CHURCH

	Great Extent	Much Extent	Some Extent	Little Extent	No Extent
1. To what extent do you believe the African American church can be a source of health education and health information for the African American community?	1	2	3	4	5
2. To what extent does the African American church use a holistic approach (mind, body and spirit) to address health issues?	1	2	3	4	5
3. To what extent can the African American church improve the health of African Americans?	1	2	3	4	5
	Very Important	Important	Moderately Important	Little Important	Unimportant
4. How <u>important</u> is the role of the African American church to engage in health and wellness programming within the African American community?	1	2	3	4	5

PHYSICAL STRUCTURE

5. Do you have any of the following things in your church?

	Yes	No	Don't Know
Classroom(s)	1	2	99
Kitchen	1	2	99
Fellowship hall/multipurpose room	1	2	99
Gym	1	2	99
Exercise room	1	2	99
Office space(s)	1	2	99
Conference/meeting room(s)	1	2	99
Sanctuary	1	2	99
Parking lot/outdoor area	1	2	99
Nurse/health room	1	2	99
Food pantry	1	2	99

6. Within the past year, have you used any of the following places to deliver health and wellness activities/programs within your church?

	Yes	No	Not applicable, don't have	Don't Know
Classroom(s)	1	2	98	99
Kitchen	1	2	98	99
Fellowship hall/multipurpose room	1	2	98	99
Gym	1	2	98	99
Exercise room	1	2	98	99
Office space(s)	1	2	98	99
Conference/meeting room(s)	1	2	98	99
Sanctuary	1	2	98	99
Parking lot/outdoor area	1	2	98	99
Nurse/health room	1	2	98	99
Food pantry	1	2	98	99

PERSONNEL

7. Within the past year, has your church had an individual, team, staff or board that was responsible for health and wellness activities/programs?

     <1>   Yes *(Please go to Question # 8)*
     <2>   No *(Please skip to Question # 14)*
     <99> Don't Know *(Please skip to Question # 14)*

8. How many people were responsible for health and wellness activities/programs including you?

     <1>   1
     <2>   2-4
     <3>   5-6
     <4>   7 or more
     <99> Don't Know

9. Did you or any members of the team, staff or board that were responsible for health and wellness activities/programs have any of the following characteristics?

	Yes	No	Don't Know
Some form of health training *(e.g. CPR/First Aid certified, completed health and/or wellness course(s), etc.)*	1	2	99
College degree or other formal training in health/wellness-related area	1	2	99
Current or former work experience as a health and/or wellness professional	1	2	99

10. Did you or any members of the team, staff or board that were responsible for health and wellness activities/programs <u>receive pay/stipend</u> for performing health and wellness duties for your church?

     <1>   Yes *(Please go to Question # 11)*
     <2>   No *(Please skip to Question # 12)*
     <99> Don't Know *(Please skip to Question # 12)*

Please continue to the next page…

11. How often did you or any members of the team, staff or board that were responsible for health and wellness activities/programs <u>receive pay/stipend</u> for performing health and wellness duties for your church?

        <1>   Weekly
        <2>   Every other week
        <3>   Monthly
        <4>   Every other month
        <5>   Quarterly
        <6>   Annually
        <9>   Other_____
        <99> Don't Know

12. Did you or any members of the team, staff or board that were responsible for health and wellness activities/programs <u>volunteer</u> to perform health and wellness duties for your church?

        <1>   Yes *(Please go to Question # 13)*
        <2>   No *(Please skip to Question # 14)*
        <99> Don't Know *(Please skip to Question # 14)*

13. How often did you or any members of the team, staff or board that were responsible for health and wellness activities <u>volunteer</u> to perform health and wellness duties for your church?

        <1>   Weekly
        <2>   Every other week
        <3>   Monthly
        <4>   Every other month
        <5>   Quarterly
        <6>   Annually
        <9>   Other_____
        <99> Don't Know

<u>FUNDING</u>

14. Within the past year, has your church used <u>any</u> form of financial support *(e.g. offerings, fundraisers, donations, grants, etc.)* to fund health and wellness activities/programs?

        <1>   Yes
        <2>   No
        <99> Don't Know

15. Within the past year, has your church supported health and wellness activities/programs through the following way(s)?

	Yes	No	Not Applicable	Don't Know
Church funds *(e.g. tithe, offerings, church budget, etc.)*	1	2	98	99
Fundraisers *(e.g. selling fruit, etc.)*	1	2	98	99
Grants *(e.g. private, government, etc.)*	1	2	98	99
Monetary donations from businesses, community organizations, individuals, etc.	1	2	98	99
Funding from national denominational office	1	2	98	99
Donated services and/or materials *(e.g. brochures, printing, use of staff, etc.)*	1	2	98	99
Participant fees/dues, etc.	1	2	98	99

16. Within the past year, has your church received <u>any</u> type of resources from any other organization(s) *(e.g. YMCA, local health department, church, hospital, bank, etc.)* to facilitate health and wellness activities/programs?

    <1>   Yes
    <2>   No
    <99> Don't Know

Please continue to the next page…

17. Within the past year, has your church received any of the following resources from <u>another organization</u> to facilitate health and wellness activities/programs?

	Yes	No	Don't Know
Funding	1	2	99
Staff *(e.g. guest speaker, nurse/doctor to provide screenings, etc.)*	1	2	99
Use of facilities	1	2	99
Informational/educational materials *(e.g. brochures, pamphlets, etc.)*	1	2	99
Equipment and/or supplies *(e.g. blood pressure cuff, weight scales pedometer, resistance bands, etc.)*	1	2	99
Training of church's health and wellness staff	1	2	99
Implement program(s) within your church *(e.g. facilitated cooking demonstrations, workshops, health screenings, etc.)*	1	2	99
Incentives *(e.g. pens, food, t-shirts, etc.)*	1	2	99

FAITH-BASED APPROACH

18. Within the past year, has your church used a faith-based approach to deliver health and wellness activities/programs? *A faith-based approach includes using <u>any</u> elements such as prayer, health scriptures, gospel music, etc. within your health and wellness activities/programs.*

    <1>   Yes
    <2>   No
    <99> Don't Know

Please continue to the next page…

19. Within the past year, has your church used the following in the delivery of health and wellness activities/programs?

	Yes	No	Don't Know
Including <u>prayer related to health</u> within health and wellness activities/programs	1	2	99
Using <u>health scriptures</u> within health and wellness activities/programs	1	2	99
Using <u>gospel music</u> within health and wellness activities/programs	1	2	99
Including <u>testimonies related to health</u> within health and wellness activities/programs and/or worship services	1	2	99
Health and wellness information <u>displayed</u> around the church *(e.g. bulletin board, health and wellness table/corner, flyers, posters, etc.)*	1	2	99
Health and wellness information <u>given out</u> *(e.g. within church bulletin, newsletter, tv/radio/newspaper ads, e-mails, church website, etc.)*	1	2	99
Health and wellness information given <u>over/from pulpit</u> during service *(e.g. church announcements, sermon, etc.)*	1	2	99
Pastor supporting health and wellness activities	1	2	99
Church leadership <u>participating in</u> health and wellness activities *(e.g. pastor, deacon, trustee, auxiliary head, etc.)*	1	2	99
Using church-tailored health messages/information on bulletin boards, newsletters, handouts, e-mails, etc. *(e.g. including church symbol/slogan in health literature, providing health information from a Christian point of view, etc.)*	1	2	99
Scheduling health and wellness activities around other church functions	1	2	99
Two or more ministries within your church working together to deliver health and wellness events	1	2	99
Co-sponsoring with any other church(es) to deliver health and wellness activities/programs	1	2	99
Congregants participating in the planning, coordination and/or implementation of the health and wellness activity/program	1	2	99
Training congregants without previous health knowledge to deliver health and wellness activities/programs *(e.g. lay health advisors)*	1	2	99
Using a buddy/support system (similar to a prayer partner)	1	2	99
Having a church service specifically focusing on health and/or healing	1	2	99
Planting a church garden where congregants can pick fresh vegetables	1	2	99
Giving religious-based incentives *(e.g. bibles, bible covers, church t-shirts, etc.)* at health and wellness events	1	2	99
Using someone as a role model to promote good health and wellness habits *(e.g. pastor, cancer survivor, celebrity, etc.)*	1	2	99

HEALTH AND WELLNESS SPECIFIC ACTIVITIES/PROGRAMMING

20. Within the past year, has your church provided any of the following as health and wellness activities/programs for your congregation?

	Yes	No	Don't Know
Health Education			
Health/wellness/community fair	1	2	99
Health education talk, seminar, workshop, etc. *(e.g. weight management, etc.)*	1	2	99
Health education brochures, newsletters, flyers, etc.	1	2	99
Nutritional cooking demonstration	1	2	99
Special training class *(e.g. CPR, first aid, etc.)*	1	2	99
Use of internet to retrieve health and wellness information	1	2	99
Direct Services			
Health screening *(e.g. blood pressure checks, glucose testing, weigh-ins, etc.)*	1	2	99
Immunizations, physical exams, etc.	1	2	99
One-on-one counseling	1	2	99
Physical activity-related activities *(e.g. aerobic class, walking group, etc.)*	1	2	99
Support groups *(e.g. cancer support group)*	1	2	99
Research Study Participation			
Participation in a research study designed and conducted by an external researcher *(e.g. University professor)*	1	2	99
Participation in a research study in which congregants helped researchers design and/or conduct study	1	2	99

21. Within the past year, how often were health and wellness-related activities/programs provided for your congregation?

    <1>   Daily
    <2>   Weekly
    <3>   Twice a month
    <4>   Monthly
    <5>   Every other month
    <6>   Quarterly
    <7>   Every 6 months
    <8>   Once a year
    <10> None
    <99> Don't Know

22. Within the past year, has your church provided any health and wellness activities/programs for the following health topics?

	Yes	No	Don't Know
Cardiovascular Disease *(e.g. heart disease)*	1	2	99
Cancer	1	2	99
Stroke	1	2	99
Diabetes	1	2	99
Obesity/Weight Lost/Weight Management	1	2	99
High Blood Pressure (Hypertension)	1	2	99
High Cholesterol	1	2	99
Physical Activity	1	2	99
Nutrition/Diet	1	2	99
Tobacco/Alcohol Use	1	2	99
HIV/AIDS/Sexually Transmitted Disease or Infections	1	2	99
Respiratory Conditions *(e.g. asthma, pneumonia, etc.)*	1	2	99
Cold/Flu *(e.g. H1N1)*	1	2	99
Mental Health (e.g. stress, depression, anxiety, etc.)	1	2	99
Elderly-Related Conditions *(e.g. Alzheimer's)*	1	2	99

BARRIERS

23. How often would the following prevent your church from engaging in health and wellness activities/programs?

	Always	Very Often	Sometime	Rarely	Never
Lack of available space or facilities	1	2	3	4	5
Lack of available personnel	1	2	3	4	5
Lack of funding	1	2	3	4	5
Not using a faith-based approach	1	2	3	4	5
Lack of materials/equipment/supplies	1	2	3	4	5
Lack of interest from the pastor	1	2	3	4	5
Lack of interest from the congregation	1	2	3	4	5

CHURCH CHARACTERISTICS

24. What is the predominate racial composition of your congregation?

        <1> African American/Black
        <9> Other_____

25. What is your religious affiliation?

        <1> AME
        <2> AME Zion
        <3> CME
        <4> COGIC
        <5> National Baptist Convention of America
        <6> National Baptist Convention, USA
        <7> Progressive Baptist Convention
        <8> Non-denominational
        <9> Other_____
        <99> Don't Know

Please continue to the next page…

26. How many years has your church been in existence?

        <1>   Less than 1 year
        <2>   1-20 years
        <3>   21-40 years
        <4>   41-60 years
        <5>   61-80 years
        <6>   81-100 years
        <7>   More than 100 years
        <99> Don't Know

27. How many members belong to your church?

        <1>   1-75
        <2>   76-150
        <3>   151-225
        <4>   226-450
        <5>   450-699
        <6>   700-999
        <7>   1,000-2000
        <8>   More than 2,000
        <99> Don't Know

28. On average, what is your total <u>weekly attendance</u> to Sunday morning worship service(s)?

        <1>   1-75
        <2>   76-150
        <3>   151-225
        <4>   226-450
        <5>   450-699
        <6>   700-999
        <7>   1,000-2000
        <8>   More than 2,000
        <99> Don't Know

29. Your congregation is mainly made up of:

        <1>   Community residents *(e.g. living within 1-3 miles of the church)*
        <2>   Non-community residents
        <3>   A mixture of both community and non-community residents
        <9>   Other_____
        <99> Don't Know

30. What is the predominate gender of your congregation?

       \<1\>   Male
       \<2\>   Female
       \<3\>   Equal ratio of both male and female

31. What age group best describes the majority of your congregants?

       \<1\>   Under 18 years old
       \<2\>   18-34 years old
       \<3\>   35-54 years old
       \<4\>   55-74 years old
       \<5\>   75 and older
       \<99\> Don't Know

32. My church currently _____ the building in which we hold worship services?

       \<1\>   Rents
       \<2\>   Pays a mortgage on
       \<3\>   Owns
       \<99\> Don't Know

33. In what kind of community is your church located?

       \<1\> Urban
       \<2\> Suburban
       \<3\> Rural

34. What is the gender of your head pastor?

       \<1\> Male
       \<2\> Female

35. Which of the following best describes your head pastor's race?

       \<1\> African American/Black
       \<2\> Asian/Pacific Islander
       \<3\> Native American/American Indian
       \<4\> White
       \<9\> Other_____

36. Which describes your <u>head</u> pastor's ethnicity?

        <1>   Hispanic/Latino
        <2>   Non Hispanic/Non Latino

37. What is the highest grade level your <u>head</u> pastor has completed?

        <1>   Less than 12th grade
        <2>   GED
        <3>   High School
        <4>   Trade school
        <5>   College
        <6>   Master's degree
        <7>   Doctoral degree *(e.g. Ph.D.)*
        <8>   Professional Degree *(e.g. MD, JD, etc.)*
        <99> Don't Know

38. What best describes your <u>head</u> pastor's age group?

        <1>   18-34 years old
        <2>   35-54 years old
        <3>   55-74 years old
        <4>   75 and older
        <99> Don't Know

39. Does your <u>head</u> pastor have some form of health training *(e.g. CPR/First Aid certified, completed health and wellness course(s), etc.)*?

        <1>   Yes
        <2>   No
        <99> Don't Know

40. Does your <u>head</u> pastor have a health background *(e.g. health-related degree)*?

        <1>   Yes
        <2>   No
        <99> Don't Know

41. What is the number of <u>clergy</u> that receive pay/stipend within your church?

        <1>   None
        <2>   1
        <3>   2-5
        <4>   6-10
        <5>   More than 10
        <99> Don't Know

42. What is the number of <u>other staff</u> (e.g. secretary/administrative assistant, janitor, etc.) that receive pay/stipend within your church?

        <1>   None
        <2>   1
        <3>   2-5
        <4>   6-10
        <5>   More than 10
        <99> Don't Know

RESPONDENT'S DEMOGRAPHICS

43. What is your role within your church?

	Yes	No
Pastor	1	2
Other Clergy *(e.g. associate minister, etc.)*	1	2
Coordinator/team member responsible for health and wellness activities/programs	1	2
Lay church officer *(e.g. deacon/deaconess, etc.)*	1	2
Church Staff *(e.g. administrative assistant, etc.)*	1	2
Lay member	1	2

44. How many years have you served in this role?

        <1>   1-10
        <2>   11-20
        <3>   21-30
        <4>   31-40
        <5>   41-50
        <6>   More than 50 years

45. What is your gender?

        \<1\>   Male
        \<2\>   Female

46. What year were you born? _____

47. Which of the following best describes your race?

        \<1\>   African American/Black
        \<2\>   Asian/Pacific Islander
        \<3\>   Native American/American Indian
        \<4\>   White
        \<9\>   Other_____

48. Which describes your ethnicity?

        \<1\>   Hispanic/Latino
        \<2\>   Non Hispanic/Non Latino

49. What is the highest grade level you have completed?

        \<1\>   Less than 12th grade
        \<2\>   GED
        \<3\>   High School
        \<4\>   Trade school
        \<5\>   College
        \<6\>   Master's degree
        \<7\>   Doctoral degree *(e.g. Ph.D.)*
        \<8\>   Professional Degree *(e.g. MD, JD, etc.)*

Please continue to the next page…

50. What is your employment status?

	Yes	No
Employed (Full time or part-time)	1	2
Self-employed	1	2
Retired	1	2
Student	1	2
Unemployed	1	2

» Please review the survey to make sure you did not accidentally skip any questions«

☺ **THANK YOU FOR YOUR TIME AND COOPERATION!!** ☺