UNIVERSITY OF CINCINNATI

Date: August 17, 2004

I, Patricia B. Williams,

hereby submit this work as part of the requirements for the degree of:

Master of Education

in:

Health Promotion And Education

It is entitled:

"A Pilot Study Comparing Health Locus of Control and God Locus of Health Control Scores Between African American and European American Christians Attending Mainstream Evangelical and Nondenominational Charismatic Churches in Southwest Ohio"

This work and its defense approved by:

Chair: Randall R. Cottrell

Kathy A. Young

A PILOT STUDY COMPARING HEALTH LOCUS OF CONTROL AND GOD LOCUS OF HEALTH CONTROL SCORES BETWEEN AFRICAN AMERICAN AND EUROPEAN AMERICAN CHRISTIANS ATTENDING MAINSTREAM EVANGELICAL AND NONDENOMINATIONAL CHARISMATIC CHURCHES IN SOUTHWEST OHIO"

A thesis submitted to the

Division of Graduate Studies and Research
of the University of Cincinnati

in partial fulfillment of the
requirements for the degree of

MASTER OF EDUCATION

in the Division of Human Services
of the College of Education

2004

by

Patricia B. Williams

B.S.N., University of Cincinnati 1981

Committee Chair: Randall R. Cottrell

Abstract

AN ABSTRACT OF THE THESIS FOR THE MASTER OF EDUCATION DEGREE IN HEALTH PROMOTION AND EDUCATION, PRESENTED ON AUGUST 17, 2004, AT THE UNIVERSITY OF CINCINNATI, OHIO.

TITLE: A Pilot Study Comparing Health Locus Of Control and God Locus Of Health Control Scores Between African American and European American Christians Attending Mainstream Evangelical and Nondenominational Charismatic Churches In Southwest Ohio.

MASTERS COMMITTEE MEMBERS: Dr. Randall Cottrell (Chair) and Dr. Keith King.

The purpose of this pilot study was to compare internal and chance health locus of control and God locus of health control scores between mainstream Evangelical and nondenominational Charismatic Christians attending churches in Southwest Ohio. For this study, the United Methodist Church was used to represent mainstream Evangelical Christians. A comparison between African Americans and European Americans within the sample population was also made. The Multidimensional Health Locus of Control and God Locus of Health Control Scales were integrated into one survey for use in this study. Using stratified random sampling, eight churches (four United Methodist and four nondenominational Charismatic) were selected. Two of the four in each of the two groups were predominantly African American and two were predominantly European American. Convenience sampling was used to survey adult church members during Sunday worship services. A total of 318 surveys (125 from United Methodist Churches and 193 from nondenominational Charismatic Churches) were obtained. Using the *t* test, mean scores from each of the locus of control scales were compared between subgroups. Results indicated that nondenominational Charismatic Christians had a stronger belief in God locus of health control than United Methodist Christians. It also indicated that

European American United Methodists had a stronger belief in chance locus of health control than African American United Methodists; however African American United Methodist had a stronger belief in God locus of health control. Results support the significance of locus of control within the religious community and warrants consideration when developing faith or church based health ministries or health programs. Further research of other religious groups was recommended.

Acknowledgements

I would like to acknowledge my deep appreciation to Dr. Randall Cottrell, my Committee Chair. Thank you so much for keeping me on the "straight and narrow" throughout this process. Thank you so much for all of the feedback, suggestions, and support that you provided over the lifetime of this project!

I would also like to acknowledge Dr. Keith King, the second member of my Committee. Your encouragement was sensed in every way! Please never stop loving what you do!

To Sam Luke, former pastor of Princeton Pike Church of God and Kim Terry, founding pastor of Living Word Fellowship- thank you for meeting with me and providing me with such wise and valuable counsel. I took all of your recommendations to heart and applied them as you recommended.

To all eight of the church pastors and their congregations- what an honor it was to work with you. May God bless you with the revelation of His plan for enjoying good health!

To the twenty volunteers- You were awesome! You gave of yourselves so freely and willingly and for that I am indebted to you. May God bless you for the kindness and support that each of you so graciously extended to me!

To Jayde and Adrienne- Thanks for keeping me on my toes and reminding me of the most important things in life!

To Dr. Sebronette Barnes- Your encouragement was always so timely! You're a great friend and mentor.

Finally, to the Greatest Professor I'll ever know- Your prompting got this started, Your wisdom and revelation kept me writing, and Your grace saw it to the end!

This thesis is dedicated to "Gregory". Your simple approach toward life served as a reminder to all of us of that the two most precious things in life are family and good health. You can't learn that in school! I only wish that we could have sat at your feet for just a little longer. You were a great teacher!

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CHAPTER ONE

The Problem

History has documented relentless endeavors to find the cause and cure for the diseases that plagued mankind (Koenig, McCullough, & Larson, 2001; Prioreschi, 1995). Archaeological finds identified time periods as far back as 5,000 B.C. that clearly demonstrated an association between religion, spirituality, and the scientific realm in an effort to diagnose and heal the sick (Koenig et al.).

It was during the Dark Ages that the relationship between health and religion obtained widespread acceptance (Cottrell, Girvan, & McKenzie, 1999; McKenzie, Pinger, & Kotecki, 1999; Timmreck, 1998). Gradually, scientific explanations and cause and effect relationships replaced the "superstitious" and spiritual view embedded in the Dark Ages (Cottrell et al., pg. 45).

In 1849, Dr. John Snow stopped the Cholera epidemic of London when he discovered a link between the contaminated water in the Broad Street water pump, and the presence of disease among those that drew water from that specific well. It was epidemiological advancements such as this along with others such as the identification of specific disease pathogens and Louis Pastuer's discovery of the process of reproduction in microorganisms that supported the emerging field of epidemiology (Cottrell et al., 1999).

In the late 1970's and early 1980's a new direction for health care began. In 1974, Canada published the LeLonde Report. The findings identified a relationship between disease morbidity and mortality, and lifestyle (Cottrell et al., 1999). *Healthy People*, a publication by the U.S. Surgeon General C. Everett Koop, soon followed and

further substantiated the need to shift from a curative to a preventive medical model (Cottrell et al.; U.S. Department of Health, Education, and Welfare, 1979).

The new emphasis on lifestyle and disease focused attention on yet another area of health care concerns—minority health issues (U.S. Department of Health and Human Services, 1990). *Promoting Health/Preventing Disease: Objectives for the Nation,* and *Healthy People 2000* were published in 1980 and 1990 to structure national objectives to reduce the disproportionate illness and death rates among populations suffering the most from lifestyle influences- minorities and in particular, African Americans (U.S. Department of Health and Human Services, 1980, 1990). Life expectancy, cardiovascular diseases, and the use of health care services were significantly lower in the African American community when compared to European Americans (American Heart Association, 2002b; Ries & Brown, 1991; Schappert, 1992).

Several factors contributed to the health issues in the African American community (Booth, 1998). Two major concerns seemed to stem from a distrust of the medical community and the perception that health care providers were insensitive to the Black culture. (Booth, 1998; Green, Maisiak, Wang, Britt, & Ebeling, 1997). It was theorized that the apprehension of African Americans toward the medical community was in part, the result of years of involuntary and uninformed participation in medical research that was conducted without their consent (Booth, 1998; Chatters, Levin, & Ellison, 1998; Green et al, 1997;).

It was suggested that the health care community could regain trust within the African American community by educating them on the health care issues facing their culture and by developing an "africentric" approach that incorporated real components of

the African American community (Booth, 1998, p.15). Another possible solution for rebuilding trust between the two communities was through the establishment of a collaborative partnership with an existing trusted institution within the Black community, such as the church (Hatch & Derthick, 1992; Olson, Reis, Murphy, Gehm, 1988). A strong social support and political institution within the Black community, it provided an arena to reach a wide variety of people that otherwise were unreachable through conventional means (Hatch & Derthick; Levin, Chatters, & Taylor, 1995).

Researchers found that religion played a significant role in health outcomes of African American and European American communities (Ellison & Levin, 1998; Ferraro & Jensen, 1991; Harmon, 1985; Levin, 1996; Levin et al., 1995; Parks, 1998). Studies showed that Mormons and Seventh Day Adventists who adhered to strict religious guidelines experienced lower mortality from specific cancer sites and cardiovascular diseases (Ferraro & Jensen; Harmon; Levin & Vanderpool, 1989). In addition, religious attendance and commitment regardless of denominational affiliation were found to provide a positive or protective effect (Hall, 1992; Levin, 1994; Levin et al., 1995; Levin & Vanderpool).

Church-based health promotion programs were initiated with wide ranging levels of success (Hatch & Derthich, 1992; Olson et al., 1988; Parks, 1998). Originally targeting the African American community, efforts to go beyond that boundary resulted in the development of health programs in other communities as well (Kelly & Huddy, 1999). Although these programs were evaluated for content and procedural correctness, none were found that evaluated health locus of control and God locus of health control, in relationship to program design and outcomes.

The concept of health locus of control was based upon Rotter's (1966) Social Learning Theory. Rotter theorized that a constant interaction between an individual and his/her environment existed. His theory also implied that one's behavior resulted from: 1) the belief in a level of expectancy that the behavior would result in a specific reinforcement, and 2) the value connected to that reinforcement.

Rotter also believed in the existence of an internal and external locus of control. Individuals that were more internal believed that their behavior/personal actions determined the outcome of an event, whereas those that were more external believed that events or outcomes were not influenced by their behavior but rather by luck, chance, fate, or powerful others (Burk & Kimiecik, 1994; Bennett, Norman, Smith & Murphy, 1997; Rotter; Saudia, Kinney, Brown, & Ward, 1991; Welton, Adkins, Ingle, & Dixon, 1996).

Rotter (1966) cited that findings from a previous study he co-researched in 1963 coincided with results from a study conducted by Lefcourt and Ladwig (1965). The studies involved a comparison of internal vs. external locus of control between European Americans and African Americans. Rotter's study involved children, Lefcourt and Ladwig's involved adults. Lefcourt and Ladwig found that African Americans tended to score higher on the external scale. Rotter cited that his results indicated that African Americans that were of lower socioeconomic status scored higher on the external LOC scale than lower and upper class European Americans as well as middle classed African Americans. Reese (1994) lent further support of this but also cautioned that years of oppressive racism must be given consideration when addressing the externality of the African American culture.

Lewis and Green (2000) also found in their study of members of African American churches in Tuscaloosa County, Alabama and Wichita, Kansas that 30% of the study participants indicated a belief that fate (or destiny), a component of external LOC, determined health. A study conducted by Colon (1992) showed that African Americans had a greater belief in fate than European Americans.

Lewis and Green's (2000) research supported the findings of prior research that identified a correlation between self-motivation and a strong belief in fate or destiny. Those with a strong belief in fate were less likely to engage in health promotion behaviors. Given the consideration that the potential perception of God as a component of fate/destiny may exist, much thought would need to be given when developing church-based health promotion and education programs (Lewis and Green).

Purpose of the Study

The first purpose of this study was to compare internal health locus of control scores (IHLC), chance health locus of control (CHLC), and God locus of health control scores (GLHC) between Mainstream Evangelical and Nondenominational Charismatic Christians attending churches in Southwest Ohio. The second purpose of this study was to compare IHLC, CHLC, and GLHC scores between African Americans and European Americans within the sample population.

Hypothesis

1. Hypothesis: Mainstream Evangelical Christians will have significantly higher internal health locus of control scores than Charismatic Christians.

Alternative Hypothesis: Mainstream Evangelical Christians will have significantly lower internal health locus of control scores than Charismatic Christians.

Null Hypothesis: There will be no significant difference between the internal health locus of control scores of mainstream Evangelical and Charismatic Christians.

2. African American mainstream Evangelical Christians will have significantly lower internal health locus of control scores than European American mainstream Evangelical Christians.

Alternative Hypothesis: African American mainstream Evangelical Christians will have significantly higher internal health locus of control scores than European American mainstream Evangelical Christians.

Null Hypothesis: There will be no significant difference in the internal health locus of control scores of African American and European American mainstream Evangelical Christians.

3. Hypothesis: African American Charismatic Christians will have significantly lower internal health locus of control scores than European American Charismatic Christians.

Alternative Hypothesis: African American Charismatic Christians will have significantly higher internal health locus of control scores than European American Charismatic Christians.

Null Hypothesis: There will be no significant difference in the internal health locus of control scores of African American and European American Charismatic Christians.

4. Hypothesis: Mainstream Evangelical Christians will have significantly higher

chance health locus of control scores than Charismatic Christians.

Alternative Hypothesis: Mainstream Evangelical Christians will have significantly lower chance health locus of control scores than Charismatic Christians.

Null Hypothesis: There will be no significant difference in the health locus of control scores of mainstream Evangelical and Charismatic Christians.

5. African American mainstream Evangelical Christians will have significantly lower chance health locus of control scores than European American mainstream Evangelical Christians.

Alternative Hypothesis: African American Evangelical Christians will have significantly higher chance health locus of control scores than European American mainstream Evangelical Christians.

Null Hypothesis: There will be no significant difference in the chance health locus of control scores of African American and European American mainstream Evangelical Christians.

6. African American Charismatic Christians will have significantly lower chance health locus of control scores than European American Charismatic Christians.

Alternative Hypothesis: African American Charismatic Christians will have significantly higher chance health locus of control scores than European American Charismatic Christians.

Null Hypothesis: There will be no significant difference in the chance health locus of control scores of African American and European American Charismatic Christians.

7. Hypothesis: Charismatic Christians will have significantly higher God locus of

health control scores than mainstream Evangelical Christians.

Alternative Hypothesis: Charismatic Christians will have significantly lower God locus of health control scores than mainstream Evangelical Christians.

Null Hypothesis: There will be no significant difference between the God health locus control scores of mainstream Evangelical and Charismatic Christians.

8. Hypothesis: African American mainstream Evangelical Christians will have significantly higher God locus of health control scores than European American mainstream Evangelical Christians.

Alternative Hypothesis: African American mainstream Evangelical Christians will have significantly lower God locus of health control scores than European American Evangelical Christians.

Null Hypothesis: There will be no significant difference in the God locus of health control scores of African American and European American mainstream Evangelical Christians.

9. African American Charismatic Christians will have significantly higher God locus of health control scores than European American Charismatic Christians.

Alternative Hypothesis: African American Charismatic Christians will have significantly lower God locus of health control scores than European American Charismatic Christians.

Null Hypothesis: There will be no significant difference in the God locus of health control scores of African American and European American Charismatic Christians.

Delimitations

This study was confined to examining health locus of control in European American and African American Christians attending churches in Southwest Ohio. The study was further narrowed to include: (1) church members 18 years or older and (2) members of predominantly European American and predominantly African American United Methodists and Nondenominational Charismatic Churches with church memberships equal to or greater than 200 members.

Thirdly, the sample was drawn from a population that may not represent the larger African American, European American, or Christian community. In addition, the Mainstream Evangelical community was delimited to United Methodists who may not represent the belief of all Mainstream Evangelical Christians. Lastly, this study was limited to churches listed in the business segment (yellow pages) of the local phone book which were self identified under the general heading of "Churches" and subheadings of "Methodist", "Nondenominational", and "Charismatic".

Limitations

A limitation of this study was that survey answers were self reported and might have been inaccurate. Participants may have provided less accurate but more socially acceptable answers. The second limitation was in the individual participant's ability to read and comprehend the survey questions.

Assumptions

The following assumptions were made for the purpose of this study:

1. All questionnaire responses by respondents were honest and accurate.

2. All questionnaire respondents were capable of reading and understanding the surveys.

Operational Definitions

1. Mainstream Evangelical- For the purpose of this study was confined to Christians attending United Methodist Churches in Southwest Ohio.
2. Non-denominational- Referred to a church that embraced Christian doctrine, was not affiliated with a specific religious denomination and was not considered mainstream Protestant.
3. Charismatic- Referred to Christians who self reported attending a Christ and Holy Spirit centered non-denominational church who: 1) practiced and believed that the baptism of the Holy Spirit was a separate experience from water baptism, 2) believed and practiced the gifts of the Holy Spirit individually and/or corporately, and 3) believed in and frequently practice speaking in tongues individually and/or corporately.
4. Church-based health promotion program- For the purpose of this study was defined as "a large scale effort by the church community to improve the health of its members through education, screening, referral, treatment, and group support" (Ransdell & Rehling, 1996, p. 195).
5. Health Locus of control- the compilation of two separate scores obtained from the 12-item instrument (6 items per scale) measuring internal health locus of control and chance.
6. God Locus of Health Control- the score obtained from the Health Locus of Control instrument pertaining to the 6 questions dealing with the power of God.

7. African American Church- a church described by its Head (or Senior) Pastor of having a church membership, which was 80% or more African Americans.
8. European American Church- a church described by its Head (or Senior) Pastor of having a church membership, which was 80% or more European Americans.

CHAPTER TWO

Review of Literature

The first purpose of this study was to compare internal health locus of control scores (IHLC), chance health locus of control (CHLC), and God locus of health control scores (GLHC) between Mainstream Evangelical and Nondenominational Charismatic Christians attending churches in Southwest Ohio. The second purpose of this study was to compare IHLC, CHLC, and GLHC scores between African Americans and European Americans within the sample population.

The following review of literature addressed 1) the top three major causes of morbidity and mortality within the general population, 2) morbidity and mortality in African Americans in the United States, 3) the role of religion in the United States, 4) a historical overview of the relationship between religion, health, and medicine, 5) the growing interest in the religion-health relationship 6) the development and implementation of church-based health promotion programs 7) the health locus of control construct and 8) the God locus of health control construct.

Morbidity and mortality in the United States

One of the most significant documents to influence the direction of healthcare and healthcare delivery was The LaLonde Report (also titled *A New Perspective on the Health of Canadians*). Written in the early 1970's, this report provided evidence from an epidemiological perspective that environmental factors and lifestyle behaviors were influencing the health and wellness of Canadians. These findings became the foundation for a national effort in Canada to initiate a health promotion and education campaign to

motivate Canadians toward self-responsibility and self-accountability regarding their personal health (Cottrell et al., 1999).

The influence of this report stretched beyond the borders of Canada. Catching the attention of leaders within the American healthcare industry, these findings became the impetus for re-examining the focus and delivery of healthcare services in the United States (Cottrell et al., 1999). In 1979, the U.S. Surgeon General, C. Everett Koop, published the document, *Healthy People* (USDHEW, 1979). This document was very instrumental in early attempts by the United States to shift the emphasis within health care from that of a treatment focused medical model to one of prevention (Cottrell et al.).

Identified in that report and in a study conducted during that same period by the Center for Disease Control, was profound evidence that lifestyle was adversely impacting the health and longevity of Americans (McKenzie et al., 1999). Certainly the issue of premature death in the American population was disturbing; however, more disconcerting was the data that indicated that morbidity and mortality rates were alarmingly higher in minority populations than in Caucasians (Lewis & Lee, 2000; McKenzie et al.; USDHHS, 1990).

The last two decades of the 20th century were strategic time periods in the history of health care in the United States. It was during that period that the national objectives, *Promoting Health/Preventing Disease: Objectives for the Nation*, in 1980 and *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, in 1990 were developed in an effort to steer public health providers toward a new emerging healthcare model that focused on prevention (USDHHS, 1980; USDHHS, 1990). Three hundred and seventy-six objectives were written under twenty-two identified priority

areas with a target completion date of 2000 (in actuality there were only 319 objectives. Fifty-seven objectives were duplications, overlapping and appearing under more than one priority area) (USDHHS, 1990). With about half of the objectives met and the target date approaching, a new directive, *Healthy People 2010*, an extension of *Healthy People 2000*, was written to continue the process of improving the health and well being of Americans (Cottrell et al., 1999, USDHHS, 2000).

By the end of the 20th century and in the first year of the 21st century, the three leading causes of death in the United States for all Americans were Cardiovascular diseases, Malignant Neoplasms (cancer), and Stroke (American Cancer Society 2002a, American Heart Association, 2002b; McKenzie et al., 1999; USDHHS/NCHS, 2002a, 2002b, 2003). Classified as chronic diseases (although acute episodes could occur within each of these categories), the initial development and progression of these diseases were most often preventable and a result of risky behaviors, lifestyle choices, exposure to occupational hazards, or simply the normal aging process (Timmreck, 1998). The aging process was identified as a preventable factor because although the process itself was not preventable, research demonstrated that over a life time, individual behaviors and lifestyle choices could slow the process and even delay the development or severity of diseases (Lee, Hsieh, and Paffenbarger, 1995; Paffenbarger, Hyde, Wing, and Hsieh, 1986; Paffenbarger and Williams, 1967).

Cardiovascular Diseases

Cardiovascular diseases were the number one cause of death in the United States during the 20th century for every year except 1918 (AHA, 2002b). According to The American Heart Association (2002b), the number of deaths caused by cardiovascular

diseases (CVD) exceeded that of the "next 5 leading causes of death combined" (p. 5). In 2000, 39.4% (1 per 2.5 deaths) of all causes of death in the United States were attributed to CVD, 32% of deaths from CVD occurred prematurely (prior to the age of 75), and 60% of all death certificates identified CVD as either the primary or contributing cause of death (AHA).

Citing results of the Third National Health and Nutrition Examination Survey (NHANES III [1988-94]), the AHA (2002b) indicated that the age-adjusted prevalence rate for CVD in adults were as follows:

- In non-Hispanic whites- 23.8% in women and 30% in men
- Among non-Hispanic blacks- 39.6% in women and 40.5% in men
- Among Mexican Americans- 26.6% in women and 28.8% in men.

With the exception of a slightly lower rate in Mexican American males, these rates indicated a higher incidence of cardiovascular diseases occurring in the African American and Mexican American populations than in the non-Hispanic white population. In addition, a higher incidence of mortality from CVD among females overall existed with 505,661 deaths in 2000 compared to 440,175 deaths among males for the same time period (AHA, 2002c).

With many chronic diseases, modifiable and non-modifiable risk factors were often involved (Timmreck, 1998). That principle held true for CVD as well. Modifiable risk factors included elevated serum cholesterol levels, physical inactivity, obesity and overweight, cigarette smoking, and Diabetes Mellitus. Results from NHANES III (1988-94), the AHA (2002b) indicated that when looking at age-adjusted prevalence rates, rates among African American and Mexican American populations were higher when

compared to non-Hispanic whites with the exception of serum cholesterol levels, which were either equal or slightly lower:

- Elevated serum cholesterol levels (200 mg/dL) among 20-74 year old non-Hispanic whites- 49% of women and 52% of men; among 20-74 year old non-Hispanic blacks- 46% of women and 45% of men; among 20-74 year old Mexican Americans- 48% in women and 53% in men.
- Physical inactivity among adult non-Hispanic whites 18 years and older- 36.2% of women and 32.5% of men; among adult non-Hispanic blacks 18 years and older- 55.2% of women and 44.1% of men; among adult Hispanics 18 years and older- 57.4% of women and 48.9% of men.
- Diabetes Mellitus (as diagnosed by a physician) among adult non-Hispanic whites aged 20 years and older- 4.7% of women and 5.4% of men; among non-Hispanic blacks- 9.5% of women and 7.6% of men; among Mexican Americans- 11.4% of women and 8.1% of men.

Using results of the National Health and Nutrition Examination Survey (NHANES [1999-2000]) and the National Health Interview Survey (NHIS [1997-1998]), the AHA (2002b) cited age-adjusted prevalence rates in the same population as follows:

- Overweight (defined as a BMI of 25-29.9) among adult non-Hispanic whites 20 years and older- 57.3% of women and 67.4% of men; among non-Hispanic blacks 20 years and older- 77.3% of women and 60.7% of men; among Hispanics 18 years and older- 56.6% of women and 66.2% of men.

Finally, using results from Health, United States, 2002 and the National Health Interview Survey (NHIS [1999]) the AHA (2002b) cited age-adjusted prevalence rates for cigarette smoking in the same population as follows:

- Among adult non-Hispanic whites 18 years and older – 21.6% of women and 25.8% of men; among non-Hispanic blacks- 20.8% of women and 26.1% of men; among Hispanics- 12.3% of women and 24.1% of men.

Consistent with the national trend, Ohio's statistics for 1998 indicated that 41 % of the total deaths for Ohio were attributed to Cardiovascular Diseases (AHA, 2002a).

Cancer

Cancer was the second leading cause of death in the United States and was responsible for 1 in every 4 deaths. Data from the National Centers for Health Statistics (2002a) attributed 553,091 deaths or 23% of the total deaths in the United States in 2000 to malignant neoplasms. Estimates indicated that approximately 555,500 (1,500/day) deaths would occur in 2002 due to cancer alone (American Cancer Society, 2002a). Considering direct medical costs, costs due to low productivity secondary to illness, and lost productivity due to death, *Healthy People 2010* estimated annual financial costs of cancer to be approximately $107 billion (USDHHS, 2000).

Only 5-10% of all causes of cancer were attributed to hereditary factors for predisposition. The remaining 90-95% were considered the result of genetic mutations that occur during ones lifetime as the result of internal (mutations resulting from cell metabolism of nutrients, immunological disorders, and hormones) and/or external/environmental (radiation, tobacco, infectious microbes, UV exposure, and chemicals) causes (ACS, 2002a).

Estimates indicated that one-third of the deaths caused by cancer in 2002 would be directly related to lifestyle choices- obesity, diet, physical inactivity, and other contributing lifestyle factors and therefore, to a degree, potentially preventable (ACS, 2002a; USDHHS/*Healthy People*, 2000).

Mortality rates for age, gender, and race varied according to the cancer site. The incidence of cancer increased with age with approximately three-fourths (77%) of all cancers diagnosed in persons 55 or older. Considering all racial and ethnic groups overall, cancer morbidity and mortality were highest in the African American population (ACS, 2002a).

Lung cancer. Lung and bronchial cancer were the number one cause of cancer deaths in the U.S. with breast and prostate cancers ranking number two. The third leading cause of cancer deaths for both men and women was colorectal cancer (10% and 11%, respectively) (ACS, 2002a).

In the 1960's the United States and Great Britain published reports that supported a direct link between cigarette smoking and primary lung cancer (National Cancer Institute [NCI], 2002). Cigarette smoking was identified as "the most preventable cause of death in our society" (ACS, 2002a, p. 29). Approximately one in every five deaths in the U.S. and 87% percent of all lung cancers were attributed to smoking. Smoking was also linked to other forms of cancer- i.e. cancer of the bladder, kidney, pancreas, cervix, larynx, esophagus, mouth, and pharynx, and to chronic diseases such as chronic bronchitis, emphysema, stroke, heart disease, and gastric ulcers as well (ACS, 2002a).

The National Cancer Institute (2002) estimated that 90% of the cases of lung cancer in men, and 78% of cases in women were linked to tobacco use. Estimates for

lung cancer deaths among women and men combined for 2002 was 154,900 (ACS, 2002a). Second hand tobacco also served as a major risk factor for lung cancer as well. On a smaller scale, exposure to known carcinogens such as radon and asbestos were also known risk factors (NCI, 2002).

Until 1987, breast cancer was the major cause of cancer among women. However that same year, a new trend began and for the first time the number of lung cancer deaths in women exceeded breast cancer deaths (ACS, 2002a; USDHHS/Healthy People, 2000). That trend continued for every year thereafter with estimates for 2002 at 65,700 and 39,600 for lung and breast cancer deaths (respectively) among women (Schottenfeld & Fraument, 1996).

Between 1992 and 1998, the number of deaths among men declined by 1.9% for each year. During this same time period there was a slight increase among women by 0.8% for each year (ACS, 2002a).

African American men had the highest mortality rate overall. When compared to European American males, African American men had a 40% higher age-adjusted death rate for lung cancer. Only a small difference was seen when comparing the same rates among African American and European American women (USDHHS/Healthy People, 2000).

Prostate cancer. The second leading causes of cancer deaths were prostate and breast cancer. More than 70% of diagnosed cases of prostate cancer occurred in men over the age of 65 and approximately 80% of prostate cancer deaths occurred in those 70 years of age or older (ACS, 2002a; NCI, 1996). Stanford et al. indicated that there were both a marked and rapid increase in the incidence rate of prostate cancer between 1987

and 1992 with a decline between 1993 and 1995. The 5-year survival rate was 96% and the relative 10 and 15-year survival rates were 75% and 54%, respectively (ACS).

The highest incidence rate in the United States (and in the world) occurred in African American males followed by European American males and thirdly, Hispanic males. The mortality rate among African American males was twice that of European American males (ACS, 2002; NCI, 1996). African American men had an incidence rate that is 60% higher than European American males and a mortality rate that was twice that of their European American counterparts (Stanford et al., 1999).

Between 1986 and 1992 the incidence rate for European American males increased by 108% and 102% among African American males (1986 and 1993) (Stanford et al, 1999.). Estimates for the number of new cases and deaths due to prostate cancer in all males for 2002 were 189,000 and 30,200, respectively. Risk factors included: a positive family history, especially if the family member was young when diagnosed, and race, specifically African American males. Studies have also suggested a link with dietary fat intake as a risk factor as well (ACS, 2002a).

When diagnosed early, the survival rate for prostate cancer was 100%. Overall, the survival rate regardless of the stage when diagnosed was 96%. The relative 10 and 15-year survival rates were 75% and 54%, respectively (ACS, 2002a).

Breast cancer. Breast cancer was identified as the second leading cause of cancer deaths in women (ACS, 2002a). The risk of being diagnosed with breast cancer increased with age (NCI, 2002). Women 30-40 years of age had a 1 in 252 risk of developing breast cancer, 40-50 year olds had a 1 in 68 risk, a50-60 year olds had a 1 in

35 risk, and 60- 70 year olds had a 1 in 27 risk. Over a lifetime, the risk was 1 in 8 (NCI).

Statistics for 1998 indicated that the mortality rate was highest among African American females with a rate of 28.2/100,000 as compared to 20.8/100,000 for European American women and 12.8/100,000 for Hispanic women (USDHHS, 2000). In 2002, breast cancer deaths estimates (for men and women combined) were 39,600 (ACS, 2002a).

Colorectal cancer. The third leading cause of cancer deaths was colorectal cancer. Over 90% of colorectal cancer morbidity and mortality occurred in those over the age of 50. Americans had a 6% risk for developing colorectal cancer over a lifetime (ACS, 2002a).

Until the age of 50, the incidence rate for men and women were approximately the same. After 50 years of age, the rate increased among men. Both morbidity and mortality rates were highest among African Americans followed next by European Americans and Asian/Pacific Islanders. The rates were lowest among Hispanics, Alaska Natives, and American Indians (ACS, 2002a).

Between 1992 and 1998 mortality rates decreased annually for European American males and females by 2.1% and 1.9%, respectively. However, the decline was less impressive among the African American population during that same time period, with a 0.9% decrease in men and only a 0.6% decrease in women (Howe et al., 2001).

Both modifiable and non-modifiable risk factors were linked to the development of colorectal cancer. Modifiable risk factors included smoking, nutrition (red meats, 5 servings or more of vegetables/day, and alcohol in excess of 1 drink/day), obesity, and

physical inactivity. Non-modifiable risk factors included a positive family or personal history of colorectal cancer or polyps and a personal history of Inflammatory Bowel Disease. In approximately 75% of diagnosed cases in those over the age of 50, none of the predisposing risk factors were found (ACS, 2002a).

Survival rate improved with early diagnosis. Considering all races combined, the 1-year survival rate was 81% and the 5-year survival rate was 61%. The survival rate lowered if surrounding organ and lymph node involvement had occurred. If, however, metastasis was present, the survival rate dropped to 8% (ACS, 2002a).

Ohio statistics indicated that as it related to the 3 leading sites the incidence rates, with the exception of breast cancer, were highest among African Americans. However, African Americans took the lead in mortality rate in all three categories (ACS, 2002b).

Stroke

Cerebral vascular accidents (stroke) were the third leading cause of death and the leading cause of disability (AHA, 2002b; USDHHS/NCHS, 2002a & 2002b; Pancioli et al., 1998). In 2000, stroke claimed 167,661 lives and accounted for 7% of the total deaths in the United States. Statistically, on average someone suffered a stroke in the U.S., every 45 seconds and died from one every 3.1 minutes (AHA, 2002b). The American Heart Association (01) indicated that as of 2000 there were approximately 4,600,000 stroke survivors. As a result of stroke, the American Stroke Association estimated that Americans would pay approximately $51 billion in medical and disability related costs (American Stoke Association, 2002).

The risk for stroke increased with age. Strokes occurred primarily in those over the age of 65 and were more common in men; however with aging, the incidence became

higher among women. Although the occurrence in most age groups were higher in men than women, more than half (3 in 5) of the total number of stroke deaths occurred in women (AHA, 2001, 2003). The percentage of stroke deaths for men and women in 1999 was 38.5% and 61.5%, respectively (AHA, 2001).

Other risk factors included: hypertension (especially if uncontrolled), arterial disease (especially carotid artery involvement), diabetes mellitus, atrial fibrillation, elevated cholesterol levels, sickle cell anemia, a history of transient ischemic attacks (TIA), the presence of an existing cardiac disease, obesity, smoking, excessive alcohol intake, physical inactivity, illegal drug use, heredity, and race. Many, but certainly not all, of these risk factors were identified as either modifiable behaviors or potentially controlled health problems (AHA, 2002b).

When compared to European Americans, African Americans had a 38% higher risk of suffering a first stroke and a higher risk of death as a result of suffering a stroke. A comparison of the age-adjusted incidence rates (per 1,000 person-years) were as follows:

- 4.44 in African American males compared to 1.78 in European American males
- 3.10 in African American females compared to 1.24 in European American females (AHA, 2001)

Comparing mortality risks, African Americans again demonstrated a higher risk of death from stroke when compared to non-Hispanic whites:

- 4 times higher in 35-54 year olds
- 3 times higher in 55-64 year olds

- 2 times higher in 75-84 year olds
- 1.2 times higher in 75-84 year olds
- slightly lower among those 85 years and up (USDHHS/MMWR, 2000)

Morbidity and mortality in African Americans

In 1985, the findings of the Report on the Secretary's Task Force on Black and Minority Health, revealed that African Americans were experiencing higher morbidity and mortality rates than European American Americans (USDHHS, 1985). It indicated that African Americans and other minorities were experiencing approximately 60,000 "excess deaths" (defined as "deaths which would not have occurred if mortality rates were the same") each year as a result of that existing disparity (Braithwaite & Lyncott, 1989; Doyle, Smith, & Hosokawa, 1989, p. 61). These findings were consistent with the findings of *Healthy People 2000 and 2010*: *National Health Promotion Disease Prevention Objectives* (U.S.DHHS, 1990; U.S. Department of Health and Human Services, 2000).

The increased gap in the morbidity and mortality of minority groups, in particular that of African Americans, became the catalyst for identifying vehicles to reach and improve the health status of at-risk populations. *Healthy People 2000* and *2010*, identified and focused on six primary areas: diabetes, cardiovascular disease, HIV/AIDS, immunizations, infant mortality, and cancer, all of which represented disproportionate numbers of cases in minority populations. Primary focus areas included health promotion and prevention and eliminating the gap in morbidity and mortality rates among minorities (Lewis & Green, 2000; USDHHS/*Healthy People*, 1990, 2000).

Research provided evidence that African Americans were experiencing higher morbidity and mortality rates especially in cardiovascular disease (AHA, 2002b; USDHSS/*Healthy People*, 2000). According to the American Heart Association (2002b) African Americans developed high blood pressure at an earlier age and their average blood pressures were significantly higher.

This resulted in deaths among African Americans from heart disease that were 1.5 times higher, fatal strokes deaths that were 1.8 times higher, and nonfatal strokes that were 1.3 times higher than that of European Americans (American Hearth Association, 2002b). Elevated rates held true for cancer diseases as well. When compared to European Americans, cancer death rates among African Americans were 30% higher and HIV mortality was more than seven times greater (USDHSS/*Healthy People*, 2000).

Other data indicated that when compared to European Americans, African Americans (1) were more prone to perceive themselves as being in poorer health (8.7% compared to 5.8%) (2) were less likely to have health insurance coverage (20.2% compared to 12.8%) and (3) made fewer visits to their primary care physician (Ries and Brown, 1991; Schappert, 1992). As anticipated, underutilization of health care services (primary care or specialty services) further compounded health care issues within this population (Green, et al., 1997).

The Role of Religion in the United States

Augustine once commented on the subject of time, "'What, then, is time? If no one asks me I know; but if I have to say what it is to one who asks, I know not.'" (Bowker et al., 1997, p. xv). Facing the dilemma that Augustine faced, literary writers

demonstrated an equal difficulty encountered when attempting to define the word "religion" in a way that was accepted by many (Bowker, et al., Koenig, et al, 2001).

Karl Marx defined religion as the following, "religion is the sigh of the oppressed creature, the heart of a heartless world, just as it is the spirit of a spiritless situation. It is the opiate of the people" (Bowker, et al. 1997, p.xv). Sigmund Freud's definition provided yet another view, "psychoanalytic investigation of the unconscious mental life reveals that religious beliefs correspond closely with the fantasies of infantile life, mainly unconscious ones, concerning the sexual life of one's parents and the conflicts this gives rise to" (Bowker, et al. p.xv).

The noted Sociologist Emile Durkheim formulated the following definition, "a religion is a unified system of beliefs and practices relative to sacred things, that is to say, things set apart and forbidden—beliefs and practices which unite into one single moral community called a Church, all those who adhere to them" (Bowker, et al., 1997, p.xv). The author of the Book of James, who was believed to be the brother of Jesus, expressed the following belief about the word "religion"—"pure and undefiled religion before God and the Father is this: to visit orphans and widows in their trouble, and to keep oneself unspotted from the world" (New King James Version) (Hayford, Middlebrook, Horner, Matsdorf, 1991, p.1897; Bowker, et al.).

The word "religion" originated from the Latin word "*religio*", which gave reference to a "fear of God or the gods" (Bowker et al., p. xv). The definition was later broadened to include ceremonious and ritualistic acts that were conducted when one approached a Deity/deities (Bowker et al.). After examining various sources, Koenig, et al. (2001) comprised the following definition: "Religion is an organized system of

beliefs, practices, rituals, and symbols designed (a) to facilitate closeness to the sacred or transcendent (God, higher power, or ultimate truth/reality) and (b) to foster an understanding of one's relationship and responsibility to others in living together in a community" (p. 18).

Religion has played a significant role in the lives of Americans (Gallup, 2001). Results from a Gallup poll conducted on December 14, 2001 indicated that 60% of Americans felt that religion played a very important roll in their life, 45% indicated that they attended a church or synagogue once a week and almost every week, and 66% stated that they were a member of a synagogue or church (Gallup, 2002).

In 2000, the Gallup Organization conducted a poll for the John Templeton Foundation titled, "Religious Beliefs, Spiritual Practices and Science in the 21st Century" (Gallup and Lindsay, 2002). Survey results indicated that as a whole, Americans believed that the 21st century will see an increase in "religious and spiritual feelings" that would be felt on a global scale (Gallup and Lindsay).

Additional results of this survey with regards to religious significance in the 21st century, further supported the importance that religion will play among Americans as evidenced in the following:

- 6 in 10 believe that "religious beliefs or spiritual practices will change the way we think" (Gallup and Lindsay, 2002, p. 9).
- By a 4:1 ratio, Americans acknowledged a belief that the influence of these practices and beliefs in individual lives will grow rather than lessen
- 8 in 10 believed that these religious practices and beliefs will have a "great

deal or some impact" on the direction that history will take (Gallup and Lindsay, p.9)

- 8 in 10 Americans expressed a desire for spiritual growth in their life (this was an increase from survey results conducted in the beginning of the 1990s) (Gallup and Lindsay).

According to a March 2000 Gallup Poll, 84% of Americans expressed a preference for Christianity—58% for the Protestant faith and 26% for Catholicism (Gallup, 2001). Two percent indicated a preference for Judaism, 3% for "other", and 6% indicated no religious preference (Gallup, 2001).

Christianity was introduced through the life and ministry of Jesus Christ between 4 B.C. and 33 A.D. (Bowker et al., 1997; Goring & Whaling, 1994; Hayford et al., 1991). A compilation of the characteristics of a Christian was best described as follows: one who believes in the principles of Christianity as defined in the following:

- God is one and the Creator
- Christianity was birthed out of Judaism and that Jesus Christ is the Messiah as spoken by the Old Testament prophets
- Jesus Christ was born of a virgin birth
- Christianity is centered on the life, ministry, death, resurrection, ascension, and return of Jesus Christ to judge the world
- Jesus Christ 1) is the restored word and action of the power (*dunamis* Greek translation) of God, 2) is uniquely related to God in that He is the Son or Logos (Word) of God, 3) shared a unique relationship with

God in that He is one with God, and 4) is the second person in the Trinity- God, Jesus, the Holy Spirit

- Forgiveness of sins and salvation come through God's grace which is only found in Jesus Christ His Son
- The Bible was divinely inspired by God and was recognized and acknowledged as authority.

(Bowker et al. 1997; Goring & Whaling, 1994).

Doctrinal beliefs, though similar in many ways, varied among Christians (Bowker et al. 1997; Goring & Whaling, 1994). Evangelism, a major component of Christianity, has been in existence throughout the life of the Christian Church (Goring & Whaling). Though it crossed denominational lines, the term "evangelical" typically referred to Protestant churches and their belief 1) in "...the message that Christ died for human sins, was buried, and rose again on the third day in fulfillment of the prophetic Scriptures, thereby providing the means of redemption for sinful humanity" (Douglas et al., p. 311), 2) in the belief and proclamation of the Gospel (Douglas et al., 1991), and 3) that the Bible is the ultimate and only authority (Bowker et al., 1997; Goring & Whaling).

History documented the evolution of evangelicalism down through the years (Douglas et al., 1991). The use of the word "evangelicalism" first originated during the Reformation when efforts were made to distinguish between the Catholic and Protestant church (Douglas et al.). Evangelicalism focused on the Holy Scriptures, faith, grace, and the concept of Christ as the central focus (Douglas et al.). With time, the spiritual fervor experienced during the Reformation diminished but soon after a rekindling occurred through three movements- Methodism, the Great Awakening, and German pietism

(Douglas et al.). The foundation of these three movements was the Puritan belief of "biblical authority, divine sovereignty, human responsibility and the need for personal piety and discipline" (Douglas et al. p. 311). These three movements refueled the Protestant church (Douglas et al.).

German pietism focused on a Christian lifestyle which emphasized preaching, studying the Bible, "personal conversion and sanctification", and missionary efforts ((Douglas et al., 1991, p. 311). A spiritual revival ignited throughout the Methodist Church and the Church of England as a result of the efforts of George Whitefield and Charles and John Wesley (Douglas et al.).

Known as the "evangelical age", the 19th century saw a focus on holy living, a growing concern for social issues, and the fulfillment of "good works" through evangelistic efforts (Douglas et al., 1991, p 311). It was during this time period that the birth of the Salvation Army, the China Inland Mission, and the Young Men's Christian Association took place. Also during this time, D.L. Moody and Charles Finney became instrumental during in the revival that swept America known as the Second Great Awakening. Douglas et al. stated that it was this movement that spread throughout the various denominations (Baptists, Presbyterian, Methodist, and Disciples of Christ) and particularly touched the Black community. They went on to state that it was through the deeply spiritually rooted beliefs of the evangelical movement that aided the Black community "both in slavery and freedom" while facing the difficulties that were encountered as a community (Douglas et al., p. 311).

Evangelicalism played a significant role in the development of America's values, politics, and social movements. As revival grew in America it became the momentum for

antislavery activities, the temperance movement, and the women's rights movement. It was in the mid-1900 that evangelicalism embraced a new direction. In opposition to the original vision that promoted separation, the focus changed toward a more ecumenical approached and was led by religious individuals and groups such as Billy Graham and Youth for Christ (Douglas et al., 1991).

By crossing the lines of denominationalism, the term "evangelicalism" grew to encompass many groups ranging form Adventists to Pentecostals to Episcopalians. It embraced a vision that included a missionary emphasis and as a result, evangelicalism had become a worldwide phenomenon (Douglas et al., 1991).

Public opinion polls conducted among Americans in 1992 and 2001 by George H Gallup Jr., indicated a growth in Evangelicalism (Gallup, 1996; Gallup, 2002). In 1992, only 36% of Americans indicated that they considered themselves as evangelical or "born-again" Christians but by the end of 2001 that statistic had increased to 42% (Gallup, 1996; Gallup, 2002).

The Charismatic movement (also known as Charismatic renewal or New Birth) began in the United States during the late 1950's and early 1960's. Also known as the neo-Pentecostal movement, its origin began in an Episcopal church. It was there that an Episcopal priest announced during a Sunday service in 1960 that he had spoken in tongues after receiving baptism in the Holy Spirit. The experience that he spoke of, baptism in the Holy Spirit was an experience that was distinctly different from water baptism (Bowker et al., 1997; Browning, 1996; Cross & Livingston, 1997; Poewe, 1994).

The practice of water baptism was based on the works of John the Baptist, the admonition of the Apostles, and the words of Jesus (Mark 1:4, 9-10; Luke 3:16,17; Acts

2:38; Romans 6:3,4; Matthew 28: 18-20). Denominations within the Protestant faith varied in their interpretation of water baptism. For some baptism was the process of the sprinkling of water over the head of the repentant person (aspersion). For others it meant the pouring of water over the head (affusion) and for others it was believed to be the emersion of the whole body in water. Still others embraced a newer belief that it was accomplished when the repentant person walked away from or separated themselves from their sinful past (Bowker et al., 1997; Browning, 1996; Douglas et al., 1991; Gruits, 1985).

Despite their differences in method, the Christian community agreed that water baptism was 1) a symbol of the purification (or cleansing) process when accepting the Christian faith, 2) the process of joining oneself to the church (or body of Christ), and 3) the process of identifying oneself with the death, burial, and resurrection of Christ. In essence, the transformation process from a life of sin to a new life in Christ (Browning, 1996; Douglas et al., 1991)).

Baptism in the Holy Spirit was viewed as a separate experience. Pentecostals and many within the Charismatic movement believed that this encounter was needed to empower the Christian believer to be able to carry out the Great Commission. Evidence of its occurrence was through the person's ability to speak in tongues (glossolalia) (Cross & Livingston, 1997). This was based on the scriptural writings of Mark 1:8:

> " 'I indeed baptized you with water but He will baptize you with the Holy Spirit' " (New King James Version) (Hayford et al., 1991, p.1468)

Act 1:5,8:

> " 'for John truly baptized with water, but you shall be baptized with the Holy Spirit not many days from now...But you shall receive power when the Holy Spirit has come upon you; and you shall be witnesses to Me in Jerusalem, and in all Judea and Samaria, and to the end of the earth' " (New King James Version) (Hayford et al., 1991, p. 1622) (Cross & Livingston, 1997).

And Acts 10:44-47:

> "While Peter was still speaking these words, the Holy Spirit fell upon all those who heard the word. And those of the circumcision who believed were astonished, as many as came with Peter, because the gift of the Holy Spirit had been poured out on the Gentiles also. For they heard them speak with tongues and magnify God. Then Peter answered, "Can anyone forbid water, that these should not be baptized who have received the Holy Spirit just as we have?"
>
> (New King James Version) (Hayford et al., p. 1646)

Paul Walker's commentary in Hayford et al. (1991) entitled, *"Holy Spirit Gifts and Power"* summarizes the experience as follows, "The Spirit-filled experience is more than just 'speaking in tongues'. In reality it is coming into the fullness of the gifts and fruit of the Spirit as outlined in the New Testament...it also encompasses the broader scope of exercising God's gifts of spiritual enablement..." (p. 2022).

The Charismatic movement spread throughout other denominations. Its heritage was steeped in Pentecostalism, Holiness, and the teachings and influences of various

individuals (Bowker et al., 1997; Poewe, 1994). Predecessors of and products from this movement included the likes of Kathryn Kuhlman, Agnes Stanford, Oral Roberts, and Demos Shakarian, the founder of the Full Gospel Businessmen's Fellowship (Bowker et al.; Poewe).

The movement was characterized by "baptism in the Holy Spirit, ...by a new informality in liturgical worship, anticipation of the Second Coming of Christ, and a renewed emphasis on the present reality of the gifts of the Spirit, especially healing, prophesy, and speaking in tongues (glossolalia)" (Bowker et al., 1997, p.206; Poewe, 1994). It placed a strong emphasis on the immediate presence and work of the Holy Spirit resulting in a new experience with God and the need for total involvement in the religious experience- the head, heart, emotions, and intellect (Bowker et al.).

A notable characteristic of this movement was its distinct style of prayer, songs, and lay involvement. While many members remained within the denominational churches, many left forming independent churches that spread internationally. David du Plessis, along with William Seymour, were very instrumental in spreading the Charismatic movement into traditional or mainline churches and beyond the limits of the United States (Bowker et al., 1997; Poewe, 1994).

The spread of the Charismatic movement in the 1970's and 1980's was assisted by the growth of Christian media such as the Trinity Broadcasting Network (TBN), the Christian Broadcasting Network (CBN), and Logos International, a publisher of Christian literature. The development of "fellowship networks" and outreach by "mega churches" like Chapel Hill Harvester in Atlanta, Georgia in the U.S. helped to further the efforts of

the Charismatic movement (Poewe, 1994, p. 5). An example of fellowship networking and outreach was demonstrated in the ministry of Bishop Earl Paulk (Poewe).

Bishop Paulk was the senior pastor of Chapel Hill Harvester in Atlanta, Georgia as well as a member of the multinational team that led the International Communion of Charismatic Churches. The multinational team was comprised of bishops from Brazil, Nigeria, the Caribbean, and the United States. Members of the team were involved, to some degree, in politics in their individual countries. The lines of commitment varied but the team members were a source of support to one another. As an outreach, Chapel Hill Harvester produced and sent religious audiovisual aides (i.e. books, tapes, etc.) to Africa, Asia, Latin America, and European countries (Poewe, 1994).

Religion, Medicine, and Science: a historical review

The existence of the integration of health and religion was documented as early as 6,000- 5,000 B.C. (Koenig, et al., 2001). Egyptian artifacts indicated that ancient belief was that mental and physical illnesses were considered one in the same and caused by evil spirits (Zilborg & Henry, 1941). Approximately 4000 years later the use of incantations (used to evoked help from the gods) were used to rid the body of demonic activity. It was believed during that time period that demons were the source of disease (Nunn, 1996).

Similar to the Egyptians, between 5,000- 1,000 B.C., ancient Mesopotamians believed that sickness was brought about by troubled ghosts that attacked or possessed the human body and left the disease as evidence of their presence (Koenig, et al, 2001).

As Judaism emerged (2000-1900 B.C.), the sick were taken to the Old Testament priests who's tri-fold role consisted of examining, diagnosing, and monitoring

the sick (Koenig, et al, 2001; Prioreschi, 1995). The monotheistic religious concept of early Judaism identified that God was the ultimate source of healing (Koenig, et al, 2001; Rosner, 1977). Israel used the names Yahweh and Jehovah throughout the Old Testament in reference and reverence to God (Ferm, 1964; Goring & Whaling, 1994; Hayford et al., 1991). God described Himself- His attributes and character, to Israel through the use of several compound names (Hayford, et al.; Stone, 1944). In reference to healing, "Yahweh-Rapha", [other accounts used Jehovah-rophe] meaning 'the Lord who heals'" was used (Hayford, et al. p. 105; Stone, 1944).

The Jewish religion also embraced the belief that it was the result of sin(s) that brought about sickness and disease from God (Greenblatt, 1985; Preuss, 1911/1993). Therefore healing, if in line with God's divine providence, could be obtained through repentance, prayer, and/or fasting (Preuss). Both concepts of the Judaic belief, God the source of healing and sin induced sickness and disease were based upon various Old Testament scriptures as indicated by the following (Preuss):

> *"'If thou wilt diligently hearken to the Lord thy God, and wilt do that which is right in His eyes, and wilt give ear to His commandments, and keep all His statutes, I will put none of the diseases on thee, which I have put upon the Egyptians, for I am the Lord that healeth thee.'"*
>
> Exodus 15:26 (Preuss, 1911/1993, p. 22)
>
> *" 'I kill and I make alive, I wound and I heal; and there is none that can deliver out of My hand.' "* (Preuss, p. 22) Deuteronomy 32:39
>
> *" 'for He maketh sore and bindeth up, He woundeth and His hands make whole' "*. Job 5:18 (Preuss, p. 22)

Further support of these Judaic beliefs were also found in the Old Testament books of Numbers, II Samuel, and Psalms:

> *"Then Miriam and Aaron spoke against Moses because of the Ethiopian woman whom he had married... 'Has the Lord indeed spoken only through Moses?' Has He not spoken through us also?' And the Lord heard it. ...Suddenly the Lord said to Moses, Aaron, and Miriam, 'Come out, you three, to the tabernacle of meeting!' So the three came out. Then He said,*
>
> > *'Hear now My words:*
> > *If there is a prophet among you, I, the Lord, make Myself known to him in a vision; I speak to him in a dream.*
> > *Not so with My servant Moses; He is faithful in all My house.*
> > *I speak with him face to face, even plainly, and not in dark sayings; And he sees the form of the Lord. Why then were you not afraid to speak against My servant Moses?'*
>
> *So the anger of the Lord was aroused against them, and He departed. And when the cloud departed from above the tabernacle, suddenly Miriam became leprous, as white as snow. Then Aaron said to Moses, 'Oh my lord! Please do not lay this sin on us, in which we have done foolishly and in which we have sinned'...So Moses cried out to the Lord saying, 'Please heal her, O God, I pray!'. Then the Lord said to Moses, '...Let her be shut out of the camp seven days, and afterward she may be received again'".* Numbers 12:1-15 (New King James Version) (Hayford, et al., 1991, p. 211; Preuss, 1911/1993).

Hayford et al.'s (1991) commentary on this scriptural passage explained, "This [seven days] is the length of elapsed time prescribed for the priest's first and second inspections of leprosy in Lev.13. The implication is that she was healed in response to Moses' prayer and would be pronounced clean after seven days" (p. 211).

> *"So David said to Nathan, 'I have sinned against the Lord.' And Nathan said to David, 'The Lord also has put away your sin; you shall not die. However, because by this deed you have given great occasion to the enemies of the Lord to blaspheme, the child also who is born to you shall surely die.'...And the Lord struck the child that Uriah's wife* [Bathsheba] *bore to David, and it became ill. David therefore pleaded with God for the child, and David fasted and went in and lay all night on the ground...then on the seventh day it came to pass that the child died...And he* [David] *said, 'While the child was alive, I fasted and wept; for I said, who can tell whether the Lord will be gracious to me, that the child may live?' "* II Samuel 12:13-16, 22 (New King James Version) (Hayford et al., 1991, p. 456; Preuss, 1911/1993).
>
> *"Bless the Lord, O my soul; And forget not all His benefits: Who forgives all your iniquities, Who heals all your diseases"* Psalms 103: 2, 3 (New King James Version) (Hayford et al., 1991, p. 841; Stone, 1944).

Concurrently, there was the acceptance that man could serve as an instrument for God's healing as noted in the healings demonstrated through several of the Old Testament prophets (I Kings 17:17-24, II Kings 4: 17-37, II Kings 5:1-15, II Kings 13:21) and the existence and use of physicians within the Judaic community (Greenblatt, 1985; Preuss, 1911/1993; Woods, 1958).

The Mishnah, Talmud, and the Old Testament demonstrated ancient Israel's belief and practice of principles of hygiene (Preuss, 1911/1993; Rosner, 1977). The belief was that by adhering to these principles, it would not only benefit the individual but society as a whole (Preuss, 1911/1993; Rosner, 1977). Rather than focusing on treatment, much of Judaic health practices focused on principles of preventive medicine and "physical and mental hygiene" (Rosner, 1977, p. 7).

Found within the Pentateuch (the first five books of the Old Testament) were specific instructions given to the Jewish nation in order to prevent the spread of infectious diseases among the people (Cherry, 1998; Hayford et al., 1991; Rosner). A commentary by Hayford et al. (1991) on Leviticus 13:4 addressing the quarantining of individuals infected with leprosy stated, "The priest oversaw the treatment of the afflicted person in a way that both cared for the sick and also protected the community. The medical principles contained in Lev. [Leviticus] view the ailment within parameters of personal and social hygiene that were unparalleled in other religions of the period" (p. 161).

According to Rosner (1977), Numbers 31:21-24 demonstrated yet another example of Mosaic instructions- principles of hygiene required of soldiers. Based on the belief that adherence of this principle would prevent the spread of disease upon returning from war, soldiers were required to adhere accordingly:

> *"Then Eleazar the priest said to the men of war who had gone to the battle, 'This is the ordinance of the law which the Lord commanded Moses: only the gold, the silver, the bronze, the iron, the tin, and the lead, everything that can endure fire, you shall put through the fire, and it shall be clean; and it shall be purified with the water of purification.*

But all that cannot endure fire you shall put through water. And you shall wash your clothes on the seventh day and be clean, and afterward you may come into the camp.' " (New King James Version) (Hayford et al., 1991).

Another principle of hygiene required of soldiers was that of always carrying "a small shovel or paddle" to ensure that fecal excrement was properly disposed of (Rosner, 1977, p.5). By doing so it was believed that the air would not become polluted and the spread of gastrointestinal infectious diseases would be prevented (Rosner, 1977):

" 'and you shall have an implement among your equipment, and when you sit down outside, you shall dig with it and turn and cover your refuse' " Deuteronomy 23:13 (New King James Version) (Hayford et al., 1991; Rosner, 1977).

Hundreds of years later this same practice and the biblical foundation from which it was drawn was required of the soldiers under the command of General George Washington. It was based on the premise that strict adherence to this principle aided in enhancing public health and hygiene (Cherry, 1998).

From 1550-332 B.C. Egyptian history indicated that the treatment of the sick was based upon a belief in a combined treatment methodology consisting of a natural approach delivered by the physician, religious healing by the priest, and the magic incantations provided by the sorcerer (Koenig, et al, 2001; Prioreschi, 1995).

Between 600 B.C. and 600 A.D., Hindus began abandoning the belief in a spiritual-demonic-magical connection with disease origin, pathology, and treatment and by doing so, embraced a belief in the principals of natural causes (Prioreschi, 1995).

They then adopted the belief that healings were the result of the efficacy of medications and therapeutic interventions rather than the result of the role of mediating with the supernatural as was once believed (Prioreschi, 1995).

Between 500 and 300 B.C., Hippocrates identified sickness and disease within the context of four bodily fluids that he believed were found within the body- phlegm, black and yellow bile, and blood (Koenig, et al, 2001). In his writings he also addressed what he described as "diseases of the brain", a term that modern medicine would later label as mental illnesses (Koenig, et al, p. 26).

Historically, the birth and ministry of Jesus Christ was believed to have occurred between 3 or 4 B.C to 33 A.D. and with it came the advent of Christianity (Goring & Whaling, 1994; Hayford et al., 1991). The teachings of Jesus gave attention to suffering and healing for the whole person (body, soul, and spirit). During this same time period Clement of Alexandria proclaimed that healing which occurred through medicine was from God but with the cooperation of mankind (Koenig, et al., 2001). He also expressed the belief that medical knowledge or the "art of healing" obtained through human understanding and wisdom were from God as well (Amundsen, 1982; Koenig, et al., p. 30).

Between 300 and 400 A.D. several events occurred which greatly impacted Christianity and ultimately it's association with healthcare (Koenig, et al., 2001). In 312 the Roman Emperor Constantine experienced a conversion to Christianity (Koenig, et al.). Soon to follow was the writing of the Nicene Creed, which established the doctrine of the Trinity (God, Jesus, the Holy Spirit) and the compilation of the New Testament ("the 'Canon'") (Koenig, et al., p. 31).

For the most part, families were the primary caregivers to their sick (Koenig, et al.). However as Christianity and its encompassing message of Godly love and soul salvation became more widespread, the attention of Christians began focusing on addressing the needs of the needy ("the destitute, the handicapped, the poor, the hungry, those without shelter, and perhaps above all, the sick") (Porter, 1993, p. 1452).

The introduction and wide-ranging acceptance of Christianity led to the beginning of the establishment of facilities to treat the sick that was accessible not to just a few in the private sector, as it was in the past, but to the general public as well (Granshaw, 1993, p. 1181; Pollak, 1963). Unlike modern facilities, the "hospitals" were set-up in various existing buildings such as homes for the aged and poor, hotels, and buildings set aside for treating specific diseases (i.e. leprosy (Pollak).

In 534 A.D. *"The Rule of St. Benedict"* was written to admonish nuns and monks to accept the responsibility and duty of providing charity and service to the sick (Pollak, 1963, p. 79). During this same period of time, less emphasis was being placed on the relationship between demons and physical illness and a new shift toward the connection between demons and mental illness was emerging (Koenig, et al., 2001).

Between 500 and 1000 A.D., the teaching principle most often used to disseminate the knowledge of medicine was through the handing down of the teachings "from the master to the pupil" (Koenig, et al., 2001, p. 33). For the next 200 years the field of medicine, based on the principles and teachings of Galen, Hippocrates, and others, was taught in formal schools of medicine and also became a part of the educational preparation of the clergy (Koenig, et al.).

During the period of 1200 and 1400 A.D. most physicians were also priests

(Koenig, et al., 2001). As it become increasingly more difficult to maintain both physician and church duties those in the role of both clergy and physician were encouraged to focus more on theology (Koenig, et al.).

It was in this same time period, that the beginning stages of separation of the medicine-church relationship occurred as physician certification was shifted from the Church to the State (Koenig, et al; Pollak, 1963, p. 91). The gulf that was being created then widened even further around 1500 when Paracelsus, a Protestant physician, rejected the humor theory and Galen's teachings and introduced the concept of "chemically based" principles of medicine (Gelfand, 1993, p. 1124; Porter, 1993, p. 1461).

In the 1700's Catholic nuns (Sisters of Charity of St. Vincent de Paul) attended to the sick in both secular and religious hospitals (Koenig, et al., 2001; Porter, 1993). By the mid 1700's the publication *L'Homme machine*, written by Julien de La Mettrie, an atheist, discussed the premise that man had neither a soul nor spirit and was in fact a "material being" (Porter, p. 1457). That theory was further supported by the writings of Denis Diderot, which soon followed claiming that the human conscience was completely organic in nature (Porter, p. 1457).

By the mid 1800's efforts to improve conditions and treatment for the medically insane were taking place (Koenig, 2001). Also during this time period medical missions that included trained medical personnel ignited through the efforts of David Livingston and Peter Parker, two Christian physicians (Numbers & Amundsen, 1986, p. 2).

In the mid to late 1800's Thomas Huxlex, agnostic in his beliefs, further widened the increasing gulf between religion and medicine through his strong support of Darwinism (Koenig, et al., 2001). The eighteenth century also yielded the discovery of

the germ theory by Louis Pasteur and works by Robert Koch with the isolation of the bacterium that caused anthrax, tuberculosis, and cholera (Koenig et al.).

The early 1900's witnessed another attempt to re-establish a cooperative spirit between medicine and theology through the works of the Episcopal clergy, Elwood Worcester, (Koenig, et al., 2001). Known as the Emmanuel Movement, Worcester believed that physical healing could be obtained using a "mind over body" approach "by activating divine forces" through prayer (Koenig, et al., p. 46). The birth of Pentecostalism in America during the period of 1907-1911 focused on miracles and faith healing as evidenced by one of the most historical Christian events known as the Azusa Street Revival (Koenig, et al.).

It was the Azusa Street Revival that ignited a spiritual movement within Pentecostalism in North America and foreign mission fields. Decades later the effects of the famous events, which occurred from 1906-1909 at 312 Azusa Street in Los Angeles, California, have continued to impact the mission fields of China, Japan, Africa, and other countries as well (Anderson, 1992; Blumhofer, Spittler, & Wacker, 1999; McGee, 1988; Poewe, 1994).

An African American Holiness preacher by the name of William J. Seymour started this phenomenal movement. Born a slave he was originally raised as a Baptist but later united with the Holiness Movement (Anderson, 1992). Though quiet in nature, he was characterized by his passionate prayer life and preaching. It was said that Seymour "had a vague unsettling effect on others" (Anderson, p. 60). It seemed that his very appearance radiated the existence of "untapped depths of awesome power..." (Anderson, p. 60).

Seymour was trained under the teachings of Charles Fox Parham. Most known for his earlier beginnings in 1901 at his Bethel Bible School in Topeka, Kansas, Parham fervently believed and preached on the Second coming of Christ, healing, the Baptism of the Holy Spirit (as evidenced by an outpouring of the Holy Spirit, speaking in tongues, and the manifestation of the gifts of the Holy Spirit), sanctification, and salvation (Anderson, 1992).

In 1905, word of Parham's ministry quickly spread when he prayed for a woman that had been brought to him. The woman, the wife of a well-known attorney in Houston, had received injuries resulting from an accident. Much publicity surrounded this case. In an account that was given, after Parham prayed for her she immediately arose and began walking about shouting with joy and thanks unto God. Since the newspapers were already covering the litigation this too was covered resulting in the further spread of the news about Parham's ministry (Anderson, 1992).

Later that year, Parham moved to Houston, Texas to open a Bible school. It was then that Parham and Seymour's paths crossed. Having heard of the school and Parham's ministry, Seymour requested to enroll. However due to the racial divide existing at that time, Parham was initially reluctant to allow Seymour to attend the school but eventually agreed (Anderson, 1992; Haar, 1998).

In 1906 Seymour was invited to go to Los Angeles to become an associate pastor at a church. With the blessings of Parham he went. Unfortunately later he left that church and after several church moves he eventually acquired an abandoned church building on Azusa Street. At the same time, word was spreading about the preaching's of Seymour (Anderson, 1992; McClung, 1986).

It was this building on Azusa Street that housed an ongoing revival that by some accounts was reported to have occurred literally nonstop for three years. Although discrepancies were noted with regards to the number that attended the services during the first year, most indicated a large following that filled the building to overflowing (Anderson, 1992; McClung, 1986). The meetings were comprised of singing, prophesying, testimonials, healings, miracles, and speaking in tongues (Anderson, 1992).

Jews, Blacks, Whites, Mexicans, Germans, Norwegians, Indians, Chinese, Ethiopians, and those of other nationalities came to hear Seymour and to experience the imparting of the Holy Spirit. Ministers, missionaries, evangelist and laity of various denominations came from within and outside of the U.S. to attend the Azusa Street meetings. Newspapers throughout the United States carried the story (Anderson, 1992; Harr, 1998; McGee, 1988).

Though the events of the Azusa Street Revival began to come to a close in 1909, those who had attended and experienced this great religious phenomenon had already began taking it back to their cities and countries. The explosion of a new direction for Pentecostalism along with the desire to fulfill the Great Commission to evangelize meant that the movement was no longer confined to the borders of the United States but had in fact began reaching the far continents of the world (Anderson, 1992; Harr, 1998; McClung, 1986; McGee, 1988).

Moving forward in history to the 1950's, over 25% of all patients hospitalized in the U.S. were in hospitals with church/religious ties (Numbers & Amundsen, 1986, p. 2). In the late 1970's the Evangelist Oral Roberts opened the City of Faith Medical and

Research Center as a facility for treating both the physical and spiritual needs of patients (Koenig, et al., 2001).

From 1980-1990 there was a resurging of interest among researchers in the fields of medicine, psychology, and sociology in the area of health and religion (Koenig, et al., 2001). By the end of the 20th century, an increased number of studies exploring the possibility of a health-religion relationship were published in medical and psychiatric journals and more than 60 of the 126 medical schools in the U.S. were offering courses on the subjects of medicine, spirituality, and religion (Koenig, et al., 2001, p. 49).

The author of the Epistle of John, the Apostle John, wrote in III John 2, "Beloved, I wish above all things that thou mayest prosper and be in health even as thy soul prospereth" (New King James Version) (Hayford, et al., 1991). Old and New Testament accounts of physical, mental, and spiritual healings by God were recorded throughout the pages of the Bible as documented in Genesis 20:17, I Kings 13:4-6, II kings 20:1-7, Matthew 8:1-3, Luke 7:2-10, Mark 1:32-34, 39, Matthew 9:20-22 (Woods, 1958).

In summary, history documented a point in time when many believed in the existence of a cause and effect association between spirituality and the presence or absence of disease (Cottrell et al., 1999; McKenzie et al., 1999). In the years that followed that time period, the medical profession engaged in a more aggressive pursuit of scientific explanations for the morbidity and mortality existing around them (Timmreck, 1998; McKenzie, et al, 1999; Chatters, Levin, and Ellison, 1998). Continued advancements in medical technology and pharmacology aided in that shift as medicine looked for more rational explanations for the health issues confronting society (Chatters, et al).

Even when interest in the relationship between religion and health was pushed aside to make room for scientific advancements, it was never completely discarded. While articles were being written in reference to the positive health affects of prayer, faith in God, and church attendance, it wasn't until the 1970's and 1980's that the effort to scientifically measure and document this relationship would emerge (Chatters, et al, 1998). The result was the rebirthing of an interest in the relationship between religion and health.

A Growing Interest in the Religion-health Relationship

As interests were rekindled, efforts increased to uncover the answer to a possible association between religion and health (Chatters et al., 1998; Koenig, 1997; Koenig, et al., 2001). Studies observing Mormons and Seventh Day Adventists demonstrated that when compared to the general population, members of both religions experienced lower morbidity and mortality rates. Both groups incorporated beliefs and behaviors into their practice of religion, resulting in improved health outcomes of their members (Strawbridge, Cohen, Shema, Kaplan, 1997).

These health gains held true not only for Mormons and Seventh Day Adventists, but also in denominations that embraced stricter behavioral guidelines such as Hutterites, Orthodox Jews, Amish, and clergy irrespective of their religious affiliation (Levin, 1994). Members of these religions appeared to be at lower risks for enteritis and colitis, cervical and uterine cancer as well as other cancer sites, stroke, cardiovascular disease, hypertension, and overall mortality (Levin, 1994).

Attributes of religion that contributed most to positive health outcomes were: (1) church attendance (2) church membership (3) prayer and meditation (4) strength of

commitment to a religion and (5) behavior practices (Hall, 1992; Levin, 1994; Strawbridge et al, 1997). The Alameda County Study, a longitudinal study on health and mortality yielded results in support of this. It demonstrated that frequent attendees had lower mortality rates and were more inclined to adopt healthy practices than non-church attendees. Additionally, they were also twice as likely to stop smoking, increase exercise frequency, and were more likely to remain married to the same person (Strawbridge et al, 1997).

Comstock and Partridge (1972) further elaborated on the health benefits of church attendance in their article "*Church Attendance and Health*". In it their findings indicated an association between church attendance and health behaviors and morbidity and mortality. Other research indicated that lower rates of suicide, premarital sex, drug use, and mental disorder were linked to higher levels of religious commitment (Hall, 1992).

In the article, *Holy Health!* David Larson cited results from his research revealing that men who attended church and enjoyed it had significantly lower blood pressures than men who neither attended church nor expressed an interest in religion (Hall, 1992). In yet another study that his research group published, it was found that smokers that attended church had blood pressures equal to or lower than non-smoking, non-church attendees. His research further found that religion played an important role in elderly patients recovering from hip fractures. Those involved in some form of religion had a lower rate of postoperative depression related to their hip fracture leading to an increased effort to ambulate as a part of their recovery thereby avoiding complications secondary to immobility. They also experienced earlier hospital discharges (Hall).

As more patients expressed a desire to receive a more holistic treatment from physicians, more studies were initiated to explore the association between prayer and/or religion and health outcomes (Dossey, L. (1997; Hall, 1992; Hixson, K., Gruchow, H., Morgan, D. (1998); Sloan, Bagiella, Powell (1999). One of the earliest and frequently cited studies pertaining to this subject involved patients admitted to a coronary care unit in which some of the trial participants received remote intercessory prayer in addition to their usual care while the second group received usual care only (Byrd, 1988). This study concluded that while length of hospital stay was not significantly affected, the hospital course score which included the number of events and needs for interventions were lower for the group that received intercessory prayer (Byrd).

A study published in 1999 by Harris et al., sought to replicate the study published in 1988 by Byrd. In a randomized, double blind controlled clinical trial studying the effects of remote intercessory prayer and cardiac outcomes was conducted using a sample size of 990 newly admitted patients to a cardiac care unit over a period of one year (Harris et al.).

The intercessors were comprised of volunteers recruited by the investigators from various denominational backgrounds (35% identified as nondenominational, 27% were Episcopalian, and the remaining 38% indicated an affiliation with Roman Catholic and Protestant groups) within the local community (Harris et.al.). Although from various religious backgrounds, all intercessors had to agree with the following statements of belief, "I believe in God. I believe that He is personal and is concerned with individuals. I further believe that He is responsive to prayers for healing made on behalf of the sick" (Harris et al., p. 2274).

The intercessors were then divided into groups of five with one team leader (Harris et al.).

Once patients were randomly assigned to the intercessory prayer group, the group leader was contacted and he/she in turn contacted the other four members in the group (Harris et al.). The only information supplied to any of the intercessors was the patient's first name. Praying individually and never as a group, the intercessors prayed that the patient would have "a speedy recovery with no complications" (Harris et al., p. 2274). They were also allowed to pray for anything else that they felt was appropriate (Harris et al.)

The investigators concluded that while the length of stay in the Coronary Care Unit and the hospital were not significantly different between the two groups, the outcome in relation to "overall adverse outcomes" was lower for the patients prayed for by the intercessory prayer groups (Harris et al., 1999, p. 2275).

It must be kept in mind that not all religious experiences resulted in positive healthy outcomes (Ferraro & Jensen, 1991). Examples included the mass suicides that involved Jim Jones with The People's Temple and Heaven's Gate, which was led by Marshall Applewhite (Ferraro & Jensen). Another potentially negative impact resided within religious groups such as Jehovah's Witnesses and Christian Scientists who discouraged their followers from partaking in various forms of medical treatment such as blood transfusions (Ferraro & Jensen, 1991).

Church-based health programs

Outreach to the sick and dying by the church was found in historical accounts of the early church demonstrating the genuine commitment to and active role of the church

with regards to the delivery of health care to the public (Gallup and Lindsay, 2002; Koenig, et al., 2001; Prioreschi, 1995). History noted that Christians cared for victims of the great plagues, the poor, and the orphaned often assuming much of the financial burden (Stark, 1998). "For a long time, churches functioned as 'healing' institutions" both for their members and the community at large (Ransdell & Rehling, 1996, p.200).

With an increase in inpatient health care costs, there began a shift to treat and/or recover patients at home and to focus on prevention efforts. A distinct benefit of church-based health programs was their ability to reach people of all socioeconomic levels and those who otherwise would not seek professional help due to fear or distrust of the medical community (Ransdell & Rehling, 1996; Green et al., 1997). These programs were also economically efficient in that they utilized volunteers to provide services within the community while maintaining the same level of success found in programs led by professional staff (Ransdell & Rehling).

Literature indicated that African Americans utilized health care system less often than European Americans (Green et al, 1997; Booth, 1998). Some attributed the reason to distrust fueled by historically significant events, such as the Tuskegee Syphilis Experiment (TSE) (Green et al.; Chatters et al, 1998; Booth). This study was conducted from 1932 to1972 on African American farmers residing in Tuskegee, Alabama that had tested positive for syphilis. More than 400 men with the disease were medically followed but denied appropriate medical treatment (Green et al.).

In 1994, a study was conducted to look at the effects of the TSE as it related to African Americans and European Americans residing in Jefferson County, Alabama. Results indicated that of the African Americans surveyed, The Tuskegee Syphilis

Experiment appeared to have had "an effect on participation or utilization of health services" (Green et al., p. 200). Distrust deepened even further as a result of experimentation conducted on African American slaves prior to experimentation on European Americans and the unauthorized testing of mustard gas on African American enlistees during World War II (Boothe, 1998; National Academy of Sciences, 1963). Underutilization was also attributed to the limited number of health care providers that were culturally competent and health care services that were culturally sensitive (Boothe, 1998).

Regardless of the underlying reason, its presence was real. It was believed that the solution rested in the development of health promotion and education programs that were community based and utilized Africentric models that addressed the "cultural beliefs and community health attitudes and practices" within the Black community (Boothe, 1998; Braithwaite &Lythcott, 1989; Johnson et al., 1998; Lewis & Green, 2000). The most likely institution through which to accomplish this was the church (Chatters et al., 1998).

Ransdell & Rehling (1996) defined church-based health promotion programs as "a large scale effort by the church community to improve the health of its members through education, screening, referral, treatment, and group support" (p. 195). During the early stages of development, many conferences were held to lay the groundwork for church-based programs. In 1989, leaders from 32 different Christian denominations, Islamic, Native American, and Jewish faith groups came together at an international conference to identify a common ground on which to build an effective religious based health program (Randsell & Rehling).

Church-based programs varied depending on disease focus and according to the target population. In their article, *Church-based health promotion: a review of the current literature*, Randsdell & Rehling (1996) indicated that most programs were geared toward the African American community and were designed to focus on topics such as physical inactivity, elevated cholesterol, nutrition, obesity, and cardiac disease.

In their study, Lewis & Green (2000) compared health beliefs, attitudes, and behaviors, and readiness to change among church attendees in two geographically different African American communities. It was hoped that the results would provide valuable information that would aid in the development of program interventions for use in church or community based health education programs targeting the African American community. The development of these interventions would potentially lead to more effective programs thus ultimately improving the health status of African Americans overall.

The participants were attendees of African American churches in Wichita, Kansas and Tuscaloosa County, Alabama. By far, the majority (90%) of participants in both locations believed that obtaining health information through health programs/seminars would improve ones health. With regards to health behavioral changes, 88% of the participants in Tuscaloosa County and 84.1% of participants in Wichita believed that health seminars would indeed aid in the process. Alarmingly, almost half (45% in Wichita and 53% in Tuscaloosa County) believed that there were not enough community based health education programs within their communities. Additional results from the study were as follows:

- 86% of participants in Tuscaloosa County and 81% in Wichita believed that the church was a place to obtain information about health
- Approximately 90% in both locations believed that health education programs within a church would be supported by the pastor of that church
- Approximately 90% in both locations (90% in Tuscaloosa County and 87.3% in Wichita) indicated that they would attend health promotion and education programs if offered at their church.

The first step in the initiation of church-based programs involved obtaining the support and involvement of the pastor (Randsdell & Rehling, 1996). Typically congregations looked to the church leadership with regards to acceptance of a program or person from outside the church. Submitted proposals were introduced to the church board for review and approval. Successful church-based programs were those that included the following components: (1) completion of a needs assessment (2) educational volunteer training sessions led by professionals (3) the establishment of operating committees along with the delegation of responsibilities (4) financial and resource assessment, planning, and acquisition (5) model development, and most importantly, (6) a determination by the church of the desired level of involvement (Randsdell & Rehling).

While indeed some programs flourished, others were less successful. Identified factors which contributed to program failure were: (1) lack of compliance by the volunteers which led to incomplete or inaccurate records (2) volunteer stress and burnout and (3) failure to develop long term strategies to provide the support measures needed for long term behavioral changes (Randsdell & Rehling, 1996).

By nature, churches were viewed as "helping" organizations (Randsdell & Rehling, 1996). Often viewed as the "nerve center" of communities, the church provided stability during difficult times and celebrations within the Black community (Randsdell & Rehling, p. 202). It was perceived as the center of gathering for important life events such as weddings, births, deaths, and baptisms (Randsdell & Rehling). The church played a role in slavery and the activities that led up to and sustained the civil rights movement throughout the South (Hatch & Derthick, 1992). Thusly, one critical purpose for church-based health programs was to reach the medically underserved and those that had became disengaged from the more established medical community (Sutherland & Hale, 1995; Green et al., 1997).

It was estimated that "as much as 70 percent of African Americans" belonged to churches (Billingsley & Caldwell, 1991). Religion, or spirituality, played a significant role in the lives of African Americans (Reese, 1994). As a trusted institution within the African American community, it "plays a major role in the daily life of both individual African Americans and the community at large" (Parks, 1998 p 126).

However, even with the advent of health promotion activities within the community and through the churches, the health status of African Americans failed to significantly improve and continued to show a disparity with that of European Americans (Parks). Acknowledging the increased utilization of church-based programs, Parks stated, "...yet something has been missing...we have used the church as a health promotion site; we have not, however, used spiritual principles and religious practices as a vehicle to promote health...there is a difference between the two" (p. 127).

Health Locus of Control

Maibach & Murphy (1995) summarized Rotter's theory on the locus of control construct as "a generalized expectancy regarding the source of outcome determination: one's own efforts or external forces; ...the perceived relationship between actions and outcomes" (p. 40). Rotter's theory proposed that individuals with an external locus of control believed that their personal actions did not influence an outcome but that the outcome was determined by influencing factors (powerful others, chance, luck, or fate) beyond their control (Conner & Norman, 1996; Holt, Clark, Kreuter, & Scharff, 2000; Saudia, Kinney, Brown, & Ward, 1991). Conversely, individuals with an internal locus of control believed that outcomes/events were under their personal control and therefore the result of their actions (Conner & Norman; Norman, 1995; Saudia et al.).

Rotter designed a scale (the I-E Scale) for the purpose of measuring internal and external locus of control in specific behavioral circumstances (Rotter, 1966). Other scales soon followed (Burk & Kimiecik, 1994; Welton et al., 1996). However the growing need to investigate a component of powerful others that until then had not been examined, God, began to emerge (Welton et al, 1996).

With social learning theory as the foundation, a growing interest emerged among psychologists with regards to a potential link between personal beliefs and health behaviors (Conner & Norman, 1996; Norman, 1995). Though others existed, the Multidimensional Health Locus of Control Scale (MHLC), developed by Wallston, Wallston, & DeVellis (1978), became the tool most often used in this area of research (Conner & Norman; Norman).

Originally the scale consisted of 18 questions with three subscales to measure powerful others, chance and internal locus of control with regards to ones attitude toward general health (Wallston et al., 1978). A 6-point Likert scale was used to measure the respondent's level of agreement for each question (Burk & Kimiecik, 1994).

Wallston et al.'s (1991) MHLC Scale consisted of three forms- Forms "A", "B", and "C". Forms "A" and "B" focused on general health status and Form "C" focused on disease-specific cognitions in people with existing health problems (Wallston et al, 1978; Wallston, Stein, & Smith, 1994). Each form consisted of 18 items (Wallston et al., 1999).

One specific arena of health locus of control that had received very little attention was the God or " 'Supreme Being' " within the category of external influence. Wrightson and Wardle (1997) concluded from their study comparing health locus of control in Afro-Caribbean, British European American, and South Asian women that both race and religion influenced health locus of control.

Surveys conducted in the United States, indicated that there was a high percentage of Americans that believed in the existence of God and prayed and worshiped regularly (Gallup, 2002). It became evident that there was a growing need to design a tool that could measure the effects of religiosity on health behavior (Wallston et al., 1999).

God Locus of Health Control

Welton et al. (1996) hypothesized that in an ideal situation someone with strong religious convictions would score high on both the internal and "God" scales. If this hypothesis were true, this would demonstrate a collaborative relationship between the

person and God, as some religions believed. Those that scored low on internal control and high on God control tended to relegate responsibility to another, in this case, to God.

Welton et al. (1996) identified the need to adapt existing tools so as to take into account the religious/God influence in a person's life. Some of the items measuring powerful others in the existing tools were potentially confusing for people with religious beliefs in God. Referring to item number 11 of Levenson's MLOC scale it was stated, "a religious individual who thinks of God as one powerful other may answer differently from one who is thinking only about powerful other people" (p. 14). As a result of this concern, it was recommended that previous locus of control studies that made generalizations to the religious community, be viewed with some degree of caution (Welton et al.).

Focusing on the two instruments most often used in locus of control research, Levenson's Multidimensional Locus of Control Scale and Wallston, Wallston, & Devellis' Multidimensional Health Locus of Control Scale, Welton et al. (1996) determined that a need existed to 1) reword Levenson's scale to limit the measurement of powerful others so as to exclude the God component 2) to develop a subscale which could assess a person's perception of the overall degree of God control in their life and 3) to develop a subscale for use with Wallston et al.'s MHLC scale that would be capable of measuring a persons perception of God's control of their health.

With the increased interest in the relationship between religion and health, the existence of statistical data indicating that religious groups with strict lifestyle and dietary practices (i.e. Mormons and Seven Day Adventist) experienced lower morbidity and mortality rates from many diseases, and more and more study results pointing toward a

relationship between religion and health, came the need to distinguish the perception and impact of God as a component of powerful others when assessing external locus of control (Bekhuis et al., 1995; Levin, 1996; Murphy, Gwebu, Braithwaite, Goodman, & Brown, 1997; Strawbridge, Cohen, Shema, & Kaplin, 1997; Wallston et al., 1999; Welton et al., 1996).

In 1999, Wallston et al. (1999) introduced another scale- the God Locus of Health Control Scale. Although he acknowledged the usefulness of Welton et al's scale, Wallston et al. identified the need for the development of an instrument to assess the health control beliefs in people with acute or chronic illnesses. The tool was originally designed to be an expansion of and use as a subscale of Form C of the MHLC scale in an effort to assess ones perception of God's control over ones immediate as opposed to general health status. However contrary to its original purpose, it was later adapted for assessing general health as well (K. Wallston, personal communication, February 5, 2002).

Most research using the MHLC scale focused on internal health locus of control (Norman, 1995; Wallston et al., 1999). With the exception of the subscale that Wellton et al. (1996) designed, Wallston et al. found that religion and its relationship and/or influence on health beliefs had been given very little consideration. It was also found that no scale existed which could measure the extent of influence that religion played on health beliefs and practices as it related to the population of people coping with acute or chronic illness. In 1999, Wallston et al. developed a six-item scale called the God Locus of Health Control Scale for that purpose.

The GLHC scale was originally created to examine the degree to which people believed that God exerted control over a current existing health condition, but a later version was developed to measure the degree to which people believed God exerted control over general health (Wallston et al., 1999). The GLHC was designed for use alone or in conjunction with the MHLC (K. Wallston, personal communication, February 5, 2002).

The initial research project using the GLHC scale was conducted using patients diagnosed with systemic sclerosis (SS) and rheumatoid arthritis (RA). There were two sample sets of patients with RA and one sample set with SS. Results indicated:

- that the scale demonstrate internal consistency
- with the exception of educational level, there was no correlation between demographic variables and the GLHC score
- participants that acknowledged strong religious beliefs, frequent involvement in religious activities, and identified religion as a form of coping, scored higher on the GLHC score (Wallston et al., 1999).

However unlike the findings of Welton et al.'s (1996) study, which found a positive correlation between a belief in God's control over health and the practice of healthy behaviors, Wallston et al's (1999) study found that those with a chronic disease (in this study RA and SS) demonstrated poorer coping and adapting skills.

The extent God or divine providence played in the process of health behaviors was potentially significant. Rotter (1966) stated, "the individual who perceives that he does have control over what happens to him may conform or may go along with suggestions when he chooses to and when he is given a conscious alternative" (p. 24).

He went on to conclude that individuals who perceive some control over destiny or fate were more likely to:

- "...be more alert to those aspects of the environment which provide useful information for his future behavior
- ...take steps to improve his environmental condition
- ...place greater value on skill or achievement reinforcements and be generally more concerned with his ability, particularly his failures
- ...be resistive to subtle attempts to influence him." (p. 25).

Summary

For centuries many attempted to discover the cause of the diseases that plagued society. Through time, explanations for the cause and cure of disease were attributed to spiritual influences. With the expansion of knowledge and the ability to discover the unknown, emphasis turned to less obvious explanations. Solutions to health care were addressing cause and effect, which resulted in the birth of the field of epidemiology. The relationship of religion and health continued in spite of this new direction.

But soon, the emphasis on health care began to shift. Communicable diseases were no longer the major cause of high morbidity and mortality. With the invention of antibiotics and other medicinal remedies, many infectious diseases had become curable. It wasn't until the late 70's that the U.S. Surgeon General focused the nation's attention on the correlation between lifestyle and health. In spite of the fact that morbidity and mortality rates were improving, the gap of disparity between European Americans and minority groups still remained.

One of the groups most impacted by the disparity in morbidity and mortality rates was African Americans. With lower life expectancy rates, they were suffering from both acute and chronic illnesses at rates greater than European Americans. One of the solutions, church-based health promotion and prevention programs was being used to reach an otherwise unreachable population. Religion had long been a central point in the lives of African Americans and an appropriate means to disseminate needed health information. It was a means of social and political support for many African Americans and influenced many aspects of their lives.

Even with the church's persuasive influence, there was still a concern regarding the continued disparity in the morbidity and mortality rates within this population. One explanation was that African Americans were distrustful of health professionals as a result of previous medical research procedures that used them as research participants without their knowledge. Another explanation pointed toward the omission of a spirituality component within community health promotion programs.

Literature indicated that as a culture, African Americans were more inclined to possess an external locus of control. External locus of control indicated that an external force determined outcomes. No research studies were found that looked at the impact of this characteristic on health outcomes in church-based programs targeting African Americans.

With the growing number of church-based health promotion and faith-based programs, came the growing need to restructure these programs to include the integration of locus of control into program development and delivery. Questions remained as to

differences among various religions and races related to locus of control and health behaviors.

CHAPTER THREE

Methods

The first purpose of this study was to compare internal health locus of control scores (IHLC), chance health locus of control (CHLC), and God locus of health control scores (GLHC) between Mainstream Evangelical and Nondenominational Charismatic Christians attending churches in Southwest Ohio. The second purpose of this study was to compare IHLC, CHLC, and GLHC scores between African Americans and European Americans within the sample population.

Subjects

The study sample consisted of European American and African American adult congregants 18 years of age and older, attending either United Methodist or Non-denominational, Charismatic Christian churches in Southwest, Ohio. It was decided that United Methodist Churches would be selected to represent Mainstream Evangelicals for the following reasons: 1) the United Methodist denomination had a large representation of both African American and European American churches which would provide a large sampling population and 2) the foundation of church doctrine/beliefs were consistent with mainstream Christian doctrines and generally did not follow the broader teachings of the Charismatic Church. The 2003-04 business sections of two local phone books were used to construct a list of all the United Methodist and non-denominational, Charismatic Christian churches within the sampling area.

Instrumentation

Two instruments were used for data collection. The first instrument, The Multidimensional Health Locus of Control Scale (MHLC), was comprised of 18 items to

assess the participants internal, chance, and powerful others locus of control. However, only the items used to measure two aspects of health locus of control- "internal" and "chance" were included for the purpose of this study. Wallston, Wallston, & DeVellis (1978) first introduced the MHLC scales in 1978. The scales were frequently cited in the literature and used in more than a thousand studies (Wallston, 1998). Regarding reliability and validity, Wallston (1998) cited that the scales were "moderately reliable" with Cronbach alphas ranging between .60 and .75 and test-retest coefficients ranging from .60-.70 (Wallston, p.5). With regards to its validity, Wallston & Wallston (1981) described validity of the MHLC scales as follows,

> "The concurrent and discriminant validity of the MHLC Scales were established by correlating them with Levenson's I, P, & C Scales. The intercorrelations of the MHLC Scale correlated most highly with its theoretical counterpart among Levenson's scales. This was most clearly the case with the IHLC, which correlated significantly only with the I Scale. The PHLC correlated highest with the P Scale but also correlated significantly with the C Scale. Likewise, the CHLC correlated highest with the C Scale but, again, correlated significantly with the P Scale and negatively with the I Scale. The significant PHLC-C and CHLC-P correlations are probably due to the .60 correlation between C and P for this sample" (p. 196).

Three versions of the MHLC scale were developed- Forms A, B, and C. Forms A and B were used for assessing locus of control as it related to general health. Form C was used when assessing "condition specific" locus of control (Wallston, 1998, p.1). After reviewing both forms for general health, Form A was selected for this research project.

The second instrument used was the God Locus of Health Control Scale (GLHC), a 6-question subscale of the MHLC Scale. Both scales could be used alone or in combination with each other. The GLHC scale was integrated into the MHLC as every 3rd question (K. Wallston, personal communication, 2/5/2002).

As noted in the initial study of systemic sclerosis and rheumatoid arthritis patients, the reliability of GLHC scale items was in the alpha value range of 87-.94 (Plante & Sherman, 2001; K. Wallston, personal communication, 2/5/2002). Regarding validity, Wallston (2002) wrote,

> "In our samples of persons with RA, the GLHC scores are independent of two of the other four MHLC Form C subscales, Internality (r = .07 for panel 1; r = .06 for panel 2) and Doctors (r = -.05 for panel 1; r = .09 for panel 2), modestly correlated with Other People (r = .22 for panel 1; r = .20 for panel 2), and somewhat strongly correlated with Chance (r = .47 for panel 1; r = .44 for panel 2). The more our subjects believed [that] their arthritis was a function of fate, luck, chance or nonmedical personnel, the stronger their belief in God's control of their condition.
>
> GLHC scores were positively related (r = .47 in panel 1; r = .42 in panel 2) to Turning to Religion as a means of coping with the pain of arthritis, and the use of prayer (r = .28 in panel 1; r = .20 in panel 2) as a self-care treatment for arthritis...in panel 1 at wave 12, GLHC scores were also correlated (r = .32; p< .01) with a measure of Religiosity; the more important a role religion plays in the person's life, the greater their belief that God determines whether their arthritis gets better or worse" (p.2).

Both the MHLC and the GHLC scales utilized a 6-point Likert-type scale with "1" meaning "strongly disagree" and 6 meaning "strongly agree". Instructions were included on the instrument along with a segment for the collection of demographic data. All survey results were anonymous. Both surveys utilized self-reporting.

Questions assessing the three dimensions of health locus of control (internal, chance, and God) were systematically distributed throughout the survey (See Appendix A). Each of the three subscales was scored separately. Items 1,5,7,11,13, and 17 addressed internal health locus of control, items 2,4,8,10,14, and16 measured chance health locus of control, and items 3,6,9,12,15, and 18 addressed God health locus of control. The possible score for each subscale ranged from six to thirty-six. For each item, participants selected an answer on the Likert scale which best described his/her belief. The score for a dimension of health locus of control was then determined by tallying the numerical values of the responses for the six items measuring that specific dimension.

Procedures

A literature review was conducted on the top three causes of morbidity and mortality among the general population followed by a review of the impact on the at-risk population of African Africans. This was followed by a historical review of the relationship between religion, health, and science, new directions in the field of the religion-health connection, a discussion of church-based health programs, and finally, a discussion on religious terminology, health locus of control and God locus of health control.

After reviewing all literature the purpose of the study and hypotheses were identified. Upon approval by the investigator's research committee and the West Campus Human Subjects Committee at the University of Cincinnati, the study was implemented.

Two current or previous pastors were consulted prior to making any contact with potential churches. This was done to identify the best approach to take when addressing pastors regarding their church members, when approaching church members for survey completion, building logistic issues, identify methods for maximum survey participation, etc. Consulting pastors were members of the protestant faith who were not affiliated with United Methodist or nondenominational Charismatic churches or were affiliated with a United Methodist or nondenominational Charismatic church but were disqualified from survey participation due to geographic locations outside of southwest Ohio, denomination affiliation, or church membership less than 200.

Only churches that were self-identified as United Methodist, Charismatic, or Nondenominational in the business segment of current local phone books were considered as potential study participants. Churches listed in the nondenominational heading that were a part of a known established denomination (i.e. Jehovah's Witness) were excluded from that list.

From these listings, two lists were developed and a stratified random sampling process was utilized. The Charismatic and Nondenominational lists were combined to make one list and the second list was United Methodists. Churches in each list were further divided by race (European American or African American) based on geographic location, community knowledge of racial composition, or church confirmation. A total of

four subgroups- 1) African American United Methodist 2) African American Nondenominational Charismatic 3) European American United Methodist and 4) European American Nondenominational Charismatic were created. The list was comprised of nine predominantly African American United Methodist churches, 71 predominantly Caucasian United Methodist churches, 38 predominantly African American Nondenominational Charismatic churches, and 39 predominantly European American Nondenominational Charismatic churches.

Churches in each of the four subgroups or strata were randomly assigned a two-digit number. Using a Table of Random Numbers, two churches from each of the four categories were identified. A phone call was made to each church and three qualifying questions were posed to the church secretary, church administrator, assistant pastor, or senior pastor (Appendix B). These three questions were:

1. Which of the following best describes the membership size of your church?

   a) less than 100

   b) 100-250

   c) 251-400

   d) greater than 400

2. Using the definition that a Charismatic Church is one that "1) believes in and teaches that the baptism of the Holy Spirit is a separate experience from water baptism and is manifested by speaking in other tongues, 2) believes that the gifts of the Holy Spirit (speaking in tongues, interpretation of tongues, prophesy, faith, miracles, healing, word of wisdom, word of knowledge, and discerning of spirits) are for use by the Church today and 3) encourages the operation of the spiritual

gifts either during church services or private prayer time, would this church be considered a Charismatic Church?

Yes No

3. Which of the following best describes the demographic makeup of your church membership-

a) 80% or greater European American

b) 80% or greater African American

c) other (specify) _____

Only churches identified by a pastor or his/her representative as 1) having a membership equal to or greater than 200, 2) having a membership 80% or greater European American or African American and 3) identifying themselves as mainstream Evangelical Christians by answering "no" to Question #2 or as Charismatic Christians by answering "yes" to Question #2 were considered for participation in the study.

Once a potential church was identified, a phone call was made to its senior pastor or his/her representative. Churches were given three business days to return the initial contact call. If a church failed to respond to the first call within two days a second phone call was made. If an answering machine/voice mail was encountered with the second call or if after contact, the church declined participation in the study, the random selection process was repeated until a total of eight qualifying churches (two for each of the four subgroups) were obtained.

The number of random selections required to obtain two churches for each of the subgroups was as follows:

- African American United Methodist

-Church number one- one random selection

-Church number two- one random selection

- European American United Methodist

-Church number one- one random selection

-Church number two- four random selections

- African American Nondenominational Charismatic

-Church number one- one random selection

-Church number two- six random selections

- European American Nondenominational Charismatic

-Church number one- twelve random selections

-Church number two- twenty-four random selections

The number of random selections for each church varied due to several factors: failure to respond to initial contact calls, study disqualification due to low church membership or racial make-up, or disconnected/incorrect phone numbers. Pastors of churches disqualified due to membership size, logistical concerns, etc. expressed an interest in the study and the final results. Of the pastors that responded to the initial phone contact only two expressed no interest in participating in the study.

Once it was determined that a church met study criteria, the senior pastor or his/her designated representative was then contacted by phone to discuss the study and the church's participation in the study. The discussion included an overview of the study, study significance, anonymity, the study tool used, procedural methods, how the results would be used, and how the results could be beneficial to the pastor and church members. Only one of the eight pastors requested to meet and further discuss the study prior to

agreeing to participate. To ensure that the pastor's endorsement of the church's participation in the study was not influenced in any way, the fact that the researcher was a Christian was not revealed until after the pastor or his/her designated representative had rendered a decision about participating in the study.

Churches agreeing to participate were sent a follow-up letter on University of Cincinnati letterhead (See Appendix C). The letter reiterated or identified: 1) the purpose of the study 2) study data confidentiality 3) procedural methodology and logistics 4) the significance of the study results 5) the expected date of completion and availability of study results 6) a copy of the Health Survey and 7) the date for their survey. Also included was a short, 1 paragraph introduction to the study for their review and approval for inclusion in the Sunday bulletin each Sunday for the two weeks preceding the survey date and on the day of the survey (See Appendix D). The church provided a verbal reminder announcement or bulletin insert on the day of the event.

Each church was given one date for data collection. Churches were surveyed immediately prior to or after Sunday morning services only. Three churches were surveyed during Week #1, one church was surveyed during Week #2, and two churches were surveyed during Weeks #3 and #4 of the study.

The surveys were available for completion by church members one hour prior to and one hour immediately following Sunday morning services. Pastors were informed that survey distribution would stop fifteen minutes prior to the beginning of the church service in an effort not to disrupt or delay attendance of church members to the service. The only exception to this was in the event that a church held more than one morning

worship service. Members leaving the previous service were allowed to complete surveys during the second or third service.

During the initial discussion, it was explained to the senior pastor or his/her contact that if a church required a second visit (as a result of low survey returns during the first visit) the second survey date would occur at the conclusion of the initial survey schedule (after Study Week #4). None of the study churches required a second visit.

A total of twenty-one volunteers were recruited to assist with conducting the surveys. One "Lead volunteer" or the researcher was assigned to each site and was responsible for overseeing the distribution of surveys at each of the church sites. Lead volunteers were required to have a minimum of a Bachelor's degree in sociology, psychology, or a health related field. Each was instructed on the survey process, which included soliciting survey participation, survey distribution, and ensuring anonymity. Volunteers other than the Lead Volunteer were required to be 18 years of age or older with a basic concept of or previous experience in confidentiality. No educational requirements were applied.

To provide consistency, all volunteers received the same packet of information (See Appendix E). The packet provided a brief overview of the study, logistical information, and specific instructions on survey distribution and data collection. Each volunteer was instructed to 1) point out and encourage participants to read the cover letter 2) point to the location of the instructions on the survey and 3) to remind participants to complete each section and answer each question. Volunteers were also instructed that they were not allowed to assist participants with answering the survey questions and could only reiterate that answers to the survey questions were neither right nor wrong. In

addition, volunteers were also instructed not to enter into discussions concerning religious beliefs and affiliation with study participants.

Results obtained from one of the mainstream Evangelical churches surveyed during the first week of data collection indicated that 50% of the participants identified themselves as "Charismatic" by answering "yes" to Question #6. Even though it was clearly stated on the survey that the answer to the question was to be based on the given definition and the three identifying characteristics stated within the definition, it was determined that an effort to ensure that participants were basing their decision on the given definition was needed. Therefore, during weeks two through four, volunteers were instructed to physically point to Question #6 and state to the participant, "In order to answer 'yes' to this question you must agree with all three of the statements in the definition".

The number of volunteers assigned to a survey site was based on the church's average Sunday morning service attendance as provided by the pastor or his/her designated representative. As much as possible efforts were made to assign a volunteer to a church based on its racial composition.

Six of the eight churches were overwhelmingly African American or European American. Therefore, African American volunteers were assigned to the African American churches and European American volunteers to the European American churches.

At the remaining two churches both African American and European American volunteers were sent.

The only exception to this was with one church that was 100% European American. Both European American and African American volunteers were used due to limited availability of the volunteers.

Each of the twelve survey sites were provided with the following:

- twelve clipboards
- (20) No. 2 pencils with erasers
- (1) pencil sharpener
- 125-150 surveys with cover letters attached (based on membership size and average Sunday attendance)
- name badges for the volunteers
- wall signs and tape for direction to the survey area
- marker pens
- (1) paper table cloth for each table provided by the church
- (1) tape-sealed empty container for completed surveys
- 125-150 nutritional snacks which included: boxed fruit juice, fresh fruit, granola bars, soy bars, soy powder mix, soy nuts, soy chips, and cereal bars. Pamphlets about soy were also provided.

On survey dates, communication was maintained via cell phone between the Site Leaders and researcher. The Senior Pastor was assured that all cell phones would be placed on "silent mode" or "vibrate" at all times.

A table was set up in the main vestibule or a specified area or room as requested or restricted by the pastor or his/her appointed representative. If space allowed, a second table with chairs was available for participants. A sign was placed above the table and/or

placed throughout the church to direct members to the survey site. Unless prohibited by the pastor, volunteers were instructed to solicit participation.

Originally volunteers were instructed to approach every other person with the following question, "Would you like to participate in our health survey?" However, it was determined during the first week that the pace and number of people entering the buildings at any given time was slow enough that every person should be approached.

Those that agreed to participate in the survey were given a clipboard with the survey and cover letter attached and a pencil. Less than 5% of those approached declined participation in the study.

Only church attendees who identified themselves as members of that church and who were 18 years of age or older were allowed to participate. Visitors, long term or otherwise, were not allowed to participate in the study. Participants were required to complete a survey at the time that it was received and were not allowed to leave the survey area with the clipboard and survey to submit it at a later time.

Once the survey was completed it was returned to a volunteer who then placed it in a sealed box. The participant was then extended an invitation to select a health food snack of their choice for their participation in the survey. At the end of the day, surveys were collected and tagged according to religious affiliation and church participation. Each survey was marked in the upper right hand corner with an "M" for mainstream or "C" for charismatic along with the initials of the participating church. Each survey was then tagged with a three digit number identifier, which was placed in the lower left hand corner.

Once data analysis was completed, a follow-up letter was sent to the Senior Pastor or his/her appointed representative thanking them for their support and participation and updating them on the progress of the study. They were also informed that an appointment would be made at a later date with the Senior Pastor to review the results of their church and the overall study results. During this meeting, each church was provided with a copy of the mean results for each of the three dimensions of health locus of control along with demographic information specific for their church. They were also provided with a copy of the overall study results along with an interpretation of the data. A copy of the book, *"The Gallup Guide: a reality check for 21st century churches"* was given as a show of the researcher's appreciation of the pastor and church's participation in the study.

Data Analysis

All information obtained from the surveys were coded for data entry and entered onto a Microsoft Excel spreadsheet by the researcher. Statistical frequencies were run on each of the variables using SPSS software. SPSS was used to test each hypothesis using the *t* test at the 95% confidence level. An IBM compatible computer was used for data computation.

The analysis focused on comparing internal, chance, and God locus of health control mean scores between mainstream Evangelical and nondenominational Charismatic Christians. It also compared the same variables between African American and European Americans within the same sample population.

In conducting this analysis, interval data was used to compare between group differences on religious affiliation, race, and health locus of control. The scores were

calculated by summing the individual participants' responses to the items for each of the three subscales. Mean scores were calculated and *t*- tests were used to test all hypotheses, more specifically, *t*-tests were conducted to compare differences between subgroups- African American mainstream Evangelical and European American Evangelical, as well as between African American nondenominational Charismatic and European American nondenominational Charismatic Christians.

CHAPTER FOUR

Results and Discussion

The first purpose of this study was to compare internal health locus of control scores (IHLC), chance health locus of control (CHLC), and God locus of health control scores (GLHC) between Mainstream Evangelical and Nondenominational Charismatic Christians attending churches in Southwest Ohio. The second purpose of this study was to compare IHLC, CHLC, and GLHC scores between African Americans and European Americans within the sample population.

Subjects

The study sample consisted of European American and African American adult congregants 18 years of age and older, attending either United Methodist or Non-denominational, Charismatic Christian churches in Southwest, Ohio. This study was based on a sample of these communities and was limited to congregants attending service on the one allocated survey date.

The 2003-04 business segments of two local phone books were used to construct a complete list of United Methodist and non-denominational, Charismatic Christian churches within the sampling area. The United Methodist Churches were used to represent Mainstream Evangelical churches for the purpose of this study. Only churches that were self-identified as United Methodist, Charismatic, or Nondenominational in the two local business phone books were considered as potential study participants. Churches listed in the nondenominational section that were a part of an established denomination (i.e. Jehovah's Witness) were excluded. From the three listings, two lists were developed. Churches under the "Charismatic" and "Nondenominational" heading

were combined to make one list and the second list was comprised of churches listed under United Methodists.

Churches in each list were further divided by race (European American or African American) based on geographic location and or community knowledge of racial composition. A total of four subgroups- 1) African American United Methodist 2) African American Nondenominational Charismatic 3) European American United Methodist and 4) European American Nondenominational Charismatic were created.

With the Charismatic Movement breaking forth into many of the mainstream denominations it was determined that it was essential to identify and separate participants in mainstream Evangelical churches (Methodists) with charismatic beliefs from those with traditional mainstream beliefs and those in the Charismatic churches with traditional beliefs from those with charismatic beliefs. To ensure that the study was limited to comparing participants with traditional non-charismatic religious beliefs to those with charismatic beliefs, participants were required to complete Question #6 as a part of the survey.

By completing this question, based on the definition provided, the participant identified his/herself as a Christian with Charismatic or Traditional Christian beliefs. Surveys were excluded from the study if 1) a participant from the mainstream Evangelical (Methodist) church answered "yes" to Question #6, 2) if a participant from the Charismatic (Nondenominational Charismatic) church answered "no" to Question #6, or 3) if Question #6 was left blank. However, that information was included in the report that was provided to each of the Senior Pastors.

Three hundred and eighteen of the 422 surveys collected met the requirements for inclusion in the study (75%). Of the 318, 125 (39%) were participants recruited from the four United Methodist churches and 193 (61%) were recruited from the four Nondenominational Charismatic churches. Looking at all participants regardless of church affiliation, more than 50% of the respondents were African American and 64% of the respondents were female. Ages ranged from 18- 88 years of age with a mean age of 49.33 years (*SD* = 14.80). The average length of church membership was 12.7 years (*SD* = 13.63). The frequency of attendance at church services and/or church activities averaged 7.7 times per month (*SD* = 5.54) (See Table 4.1).

Among the 125 mainstream Evangelical Christians (Methodist churches), 40% were African American and 68% were female (See Table 4.2). The mean age was 55.93 years (*SD* = 14.48). The average length of church membership was 20.62 years (*SD* = 17.39). Consistent with the overall study average, attendance at church services and/or church activities averaged 7.86 times per month (*SD* = 6.38) (See Table 4.3).

Among the 193 Charismatic Christians (Nondenominational Charismatic churches), 67% were African American and 61% were female. The mean age was 45.11 years (*SD* = 13.42). The average length of church membership was 7.55 years (*SD* = 6.53). Again, consistent with the overall study average, attendance at church services and/or church activities averaged 7.62 times per month (*SD* = 4.91) (See Table 4.3).

Results

Using a six-point Likert-type scale, the potential scores for each of the three Health Locus of Control subscales used in this study ranged from six to thirty-six with six indicating a low degree of control and thirty-six indicating a high degree of control in the

Table 4.1

Demographic Data

Age, Church Membership, and
Church Attendance For All Study Participants

	n	Range	Mean	*SD*
Age (years)	315	18-88	49.33	14.80
Length of Membership (years)	306	0.25-80	12.72	13.63
Church Attendance (per month)	303	1-40	7.71	5.54

Table 4.2

Demographic Data

Race and Gender By Church Affiliation

	Mainstream Evangelical		Nondenominational Charismatic	
	n	%	n	%
Race				
African American	50	40%	130	67.4%
European American	74	59.2%	58	30.1%
Other	0	0	1	0.5%
Missing	1	0.8%	4	2.1%
Total	125	100%	193	100%
Gender				
Male	37	29.6%	72	37.3%
Female	86	68.8%	118	61.1%
Missing	2	1.6%	3	1.6%
Total	125	100%	193	100%

Table 4.3

Demographic Data

Mean Age, Length of Church Membership,
& Frequency of Church Activity and Attendance By Church Affiliation

	Mainstream Evangelical			Nondenominational Charismatic		
	n	Range	Mean *SD*	n	Range	Mean *SD*
Age (years)	123	18-88	55.93 (14.48)	192	19-79	45.11 (13.42)
Length of Membership (years)	121	1-80	20.62 (17.39)	185	0.25-24	7.55 (6.53)
Church Attendance (per month)	122	2-40	7.86 (6.38)	181	1-28	7.62 (4.91)

variable being measured. There were a total of six survey items for each of the three subscales. Participants were instructed to circle only one answer for each of the 18 survey items.

Hypothesis 1

The first hypothesis stated that, "Mainstream Evangelical Christians will have significantly higher internal health locus of control scores than Charismatic Christians". The mean score for Internal Locus of Health Control among mainstream Evangelical participants was 24.90 (SD = 4.37) compared to 25.84 (SD = 5.20) among Charismatic participants (See Table 4.4). Using a t-test at the 95% confidence level, (t = -1.677, p = .09 {two-tailed}), it was determined that the .095 difference in the mean scores of the two groups was not significant.

Therefore Null Hypothesis #1, which stated that there would be no significant difference between the internal health locus of control scores of mainstream Evangelical and Charismatic Christians, was not rejected. Based on the study data, it was concluded that there was no difference in IHLC scores for these participants. Both Mainstream Evangelical and Nondenominational Charismatic Christians had fairly high levels of IHCL.

Hypothesis 2

The second Hypothesis stated that, "African American mainstream Evangelical Christians will have significantly lower internal health locus of control scores than European American mainstream Evangelical Christians". The mean score for Internal Locus of Health Control among African American mainstream Evangelical participants Was 25.18 (SD = 4.53) compared to 24.73 25.18 (SD = 4.31) compared to 24.73 among

Table 4.4

Mean IHLC, CHLC, and GLHC Scores by Church Affiliation

Church Affiliation	IHLC		CHLC		GLHC	
	M	*SD*	M	*SD*	M	*SD*
Mainstream Evangelical (United Methodist Churches)	24.90	4.37	15.97	4.97	20.14	6.83
Nondenominational Charismatic Churches	25.84	5.20	13.53	5.01	22.15	7.40
Difference	-.094		2.44*		2.01**	

* $p = <0.0001$

** $p = <0.01$

European American mainstream Evangelical participants (See Table 4.5). Using a *t*-test at the 95% confidence level, ($t = .561$, $p = .57$ {two-tailed}), it was determined that the 0.45 difference in the mean scores of the two groups was not significant.

Therefore Null Hypothesis #2, which stated that there would be no significant difference between the internal health locus of control scores of African American and European American mainstream Evangelical Christians, was not rejected. Based on the study data, it was concluded that there was no difference in IHLC between African American and European American mainstream Evangelical Christians. Both African American and European American Mainstream Evangelical Christians had fairly strong IHLC scores.

Hypothesis 3

The third Hypothesis stated that, "African American Charismatic Christians will have significantly lower internal health locus of control scores than European American Charismatic Christians". The mean score for Internal Locus of Health Control among African American Charismatic participants were 26.00 ($SD = 5.12$) compared to 25.53 ($SD = 5.44$) among European American Charismatic participants (See Table 4.5). Using a *t*-test at the 95% confidence level, ($t = .57$, $p = .56$ {two-tailed}), it was determined that the 0.47 difference in the mean score between the two groups was not significant.

Therefore Null Hypothesis #3, which stated that there would be no significant difference between the internal health locus of control scores of African American and European American Charismatic Christians, was not rejected. Based on the study data, it was concluded that there was no difference in IHLC between African American and European American Charismatic Christians. Both African American and Charismatic

Table 4.5

Mean IHLC, CHLC, and GLHC Scores by Race and Church Affiliation

United Methodist Churches

Race	IHLC		CHLC		GLHC	
	M	*SD*	M	*SD*	M	*SD*
African American	25.18	4.53	15.58	5.58	23.21	6.58
European American	24.73	4.31	16.28	4.43	18.05	6.27
Differences	0.45		-0.70		5.16*	

* $p = < 0.0001$

Nondenominational Charismatic Churches

Race	IHLC		CHLC		GLHC	
	M	*SD*	M	*SD*	M	*SD*
African American	26.00	5.12	13.65	5.20	22.37	7.77
European American	25.53	5.44	12.84	4.52	21.71	6.75
Differences	0.47		0.81		0.66	

Christians had fairly strong IHLC scores.

Hypothesis 4

The fourth Hypothesis stated that, "Mainstream Evangelical Christians will have significantly higher chance health locus of control scores than Charismatic Christians". The mean score for Chance Locus of Health Control among mainstream Evangelical participants was 15.97 (SD = 4.90) compared to 13.53 (SD = 5.01) among Charismatic participants (See Table 4.4). Using a t-test at the 95% confidence level, (t = 4.27, p = < 0.0001 {two-tailed}), it was determined that the 2.44 difference in the mean scores of the two groups was significant and therefore the Null Hypothesis was rejected.

Based on the study data, it was concluded that CHLC was higher in mainstream Evangelical Christians than nondenominational Charismatic Christians. In both groups, however, the CHLC scores were fairly low.

Hypothesis 5

The fifth Hypothesis stated that, "African American mainstream Evangelical Christians will have significantly lower chance health locus of control scores than European American mainstream Evangelical Christians". The mean score for Chance Locus of Health Control among African American mainstream Evangelical participants was 15.58 (SD = 5.58) compared to 16.28 (SD = 4.43) among European American mainstream Evangelical participants (See Table 4.5). Using a t-test at the 95% confidence level, (t = -.773, p = .441 {two-tailed}), it was determined that the -.70 difference in the mean scores of the two groups was not significant.

Therefore Null Hypothesis #5, which stated that there would be no significant difference between the chance health locus of control scores of African American and

European American mainstream Evangelical Christians, was not rejected. Based on the study data, it was concluded that there was no difference in CHLC between African American and European American mainstream Evangelical Christians. Both African American and European American mainstream Evangelicals exhibited fairly low chance health locus of control scores.

Hypothesis 6

The sixth Hypothesis stated that, "African American Charismatic Christians will have significantly lower chance health locus of control scores than European American Charismatic Christians". The mean score for Chance Locus of Health Control among African American Charismatic participants was 13.65 (SD = 5.20) compared to 12.84 (SD = 4.52) among European American Charismatic participants (See Table 4.5). Using a t-test at the 95% confidence level, (t = 1.03, p = .304 {two-tailed}), it was determined that the 0.81 difference in the mean scores of the two groups was not significant.

Therefore Null Hypothesis #6, which stated that there would be no significant difference between the chance health locus of control scores of African American and European American Charismatic Christians, was not rejected. Based on the study data, it was concluded that there was no difference in CHLC between African American and European American Charismatic Christians. Both African American and European American Charismatic Christians had CHLC scores that were fairly low.

Hypothesis 7

The seventh Hypothesis states, "Charismatic Christians will have significantly higher God Locus of Health Control scores than mainstream Evangelical Christians". The mean score for God Locus of Health Control among Charismatic participants was

22.15 (*SD* = 7.40) compared to 20.14 (*SD* = 6.83) among mainstream Evangelical participants (See Table 4.4). Using a *t*-test at the 95% confidence level, (*t* = 2.43, *p* = .015 {two-tailed}), it was determined that the 2.01 difference in the mean score of the two groups was significant and therefore the Null Hypothesis was rejected. Based on the study data, it was concluded that God Locus of Health Control was stronger in nondenominational Charismatic Christians than mainstream Evangelical Christians.

Hypothesis 8

The eighth Hypothesis stated that, "African American mainstream Evangelical Christians will have significantly higher God Locus of Health Control scores than European American mainstream Evangelical Christians". The mean God Locus of Health Control score among African American mainstream Evangelical participants was 23.21 (*SD* = 6.58) compared to 18.05 (*SD* = 6.27) among European American mainstream Evangelical participants (See Table 4.5). Using a *t*-test at the 95% confidence level, (*t* = 4.40, *p* = <0.0001 {two-tailed}), it was determined that the 5.16 difference in the mean scores of the two groups was significant and therefore the Null Hypothesis was rejected. Based on the study data, it was concluded that God Locus of Health Control was stronger in African American mainstream Evangelicals than European American mainstream Evangelical Christians.

Hypothesis 9

The ninth and final Hypotheses stated that, "African American Charismatic Christians will have significantly higher God Locus of Health Control scores than European American Charismatic Christians". The mean score for God Locus of Health Control among African American Charismatic participants was 22.37 (*SD* = 7.77)

compared to 21.71 (SD = 6.75) among the European American Charismatic participants (See Table 4.5). Using a t-test at the 95% confidence level, (t = .558, p = .578 {two-tailed}), it was determined that the 0.66 difference in the mean score between the two groups was not significant.

Therefore Null Hypothesis #9, which stated that there would be no significant difference between the God health locus of control scores of African American and European American Charismatic Christians, was not rejected. Based on the study data, it was concluded that there was no differences in GLHC scores between African American and European American Charismatic Christians. Both African American and European American Charismatic Christians exhibited moderately strong GLHC scores.

Discussion

A total of 318 useable surveys were collected and were used to test the nine hypotheses in this research study. Looking at IHLC, there was no statistically significant difference between mean scores of the Nondenominational Charismatic and Mainstream Evangelical Christian groups. When comparing race, there also was no significant difference in the IHLC mean scores of African Americans and European Americans in either the Nondenominational Charismatic or the Mainstream Evangelical groups.

Comparing the Nondenominational Charismatic group to the Mainstream Evangelical group as it related to CHLC, the difference between the two groups was statistically significant. Mainstream Evangelical Christians had a higher CHLC than did nondenominational Charismatic Christians. When comparing race and the mean score for the CHLC subscale, there were no significant differences between groups.

The mean score for GLHC was statistically significant in two of the three group

comparisons. The Nondenominational Charismatic group had a higher mean score when compared to the Mainstream Evangelical group and the African American Mainstream Evangelical group had a higher mean score compared to their European American counterparts. There was no statistically significant difference when comparing the two racial groups within the Nondenominational Charismatic group. A summary of finding related to the nine hypotheses in this study can be seen in Table 4.6.

Table 4.6

Statistical Significance Between Study Groups

Comparison of Study Groups	IHLC	CHLC	GLHC
Mainstream Evangelical vs. Nondenominational Charismatic Christians	$t = -1.718$ $p = 0.087$	$t = 4.355$ $p = <0.0001$	$t = 2.551$ $p = 0.011$
African American Mainstream Evangelical vs. European American Mainstream Evangelical Christians	$t = 0.517$ $p = 0.606$	$t = -.922$ $p = 0.358$	$t = 4.251$ $p = <0.0001$
African American nondenominational Charismatic vs. European American nondenominational Charismatic Christians	$t = 0.087$ $p = 0.930$	$t = 0.860$ $p = 0.391$	$t = 0.295$ $p = 0.769$

CHAPTER FIVE

Conclusions and Recommendations

The first purpose of this study was to compare internal health locus of control scores (IHLC), chance health locus of control (CHLC), and God locus of health control scores (GLHC) between Mainstream Evangelical and Nondenominational Charismatic Christians attending churches in Southwest Ohio. The second purpose of this study was to compare IHLC, CHLC, and GLHC scores between African Americans and European Americans within the sample population.

The interest in the religion-health relationship had been documented throughout the ages. History demonstrated relentless endeavors by many to find the cause and cure for the diseases that plagued mankind (Koenig, et al, 2001; Prioreschi, 1995). The original belief that sickness and disease was attributed to the works of the supernatural gave way to the discoveries inherently embedded in the great findings and advancements of science and medicine (Koenig et al.; Cottrell, Girvan, & McKenzie, 1999). Throughout the centuries religion and science would interchange positions taking the primary role treating sickness and disease. Though waning at times, the religion-health relationship never completely divorced. It's existence remained viable to many of its strong supporters and believers. The significance as well as the practical implications of this relationship served as a source of debate among many throughout the centuries.

In Chapter One, a brief overview of the religion-health relationship was provided. The concept of locus of control and the potential importance of exploring its significance to church-based health programs was introduced. Nine hypotheses addressing IHLC, CHLC, and GLHC were identified. Included in this chapter was a list of operational

definitions for this research project.

In Chapter Two, a literature review of eight topics was discussed. These topics included: 1) the three leading causes of morbidity and mortality within the general population, 2) morbidity and mortality in African Americans in the United States, 3) the role of religion in the United States, 4) a historical overview of the relationship between religion, health, and medicine, 5) the growing interest in the religion-health relationship 6) the development and implementation of church-based health promotion programs 7) the health locus of control construct and 8) the God locus of health control construct.

Chapter Three identified and described the research methodology used in this project. This chapter discussed: 1) the randomization process used for subject selection, 2) the research tool, 3) the recruitment and training of project volunteers, 4) the research process and 5) data analysis used in this research.

In Chapter Four, results obtained from the data analysis were described. Demographic data for all study participants and results by race and church affiliation were identified. Mean locus of control scores for each of the four subgroups were calculated, compared, and discussed for each of the nine research hypotheses.

Conclusions

There were a total of nine hypotheses in this study. Of the nine, three were found to be statistically significant. With regards to CHLC, the mean score for the mainstream Evangelical churches (15.9) was significantly higher than that of the nondenominational Charismatic Churches (13.5).

With regards to GLHC, nondenominational Charismatic Christians had a higher mean score (22.15) than mainstream Evangelicals (20.14) and African American

mainstream Evangelicals had a higher mean score (23.21) than European American mainstream Evangelicals (18.05). Mean scores for IHLC for all of the groups were very close with only a minimal difference between each group.

Discussion

Mean IHLC scores obtained from previous studies using the MHLC were 24.74 and 27.23. In the first study (mean score of 24.74), 87% of the study participants identified themselves as Protestants and 96% indicated that prayer was used to cope with their health problem (Norman, 1995; Saudia et al., 1991). The mean IHLC score in this study for the Nondenominational Charismatic group was 25.84 and 24.90 in the Mainstream Evangelical group. In the second study (the IHLC mean score was 27.23), religious beliefs and affiliation were not assessed. Mean CHLC scores from that study were 15.87 and 13.92, respectively. Results for this study were similar with 13.53 in the Nondenominational Charismatic group and 15.97 in the Mainstream Evangelical group.

In their study conducted by Wallston et al. (1999) with patients diagnosed with Systemic Sclerosis and Rheumatoid Arthritis, the mean score for the GLHC subscale was 16.1. However participants in the Systemic Sclerosis group that actively participated in their religion had higher mean GLHC scores (19.38) than those that did not (13.1). GLHC scores for both study groups in this research project were higher with 22.15 in the Nondenominational Charismatic group and 20.14 in the Mainstream Evangelical group.

This study demonstrated a definitive difference in perception of health locus of control in two major Christian denominations. The results indicated that although no difference was identified when comparing IHLC between the two religious and racial groups, mainstream Evangelical Christians demonstrated a greater CHLC orientation than

nondenominational Charismatic Christians and nondenominational Charismatic Christians demonstrated a greater orientation to GLHC than mainstream Evangelical Christians. With the exception of CHLC, these results would seem to be consistent with the teachings and beliefs within each of the groups/subgroups. None of the groups were expected to have CHLC scores as high as they were secondary to the foundational teachings of Christianity and the belief in faith toward God and divine providence.

The relatively close mean IHLC scores between the four subgroups may have been due in part to the increased health promotion and education efforts, which target both the general population and religious community. With the advent of the internet and its accessibility to the majority of the general population, the enhancement of the health education process through the use of the media, and the increased support of healthy living among Christians, these factors may have contributed to the relatively high and close IHLC mean scores seen in all four subgroups.

The CHLC mean scores for all groups were significantly lower than those for IHLC and GLHC yet they were higher than initially anticipated. The findings of Lewis and Green (2000) indicated that approximately a third of the church participants in their study believed in fate or destiny. Colon (1992) indicated that African Americans had a greater belief in fate than European Americans. In this sense, fate or destiny was viewed as an extension of and inclusion of God.

The possibility existed that the low, yet higher than anticipated CHLC scores, indicated that although there was a stronger affinity towards internal and God locus of control, there still remained the existence of the belief in luck, albeit contradictory to the teachings in many Christian circles. This would be viewed as important information for

the Christian community. The existence of a belief in chance could potentially counter the importance of incorporating a proactive approach toward health into one's lifestyle.

Comparing the mean GLHC scores for the entire study population, the score was higher in the nondenominational Charismatic population. This was consistent with their strong belief and teachings centered in faith of the finished works of the Crucifixion and resurrection of Christ, the works of the Holy Spirit, divine intervention, spiritual healings, and miracles.

When comparing each of the four subgroups, the mean GLHC scores were higher in both African American groups (mainstream Evangelical and nondenominational Charismatic Christians) albeit the higher score in the nondenominational Charismatic group was not statistically significant. This was consistent with the findings that support the importance of the role of the Church (and God) in the Black community and the need to use it as an entry point for health education and services.

The high mean scores for both IHLC and GLHC in the African American United Methodist and nondenominational Charismatic groups lends credence to the success of the various health promotion and education efforts (both inside and outside the church) used over the years to positively impact this at-risk population. The high GLHC mean score supports the need to review and possibly adjust existing faith-based programs from those that simply integrate the use of religious terms into a secular format to those that incorporate Christian concepts and principles as its foundation and conceptual framework for teaching health education and health promotion.

An ideal survey outcome for a religious community would be a score high in both IHLC and GLHC. This combination would indicate a healthy balance between self-

responsibility and accountability and Divine assistance/intervention. As a whole, this was seen in each of the four subgroups.

Recommendations

Recommendations for practice

The results of this study indicated a difference in the perception of internal, chance, and God health locus of control in two denominations within the Christian community. This suggested that the differences and similarities between denominations and races within the Christian community should be carefully considered when designing faith-based programs.

The high mean IHLC and GLHC scores in all four subgroups indicated the belief in personal responsibility and divine intervention, which together supported the belief in a collaborative relationship between man and God. Congregations or denominations embracing this concept would be more likely to demonstrate a readiness for learning and the utilization of health education and wellness principles because it would indicate the adoption of a healthy balance between "works" (what one does) and "faith" (belief in God's promises) had occurred. Individual congregants with high GLHC and low IHLC scores or high CHLC scores and low IHLC and/or GLHC scores would indicate a need for a more individualized program that would help them to develop balance in these areas. Efforts should be made to assess for this prior to initiating a health and wellness program.

The CHLC scores also provided information that would be useful to health ministry program developers or directors. The mean CHLC scores obtained through this

study indicated that although there was a greater orientation toward God and self, there still remained a belief, albeit a somewhat weak one, in chance as it related to ones health. This was an important point because the belief in chance or luck could potentially sabotage individual or group decisions to continue in a health and wellness program.

The Christian faith was based on divine providence, which contradicted the existence of luck or chance. In most Christian communities, to believe in luck implied a low degree of faith in God. One explanation for the belief in luck or chance would be that on an individual basis, Christians possess "faith" in God in varied degrees for different facets of their lives. An example of this would be a Christian who had a strong belief in "faith" but a weak or non-existing belief in luck in the area of health but a weak belief in faith and a strong belief in luck in the area of their personal finances.

If a Christian believed in the existence of luck or chance it would be reasonable to infer that their Christian faith in the works of God and a belief in coincidence coexisted. Another plausible explanation for the mean CHLC scores observed in this study would be that participants considered the role of genetics (the "role of the dice") when answering some of the CHLC items.

The subject of luck or chance and its role in health and wellness decision-making would need to be included in the development of a church- or faith-based health program. By doing so it would encourage participants to explore their personal feelings and allow the opportunity to open the door for further discussion on the positive and negative impact that chance has on making personal health decisions.

The mean scores from all three subscales (IHLC, CHLC, and GLHC) could be valuable to national organizations such as the American Lung Association, the American

Diabetes Association, and the American Heart Association as well as grassroots programs that engage in education and outreach at the community level. By doing so, programs could be designed with consideration of all three of these motivating factors.

Recommendations to improve this research

Each church received one survey date. It may have been more beneficial to survey on more than one Sunday and during services held during the week. By doing so it would have provided a more comprehensive overview of the beliefs of the church members and thusly the church, by including members not present on the day of the survey.

Data obtained from this survey reflected the beliefs of church members attending service on the assigned survey date only. Members absent that day or who only attended weekday services due to other commitments were missed. Surveying congregants during various services would no doubt provide a more complete picture of the beliefs of the members of that church and denomination.

With regards to survey format, using a larger font size may have been more beneficial. An Arial font size 11 was used in this survey. Several surveys were submitted with unanswered items. The mean age for the mainstream Evangelical members was 55 years of age and it was 45 years of age for the nondenominational Charismatic members. This could be reflective of many churches. A larger print with wider spacing between each survey item would no doubt prove more logical for this population.

Including a demographic segment in this survey proved valuable. Changing the answer blanks to "groupings" of choices for participants to place a check mark (x) next to

their answer may have facilitated a quicker completion of the survey and less discrepancies of answers. However, in doing so, this would have eliminated the ability of the researchers to calculate means and standard deviations.

Most of the pastors contacted were very enthusiastic about participating in this research project and expressed interest in the results. Expanding the research to include churches with memberships less than 200 and the use of sampling means other than convenience sampling to reach all of a church's members may have improved this research.

The usefulness of a health snack reward system varied according to site. A variety of health snacks, which included fruit juices, snack bars (i.e. granola), soy snacks, and fresh fruit were provided. Many participants completing a survey declined the selection of a snack afterwards. By far the fresh fruit was the snack of choice. This was especially true in churches with a service of short duration. This could have been related to the fact that they were not use to eating snacks at that time of the day. It may have been more fitting to provide a drawing for each participating church where the prize would be something Christian oriented (i.e. gift certificate to a Christian bookstore, tickets to an upcoming Christian event, Christian apparel- t-shirt, bible covers, etc. or a Christian item- bible, book, etc.).

Pairing a church with volunteers of the same ethnic background seemed to support survey participation. This was especially true in the churches that were 99-100% African American or European American with a predominantly older population. However, support of the project by the Senior Pastor or his/her representative seemed to play a significant role.

Lastly, consulting with pastors prior to contacting potential study churches was very helpful. Sound insight and recommendations were provided especially as it related to approaching and obtaining the support of church pastors. Futuristically, it would be beneficial to include consulting pastors in on the project as early as possible.

Recommendations for future research

This was a great pilot study to explore the possibility of differences, as it related to health locus of control among Christians. However, within the mainstream Evangelical community there exists many different denominations- Baptist, Southern Baptists, Episcopalians, African Methodist Episcopalians, Catholics, Lutheran, etc. The same held true for the Charismatic community (Holiness, Pentecostal, Church of God, Church of God in Christ, etc.). In order to obtain a true reflection of the Christian community and the differences or similarities that possibly exists, it would seem essential to sample several of the various denominations in each of the two groups.

Future research could also address the relationship between chance/luck and faith in God to determine if they are viewed as two in the same. This research could lead to possible explains for the CHLC scores seen in this and previous studies among Christian populations. Also, further research addressing the possible existence of variances within a specific denomination may also be valuable. Variances in health locus of control within a denomination may further support the need to individualize health programs within a denomination as well as between different denominations.

Further research could also extend to other religious groups such as Muslims, Jews, Hindus, Jehovah Witnesses, and Christian Scientists. Findings from these groups

could lead to the development of health promotion and education programs that specifically address the needs within their communities.

By expanding this research to include other facets of the Christian community or to include other religions, the findings could be useful for inclusion in nursing and medial school curriculums to enhance cultural competence within these professions. It could also prove useful to nurses in their development of nursing care plans in the community health setting and with Parish Nursing ministries. This could also be very valuable information for physicians to use when developing individual traditional or holistic treatment plans.

Health Educators may find this information value in their development and implementation of health promoting and education efforts at the local, national, and international level. This would be particularly true considering the growing amount of diversity in the community setting.

Surveying members of the same denomination in different geographical locations may also yield valuable information. For example, nondenominational Charismatic Christians in California may have different beliefs and values than of nondenominational Christians residing in Maine or Indiana. The same may hold true within other religious groups as well. For example Muslims or Hindus who have resided in the United States most of their lives may still practice the Muslim or Hindu faith but not as strict as others living outside the U.S. or living in different segments of the U.S.

Further research may also wish to examine whether significant differences exist between individuals subscribing to a particular faith (i.e., Christians) and individuals not subscribing to a particular faith (i.e., atheists). Future research may also want to address the relationship between locus of control and other variables (i.e. gender, age, SES, or

educational level) in the religious community. This could be further extended to comparing both within and between specific denominations or faiths.

Finally, expanding to other ethnic groups would also be valuable. Looking at locus of control (IHLC, CHLC, PHLOC, and GLHC) in the Hispanic, Asian, and African populations would assist health care professionals, especially nurses and physicians, in their practice. It could equip them with insightful information as to the motivating factors of a patient/client with regards to compliance to prescribed treatment plans. Research obtained from the various ethnic groups could be used by organizations such as the World Health Organization (WHO), Doctors Without Borders, and other health focused missions groups.

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Appendix A

HEALTH SURVEY

I. **Demographic Information-** Please complete the following with answers that most accurately describe your race, gender, age, church participation, and beliefs. Please answer **EACH SECTION.**

1. **Race:** _____ 2. **Gender:** _____ 3. **Age:** ____ **yrs.**
4. **How long have you been a member of this church?** _____
5. **How often do you attend church each month?** (this includes Sunday services, midweek services, classes, rehearsals, meetings, volunteering of services, etc.): _____ times/month.
6. **Based on the <u>following</u> definition:**

"A Charismatic Christian is a Christian: 1) who believes in and practices the baptism of the Holy Spirit as a separate experience from water baptism and is manifested by speaking in other tongues, **2) who believes** that the gifts of the Holy Spirit are for use by the Church today, **and 3) who actively participates** in one or more of the following spiritual gifts- speaking in tongues, interpretation of tongues, prophesy, faith, miracles, healing, word of wisdom, word of knowledge, and discerning of spirits"

Do you consider yourself a "Charismatic" Christian? ___Yes ___No

II. **Instructions:** Each item below is a belief statement about your health with which you may agree or disagree. For each item we would like you to circle **ONE** response that best represents the extent to which you agree or disagree with that statement. Please make sure that you answer **EVERY ITEM. This is a measure of your personal beliefs; obviously there are no right or wrong answers.**

1=STRONGLY DISAGREE **(SD)**	4=SLIGHTLY AGREE **(A)**
2=MODERATELY DISAGREE **(MD)**	5=MODERATELY AGREE **(MA)**
3=SLIGHTLY DISAGREE **(D)**	6=STRONGLY AGREE **(SA)**

		SD	MD	D	A	MA	SA
1	If I get sick, it is my own behavior which determines how soon I get well again.	1	2	3	4	5	6
2	No matter what I do, if I am going to get sick, I will get sick.	1	2	3	4	5	6
3	If my health worsens, it is up to God to determine whether I will feel better again.	1	2	3	4	5	6
4	Most things that affect my health happen to me by accident.	1	2	3	4	5	6
5	I am in control of my health.	1	2	3	4	5	6
6	Most things that affect my health happen because of God.	1	2	3	4	5	6
7	When I get sick, I am to blame.	1	2	3	4	5	6
8	Luck plays a big part in determining how soon I will recover from an illness.	1	2	3	4	5	6
9	God is directly responsible for my health getting better or worse.	1	2	3	4	5	6
10	My good health is largely a matter of good fortune.	1	2	3	4	5	6
11	The main thing which affects my health is what I myself do.	1	2	3	4	5	6
12	Whatever happens to my health is God's will.	1	2	3	4	5	6
13	If I take care of myself, I can avoid illness.	1	2	3	4	5	6
14	No matter what I do, I'm likely to get sick.	1	2	3	4	5	6
15	Whether or not my health improves is up to God.	1	2	3	4	5	6
16	If it's meant to be, I will stay healthy.	1	2	3	4	5	6
17	If I take the right actions, I can stay healthy	1	2	3	4	5	6
18	God is in control of my health.	1	2	3	4	5	6

THANK YOU FOR PARTICIPATING IN THIS SURVEY

Survey taken from the MHLC and the GLHC Scales. Used by permission of Wallston, K., 2002

Appendix B

Qualifying Questions for Churches

Name of Church: _____

1. Which of the following best describes the membership size of your church?

   a) less than 100
   b) 100-250
   c) 251-400
   d) greater than 400.

2. Using the definition that a Charismatic Church is one that "1) believes in and teaches that the baptism of the Holy Spirit is a separate experience from water baptism and is manifested by speaking in other tongues, 2) believes that the gifts of the Holy Spirit (speaking in tongues, interpretation of tongues, prophesy, faith, miracles, healing, word of wisdom, word of knowledge, and discerning of spirits) are for use by the Church today and 3) encourages the operation of the spiritual gifts either during church services or private prayer time, would this church be considered a Charismatic Church?

   Yes No

3. Which of the following best describes the demographic makeup of your church membership-

   a) 80% or greater Caucasian
   b) 80% or greater African American
   c) other (specify) _____

Does this church meet criterion for inclusion in this study? Yes No

Appendix C

Initial Letter to Church Pastors

University Letterhead

Date

Name of Senior Pastor or Appointed Representative
Title
Name of Church
Address

Dear Pastor _____:

This letter is a follow-up to our conversation on today. Again, thank you for agreeing to allow the members of your church to participate in my thesis project. As we discussed, I am a graduate student at the University of Cincinnati completing a graduate degree from the College of Education's Health Promotion and Education Program.

As indicated, I am researching the subject of the relationship between religion and health. History has documented the existence of this relationship to thousands of years before the birth of Christ. Today, research has been able to substantiate a positive and beneficial health effect in those with a strong religious commitment.

As we also discussed, I am conducting a survey of members of United Methodist and non-denominational Charismatic churches attending churches in Southwest Ohio. Participants must be 18 years of age or older and a current member of your church. Participation by church members is strictly on a volunteer basis. All responses will be handled anonymously and confidentially. Surveys take less than five minutes to complete and will be available for church members one hour before and after one, or at the most, two Sunday morning services. In appreciation for their participation, after completing the survey the participant will be able to select a health food snack.

As previously stated, I will need a minimum of 30-40 surveys from each church or 50 surveys per subgroup. Churches with a low number of completed surveys will receive a second survey date once all eight of the participating churches have been surveyed.

Once the research project is completed, you will receive a copy of the data results from your church along with a summary of the study results in its entirety. None of the participating churches or their members will be able to be identified in any part of the study results.

The data from this research project is potentially very valuable. It will supply church leaders with valuable information regarding their members' perception of their role, chance, and God in their health and healing. In addition it can also aid health educators in the development of future "faith-based" health promotion and education programs.

Attached is a copy of the survey that will be used. If you have any additional questions regarding this study or your churches participation, please don't hesitate to give me a call.

Sincerely,

Patricia B. Williams RN, BSN
Graduate Student
University of Cincinnati
College of Education
Health Promotion and Education Program
Contact number

Appendix D

Second Letter to Church Pastors

University Letterhead

Date
Name of Senior Pastor or Appointed Representative
Title
Name of Church
Address

Dear Pastor _____:

We will be at your church to conduct the Health Survey on Sunday, _____. We would like to conduct the surveys 30 minutes before Sunday School and one hour before and after your morning service. Survey distribution will end 15 minutes before Sunday morning service begins.

To ensure that your services are not disrupted, church members will not be allowed to take surveys into the church service or an assigned work area. Members leaving the services early will be permitted to complete the surveys if they choose to. I will contact you within the next week to finalize any logistics.

Please include the attached announcement in your bulletin and in your morning announcements for **two weeks before** and on **the Sunday of** your survey date. If bulletins are not distributed during services, please provide a verbal announcement during the "Announcement" segment of your service.

When discussing the survey please try to avoid discussing it as a religion and health survey. We want them to answer the questions based on their true beliefs and feelings rather than the way that sounds more religious.

Please feel free to call me regarding any questions or comments.

Sincerely,

Patricia B. Williams R.N., BSN
Graduate Student
University of Cincinnati
Health Promotion and Education Program
Contact Phone Number

Appendix E

Church Bulletin Announcement

Dear Pastor:

The following is being submitted for your review. Please include it in your church bulletins two weeks prior to and the day of the event. Also, if verbal announcements are made, please include it there as well. Thank you.

HEALTH SURVEY- a graduate student from the University of Cincinnati will be conducting a health survey at our church for 30 minutes before Sunday School and one hour before and after morning service on Sunday, _____, 2004. It will be held in _____. **The survey takes less than five minutes to complete.** All survey results are anonymous. If you are interested in participating, please **mark your calendar** for this event!

HEALTH SURVEY- a graduate student from the University of Cincinnati will be conducting a health survey **TODAY** at our church for 30 minutes before Sunday School and one hour before and after morning service. It will be held in _____. **The survey takes less than five minutes to complete.** All survey results are anonymous. If you are interested in participating, stop by their table today.

Appendix F

Guidelines for Study Volunteers

This is a guide for all study volunteers to use on the day of the event. Please read it very carefully in an effort to make certain that the study is conducted without influence or bias and to ensure that the results are as "pure" as possible.

I will be at one of the two or three sites each Sunday. I will be able to be reached on my cell phone at _____. Because it will be on silence, and I may be in the middle of talking with a study participant, it may take me a few minutes to get back with you.

I am very indebted to all of you for volunteering to do this. It's because of you that I will be able to complete this in 3 rather than **8** weeks. **Thank you, thank you, and thank you!** I would not have been able to do this without your help!

Title of my Thesis:

"A Pilot Study Comparing Internal and Chance Health Locus of Control and God Locus of Health Control Scores Between Mainstream Evangelical and Nondenominational Charismatic Christians Attending Churches in Southwest Ohio".

Purpose:

For years it has been documented that there is a strong relationship between religion and health. People with strong religious commitments have been found to practice healthier lifestyles and thusly enjoy lower morbidity and mortality rates from various diseases. Locus of control is a concept that focuses on the sources that influence the beliefs and ultimately decisions that a person makes. In this research, I will be looking at the beliefs of Christians as it relates to their Christian faith toward God and their health beliefs. These health beliefs, in part, govern their health practices.

Please note that the above is only meant for clarification purposes for you the volunteer and cannot be discussed or described to the study participants. It will simply confuse them or prompt them to answer in a way that sounds "religious" rather than in a way that reflects their true beliefs.

I. Confidentiality And Anonymity

This is one of, if not the, most important component of this survey. Each of the churches that have agreed to participate in this survey, were **guaranteed** anonymity. The name of the church will be excluded from the

final results of this research. The only reference to any of the churches in my thesis will be that Methodist and Nondenominational Charismatic churches in Southwest Ohio were included in the study.

It is imperative that you not discuss or reveal to anyone 1) the name of your assigned church, 2) the community or location of the church, or 3) **any** events that occurred at the church while conducting this survey.

The senior pastor of each church will receive a copy of the results of his/her church once the study has been completed. Individual participants and churches have been guaranteed anonymity.

To maintain anonymity, you cannot review the survey questions with a study participant after they have completed it. The only exception to this is when special circumstances occur. (These special circumstances will be discussed later in the guide).

II. Study site

You will be notified the Thursday before your event of the location of the church and the name of your contact person who will assist you on the day of the event. This person is only available to answer questions with regards to the logistical piece. They cannot assist in any way with **any** other aspect of this study.

Pastors are preparing to allow volunteers to be able to get into the church 1 1/2 hours before the morning service begins for set-up. We should be prepared to distribute surveys one hour before the morning service begins. Most of us will be located in the main vestibule or entry area. On occasion, the building layout or the pastor's preference may dictate other arrangements. If this is the case, you will be notified of that before the day of your event. Churches will provide 1 table and 2 (or 3) chairs for the survey. Based on location and the amount of available room, a second table and chairs may be provided for participants.

III. Study Participants

To complete a survey, study participants must be:

- 18 years of age or older
- a member of the church (length of membership doesn't matter)

IV. Surveys

The survey itself is 1 page in length. The top of the survey is "fill-in" for demographic information. The actual survey itself which is located on the

bottom half of the page has a total of 18 questions. Each question has a scale ranging from 1 to 6. The numbers correspond to the participant's degree of agreement with 1 corresponding to "strongly agree" and 6 denoting "strongly disagree". (For those of you who are nurses, it's similar to the scale of 1 to 10 that we use for patients to describe their level of pain, 1 being the least amount of pain and 10 being the most.)

The page stapled to the front of the survey is the cover page. It is very short in length. Each participant is encouraged to read it prior to completing the survey. It basically states what the study is about, who they can contact at U.C. if they have any concerns, that the results are anonymous, and that their pastor will receive a copy of the study results upon its completion. The page is divided so that they can take a copy of it with them (most probably won't).

PLEASE MAKE SURE THAT THE TOP COPY OF THE COVER PAGE REMAINS ATTACHED TO THE SURVEY. IT IS MY ONLY PROOF THAT EACH SURVEY PARTICIPANT RECEIVED NOTIFICATION OF THE INFORMATION PRIOR TO TAKING THE SURVEY. THE HUMAN SUBJECTS COMMITTEE AT THE UNIVERSITY OF CINCINNATI REQUIRES THIS STEP.

I need as many surveys as I can get ☺ and the more the better. I need a minimum of 30-40 per church.

V. Supplies

Each set of volunteers will have the following supplies. Churches with large Sunday morning attendance will have more of most items.

- 15-20 pencils
- 12 clipboards
- 125 cover letters and surveys (already stapled)
- 1 or 2 disposable table covers
- A sign that reads "Health Survey" to be placed above the table
- A box for the completed surveys
- 125 Health snacks (1 to each participant as a "thank you" for completing a survey)
- 1 roll of tape

VI. Volunteers

Two or three volunteers will be assigned to each site. One of them will be the Site Leader. The role of the site leader will be to ensure that study participants are treated in a humane way, as dictated by the University of Cincinnati's Human Subject Committee, and that confidentiality and

anonymity is maintained. See Q & A section. An attached script will help with all other questions.

Please plan to arrive at the church for set-up so that you are prepared to begin distributing the surveys 1 hour before the service begins. You will need to remain throughout the service to catch people going in and out of the main sanctuary. We will also be surveying for 1 hour after the service ends (or sooner if the church clears out pretty quickly).

If you are assigned to a church that has 2 morning services, the arrangements are a little different. They will be discussed on an individual basis.

VII. Set Up

On the day of the survey, arrive at your assigned church as prearranged. Most churches will already have the table and chairs set up for you. Set up includes:

- covering the table with the table cover
- setting up the 12 clipboards with surveys attached
- setting out the box of pencils
- setting out the box for completed survey results
- setting out health snacks for those completing the survey (1 snack per person)
- placing the "Health Survey" sign above the table

VIII. Conducting the Research

A) Recruitment

One of the ways that I am using to recruit survey participants is through the church itself. Churches have been announcing in their church bulletin for 2 weeks that the survey will be taking place so church members are already aware of the date of the event and the location of the table. It will also be announced the day of the event as well.

The second way will be through you the volunteers. You will be using a random selection process. This process means that **every other person** who walks past you is asked the following question,

"Would you like to participate in our Health Survey?"

Although any and everyone can participate and certainly is welcomed, for the sake of randomization, **ask** every-other-person.

B) **Research Process**

Step 1: Once a person indicates that they are interested in participating, **ask if they are 18 years or older** (unless it's obvious that they are). Only church members 18 years of age or older can participate.

Step 2: The second question is, **"Are you a member of this church?"** Only members of that church can participate. No visitors, including long time church attendees can participate. NO EXCEPTIONS.

Step 3: Handing them the survey, tell them that the survey takes less than 5 minutes to complete.

Step 4: Next, state, **"Please read the front page" (pointing to it)**. Then show them that the bottom portion of the 1st sheet is theirs to tear off to keep if they want like (again, most probably will not).

Step 5: Flipping to the 2nd page say,
"The directions are at the top of the page. Please be sure to complete each of the sections".

****Surveys and clipboards cannot be taken from the table to be completed somewhere else or to complete during service and returned later. They must be completed at the time received.**

Step 6: Once they have completed the survey, remove it and have them fold their survey and place it in the slot in the box. Then say,

"Thank you so much for completing our survey. As a thank you gift, please feel free to select one of the health food snacks on the table".

Refill the clipboard and repeat Steps 1 through 6.

C. **Assisting Participants**

Church members requiring assistance due to reading or visual

problems may be assisted with completing the survey. Please take them off to an area that will provide privacy and confidentiality.

Volunteers should not expound on or explain the questions to study participants. Let them answer the questions based on their understanding of the question. (See the sample Q & A)

D. Wrap-up

Once the survey process is completed, box up the supplies and dispose of the table cover. The lead volunteer will take the supplies home and I'll pick them up that day. The box with the completed surveys will be taped shut so as to seal its contents. It should not be opened for any reason. Survey results cannot be retrieved once they have been placed in the box.

E. Attire

I will contact each of you individually regarding the attire that is acceptable at your assigned church.

F. The Do's & Don'ts

1. Please put your cell phone on vibrate or silence
2. Please be sensitive to what is taking place in the church service such as prayer time, etc. Remember that while this is a research project, we are on their turf and what they (and God) are doing during the service takes precedence over our work.
3. Volunteers should not discuss their personal religious affiliation or beliefs during the surveying.
4. Volunteers should not discuss their personal interpretation of survey questions with study participants.
5. Survey taking is permitted before and one hour after church services only. Stop distributing surveys 15 minutes prior to the beginning of service the service. Members leaving the church prior to the end of the service may complete a survey.

Q & A

1. **Q. "What should I do if someone asks me what one of the survey questions 'means' or to 'explain' a survey question?"**

   A. Gently encourage them to answer it the way that **they** interpret it. (There really shouldn't be too many questions like this because the questions are short statements and pretty straight forward). Remind them that there are no "right" or "wrong" answers. If the discussion starts to become complicated, refer the person to the Site Leader.

2. **Q. "What should I do if someone begins to complete the survey then says that they want to stop the survey and discontinue?"**

   A. Gently respond, "Okay, thank you anyway". Immediately notify the Site Leader so she can follow-up with the person.

3. **Q. "Can we wear pants to the church?"**

   A. As long as it's the normal attire for the church that you are assigned to. This will be discussed with the senior pastor ahead of time. If they are allowed, business casual is recommended. You may also want to wear comfortable, flat shoes. You may also want to bring a sweater or jacket since we will probably be located in the vestibule area, which is between the outer doors and the sanctuary.

4. **Q. "Can we hand out the health food snacks to adults not completing the survey or to children?"**

   A. Sorry, but no. The snacks are meant to be an incentive for completing a survey. Any left over snacks will be distributed at the next survey church the following week.

5. **Q. "What should I do if a member of the church inquires about <u>my</u> religious affiliation or the name of the church that I am a member of?"**

   A. Politely explain that because of the nature of the study you can't discuss your religious beliefs.

   Ex. "Unfortunately, because of the nature of this study, I can't discuss that. We want to make sure that the results of the study are not biased in any way".

6. **Q. "What should I do if we run out of surveys and snacks?**

   A. Hopefully this won't happen. Each church will be equipped to Handle 125 participants. But if it does happen let your contact at the church or an usher know and begin preparing to leave. Once you run out the survey is concluded.

7. **Q. "Why do I have to recruit every other person? Why can't I just ask anyone to participate?**

   A. Asking every-other-person who walks past you is a part of the randomization process. This way, neither you nor the study itself can control who participates. This lends greater credibility to the study. If a group of people walks up to you and ask if they can participate you are free to answer all of them. In this situation you are not recruiting them, they are volunteering to participate.

8. **Q. "What should I do if someone wants their survey back after it's been placed in the box?"**

   A. Once it has been placed in the box, the survey cannot be retrieved. First, there would be no way of identifying their survey since names are not attached to them. Secondly, it would expose the survey results of those who have completed it. Gently apologize then explain that the box is sealed to maintain confidentiality and anonymity and cannot be opened.

9. **Q. "I read the survey and would like to take it to my church. Can I take one home with me?"**

   A. Sorry, no. Part of this survey is taken from an existing survey and the other portion I created. This survey will be a part of a published work- my thesis. It will be available through the University of Cincinnati's library, Ohiolink, and through other online links to thesis and dissertations nationally. Its use will require consent from and the citation of both authors.

Appendix G

Final Letter to Church Pastors

University Letterhead

Date

Name of Pastor
Church

Dear Pastor _____:

Enclosed is a copy of the results of the study that I conducted at your church between February and March 2004. You will be pleased to know that your church was one of eight churches in Southwest Ohio that participated in this study.

I have divided the results into four sections. Section I is a broad overview of the purpose of the study. Included in this section are the nine hypotheses, a brief history on the religion-health relationship, an explanation of the concept of health locus of control, and a brief overview of study methodology.

Section II is comprised of a table detailing the demographic information that is specific to your church. It also includes the demographic data of the remaining three churches within your "denomination" as well as the overall study results.

Section III contains a table that identifies the mean Internal Health Locus of Control (IHLC), Chance Health Locus of Control (CHLC), and God Locus of Health Control (GLHC) scores for your church, the three remaining churches within your "denomination" as well as the overall study results. Section IV provides a discussion of the study results.

In appreciation of your kindness and tremendous support, please accept the enclosed book, *"The Gallup Guide: a reality check for 21st century churches"* by George Gallup, Jr. and D. Michael Lindsay. I hope that this book will assist you and the leadership of your church to further the work that you and your church members are doing to accomplish your goals for the Kingdom of God.

Your kindness, cooperation, and patience have been greatly appreciated. God bless!

Sincerely,

Patricia B. Williams R.N., BSN
Graduate Student
University of Cincinnati
College of Education
Division of Health Promotion and Education
Contact Phone Number