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Congregational Health and Wellness Ministry
Using Locus of Control to Develop Teaching Methods

by

Theresa Lee Trivette

A thesis/project submitted to the faculty of
Gardner-Webb University School of Nursing
in partial fulfillment of the requirements for the
Degree of Master of Science in Nursing

Boiling Springs

2010

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Abstract

Faith communities have a unique opportunity to help congregational members modify health-seeking behaviors in order to reduce modifiable health risk factors. Health researchers have increased their use of health locus of control as a preferred method for studying health promotion and sick-role behaviors. Targeted education and activities designed from the context of the subjects' health locus of control may provide an effective method to influence people to make positive healthy behavior modifications with a higher likelihood of success because locus of control beliefs have been shown to have direct relationships with healthy behavior choices. The health locus of control theory has not been widely used in a faith community structure. This project investigated the potential use of health locus of control to design a faith community program that would reach the congregation in the context of their own current locus of control to help them achieve improved health and wellbeing.

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Acknowledgments

I would like to thank:

Dr. Janie Carlton for providing me with the support, guidance, and direction I needed to complete this project and this chapter of my educational journey.

Rev. Nathan Parrish for providing me the opportunity to develop the health and wellness program for the congregation at Peace Haven Baptist Church of Winston-Salem, and providing the support and encouragement to complete this journey.

Barbara Lehman, my accomplice and friend, for always being the stabilizing force in my workday. Without your endless support and encouragement, I could have never made this final leg of the journey!

Lisa Chambers, my amazing best friend, for providing me the comfort of knowing that I always have my best friend close by no matter how far away I am! Thanks for always accepting me for who I am and for celebrating my journey with me!

Freda Lee, the world's best mother, for inspiring me to follow my dreams! I am so glad you are able to share this successful journey with me! I could never have made it this far in my journey if you had not taught us kids that nothing is impossible if we just stretch our minds and reach for the stars to achieve success! I did it, Mom! I love you!

Scott Trivette, the love of my life, for always being there for me when I needed you most. You provided me with the strength to get through these difficult final months. You always anticipated my needs before I even knew I had them. Thank you for always knowing when I needed to laugh and for providing the humor I needed to break the stress! You are my life, my light and my love! I love you with all my heart and soul! Now, it is time to let me care for you as you follow your dreams!

And most importantly, God, for providing me the spirit and desire to do good work in his name and in his honor. I also thank God for giving me the support and love from all of you to make this journey a reality (and for giving each of you the strength to put up with me on this journey)!

Table of Contents

Chapter 1: Introduction	1
Background	1
Theoretical Framework	5
Health locus of control theory.....	5
Multidimensional health locus of control scale	6
God locus of control scale.....	7
Purpose and Rationale.....	8
Project question.....	9
Chapter II: Review of the Literature	10
Predicting One’s Desire to actively Participate in Healthy Behaviors	10
Education and Its Role in Developing Healthy Behaviors	11
Intersection between God and Healthy Behaviors.....	12
Chapter III: Project Description.....	14
Design	14
Sample and setting	14
Method of measurement	15
Pre-intervention health needs assessment findings.....	15
Locus of control scores	16
Intervention	17
Chapter IV: Outcomes and Evaluation Plan	18
Chapter V: Discussion	19
Project Summary.....	19
Implications for Nursing.....	19

Implications for Further Study.....	20
References	21
Appendices	
Appendix A: Health Needs Assessment	27
Appendix B: MHLC Scale.....	29
Appendix C: GLHC Scale	31

List of Tables

Table 1: Characteristics of the Health Needs Assessment and Multidimensional Health Locus of Control/God Locus of Health Control Scales.....	15
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Chapter I: Introduction

The country is facing a major health crisis. Obesity, diabetes and cardiovascular disease are on the rise, health care spending is increasing to unprecedented rates, and overall longevity appears to be declining. Yet the country continues to participate in unhealthy lifestyle practices that only escalate the propensity for increasing morbidity and mortality.

Many public and private entities are urging the faith community to become more involved in population health and wellbeing. Faith community nursing (also known as parish nursing) has been in existence for many years. However, there are still gaps in how these programs are able to reach the heart of the congregation to motivate people to adopt healthier lifestyles to improve overall health and wellbeing.

Health researchers have identified health locus of control as one method to assess a population's potential for making healthy lifestyle changes. However, this theory has not been widely used in a faith community structure. The project will seek to use the Health Locus of Control Theory to design a faith community program that can reach the congregation in the context of their own current locus of control to help them achieve improved health and wellbeing.

Background

The current health status of Americans is a direct result of willful lifestyle choices such as lack of exercise, smoking and other addictions, poor dietary consumption and inadequate stress management (Minor, 2010). The Centers for Disease Control and Prevention (CDC) (2010) stated, "American society has become 'obesogenic,' characterized by environments that promote increased food intake, nonhealthful foods, and physical inactivity (para 1)." Data from a recent report of the Surgeon General (2010) demonstrated that obesity in the US has nearly

doubled in recent decades for adults and tripled for children. Obesity is estimated to cause nearly 112,000 deaths each year in the United States (Flegal, Graubard, Williamson, Gail, 2005; CDC-NCHS, 2009). Current literature even suggests that children today may even be the first generation in decades to actually have a shorter lifespan than their parents or grandparents (Olshansky et al., 2005).

Diabetes is a serious concern for all age groups as it is the seventh leading cause of death in the US and is a major factor in multiple serious health complications such as kidney disease, heart disease, vascular compromise and blindness (CDC, 2008; CDC-NCHS, 2009; USDHHS, 2010a). Nearly 8 percent of the entire US adult population has been diagnosed with diabetes (CDC-DDT, 2010; USDHHS, 2010a). Thirty-three percent of US children are expected to develop diabetes at some point during their life because of obesity (Flegal, Graubard, Williamson, Gail, 2005).

In North Carolina, 9.6 percent of the state population has been diagnosed with diabetes (1.6 percent higher than that national average), and 35 percent are overweight (BMI 25-29) and 30 percent are obese (BMI greater than 30) (CDC-BRFSS, 2009). The state's cardiovascular disease rate is 4.4 percent versus 3.8 percent for the nation, and less than half of the state's population report that they engage in a routine of regular physical exercise each week (CDC-BRFSS). The direct medical costs for obesity related medical care exceeds \$92 million per year, nearly 37 percent higher than the medical costs for healthy patients across the state (Spalding, 2009). Finkelstein, Fiebelkorn, and Wang (2004) reported that North Carolina was in the top 10 of states with the most medical expenditure costs associated with obesity-related care.

To address the national array of concerning health issues over the decades, the US Department of Health and Human Services (USDHHS) has coordinated Healthy People

campaigns (since 1979) with the objective of promoting health and preventing disease (USDHHS, 2000). Healthy People 2010 launched in 2001 as the third version of health promotion and disease prevention objectives with a specific focus on increasing life expectancy and the quality of life through knowledge, motivation and other opportunities to help people make informed decisions about their health (USDHHS, 2000). The idea for Healthy People 2010 was to encourage the development of community and state efforts to promote healthy behaviors and develop healthier community environments (USDHHS, 2000). The USDHHS (2010b) will launch the Healthy People 2020 objectives later this year to help set the priorities for the next decade regarding health and wellness activities and emerging health risk prevention associated with the nation's current trends in health statistics. The topics included in Healthy People 2020 will include diabetes, nutrition, weight, physical activity and overall wellbeing (USDHHS, 2010b).

Health exists on a continuum of physical, social, emotional, and spiritual well-being, and when all of these dimensions are working together in harmony, an individual is more likely to achieve optimal health and wellness (Minor, 2010). The local church can bring a holistic perspective with a focus on harmony with oneself, with others, within the environment, and also with God in the pursuit of health and wellbeing (Minor). The First Lady, Michelle Obama, launched the *Let's Move* campaign, a collaborative community-based set of strategies designed to address factors that influence childhood obesity (Office of First Lady, 2010). One of the strategies in the *Let's Move* campaign urges faith-based community groups to collaborate and develop activities to encourage the community to strive for healthier living and well-being (*Let's Move*, 2010).

Dr. Harold Koenig (2008), Director of the Duke University Center for the Study of Religion/Spirituality and Health, reported to the US House of Representatives that religion does influence health in the community. He reported that he sees religious affiliation as a preventative effect for people's health status (Koenig). The faith community provides a strong social support system for people in times of need, and that religious people are more likely to avoid unhealthy choices than their non-religious counterparts (Koenig).

Rev. Granger Westberg was a visionary who recognized the connection between physical well-being and spiritual health, and began his quest for holistic healthcare dating back to the 1940s (Patterson, 2003). He saw how congregational programs could positively impact the health of the faith community, and was the primary leader in the establishment of the first recognized parish nursing program in the 1980s (Patterson). Today, there are hundreds of parish nursing programs serving congregations in many denominations of faith all over the country.

Parish nursing has been a model recognized for many years for its ability to reach lives across all generations, cultures, and socioeconomic lines (Patterson, 2003, Koenig, 2008). By collaborating with other community health resources, parish nursing programs can foster relationships to help build programs to help the faith community achieve optimal health and wellness (Patterson; Koenig; International Parish Nurse Resource Center [IPNRC], 2010). Dr. Koenig suggested that if all of the religious congregations in America would develop health ministries, then nearly two-thirds of the US population would be provided access to health promotion efforts. This would also enable health education efforts to reach people of all ages and could address each generation's needs more effectively (Koenig).

Theoretical Framework

Health locus of control theory. Julian Rotter first formulated the concept of locus of control from his social learning theory which proposed that the probability of one's behavior occurring is related to an individual's expectancy that the behavior will gain reinforcement and that the reinforcement would have value to the individual (Rotter, 1966, 1989). The locus of control construct classified an individual's attitude regarding the relationship between one's own behaviors and the outcome of those behaviors between internal and external controls (Rotter). Hannah Levenson (1973) later expanded the locus of control model from a unidimensional (internal or external) model to one that has three independent dimensions—internal, chance and powerful others. Wallston, Wallston and DeVellis (1978) further refined the multidimensional locus of control theory as it directly related to health behaviors and health outcomes. The three constructs of the multidimensional health locus of control include Internals, Powerful Others and Chance. A final construct was also presented by Wallston et al. (1999) that reflects God as yet another locus of control.

Internals. Those that feel their own actions are the primary source of control on the outcome are considered to have an internal locus of control (Wallston, Maides, & Wallston, 1976; Wallston, Wallston, Kaplan, & Maides, 1976; Wallston, & Wallston, 1978; Wallston, Wallston, & DeVellis, 1978; Wallston et al., 1983; Wallston, Wallston, Smith, & Dobbins, 1987; Wallston, 1989, 1991). Internals generally have higher self-esteem and believe in themselves to have the power to change their circumstances for the better.

Powerful others. Those that believe other people's actions control their outcomes are considered to have a powerful others locus of control (Wallston, Maides, & Wallston, 1976; Wallston, Wallston, Kaplan, & Maides, 1976; Wallston, & Wallston, 1978; Wallston, Wallston, & DeVellis, 1978; Wallston et al., 1983; Wallston, Wallston, Smith, & Dobbins, 1987; Wallston, 1989, 1991). Those with the powerful others locus of control generally believe it takes someone else with greater power to influence their outcomes, so they are less likely to believe they can control their own outcomes.

Chance. Those that believe their outcomes are simply brought upon by chance or fate are considered to have a chance locus of control (Wallston, Maides, & Wallston, 1976; Wallston, Wallston, Kaplan, & Maides, 1976; Wallston, & Wallston, 1978; Wallston, Wallston, & DeVellis, 1978). Those with a chance locus of control generally do not have much confidence in their ability to influence their outcome, their environment or their health.

Multidimensional health locus of control scale. Health researchers have embraced the expanded locus of control theory as a means for explaining health seeking behaviors. Increasing numbers of investigators are turning to the health locus of control measure as the preferred alternative for studying health and sick-role behaviors. Scales to capture a person's locus of control have evolved over the years. Rotter developed the 23 question Internal-External (I-E) Scale to determine the extent a person's control was internal versus external (Rotter, 1966, 1989). To expand on this scale specific to health related issues, Wallston, Wallston, et al. (1976) designed the Health Locus of Control Scale as a unidimensional measure of whether individuals believed that their health was controlled by internal or external Factors. The survey questions were scored and summed to determine whether the individual had internal or external health beliefs with scores above the medial indicating "external" and those below had an internal locus

(Wallston, Maides, & Wallston, 1976; Wallston, Wallston, et al., 1976; Wallston, & Wallston, 1978; Wallston, Wallston, & DeVellis, 1978). In keeping with her expanded locus of control theory, Dr. Levenson later developed the IPC Scale composed of some items adapted from Rotter's I-E Scale and other items she wrote specifically to measure the three dimensions of control—internal, powerful others, and chance (Levenson, 1973, 1981). Following Dr. Levenson's adapted inquiry, Wallston and Wallston combined the unidimensional HLC Scale and Levenson's IPC Scale to develop the current Multidimensional Health Locus of Control (MHLC) Scale (Wallston, & Wallston, 1978; Wallston, Wallston, & DeVellis, 1978). The scale consists of an 18 question survey with a 1-6 Likert Scale to determine the extent one believes their health and wellness is determined by their own behaviors, powerful others or by fate, luck or chance (Wallston, Maides, & Wallston, 1976; Wallston, Wallston, Kaplan, & Maides, 1976; Wallston, & Wallston, 1978; Wallston, Wallston, & DeVellis, 1978; Wallston, Smith, et al., 1983; Wallston, 1991).

God locus of health control scale. The God Locus of Health Control (G LHC) Scale was created as an additional part that could be added to the Multidimensional Health Locus of Control Scale as a way to assess the extent an individual believes that God has a significant control over his or her health status (Wallston, Malcarne, Flores, Hansdottir, Smith, Stein, Weisman, and Clements, 1999). Wallston et al. (1999) found that those with higher GLHC did not necessarily relate to better health outcomes, but potentially correlate to better coping of illness states (Wallston et al., 1999).

Purpose and Rationale

With the increased health related risks, early mortality risk and increased financial burden that obesity and its related complications causes to the community, it is critical to focus on efforts to improve the health and wellness status of the families in the community today to ensure better health and longevity for North Carolina's future generations. Identifying the community's lifestyle choices and supporting changes in those behaviors are the most effective first actions to take to fight obesity in an effort to also control the downstream effects of obesity related illnesses and conditions (USDHHS, 2010a, 2010b).

As noted previously, modifiable risk factors including physical activity, sedentary behavior and diet can reduce the risk for many of the diseases associated with obesity, including diabetes and heart disease (USDHHS, 2010a, 2010b). Planned activities to address prevention of obesity should focus on personal behaviors, biological traits, and the social and physical environments that effect access to or compliance with opportunities to improve health status (USDHHS, 2010a, 2010b). The surgeon general states that these activities can take place anywhere, including the home, work, and community settings such as churches (USDHHS, 2010a). So how can the church become an effective mode of health and wellness support for a congregation?

Healthy ministries can foster the relationship between spirituality and health, helping congregations find methods to achieve key improvements in high risk behaviors and lifestyle choices such as nutrition, physical activity and smoking (Minor, 2010). As a community of faith, the church congregation can serve as a vessel for health and wellness in all aspects of the whole self—mind, body, and spirit. The strength of building a congregational health and wellness ministry is that the body of believers are joined together through their faith in God to

strengthen the healing process. A congregational health and wellness ministry can facilitate the congregation's access to health education, support for targeted needs (community resources, support groups, etc), and overall health promotion (Minor; Let's Move, 2010). Additional healing opportunities within the congregational setting include worship, special services for emotional and spiritual needs, prayer, education, fellowship and service (Minor).

This project will apply the concepts within the locus of control theory to plan a highly effective, faith-based health and wellness ministry that will help the congregation adopt healthier lifestyles and promote health seeking behaviors.

Project question. Can a faith-based health and wellness program use the context of health locus of control to encourage a congregation to develop positive health-seeking behaviors to achieve improved health and wellbeing?

Chapter II: Review of the Literature

Predicting One's Desire to Actively Participate in Healthy Behaviors

Many health researchers have used the Health Locus of Control theory to design studies regarding one's own beliefs regarding their ability to affect their health outcomes and how those beliefs are related to their health seeking behavior patterns. The Multidimensional Health Locus of Control Scale (MHLC) provides the ability to assess a group's health-related locus of control beliefs in order to build more effective health and nutrition educational programs geared toward their own control beliefs (Wallston, Maides, & Wallston, 1976; Wallston, Wallston, Kaplan, & Maides, 1976; Wallston, & Wallston, 1978; Wallston, Wallston, & DeVellis, 1978; Wallston, Smith, et al., 1983; Wallston, 1991; Wallston et al., 1999).

More targeted education based on the subjects' MHLC may provide an effective method to influence people to make positive healthy behavior modifications with a higher likelihood of success because locus of control beliefs have been shown to have direct relationships with healthy behavior choices (Wallston, Maides, et al., 1976; Wallston, Wallston, et al., 1976; Wallston, & Wallston, 1978; Wallston, Wallston, et. al., 1978; Wallston, Smith, et al., 1983; Wallston, 1991; Wallston et al., 1999; Luszczynska & Schwarzer, 2005). In a recent review of the MHLC's predictive results by Luszczynska and Schwarzer (2005), the concept that health locus of control predicted one's desire to participate in health seeking behaviors was well supported, and that methods to achieve better health were well established in numerous studies (Luszczynska & Schwarzer, 2005).

Several studies have found that those with internal health locus of control were more likely to be compliant with health behaviors, screening and follow-up care than those with more external dimensions of health locus of control who are more likely to participate in unhealthy

behaviors (Burker et al., 2005; Fair et al., 1989, 1991; Wallston, Maides, et al., 1976; Wallston, Wallston, et al., 1976; Wallston, & Wallston, 1978; Wallston, Wallston, et al., 1978; Wallston, Smith, et al., 1983; Wallston, 1991; Wallston et al., 1999; Bodecs et al., 2010). This tendency has been studied and reported across many health conditions including prenatal care, breast cancer screening and treatment, lung transplant, and diabetes care (Burker et al., 2005; Fair et al., 2010; Bodecs et al., 2010; Rowe, Montgomery & Duberstein, 2005; Kinney, Emergy, Dudley, Croyle, 2002; Bourholly, 1998). Internal and external health locus of control foci are also associated with overall psychological adjustments to new medical diagnoses including cancer (Rowe, Montgomery & Duberstein, 2005; Fair et al., 2010). High internal locus of control has also been cited as a related factor is high coping, low depression, and overall life satisfaction (Bettencourt, Talley, Molix, Schlegel and Westgate, 2008).

Education and Its Role in Developing Healthy Behaviors

Effective health education dissemination is an important step for health professionals for motivating people into action toward better healthy behaviors. Health education helps draw awareness to the rising health problems facing people today, and it can be used to effectively energize people to choose behaviors that are known to improve health outcomes (USDHHS, 2000, 2010b). There has been little research to date on whether targeted education can shift a person's health locus of control.

Several studies, however, have shown how patients made better health promoting choices and adapted healthy behaviors following educational offerings. For instance, Bastani, Hashemi, Bastani and Haghani (2010) found that health education could positively affect health locus of control and self-efficacy as found in their study of Iranian women with regard to exercise compliance. Miller et al. (2002) found that nutrition education provided to older adults with type

II diabetes through a structured program taught by health professionals had direct positive improvements in metabolic outcomes for the subjects who received the prescribed educational program compared to the control group who did not. Diabetes educators have been providing specific patient education for diabetes patients for many years; however, physicians do not always refer patients to this type of educational offering. Duncan et al. (2009) found that patients who were referred to diabetes educators were more likely to have better glucose control and also were found to have fewer Medicare claims for illnesses related to their diabetes management. Cardenas, Hoffman, Kelly & Mayo (2004) also found that a structured educational program improved spinal cord injury patients' sense of control over their own health outcomes as demonstrated by the statistically significant increase in the treatment group's scores on the internal MHLC Scale following the educational intervention.

Intersection between God and Healthy Behaviors

Religious beliefs can also have a negative impact on a person's health seeking patterns of behavior. Several studies have found that those that allowed God's will in their health status were more likely to have lower levels of self-esteem and confidence than those that were self-motivated (Pargament et al., 1988; Kinney et al., 2002). Wallston et al. (1999) expanded the MHLC to include a new subscale, the God Locus of Health Control (GLHC) Scale to measure the degree of a person's belief that God controls his or her health status and outcomes. Kinney et al. (2002) used the GLHC in their study of African American women with breast cancer risk and found those that had a high GLHC were less likely to participate in preventative care for breast cancer than those with a lower GLHC. However, the study also demonstrated that the presence of a primary care provider also had a high correlation to the patient's decision to adhere to screening examinations so it may not be specifically related just to the GLHC, but possibly other

external HLC factors also (Kinney et al., 2002). Bourjolly (1998) reported that complete reliance on God to determine health status lead to decreased compliance with screening practices and overall healthcare seeking activities. However, those with a high Internal HLC along with a perception that God is a collaborative partner rather than a superior factor in their outcomes are more likely to exhibit health seeking behaviors and superior coping compared to those with low Internal HLC (Bourholly, 1988, 1990).

O'Hea et al. (2005) used the MHLC to predict whether the study subjects would adhere to their diabetic treatment plans and found an additional intersection among the subscales of the MHLC and the GLHC. For instance, they found that those with high GLHC were less compliant when their Internal HLC was low, but that when Internal HLC was high it mitigated the negative influence of the high GHLC (O'hea et al). This further supports the idea that those that believe God controls their health may possibly have less compliant health behaviors if they also feel that they are not responsible for their own health (O'hea et al).

Chapter III: Project Description

The proposed Health and Wellness Ministry for the Peace Haven Baptist Church of Winston-Salem is designed as a foundation of support for the church that will provide health education programs. This program was designed based on principles of parish and faith community nursing models, but is intended the church to be able to maintain independently. Many congregations cannot afford to pay for a parish nurse, so it was important to consider this when helping churches build programs for sustained success. The program designed in this project includes programs aligned with existing resources in the community that can bring health and wellness education, preventive screening opportunities, support group options, and many other wellness activities to the congregation. These programs can help influence the congregational members with adaptive changes in health promoting behaviors, better coping with existing illnesses, and potential improvement in overall health of the individuals in the congregation. The Multidimensional Health Locus of Control Scale will be used to identify the current level of Internals within the group and how God affects their Locus of Control.

Design

Sample and setting. Members and visitors of the Peace Haven Baptist Church of Winston-Salem were offered the opportunity to participate. To help effectively plan health promotion activities, it is important to acquire a solid set of data regarding the health of the population to be served (Gustafson & Bredow, 2001). Therefore, all members of the congregation were given a letter with informed consent information along with the Health Needs Assessment Survey along with the MHLC and GLHC Scales. Thirty-seven members (55% of the active membership) enrolled in this program and returned the pre-test Health Needs Assessment and MHLC and GLHC Scales.

Method of measurement. Each program participant completed a pre-intervention Health Needs Assessment (see Appendix A) to provide current health status and identified health needs. Each participant was also given the Multidimensional Health Locus of Control Scale (see Appendix B) and God Locus of Health Control Scale (see Appendix C) to measure their primary locus of control scores.

Pre-intervention health needs assessment findings. Table 1 provides a summary of the characteristics of the included congregational members who returned the surveys.

Table 1: Characteristics of the Health Needs Assessment and Multidimensional Health Locus of Control/God Locus of Health Control Scales

		N	Internal	Chance	Powerful Others	God
Gender	Female	20	23.4	16.9	19.0	16.7
	Male	17	25.8	14.5	20.0	14.1
Ages	18 t 29	5	24.4	15.6	15.8	11.8
	30 t 39	2	24.3	22.0	18.0	15.0
	40 t 49	6	26.0	15.1	19.9	16.2
	50 t 59	2	28.0	9.5	16.0	12.0
	60 t 79	16	24.3	15.6	20.6	14.6
	80 and older	6	23.0	18.2	20.3	21.3
Disease Burden	0 Diseases	10	25.2	18.0	19.6	19.3
	1 Disease	11	24.7	15.4	19.5	15.6
	2 Diseases	10	24.4	13.9	17.7	14.1
	3 Diseases	2	22.0	12.0	22.0	7.0
	4 Diseases	3	23.3	17.3	21.0	14.3
	6 Diseases	1	24.0	20.0	24.0	13.0
Marital Status	Married	26	24.5	15.5	19.8	15.0
	Partnered	5	27.4	15.2	18.2	16.8
	Single	2	26.0	16.0	19.0	10.5
	Widowed	4	19.8	18.0	18.5	19.3
Overall Locus of Control	High Internals	76%				
	High Chance	5%				
	High Powerful Others	19%				
	High God	22%				
Self Rated Overall Health	excellent	11				
	fair	5				
	good	20				
Self Reported Overweight	Yes	15				
	No	22				

Additionally, less than one-half of women responding indicated participation in preventive screening activities such as monthly self-breast exams, PAP smears and mammograms. Less than one-quarter of the men responding indicated participation in preventative screening activities such as testicular self-exams and prostate cancer screenings. While 92% of respondents indicated they see their doctor for a routine physical every 1-2 years, only 65% indicated that they see their eye doctor, and 84% see their dentist every year. Only 15 (43%) of respondents eat at least 5 servings of fruits and vegetables a day, 14% admitted to smoking tobacco, 41% believe they are overweight, and only 8% feel overwhelmed by stress in their lives. Forty three percent indicated participation in exercise three or more times per week. Ten of the 37 respondents indicated no present disease burden, while 11% have been diagnosed with heart disease, 11% with diabetes, 38% with high blood pressure, and 8% with any form of cancer diagnosis. The overall spread of the MHLC and GLHC across the age groups differed. The highest Internals were found in the young adult through the 50's, and the lowest found in the 60 and over groups.

Locus of control scores. The results from the Multidimensional Health Locus of Control Scale pre-test indicated that 76% of the participants were high Internals, 5% were high Chance and 19% were high Powerful Others, while 6% had both high Internal and high Powerful Others scores. Only eight of the thirty-seven people surveyed indicated a high God Locus of Health Control. These overall results demonstrate a large portion of those surveyed being high Internals. Interestingly, mean internal locus of control scores decrease when more than one active disease state is present in an individual. This finding demonstrates the importance of improving overall health to help reduce the incidence of obesity related disease states.

Intervention. A Health and Wellness Ministry team was formed with the mission of promoting and fostering a holistic approach to human well-being. The ministry will create several health and wellness educational offerings through series of courses, lectures, and activities focused on health education specific to the health and wellness needs identified by the participants on the Health Needs Assessment. The educational framework will be designed in a manner that will target participants' current locus of control perceptions. For instance, high Internals already have the propensity for applying learned behaviors that are known to improve health and overall health outcomes. Therefore, this group may only need to be provided the information they need to know to make informed decisions. The low internals groups (chance, powerful others and God) do not currently have the belief that they can change the outcome by changing their behaviors. An educational program that has easy to implement actions that can provide quick successes can help low internals see how they can have control over their own outcomes. By providing this group with short-term successes, easy to implement behaviors, and sharing in the celebration of their goal attainment, it is possible to influence their locus of control to more internal perspectives.

The key areas of focus for the first year of this program will include the following:

- *Mental and Social Health*—activities will be arranged with the intention of developing fulfilling relationships with others, and helping the members develop skills that will enable them to adapt and cope to changes in their lives and health.
- *Spiritual Health*—activities will focus on ways to further develop their commitment and relationship with God.
- *Physical Health*—activities will focus on education and participatory offerings related to active living, healthy eating, disease prevention, and disease management.

Chapter IV: Outcomes and Evaluation plan

The outcomes of this program will be determined at the end of the first year of the program. Each person who participated in the programs will be asked to complete the Health Needs Assessment Survey, the Multidimensional Health Locus of Control Scale and the God Locus of Health Control Scale upon completion of the Health and Wellness Ministry's year of planned activities. The results will be scored and compared to the pre-intervention scores received to determine whether any positive improvement was made in the key variables (disease burden, overall health, overweight status, and Internal Locus of Control). The study design for this project is a serial cross-sectional study because both the pre- and post-intervention cohorts will be sampling from the same population, but not necessarily the exact same individuals. The pre-intervention data are normally distributed using the Anderson-Darling Normality Test. Therefore, an unpaired t-test will be used to determine whether the mean MHLC and GLHC scores in each subcategory (internal, powerful others, chance, God) of the two groups (pre- and post-intervention) are statistically different from each other.

An analysis using descriptive statistics for both the pre- and post-intervention groups will provide any data to suggest a shift in the prevalence of disease burden, overall health, and healthy behaviors. Once the data are analyzed and reported, a full review of the activities that were offered will be evaluated for their effectiveness in achieving improvement in overall health and healthy behavior choices of the congregation as evidenced by a decreased report of disease burden, increased healthy behavior profile and increase in internal locus of control scores. From this review, modifications will be made accordingly to adapt to the needs of the congregation going forward.

Chapter V: Discussion

Project Summary

To date, several educational offerings have been completed. CPR training was provided to a group of 15 members. Each were certified in first aid, CPR and AED utilization and have been listed with the church office as resources in case of future emergencies in the church. A Health and Wellness Ministry educational passage is offered each week in the church newsletter. Wednesday evening dinners are now prepared with healthy choice offering in addition to the regular meals, and fresh water is offered at every event as one of the beverage options. The church and its grounds are designated as non-smoking areas. Physical activities are offered for senior adults including yoga and Pilates weekly. Seniors also participate in weekly Bridge card games and crafting sessions to stimulate the brain for mental health. The congregation participated in the Crop walk for Hunger, and the youth have several physical activities planned in the coming months. Beginning in January 2010, several education series will be offered during Wednesday evening services, and possibly as occasional Sunday morning bible study series.

Implications for Nursing

The results from this program will help provide information for other faith communities as to the efficacy of such structured programs. Nurses in the faith community have a unique opportunity to influence health promotion and health seeking behavior modifications of the faith community through structured health and wellness programs. The importance of helping members of the faith community learn they do have control over their health outcomes is an important step for influencing compliance with healthy lifestyle choices that are known to reduce the potential development of diseases related to otherwise poor lifestyle choices.

Implications for Further Study

This program is limited by the small congregation and sample size of this study. This faith community is composed mostly of highly educated, Caucasian middle class families who all indicated their health needs were being met by their insurance and primary care providers. It will be important for future faith community programs to use this model to reach other ethnic and lower socioeconomic groups. It is also important for future researchers to continue to investigate how education is delivered and its effect on increasing the Internal Locus of control scores since this is the group who may have the best opportunity to improve their health by making more informed healthy behavior choices.

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Appendix A: Health Needs Assessment

1. How would you rate your overall health?	Excellent	Good	Fair	Poor	
2. How many times a week do you engage in regular exercise?	5 or more	3 to 4 times	1 to 2 times	occasionally	never
3. How many times a week do you pray?	7 or more	3 to 6 times	1 to 2 times	occasionally	never
4. On average, how many times a week do you eat fast food?	5 or more	3 to 4 times	1 to 2 times	occasionally	never
5. How many cans/cups of caffeinated soda and/or coffee do you drink per day?	5 or more	3 to 4	1 or 2	1	none
<i>Please answer yes, no or not applicable to the following:</i>					
	Yes	No	NA		
6. Do you eat together as a family 3 or more times a week?					
7. Do you eat 5 or more servings of fruits and vegetables a day?					
8. Do you use herbal supplements?					
9. Do you believe you are overweight?					
10. Do you or someone in your immediate family have an eating disorder?					
11. Has anyone ever told you or do you believe alcohol is interfering in your life?					
12. Do you think you have a chemical problem? (This could include alcohol, illicit drugs, or prescription drugs.)					
13. Are you concerned about a friend or family member with the above problems?					
14. Do you smoke or chew tobacco?					
15. Do you feel overwhelmed by stress in your life?					
16. Do you wear a seat belt?	Always	Usually	Sometimes	Never	
17. Do you wake up in the morning feeling rested?	Always	Usually	Sometimes	Never	
18. Do you have friends and/or family that you can talk to when you are having a hard time?	Always	Usually	Sometimes	Never	
19. Do you experience loneliness, sadness, depression, or overwhelming grief?	Always	Usually	Sometimes	Never	
20. I am the primary care giver that is responsible for:	Aging relative	Special needs child	Special needs adult	NA	
21. Do you feel overwhelmed in caring for any of the above?	Always	Usually	Sometimes	Never	

<i>Please answer yes, no, or not applicable to the following:</i>		Yes	No	NA
22. Do you feel safe in your home?				
23. Do you see your doctor for a physical every one to two years?				
24. Do you see your dentist every year?				
25. Do you see your eye doctor every year?				
26. Do you receive a tetanus vaccination every 10 years?				
27. Do you have a living will or advanced directive?				
Women only: 28. Do you do monthly self-breast exams?				
29. Do you have a PAP smear done every 1-3 years?				
Women over 40: 30. Do you have a mammogram done yearly?				
Men only: 31. Do you do monthly testicular self-exams?				
Men over 50: 32. Do you have yearly testing for prostate cancer?				

Please circle if you have had or currently have any of the following:

Heart Disease	High Blood Pressure	Stroke	Hearing Loss
Diabetes	Back/Neck Pain	Arthritis	Vision Loss
Multiple Schlerosis	Cancer	Physical Disability	ADD/ADHD
Emphysema	Asthma		

33. What are some of the practices you do regularly to maintain your spiritual health? (circle all that apply)

Prayer	Worship	Meditation	
Bible Reading	Study	Other	(please explain _____)

34. What part can the church play in promoting wellness?

Demographic information	Age	<input type="checkbox"/> 18-29	<input type="checkbox"/> 30-39	<input type="checkbox"/> 40-49	<input type="checkbox"/> 50-59	<input type="checkbox"/> 60-79	<input type="checkbox"/> 80 and older
	Sex	<input type="checkbox"/> Male	<input type="checkbox"/> Female				
	Status	<input type="checkbox"/> Single	<input type="checkbox"/> Married	<input type="checkbox"/> Partnered	<input type="checkbox"/> Separated	<input type="checkbox"/> Divorced	<input type="checkbox"/> Widowed
	Ages of Children	_____					
	Type of health insurance	<input type="checkbox"/> Private insurance	<input type="checkbox"/> Medicare	<input type="checkbox"/> Medicaid	<input type="checkbox"/> Other		
	Do you feel your health insurance adequately meets your needs?	<input type="checkbox"/> Yes	<input type="checkbox"/> No				

Appendix B: Multidimensional Health Locus of Control Scale (MHLC)

Multidimensional Health Locus of Control Scale: Form B.							
Instructions: Each item below is a belief statement about your medical condition with which you may agree or disagree. Beside each statement is a scale which ranges from strongly disagree (1) to strongly agree (6). For each item we would like you to circle the number that represents the extent to which you agree or disagree with that statement. The more you agree with a statement, the higher will be the number you circle. The more you disagree with a statement, the lower will be the number you circle. Please make sure that you answer EVERY ITEM and that you circle ONLY ONE number per item. This is a measure of your personal beliefs; obviously, there are no right or wrong answers.							
		STRONGLY DISAGREE (SD)	MODERATELY DISAGREE (MD)	SLIGHTLY DISAGREE (D)	SLIGHTLY AGREE (A)	MODERATELY AGREE (MA)	STRONGLY AGREE (SA)
1	If I become sick, I have the power to make myself well again.	1	2	3	4	5	6
2	Often I feel that no matter what I do, if I am going to get sick, I will get sick.	1	2	3	4	5	6
3	If I see an excellent doctor regularly, I am less likely to have health problems.	1	2	3	4	5	6
4	It seems that my health is greatly influenced by accidental happenings.	1	2	3	4	5	6
5	I can only maintain my health by consulting health professionals.	1	2	3	4	5	6
6	I am directly responsible for my health.	1	2	3	4	5	6
7	Other people play a big part in whether I stay healthy or become sick.	1	2	3	4	5	6
7. D o	Whatever goes wrong with my health is my own fault.	1	2	3	4	5	6
8. D o	When I am sick, I just have to let nature run its course.	1	2	3	4	5	6
10	Health professionals keep me healthy.	1	2	3	4	5	6
11	When I stay healthy, I'm just plain lucky.	1	2	3	4	5	6
12	My physical well-being depends on how well I take care of myself.	1	2	3	4	5	6
13	When I feel ill, I know it is because I have not been taking care of myself properly.	1	2	3	4	5	6
14	The type of care I receive from other people is what is responsible for how well I recover from an illness.	1	2	3	4	5	6
15	Even when I take care of myself, it's easy to get sick.	1	2	3	4	5	6
16	When I become ill, it's a matter of fate.	1	2	3	4	5	6
17	I can pretty much stay healthy by taking good care of myself.	1	2	3	4	5	6
18	Following doctor's orders to the letter is the best way for me to stay healthy.	1	2	3	4	5	6

**Scoring Instructions: Multidimensional Health Locus of Control
Scale: Form B.**

SUBSCALE	POSSIBLE RANGE	Only These Questions
Internal	6 - 36	1, 6, 8, 12, 13, 17
Chance	6 - 36	2, 4, 9, 11, 15, 16
Powerful Others	6 - 36	3, 5, 7, 10, 14, 18

The score on each subscale is the sum of the values circled for each item on the subscale (i.e., where 1 = "strongly disagree" and 6 = "strongly agree"). No items need to be reversed before summing. All of the subscales are independent of one another. **There is no such thing as a "total" MHLC score.**

Appendix C: God Locus of Health Control Scale (GLHC)

God Locus of Health Control (GLHC) Scale							
<p>Each item below is a belief statement about your medical condition with which you may agree or disagree. Beside each statement is a scale which ranges from strongly disagree (1) to strongly agree (6). For each item we would like you to circle the number that represents the extent to which you agree or disagree with that statement. The more you agree with a statement, the higher will be the number you circle. The more you disagree with a statement, the lower will be the number you circle. Please make sure that you answer EVERY ITEM and that you circle ONLY ONE number per item. This is a measure of your personal beliefs; obviously, there are no right or wrong answers.</p>							
		STRONGLY DISAGREE (SD)	MODERATELY DISAGREE (MD)	SLIGHTLY DISAGREE (D)	SLIGHTLY AGREE (A)	MODERATELY AGREE (MA)	STRONGLY AGREE (SA)
1	If my health worsens, it is up to God to determine whether I will feel better again.	1	2	3	4	5	6
2	Most things that affect my health happen because of God.	1	2	3	4	5	6
3	God is directly responsible for my health getting better or worse.	1	2	3	4	5	6
4	Whatever happens to my health is God's will.	1	2	3	4	5	6
5	Whether or not my health improves is up to God.	1	2	3	4	5	6
6	God is in control of my health.	1	2	3	4	5	6

GLHC Scoring Scale		
SUBSCALE	POSSIBLE RANGE	Only These Questions
God	6 - 36	All Questions Together
<p>The response scale for the GLHC should be the same as for the MHLC scales--a high score represents belief in God as a locus of control.</p>		