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A Mixed-Methods Exploration of Employee Attitudes, Awareness, and Satisfaction with Regard to the University Employee Wellness Program

by

Linda Ann Walters

A Dissertation submitted to the Education Faculty of Lindenwood University

in partial fulfillment of the requirements for the

degree of

Doctor of Education

School of Education

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This dissertation has been approved in partial fulfillment of the requirements for the degree of

Doctor of Education

at Lindenwood University by the School of Education

Dr. Annie Alameda, Dissertation Chair	8/17/15 Date
Dr. Susan Isenberg, Committee Member	8/14/15 Date
Dr. Kate Tessmer, Committee Member	8/14/15 Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

Full Legal Name: Linda Ann Walters

Signature: Linda Ann Walters Date: 8/14/2015

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challenging for you. Thank you for being my rock and selflessly supporting me throughout this journey.

Abstract

While there was an abundant amount of research supporting the need for and benefits of a workplace health program (WHP), little empirical research existed regarding WHPs in a university setting (Watts, 1992). Compared to other WHP settings, the university setting is unique in that the employee population consists of both faculty and staff, with various work schedules, job responsibilities, and demographics. Universities also provide a unique setting for WHPs due to their access to various internal resources, such as employees with expert knowledge, campus food services, on-site facilities, and students studying health and wellness disciplines (RAND Corporation, 2013). As reported by the National Institute of Health Care Management (NIHCM, 2011), there was a need for more research to build a stronger evidence base for establishment of WHPs, and to identify program components that work best in different types of workplace environments, such as the university setting. The purpose of this study was to conduct an analysis of a Liberal Arts University WHP, to assess employees' feedback regarding their program participation, or lack thereof, and whether a difference existed between full-time faculty and full-time staff attitudes, awareness, and satisfaction with the WHP (Centers for Disease Control and Prevention, 2012b; Hanks et al., 2013). The primary investigator (PI) collected both quantitative and qualitative data through the utilization of an anonymous web-based survey and four focus groups.

Quantitative data analysis revealed, that differences did exist, some of which were statistically significant, between the university's full-time faculty and staff attitudes and awareness. Furthermore, the quantitative data revealed minimal differences in regards to faculty and staff satisfaction with the WHP. Qualitative data presented three emerging

themes: administration/supervisor support, defining the purpose of the WHP, and effective communication and marketing. Differences in faculty and staff attitudes towards and awareness of the WHP indicated a need for more effective communication and increased leadership support of the WHP. WHP practitioners may benefit from future research that scientifically investigates how to create or increase WHP participation and engagement. Such assessments are vital to the ongoing evaluation of WHPs, and are a crucial component to chronic disease management efforts in the U.S. (Sorensen & Barbeau, 2004).

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Chapter One: Introduction

In 2001, the Centers for Disease Control and Prevention (CDC) reported life expectancy in the United States (U.S.) had increased since the 1900s, and the primary causes of death no longer included infectious diseases such as pneumonia, influenza, tuberculosis, diarrhea, and enteritis (Sahyoun, 2001). Instead, chronic diseases, such as heart disease, stroke, cancer, diabetes, and arthritis were the leading causes of death and disability of Americans (Sahyoun, 2001). While genetics may play a role in the acquisition of a chronic disease, most often, modifiable health risk behaviors and a sedentary lifestyle are to blame (CDC, 2012b). The CDC (2012b) reported health risk behaviors responsible for putting people at most risk of acquiring a chronic disease included: (1) lack of physical activity, (2) smoking, (3). poor nutritional habits, (4) abuse of alcohol, and (5) chronic stress.

Given that health risk behaviors can be modifiable, and a large number of U.S. adults spent most of their wake time at work, the workplace is a desirable setting for interventions related to reducing health risk behaviors (Linnan, 2008).

Problem Statement

The establishment of the university workplace health program (WHP) analyzed for this study, took place in the spring of 2008. The primary purpose of the program was to create a healthy work environment through health education and interventions related to the five dimensions of wellness: physical, mental, social, spiritual, and environmental (Alameda, 2008, p. 1). Each year the program grew in visibility and use by employees; however, compared to the number of full-time employees (~500), the number of the

university's WHP participants was relatively low (32 full-time faculty and 50 full-time staff), thus creating the need for a program analysis.

Purpose of the Dissertation

The purpose of this study was to conduct an analysis of a Liberal Arts University WHP, to assess employees' feedback regarding their program participation, or lack thereof, and whether a difference existed between full-time faculty and full-time staff attitudes, awareness, and satisfaction with the WHP (CDC, 2012b; Hanks et al., 2013). The study also aimed to identify potential program gaps through the utilization of the CDC *Worksite Health ScoreCard* (HSC). An analysis of this nature may assist program leaders with the development of program goals and the implementation of appropriate intervention strategies to assist employees with meeting their personal wellness needs.

Rationale

While there was an abundant amount of research supporting the need for and benefits of a WHP, little empirical research existed regarding WHPs in a university setting (Watts, 1992). Compared to other WHP settings, the university setting is unique in that the employee population consists of both faculty and staff, with various work schedules, job responsibilities, and demographics. Universities also provide a unique setting for WHPs due to their access to various internal resources, such as employees with expert knowledge, campus food services, on-site facilities, and students studying health and wellness disciplines (RAND Corporation, 2013).

Identifying the differences between faculty and staff attitudes, awareness, and satisfaction with the university WHP may assist WHP practitioners with the implementation of intervention strategies to meet the needs of all employees, especially

non-participating, and those identified as 'high risk' (National Institute of Health Care Management [NIHCM], 2011; Zoller, 2004). As reported by the NIHCM in 2011, there was a need for more research to build a stronger evidence base for the implementation of WHPs and to identify program components that work best in different types of workplace environments, such as the university setting.

Hypotheses

H_1: As measured by the CDC's Worksite Health ScoreCard, the WHP total score will be lower than the average total score for similar size WHPs.

H_2: As measured by the researcher-designed survey, a difference will exist between full-time faculty and full-time staff attitudes towards the program.

H_3: As measured by the researcher-designed survey, a difference will exist between full-time faculty and full-time staff awareness of the program.

H_4: As measured by the researcher-designed survey, a difference will exist between full-time faculty and full-time staff satisfaction with the program.

Research Questions

Main Research Question: How do employees' awareness, attitudes, and satisfaction with their workplace wellness program effect their participation and engagement in the program?

Sub Questions:

1) Does awareness effect an employee's participation and engagement in the workplace wellness program?

2) Do attitudes effect an employee's participation and engagement in the workplace wellness program?

3) Does satisfaction effect an employee's participation and engagement in the workplace wellness program?

Limitations

While the study provided a sound mixed-methods exploratory design, as with any research, there were limitations. The study was limited to only one WHP and to approximately 500 individuals identified as full-time faculty and staff. Since the sample was limited to one WHP, the findings may not express the views of faculty and staff at other institutions of higher learning. The number of survey respondents (157), may also be a limitation. However, in theory the population sample represented the entire population. The administration of the web-based survey via the university email system may have limited survey response because some employees did not utilize the university's email system on a regular basis, or at all, therefore they may not have been aware of the survey's existence.

In addition, though this particular study did not aim to assess part-time employees' attitudes, awareness and satisfaction with the WHP, part-time employees did have access to the WHP, therefore their opinions may have provided additional data to support the study's findings. Lastly, the primary investigator was a graduate assistant for the program. Involvement in the program prior to and during the study could potentially lead to bias towards the outcomes, due to knowledge of the hypotheses and/or expected outcomes. However, responses provided by all study participants were anonymous, and the primary investigator did not have access to the data until the survey closed and she reviewed the transcribed focus group responses.

Definition of Terms

High-Risk- Referring to those individuals at greater risk than others of suffering from a specific disease or disability due to biomedical or behavioral lifestyle factors, such as tobacco use, high blood pressure, obesity, diabetes, high cholesterol, poor nutritional intake, or lack of physical activity (CDC, 2013f).

WHP Participant – Full-time faculty or full-time staff of the University who formally enrolled in the University's WHP by completing the University's WHP Enrollment Form.

Workplace Health Programs – Also known as workplace wellness program, employee wellness program, or worksite wellness program: "a coordinated and comprehensive set of strategies which include programs, policies, benefits, environmental supports, and links to the surrounding community designed to meet the health and safety needs of all employees" (CDC, 2013f, p. 7).

Summary

As the chronic disease epidemic continued to threaten the well-being and productivity of Americans, many workplaces were turning to preventative measures, such as WHPs, to reduce health risk factors and costs associated with chronic diseases. However, both appropriate interventions and employee participation are necessary for the desired outcomes to occur. Furthermore, employers must assess their employee population to determine factors that will best support their employees' health and wellness needs. Identifying program components conducive to specific work environments and employee populations, may contribute to the existing body of research available in this field of study.

Chapter Two: The Literature Review

According to the CDC (2014b), chronic health diseases were a leading public health concern in the United States (U.S.). They often led to a diminished quality of life, decreased productivity, and increased medical costs. As of 2012, approximately one out of every two adults in the U.S. was living with at least one chronic health disease (CDC, 2012b). This health epidemic not only affected Americans' quality of life, but American businesses were suffering and employee productivity was decreasing, while health care costs continued to rise (CDC, 2012b). Given that a large number of U.S. adults spent the majority of their time at work, the workplace was a desirable place for health interventions related to chronic disease management and intervention (Linnan, 2008).

This literature review, discusses chronic diseases in detail, including disease physiology, possible causes, the physical and economic impact, and related statistics. Also discussed are health behavior theories, models of wellness, a history of workplace wellness program (WHP) structure, and the impact of WHPs on both employees and the employer.

Chronic Diseases-Facts and Statistics

According to the CDC (2012b), "chronic diseases such as heart disease, cancer, stroke, diabetes, and arthritis, are among the most common, costly, and preventable of all health problems in the U.S." (p. 1). At the time of this CDC statement, each year, seven out of ten U.S. adult deaths were a direct result of one or more chronic diseases (CDC, 2012b, p. 1). While genetics may play a role in the acquisition of a chronic disease, most often, modifiable health risk behaviors such as "lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption" were to blame (CDC, 2012b, p. 1).

Heart disease was the leading cause of chronic disease related deaths in the U.S. (CDC, 2009a). Heart disease, as defined by the CDC, was a term used to describe general types of ailments related to the heart (CDC, 2009a). The top three risk factors associated with heart disease were smoking, elevated low-density lipoprotein (LDL) cholesterol, and blood pressure. Statistics indicated about 49% of Americans had one or more of these heart disease related risk factors (CDC, 2013a, p. 3).

Coronary artery disease (CAD), a common type of heart disease in the U.S., occurs when the coronary arteries responsible for supplying blood to the heart, become lined with cholesterol deposits known as plaque (CDC, 2009b). Plaque consists of "cholesterol, fatty substances, cellular waste products, calcium and fibrin (a clotting material in the blood)" (American Heart Association [AHA], 2014, p. 1). Scientists did not know exactly what caused plaque to form, but many believed it occurred due to damage to the endothelium, the inner lining of the artery (AHA, 2014). Elevated cholesterol and triglycerides in the blood, high blood pressure, and cigarette smoking were all potential causes of endothelial damage (AHA, 2014). Endothelial damage comprises the integrity of the vessel and initiates a vicious cycle of cholesterol and cellular debris buildup (AHA, 2014). In time, atherosclerosis, the buildup of plaque, leads to a narrowing of the arteries, resulting in the blockage or reduction of blood allowed passing through the vessel (CDC, 2009b).

One of the most severe conditions related to CAD is a heart attack, also known as a myocardial infarction (CDC, 2012a). As a result of a heart attack, a section of the heart dies or is damaged due to the reduction of blood flow (CDC, 2012a). In the U.S. during the year 2014, approximately 720,000 Americans had a heart attack each year, and

of that number, approximately 250,000 died (CDC, 2014c; The Heart Foundation, n.d., p. 1). Those who are fortunate enough to survive a heart attack may still be at risk for the development of irregular heart rhythms, inefficient pumping and circulation, stroke, kidney disorders, and peripheral arterial disease (CDC, 2012b). The aftermath of heart attack survival typically includes cardiac rehabilitation, a combination of medications, and lifestyle modifications, such as changes in diet and exercise habits (CDC, 2013b).

In 2013, the CDC reports estimated the cost of medical care, medications, and lost productivity related to heart disease as nearly $108.9 billion each year (CDC, 2013a, p. 1). However, projections indicated the cost would reach nearly $818 billion for direct medical costs and $276 billion for indirect costs (lost productivity) by the year 2030 (Heidenreich, 2011, p. 935). Heart disease holds no prejudice, making people of various ages, ethnicities, and backgrounds susceptible (CDC, 2013a). Without effective prevention strategies, heart disease may continue to burden the financial and physical future of Americans.

The second leading cause of chronic disease related deaths in the U.S. was cancer (CDC, 2009c). Cancer occurs due to abnormal cell growth; specifically, the deoxyribonucleic acid (DNA) responsible for directing appropriate actions within a cell is damaged (American Cancer Society [ACS], 2012). Instead of repairing itself or dying like a normal cell, a cancer cell continues to grow abnormally creating cells that are harmful to the body (ACS, 2012).

The American Cancer Society (2012) reported, “Half of all men and one-third of all women in the U.S. will develop cancer during their lifetimes” (p. 1). It was predicted that in the year 2013, approximately 1,660,290 Americans would receive a cancer

diagnosis and 580,250 would die of cancer (ACS, 2013a, p. 1). In most cases, the specific cause of cancer was unknown (ACS, 2012). Some people were genetically predisposed to damaged DNA, but researchers believed most cancers formed due to an anomaly or environmental/behavioral influence, such as pollution, sun exposure, tobacco use, and poor nutritional and physical activity habits (ACS, 2012). As recommended by the American Cancer Society, Americans can significantly reduce their chance of acquiring cancer by participating in cancer screenings, being educated, and living a healthy lifestyle (ACS, 2013a).

The economic impact on an individual with cancer, as well as on families, employers, and the U.S. society as a whole, was immense (ACS, 2013b). In 2011, the National Institute of Health (NIH) estimated the total cost of cancer related expenses to be $201.6 billion (ACS, 2013b, p. 1). Direct medical costs, such as hospitalization, surgery, physician visits, radiation therapy and chemotherapy or immunotherapy accounted for approximately $86.6 billion spent (ACS, 2013b, p. 1). The remaining $130 billion resulted in indirect mortality costs, such as lost productivity due to premature death (ACS, 2013b, p. 1). In addition, Americans who had cancer and did not have health insurance significantly contributed to the cost of treatment, because often times their diagnosis occurred at a later stage, when treatment is more involved and costly (ACS, 2013b, p. 1).

As the American population continues to age and grow, and lifestyle risk factors remain unchanged, cancer diagnoses and the need for cancer treatment will only intensify (Yabroff, Lund, Kepka, & Mariotto, 2011). Employers are likely to continue to face rising health insurance costs, and decreases in profits due to a loss of employee

productivity. Additionally, working adults whom acquire cancer will not only have difficulties remaining in the workforce; they will also likely face the challenge of finding the financial means necessary to support their households.

Stroke, the third leading cause of death in the U.S. in 2009, occurred when a vessel responsible for supplying blood to the brain ruptures, or when a clot in a vessel prevents blood from flowing to the brain (CDC, 2019c; 2011). Either scenario can cause damage or death to sections of the brain resulting in paralysis or weakness on one side of the body, intellectual, emotional, and speech difficulties, and possibly death (CDC, 2011). According to the CDC (2013c), "stroke is a leading cause of serious long-term disability" and "costs the United States an estimated $38.6 billion each year" (p. 1). As with heart disease, the top three risk factors associated with stroke were smoking, elevated LDL cholesterol, and blood pressure (CDC, 2013c). Approximately 130,000 of 795,000 strokes that occur each year result in death (CDC, 2013c, p. 1). While some strokes may not be preventable, Americans can greatly reduce their risk by leading a healthy lifestyle that includes avoiding tobacco use, excessive alcohol consumption, maintaining a healthy weight and participation in regular physical activity (CDC, 2013d).

Diabetes was another chronic health disease plaguing millions of Americans each year. According to the CDC (2009c), "It is the leading cause of kidney failure, non-traumatic lower extremity amputations, and new cases of blindness each year among U.S. adults aged 20–74 years" (p. 1). Diabetes occurs when the body is unable to produce, or effectively use, the hormone insulin to regulate blood glucose levels (National Diabetes Education Program, n.d.b). Insulin is directly responsible for the cell's ability to use

glucose (the body's main source for energy and growth). The two main types of diabetes are type 1 and type 2 (Clearinghouse, 2013).

Type 1 diabetes occurs when the body is unable to produce insulin, thus resulting in the need to inject the hormone daily. The exact cause of type 1 diabetes is unknown; however, research indicated "a genetic predisposition and environmental factors" may be to blame (University of Maryland Medical Center, 2013b, p. 4). Five to ten percent of people with diabetes have type 1; the disease typically occurs early in life, however, the development of the disease can occur in people of all ages (University of Maryland Medical Center, 2013b, p. 1).

Type 2 diabetes occurs when the body does not respond properly to insulin. This condition is sometimes referred to as insulin resistance (University of Maryland Medical Center, 2013b). As with type 1, there is no known exact cause for type 2 diabetes; however, research suggested lifestyle factors such as poor nutritional habits and lack of physical activity, which can result in obesity, most likely play a significant role in the acquisition of the disease (University of Maryland Medical Center, 2013a). Ninety to 95 percent of people with diabetes have type 2; the disease typically occurs in older adulthood; however, it is becoming more prevalent in youth (University of Maryland Medical Center, 2013a, p. 1).

In a 2013 report released by The American Diabetes Association, the total estimated economic impact of diagnosed diabetes rose from $174 billion in 2007, to $245 billion in 2012, with $176 billion related to medical costs and $69 billion due to reduced productivity, resulting in a 41% increase in just five years (American Diabetes Association, 2013, p. 1). Results of the study further indicated the following:

> People with diagnosed diabetes, on average, have medical expenditures approximately 2.3 times higher than what expenditures would be in the absence of diabetes. For the cost categories analyzed, care for people with diagnosed diabetes accounts for more than 1 in 5 health care dollars in the U.S., and more than half of that expenditure is directly attributable to diabetes. Indirect costs include increased absenteeism ($5 billion) and reduced productivity while at work ($20.8 billion) for the employed population, reduced productivity for those not in the labor force ($2.7 billion), inability to work as a result of disease-related disability ($21.6 billion), and lost productive capacity due to early mortality ($18.5 billion). (American Diabetes Association, 2013, p. 1)

These facts spotlight the uphill battle Americans faced with diabetes. They also demonstrate American's need for lifestyle change and experienced diabetic care professionals who are able to lead effective education and behavior change interventions.

Arthritis, the fifth among the most common, costly and preventable chronic health problem in the U.S, at the time of this writing, was a complex musculoskeletal disorder that causes damage to the body's joints, bones, muscles, and various connective tissue, making physical movement difficult, painful, and even obsolete (Arthritis Foundation, 2011; CDC, 2012b). Compared to the aforementioned chronic diseases, arthritis was generally viewed by many Americans as a common, non-life threating, age related disease, giving minimal attention to its seriousness and potentially life-altering threats. However, arthritis is more likely to limit a person's physical activity than heart disease, cancer, and diabetes (Arthritis Foundation, 2011). Furthermore, the CDC estimated arthritis to be responsible for movement limitations in approximately 22.7 million

Americans every year (CDC, 2012b, p. 1). While treatments were available to help alleviate some of the symptoms associated with arthritis, there was no known cure (Arthritis Foundation, 2011).

The most common form of arthritis was osteoarthritis (OA) (Arthritis Foundation, 2013). Osteoarthritis occurs when cartilage, a protective layer on the ends of the bones in joints, wears thin, causing friction, which leads to joint inflammation, pain, and the loss of flexibility (Mayo Clinic, 1998-2014). Risk factors associated with acquiring the disease include older age, joint injuries, repetitive joint movement, and obesity (Arthritis Foundation, 2013). In 2011, approximately 50 million U.S. adults (1 in 5) and 300,000 children were living with some form of arthritis (Arthritis Foundation, 2011, p. 1). What's more, 1 in 3 U.S. adults who were obese suffered from osteoarthritis (Arthritis Foundation, 2011).

The Arthritis Foundation estimated, if trends continued, by the year 2030, approximately 67 billion Americans would be living with arthritis (Arthritis Foundation, 2011, p. 1). Unfortunately, there is little one can do to reverse the aging process or an accidental joint injury. Therefore, addressing and modifying health related behaviors that can lead to lifestyle related illnesses, specifically obesity, may be one's only chance of reducing the risk of acquiring osteoarthritis.

In 2011, the economic impact of arthritis was approximately $128 billion annually (Arthritis Foundation, 2011, p. 1). Medical costs directly attributed to $80.8 billion of the $128 billion, and $47 billion to indirect costs, such as lost earnings (Arthritis Foundation, 2011, p. 1). Consequently, as the number of those diagnosed with arthritis continues to rise, one can assume the cost will follow suit.

Chronic Disease's Total Cost and Effect on the US Healthcare System

Compared to those without chronic diseases, people with chronic diseases use healthcare in the U.S. far more often (Partnership to Fight Chronic Disease [PFCD], n.d.). In fact, 81% of hospital admissions, 91% of all prescriptions filled, and 76 % of all visits to the doctor were of those with a chronic disease (PFCD, n.d., p. 1). In 2005, the U.S. spent a total of 2 trillion dollars on public and private healthcare; those with a chronic disease cost the U.S. 75 % of the 2 trillion dollars (PFCD, n.d., p. 1).

Due to the greater demand and use of U.S. healthcare, healthcare costs for both employers and employees skyrocketed (PFCD, n.d.). The following statistics, as summarized in *The Growing Crisis of Chronic Disease in the U.S.* report, written by The Partnership to Fight Chronic Disease, painted a clear picture of the serious and costly chronic disease epidemic:

> Health care premiums for employer-sponsored family coverage have increased by 87% since 2000. Health care coverage costs for people with a chronic condition average $6,032 annually-five times higher than for those without such a condition. The total cost of obesity to U.S. companies is estimated at $13 billion annually. This includes the 'extra' cost of health insurance ($8 billion), sick leave ($2.4 billion), life insurance ($1.8 billion), and disability insurance ($1 billion) associated with obesity. (p. 1)

As alarming as this information may seem, future trends were a cause for additional concern as they demonstrated a rise in the number of Americans with a chronic disease, as well as associated costs (National Health Council, 2014). Yet, it is important to note, one may delay, or even prevent, many chronic diseases by avoiding health risk behaviors

such as smoking, becoming overweight or obese, living a sedentary lifestyle, and eating foods low in nutritional value. Then again, changing a health behavior, especially one that has been present for many years, is not a simple or one-size-fits-all process. Therefore, experienced health care professionals, with extensive knowledge in assisting others with health behavior modification, are needed more than before.

Health Behavior Change Techniques and Models

A considerable amount of research existed regarding the effectiveness of utilizing techniques, tools, and theories related to making a health behavior change. As stated by Glanz, Rimer, and Viswanath, in 2008, "A premise of Health Behavior and Health Education is that a dynamic exchange among theory, research, and practice is most likely to produce effective health education" (p. 5). The challenge for health education practitioners lies in deciding which theories and/or techniques to utilize when attempting to develop a successful health behavior education, change, or intervention program.

One of the most popular techniques health practitioners utilized when assisting individuals in making a health behavior change was to set SMART goals. The acronym SMART represented the following components of a SMART goal: specific, measurable, attainable, realistic, and timely. When setting a goal, it is especially important for one to use specific language related to the desired goal. Simply stating, 'I want to lose weight', is not specific enough. Instead, one might say, 'I want to lose 15 pounds by January first of a specific year.' The more detailed and specific the goal, the more likely one is to achieve success (Werle Lee, 2010).

Measuring progress and achievement was the second step in SMART goal attainment. During this step individuals are encouraged to track and monitor progress

towards the desired goal. Creating a log or journal is helpful and assists the goal setter in maintaining motivation. Journaling is also an effective strategy in creating awareness and accountability, both leading to an increased likelihood of success (Werle Lee, 2010).

To attain a goal, the goal must be achievable. Often times this step involves going through a set of smaller steps so that one may achieve the final goal. For example, instead of choosing a goal of losing 50 pounds in one month, which is for all intents and purposes, unrealistic, a SMART goal, would rather state, 'I will lose two pounds per week until I have lost a total of 50 pounds.' Similarly, it is also exceptionally important that the desired goal is realistic. Unrealistic goals will lead to certain failure. Goal setters must honestly evaluate the goal, the tasks required to achieve the goal, and ultimately decide whether they are realistic (Werle Lee, 2010).

The last step in creating a SMART goal is to develop a timeframe for goal achievement. Much like the goal itself, the timeframe should be specific. A timeframe of summer 2014 is not specific enough; instead, one would want to set a specific date, such as June 1, 2014 (Werle Lee, 2010).

For novice goal-setters, SMART goal setting can be a daunting task. They are especially vulnerable to setting unrealistic and unattainable goals. Consequently, assistance from a professional may be helpful. However, once the SMART goal is set, goal-setters will often begin to feel less stress and anxiety related to the process, resulting in increased confidence and motivation.

In regards to models of behavior change, The Transtheoretical Model (TTM), also known as The Stages of Change Model, and the Health Belief Model (HBM) were two of the most commonly utilized in the fields of health promotion and behavior change

(Alameda, 2009). While the TTM and HBM have dissimilar components, both models provide ideas related to the process of individual behavior change. Health education professionals often utilized these models to build programs and strategies intended to assist individuals in changing a health risk behavior (Alameda, 2009).

The TTM asserted change is a process that occurs in five progressive stages, pre-contemplation, contemplation, decision, action, and maintenance (Prochaska & Norcross, 2001). Though the model demonstrated movement from one stage to the next, this process does not always occur in a liner manner. When attempting to make a change in behavior, it is possible, and often the case, that one would progress through several stages, only to relapse and begin the behavior change process all over again. Due to the likelihood of relapse, Prochaska and Norcross (2001) asserted for matching specific tasks one needs to complete within each stage, such as seeking new information, experiencing negative emotions, committing to change, and using rewards for positive changes will lead to a higher probability of attaining and maintaining the final stage of maintenance.

Pre-contemplation is the first stage of the TTM. Individuals in the pre-contemplation stage are unaware of, or do not see a particular behavior as a problem, therefore, they have no intention to change. Typically pressure from friends and family leads to the individual becoming aware of the 'problem' (Prochaska & Norcross, 2001). Since individuals in this stage do not view the behavior as problematic, movement from pre-contemplation to contemplation is unlikely. However, research showed sustained support and encouragement from loved ones can be effective in moving an individual along in the behavior change process (Prochaska & Norcross, 2001).

In the second stage, contemplation, individuals are aware a problem exists and want to make changes to address the problem within the next six months. Individuals in the contemplation stage make comments acknowledging the problem and their desire to make a change, however, they have not made a commitment to that change and lack the knowledge needed to make a behavior change plan (Prochaska & Norcross, 2001). These circumstances can lead to an individual spending time in the contemplation stage. However, once one reaches the third stage of the TTM, the decision stage, they are able make small behavioral changes, 'baby steps', and have an intention to take some form of action in the next month (Prochaska & Norcross, 2001). Individuals in this stage can benefit greatly from an experienced coach or behavior change professional to help them as they prepare to take action.

Individuals are most likely in the action stage, stage four, if they have successfully changed the problematic behavior for 1 day to 6 months (Prochaska & Norcross, 2001). This stage requires modifications to one's behavior and environment in order to successfully carryout the desired change (Prochaska & Norcross, 2001). The action stage also requires a great deal of time and commitment, however, it is in this stage in which individuals often receive the most recognition and validating feedback from peripheral sources (Prochaska & Norcross, 2001). Support remains helpful in this stage, as an individual is bound to experience struggles along the way.

The final stage in the TTM is the maintenance stage. During this phase, individuals not only attempt to maintain the changes they attained during the action stage, they also strive to prevent relapse (Prochaska & Norcross, 2001). While temptations may arise, when an individual reaches the maintenance stage they are much more confident in

their ability to avoid temptations that may lead to relapse. However, techniques, such as seeking support from loved ones or a professional, and developing a reward system remain helpful techniques in preventing relapse.

Also included in the TTM are processes of change; practices one may utilize to move through each of the five stages. The following 10 processes, as stated by Glanz et al., (2008), "have received the most empirical support in research to date" (p. 139):

> (1) consciousness raising, (2) dramatic relief, (3) self-reevaluation, (4) environmental reevaluation, (5) self-liberation, (6) social liberation, (7) counter conditioning, (8) stimulus control, (9) contingency management, (10) helping relationships. (p. 139)

In 1992, Prochaska, DiClemente, and Norcross discovered a relationship between the stage of change an individual was in, and the processes they utilized to progress from one stage to the next (as cited by Glanz et al., 2008). In many instances, individuals in the pre-contemplation and contemplation stages relied on processes involving awareness and evaluation; processes 1, 2, 3 and 4. On the other hand, individuals in the later stages, such as action and maintenance, seemed to rely more heavily on supportive relationships and control of their environment; processes 8, 9 and 10. This finding was profound for health education professionals as there were practical implications that may lead to an increase in the potential of successfully assisting an individual to progress from one stage to the next.

Originally developed in the 1950s by social psychologists Hochbaum, Rosenstock, and Kegels, the Health Belief Model (HBM) attempted to explain why people failed to undertake preventive health measures (University of Twente, 2013). The

focus of the investigators' initial research was to attempt to increase the use of preventative services available to the public in the 1950s (Glanz & Rimer, 1997). Through their research, Hochbaum et al. discovered that an individual's perceived risk of disease and perceived benefits of action greatly influenced one's motivation to take action.

The HBM contained six key concepts. The first four, and original concepts of the HBM, perceived susceptibility, perceived severity, perceived benefits, and perceived barriers, related to a person's readiness to act based on perception of whether they were at risk of acquiring a particular condition (Glanz & Rimer, 1997). The developers later added the fifth concept, cues for action, which involved using reminders or other cues to activate a behavior. In 1988, Rosenstock et al. added the final concept, self-efficacy, to the model (Glanz & Rimer, 1997). This concept involved constructs related to one's belief that they will successfully perform the action needed to address the problem behavior.

Table 1 provides a review of each of the HBM concepts, their definitions, and suggestions for application. Though the original purpose of the HBM was to explain health behaviors, health promotion practitioners may also utilize the model to design behavior change techniques.

Table 1.

Stages of Change.

Concept	Definition	Application
Perceived Susceptibility	One's opinion of chances of getting a condition	Define population(s) at risk, risk levels; personalize risk based on a person's features or behavior; heighten perceived susceptibility if too low.
Perceived Severity	One's opinion of how serious a condition and its consequences are	Specify consequences of the risk and the condition
Perceived Benefits	One's belief in the efficacy of the advised action to reduce risk or seriousness of impact	Define action to take; how, where, when; clarify the positive effects to be expected.
Perceived Barriers	One's opinion of the tangible and psychological costs of the advised action	Identify and reduce barriers through reassurance, incentives, assistance.
Cues to Action	Strategies to activate "readiness"	Provide how-to information, promote awareness, reminders.
Self-Efficacy	Confidence in one's ability to take action	Provide training, guidance in performing action.

Note: Source: Glanz et al., (1997), with permission.

As stated by Glanz, Rimer, and the National Cancer Institute (1997) and illustrated in Table 1, “The six constructs of the HBM provide a useful framework for designing both short-term and long-term behavior change strategies” (p. 19). Since health motivation is the ‘central focus’ of the HBM, the model is particularly beneficial for addressing preventative health behaviors (diet, exercise, immunizations) and health-risk behaviors, such as smoking (University of Twente, 2013).

Model of Wellness

Wellness is a term commonly associated with discussions involving matters of health and well-being. As defined by the National Wellness Institute (NWI), wellness “is

an active process through which people become aware of, and make choices toward, a more successful existence" (National Wellness Institute, n.d., p. 1). Although there were varying views on what wellness encompasses, most would agree, "wellness is multidimensional and holistic, encompassing lifestyle, mental and spiritual well-being, and the environment" (National Wellness Institute, n.d., p. 1). Developed by Hettler (as cited by University of Mary Washington, 2014), the Six Dimensions of Wellness Model provides the foundational framework for NWI's resources and services. The six dimensions comprising the model include occupational wellness, physical wellness, social wellness, intellectual wellness, spiritual wellness, and emotional wellness (University of Mary Washington, 2014).

The occupational dimension of the Six Dimensions Wellness Model related to one's attitude about their work (University of Mary Washington, 2014). Personal satisfaction and enrichment of one's life were also common themes of this dimension. Those who are occupationally well are able to contribute their unique skills and talents to their occupation, while participating in events that are personally gratifying, thus resulting in a meaningful and rewarding significance in one's life (University of Mary Washington, 2014).

The physical dimension of the Six Dimensions Wellness Model involved participation in regular physical activity and maintaining a nutritious diet, in an effort to attain optimal health. The five health-related dimensions of physical fitness are cardiovascular fitness, muscular strength, muscular endurance, balance, and flexibility, are also components of this dimension. Achievement of one's own personal level of optimal physical wellness in each of the five health related dimensions of physical fitness

contribute to optimal physical health. As one's physical wellness skills begin to develop, they become competent in building body awareness, resulting in the ability to recognize warning signs and symptoms of illness or distress. In turn, one generally begins to experience "enhanced self-esteem, self-control, determination, and a sense of direction" (University of Mary Washington, 2014, p. 2).

As evident by its title, the social dimension of the Six Dimensions Wellness Model involved ones relationships with others. This dimension promotes the ability to live peacefully in our environment and with others, as well as contribute to the common welfare of one's community (University of Mary Washington, 2014). Those who are socially well understand their significance in society, and are successful at building gratifying personal relationships and friendships.

The intellectual dimension of the Six Dimensions Wellness Model focuses on creative and mentally stimulating activities that foster one's intellectual growth (University of Mary Washington, 2014). Intellectually well people are eager to learn and share their knowledge with others. They seek solutions to problems and act on them, rather than become complacent. Intellectual wellness breeds one's desire to "stretch and challenge" their minds while staying well informed about the world and society in which they live (University of Mary Washington, 2014, p. 3).

The spiritual dimension of the Six Dimensions Wellness Model involved human's natural tendency to explore and understand the meaning and purpose of life (University of Mary Washington, 2014). The development of spiritual wellness often occurs in conjunction with the development of one's personal value system, as they both relate to the formation of one's view of the world. As one travels through the journey to become

spiritually well, their actions align with their beliefs and values, resulting in a sense of trueness to one's self (University of Mary Washington, 2014).

The last dimension of the Six Dimensions Wellness Model, emotional wellness, "includes the degree to which one feels positive and enthusiastic about oneself and life" (University of Mary Washington, 2014, p. 4). Emotionally well individuals are able to effectively communicate and manage their feelings and stressors. They are aware of and accept their feelings, and have an optimistic view on life (University of Mary Washington, 2014). Acquiring a state of emotional wellness assists individuals in achieving peace and harmony in all aspects of their life.

While optimal wellness involves fulfillment in each of the six aforementioned dimensions of wellness, the reality that exists is, most people do not possess the education and/or skills needed to attain optimal wellness. Consequently, health education professionals and programs geared toward helping others attain optimum wellness are a tremendous resource for those seeking to reach their wellness goals. As the number of chronic health conditions continue to rise in the U.S., so does the need for preventative educational programs and services. At the time of this writing, such programs were becoming more prominent in schools, communities and workplaces, as each entity recognized not only the need but also the value of having even the most basic services in place.

Workplace Health Programs

Employers' concern with the health and well-being of their employees was not a phenomenon unique to the 21st century (Gebhardt, 1990). In fact, employers have had an interest in their employees' health dating as far back as the 1920s, when infectious

diseases were the primary cause of illness and death (Gebhardt, 1990; Sahyoun, 2001). In the 1950s, programs geared toward assisting employees with home-life problems, prevention of infectious diseases, and health education became a popular theme in the workplace (Gebhardt, 1990). These programs were the early forms of the Employee Assistance Programs (EAPs) made available by many employers in the early 21st century (Call, Gerdes, & Robinson, 2009).

EAPs became a common benefit with-in the workplace. In fact, in a 2008 report provided by the Society for Human Resource Management (SHRM), approximately 70% of employers in the U.S. provided an EAP for their employees (Society for Human Resources Management, 2008, p. 10). The primary goal of EAPs was to assist employees with various personal and professional challenges ranging from substance abuse, domestic violence, and family concerns, as well as injury prevention and risk management, so employees were able to remain productive and working (Call et al., 2009).

Another common benefit offered by many U.S. workplaces are Workplace Health Programs (WHPs), also known as Employee Wellness Programs (EWPs). While both EAPs and WHPs were concerned with an employee's health and well-being, WHPs focused primarily on keeping healthy employees healthy and assisting employees with the modification of negative health behaviors that could lead to an increased risk of acquiring chronic diseases and disabilities. Many employers supported the idea of having a WHP because research supported that these programs increased employee performance and productivity, reduced absenteeism and health care costs, and were a positive recruiting tool (Utah Department of Health Bereau of Health Promotion, n.d.). As

reported by Baicker, Cutler, and Song (2010), "in 2006, 19% of companies with 500 or more workers reported offering wellness programs, while a 2008 survey of large manufacturing employers reported that 77% offered some kind of formal health and wellness program" (p. 2).

The occupational safety and health (OSH) and worksite health promotion movements of the 1970s were both credited as being the "driving forces behind the concept of worksite wellness" (Reardon, 1998, p. 2). As addressed in a paper written by the National Institute for Occupational Safety and Health (NIOSH) in 1984, both movements assisted with the idea of a comprehensive method of reducing employees' health risks (Sorensen & Barbeau, 2004). Since that time, culture changes related to fitness, revelations supported by research regarding the cost of unhealthy employees, and health promotion groups and government-supported initiatives, such as Healthy People, all fueled the response of employers to address the health and wellness needs of their employees through the implementation of WHPs (Reardon, 1998).

Structure of Workplace Health Programs

Each WHP was unique in its structure and program offerings; however, most elected to utilize one or more of the following components: health risk appraisals (HRAs), biometric wellness screenings, health-related interventions, educational workshops, and incentives for participation (RAND Corporation, 2013). Some organizations employed internal personnel to manage their WHPs, while others contracted with a third party to coordinate and implement services. Either tactic may have both advantages and disadvantages, however, what seemed to be most important for program success was to have an understanding of employees' interests and needs (Zoller,

2004). WHP practitioners utilized a variety of assessment techniques to asses data related to the program and the employee population the program served. Such assessments provided valuable information about "factors that support and/or hinder the health of employees at a particular workplace and identify potential opportunities to improve or address them" (CDC, 2013f, p. 1). Much like WHP components, WHP assessments are as unique as the worksite for which they take place. Depending on the WHP practitioner's resources and needs, they may choose to assess one or more of the following types of data:

- Observations of the workplace setting, including interviews with managers and employees to discuss their health attitudes and beliefs, a review of health promotion programs and policies, and the evaluation of the worksite environment for health risks.
- Employee surveys such as Health Risk Appraisals and satisfaction and interest surveys.
- Health plan benefits review and employees access to health promotion programs.
- A review of health care and prescription claims.
- Employee absenteeism or attendance data.
- Employees' participation in or satisfaction with the WHP. (CDC, 2013f, p. 1).

As a first step in working to assess employees' health related needs, WHP practitioners often invited their employees to complete an HRA and/or a biometric screening. In fact, The RAND 2013 Employer Survey data suggested 80 percent of

employers with a WHP screened their employees for health risks using assessments such as HRAs, health behavior related questionnaires, and biometric screenings (RAND Corporation, 2013, p. 27). The general purpose of an HRA was to collect information on an individual's demographics, lifestyle, and personal and family medical history in an effort to provide both the individual and/or employer with an evaluation of the participant's current health (CDC, 2010a). Examples of HRA questions include the following:

1. What is your blood pressure?
2. On average, how many alcoholic beverages do you consume in a week?
3. How would you describe your cigarette smoking habits?
4. In the average week, how many days do you perform physical exercise?
5. How often do you feel stressed or depressed?

Not only were HRAs informational, they were also typically free, and easily analyzed via paper or online resources. See Appendix A for an example of a paper-based HRA developed by the University of Michigan Health Management Research Center (HMRC, 2009).

Another positive aspect related to HRAs was they could be self-administered, meaning the employee could answer the health-related behavior (e.g., nutritional and exercise habits) and risk factor (e.g., tobacco and alcohol use) questions privately, and at their leisure (RAND Corporation, 2013). The quick and seamless nature of HRAs made them an attractive WHP component. In the 2004 National Worksite Health Promotion Survey, researchers discovered that 19.4% of worksites surveyed reported the use of HRAs (Linnan, 2008, p. 1504). Furthermore, there were statistically significant

differences in the administration of HRAs based on the size of the worksite (Linnan, 2008). Specifically, results indicated the larger the worksite size the more often HRAs were utilized (11.3% with 50 – 99 employees compared to 45.8% with more than 750 employees) (Linnan, 2008, p. 1504). The RAND 2013 Workplace Wellness Programs Study had similar findings with 33% of those employers surveyed with 50 or more employees offering HRAs.

Comparable to HRAs, biometric screenings were also utilized to asses one's risk for disease. These screenings typically involved minimally invasive measurements such as blood pressure, height, weight, and a finger prick for a small sample of blood. Data obtained in the RAND 2013 Workplace Wellness Programs Study suggested, of those employers who had a WHP and 50 or more employees, 25% used biometric screenings as a means of program planning and evaluation (RAND Corporation, 2013). For example, through the body mass index (BMI) assessment, a common measurement which utilized an individual's height and weight to determine body fatness, WHP practitioners were also able to determine whether or not their employee population was at risk of acquiring weight-related (over or under) risk conditions and/or diseases. WHP practitioners may then implement programs designed to help employees loose or gain weight and work towards achieving an optimal BMI, leading to a reduction in health related risk factors that can lead to chronic disease such as cardiovascular disease (CVD), diabetes and stroke.

Blood samples obtained during the biometric screenings also provided valuable data, such as cholesterol and blood glucose levels. As mentioned earlier in the discussion, cholesterol is a component of plaque, a fatty substance that can obstruct and

damage vascular walls. Particles known as lipoproteins, of which there are two types, high-density (HDL) and low-density (LDL) transport cholesterol in the blood (CDC, 2010b). High levels of LDL, also known as 'bad' cholesterol, are a cause for concern because the buildup of these lipoproteins may lead to various forms of heart disease (CDC, 2010b). Alternatively, HDLs, also known as the 'good' cholesterol, reduce one's risk for heart disease because they absorb and transport LDLs to the liver, removing them from the body (CDC, 2010b).

Glucose is the body's main source for energy and growth. However, when the body is unable to regulate blood glucose levels, an individual is likely to acquire diabetes. One method of assessing whether an individual has diabetes or is at risk of acquiring diabetes is to measure the blood glucose levels in a fasted state. Fasting blood glucose levels at or above 126 mg/dl is indicative of diabetes, a fasting glucose of 100 mg/dl to 125 mg/dl is a sign of pre-diabetes, and a fasting blood glucose level less than 100 mg/dl is considered normal (American Diabetes Association, 2014, p. 1).

Given the seriousness and potentially life and occupational altering implications of elevated BMIs, cholesterol, and blood glucose levels, biometric screenings are an invaluable resource to both employees and employers. Not only are employees likely to take some form of action if they discover they are at risk, employers may also feel inclined to provide their employees with resources to assist them in their behavior change endeavors. In either or both cases, both parties stand to reap the benefits.

Lifestyle management programs providing employees with information regarding health risk factors and/or risky health related behaviors are another common WHP component. In fact, 77% of employers who offer a WHP also offer educational lifestyle

management programs on a variety of health risk-related topics (RAND Corporation, 2013). Some employers offer these programs onsite during regular work hours, while others may choose to outsource the programs through local fitness centers or health professionals (Freudenheim, 1999). Figure 1 illustrates the percentage of WHPs found in the RAND 2013 Workplace Wellness Programs Study to offer specific lifestyle management programs.

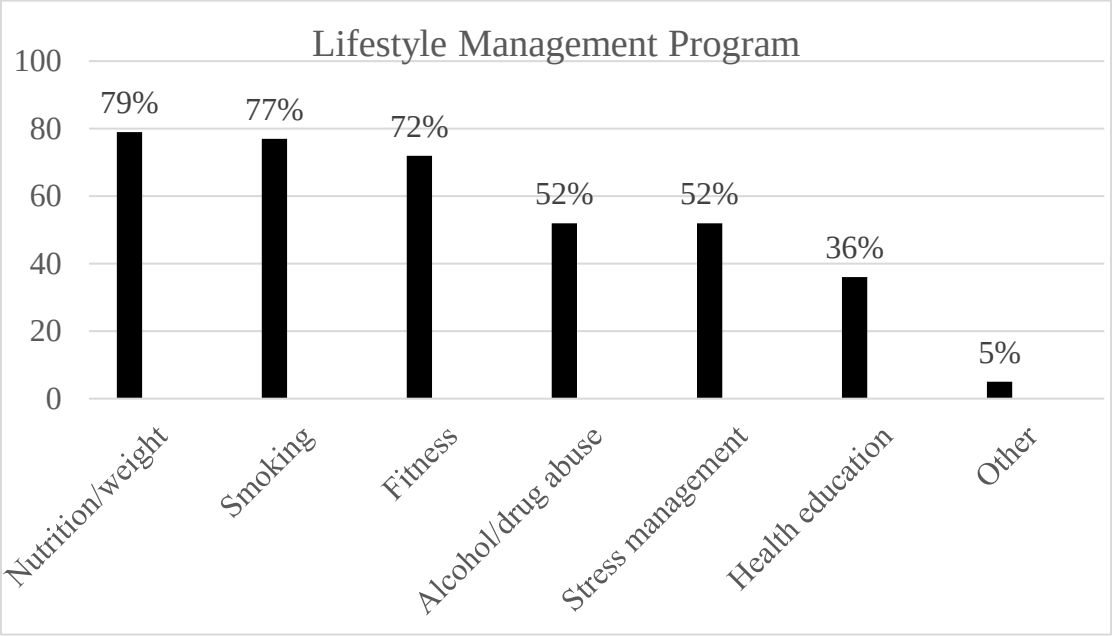

Figure 1. Among employers offering a lifestyle management program, percentage offering specific interventions. The graph represents information from employers with at least 50 employees that offer any lifestyle management intervention as a component of a wellness program. Fifty-one percent of employers offer a wellness program, and 77% of those offer a lifestyle management intervention.

At 79%, nutrition and weight related lifestyle management programs are the most commonly offered programs. Smoking related programs, such as smoking cessation, come in second at 77%, and fitness related programs third, with 72%. Alcohol/drug abuse and stress management programs are also popular selections with 52% of employers offering these programs.

Healthy People 2010, the national initiative to improve the health of Americans, considered WHPs possessing five specific components to be "comprehensive" (Partnerships for a Healthy Workforce, 2001, p. 12). These components included health education, supportive social and physical environments, integration of the WHP into the organization's structure, linkage to related programs like EAPs, and worksite screening programs (Partnerships for a Healthy Workforce, 2001). In addition, Healthy People 2010 had two main objectives related to WHPs. The first was, 75% of all U.S. worksites, regardless of size, offer comprehensive programs, and the second was, at least 75% of employees participate in their WHP (Partnerships for a Healthy Workforce, 2001). The results of the 2004 National Worksite Health Promotion Survey (NWHPS) reviewed, among other variables, the percentage of worksites offering comprehensive WHPs. Results of the study indicated, of the 730 responding worksites, only 6.9% offered a comprehensive WHP (Linnan, 2008, p. 1507). However, 24.1% of worksites with 750 or more employees offered comprehensive programs, compared to 11.3% of worksites with 250 to 749 employees (Linnan, 2008, p. 1507). Clearly, worksite size had an impact on whether or not an employer chose to offer a comprehensive WHP. Regardless, based on this report, it appeared there was a large gap between the Healthy People 2010 goal and the accounts of the number of comprehensive WHPs.

While each of the aforementioned components of a WHP, regardless of whether or not the program was comprehensive, can lead to a variety of positive outcomes for both the employee and employer, employees' participation in their WHP was a key factor to the program's success. Contrary to popular belief, even programs with large budgets,

unlimited resources, and highly qualified staff will surely fail if employees choose to refrain from participation (NIHCM, 2011).

Lack of employees' participation in their WHP can be due to a number of factors, including program offerings that are not of interest or significance to the employee. However, lack of participation may also be due to lack of program awareness. While many WHP practitioners reported lack of employee participation as a major obstacle to the program's success, many employees reported their lack of program awareness as the factor that kept them from participating (Miller, 2012). In a 2012 Colonial Life survey, 52 % of employees who had a WHP said they had some to no knowledge of their WHP (Colonial Life, 2012, p. 9). Simply having a WHP and mentioning the program once or twice a year is not enough to elicit program participation. Employees need continuous communication from various avenues to become aware of and understand the benefits the WHP has to offer.

Incentives for Participation in Workplace Health Programs

In an effort to combat less than desirable participation rates, and pique employees' interest in WHP's events and programs, WHPs often offered employees incentives for their participation. Typically, WHPs used incentives in one, or a combination of the following three ways:

1. Participation-based in which the incentive is earned by simply participating in an event/program,
2. Outcome-based in which the incentive is earned for achieving a specific health outcome, and

3. Progress-based in which incentives are earned as employees progress towards specific health goals. (CDC, 2013f)

Common incentives offered by WHPs included gift cards, t-shirts, water bottles, paid time off, cash, and reductions in monthly health insurance premiums (National Center for Chronic Disease Prevention and Health Promotion [NCCDPHP], 2013a). According to the NCCDPHP, (2013a), of 300 employers who participated in a 2012 survey, 42% offered raffles and drawings to their employees for their participation the WHP (p. 9). Thirty-three percent offered gift cards, and 26% offered health insurance premium discounts and cash (p. 9). Reduced cost share, vacation days and paid time off were the least commonly offered incentives at eight and nine percent.

WHP practitioners may also utilize disincentives to elicit WHP participation. Disincentives typically came in the form of a penalty, such as an increase in monthly health insurance premiums or cost sharing (NCCDPHP, 2013a). In a 2011 survey of approximately 600 U.S. employers, approximately 50% reported the use of financial penalties or planned to implement these penalties within the next three to five years on employees who refrain from participation in their WHP (James, 2013, p. 3). While employees may feel a slight aversion to this form of incentive, research suggested many would choose to participate in their WHP, if in return they receive some form of incentive. Findings from the 2011 EBRI/MGS Consumer Engagement in Health Care Survey suggested financial incentives played a key role in whether an employee decided to participate in their WHP. Of those who participated in their WHP, common explanations for participation involved prizes and reduced health insurance premiums (Fronstin, 2011).

Whether WHP practitioners choose to incentivize or dis-incentivize their employees, the desired outcome, program participation remains consistent. While incentives and disincentives may lead to an employees' desire to participate in their WHP, available data suggested fewer than 20% of a workplace's eligible employee population actually participate in their WHP (Mattke, 2012, p. 6). Given the large number of U.S. adults who had, or were at risk of acquiring a chronic disease and the accompanying employer related costs, WHP practitioners were especially interested in eliciting increased program participation from their high-risk employees (NIHCM, 2011). Furthermore, while it may be true many employers sincerely cared about the health and well-being of their employees, it is also true that sick employees pose a large threat to an employer's bottom line and profitability. The succeeding discussion provides a description of how employers use WHPs to combat the economic hazards related to sick employees.

Return on Investment

Despite the literature reviewed thus far, one may still question why an employer would want to invest in a WHP. They may pose the question, "What do employers truly stand to gain from this program?" The answer to that question, for most, if not all employers who offer a WHP, is return on investment (ROI). Nyman (2012) defined ROI in relation to WHPs as:

> A type of economic evaluation in which the effectiveness gains from the adoption of an intervention are not captured separately by a health outcome variable, such as life years, but instead captured solely by their effect on costs. The theory underlying ROI is that an intervention might cost more initially, but is so effective

> in improving health that the downstream health care cost savings swamp the initial investment and generate a positive return. Cost savings can also be generated through less absenteeism and greater presenteeism, and these effects are sometimes incorporated into the ROI. (Nyman, 2012, p. 9)

The basic formula for ROI is $ROI\% = \frac{(\text{Gain from Investment} - \text{Cost of Investment})}{\text{Cost of Investment}} \times 100$ (Terry, 2012, p. 7). However, utilizing this formula to determine the total ROI of a WHP can be challenging, because it is difficult to quantify gains resulting from reduced absenteeism, greater presenteeism, and worker productivity. One way WHP practitioners overcame this barrier was to develop cost estimator tools, such as the Integrated Benefits Institute's (IBI) Full Cost Estimator. This tool estimated the expected total costs of health-related business costs, such as medical, absenteeism, disability, performance and productivity through a benchmarking program that utilized information, such as disability, worker's compensation and FMLA claims from national databases (Integrated Benefits Institute, 2014).

Overcoming the complex choice of determining appropriate ROI tools can pose a challenge for WHP practitioners. However, many have successfully muddled through this process and discovered their WHPs have resulted in a positive ROI. In 2003, 2005, and 2012, Chapman summarized results from peer-reviewed articles, 62 specifically examined the ROI of WHPs. Despite the lack of standardized ROI analysis procedures, Chapman concluded the results of the 2012 meta-analysis continued to indicate an average 25% reduction in "sick leave, health plan costs, and worker's compensation and disability insurance costs" (Chapman, 2012, p. 9).

In 2010, Baicker et al. conducted a meta-analysis of the literature on costs and savings associated with WHPs. Baicker et al. found for every dollar spent on wellness programs, medical care costs decrease by approximately $3.27, and absentee per day costs decrease by an average of $2.23 (p. 9). In 2008, Johnson and Johnson reported their wellness programs saved the company approximately 250 million dollars over the past ten years; their average ROI between 2002 and 2008 was $2.27 "for every dollar spent" (as cited in Berry, 2010, p. 1). There have been reports suggesting the average rate of ROI is 15:1, however, in most cases these estimates are unsubstantiated projections and lack the support of empirical data (Mudge-Riley, 2013). Realistically speaking, the true rate of return is closer to 1.5:1 to 2.5:1 (Mudge-Riley, 2013, p. 13). In any event, most would agree properly designed, and well-managed wellness programs do offer a positive ROI (Mudge-Riley, 2013).

It is important to note, positive ROI does not always come in the form of dollars saved. Organizations with WHPs tend to attract talented and highly desired workers who also value their health and wellness. Such employees will likely significantly contribute to a culture of health and wellness in the workplace, which often influences job satisfaction leading to a reduction in employee turnover. Reduced turnover sends the message to employees that the employer's concern for them expands beyond their occupational duties. Employees are 1.5 times more likely to stay at their current place of employment when their employers practice and promote a culture of wellness (Mudge-Riley, 2013). Job satisfaction directly relates to greater presenteeism and reduced absenteeism, positively affecting the employer's bottom line. Employees who place value on their personal health and well-being are also more likely to avoid risky health

behaviors, leading to a reduction in their use of the health care system, leading to a reduction in health care system costs for the employer.

University Workplace Health Programs

As evident in the aforementioned context regarding WHPs, there is an abundant amount of research supporting the need for, and benefits of, a WHP. However, little empirical research existed regarding WHPs in a university setting (Watts, 1992). Compared to other WHP settings, the university setting is unique in that the employee population consists of both faculty and staff, with various work schedules, job responsibilities, and demographics. For example, staff members often work eight hours a day, with a one-hour lunch break and are typically non-exempt employees, paid by the hour. Often this equates to strict policies regarding when they 'clock' in or out, and how they spend their time while on the 'clock.' Faculty on the other hand, typically have less restrictive expectations regarding when they are present. Depending on their obligations and teaching schedules (9 month vs. 12 month), they may come to the university five days a week for eight hours each day, or at various times throughout the day and year.

Universities also provide a unique setting for workplace health programs, due to their access to various internal resources (RAND Corporation, 2013). Employees with expert knowledge, campus food services, on-site facilities, and students studying health and wellness disciplines all add to the resources the university WHP has to offer. Many universities also offer student wellness services, such as group exercise, student health centers and counseling services; all of which add to the resources available to university employees.

Assessing employees' feedback regarding their program participation, or lack thereof, and differences that exist between faculty and staff's attitudes, awareness, and satisfaction with their WHP will assist university WHP practitioners with the implementation of intervention strategies to meet the needs of all employees, especially non-participating, and those identified as 'high risk' (NIHCM, 2011; Zoller, 2004). As reported by the NIHCM (2011), there is a need for more research to build a stronger evidence base for WHPs, and to identify program components that work best in different types of workplace environments, such as the university setting.

Summary

The interconnectedness of the presented literature is not a coincidental anomaly. Rather, it is evidence American citizens and businesses are facing a 21st century multidimensional chronic health disease epidemic that is as complex and inter-related as the strategies proposed for its eradication. Given the implications of American's future quality of life and economic status, interventions related to the prevention and management of chronic health disease from various platforms are needed. However, taking into consideration the large amount of working U.S. adults, the trend of many of these adults remaining in the workforce well beyond the typical retirement age of 65, and their reliance on their employers to provide health insurance, the workplace is a suitable environment for such endeavors.

According to the CDC (2014b), evidence-based comprehensive WHPs that include "individual risk reduction programs, coupled with environmental supports for healthy behaviors and is coordinated and integrated with other wellness activities" is the approach proven to be most effective (p. 5). Research repeatedly cited the importance of

understanding the uniqueness of workplaces and their employee population when administering WHPs. In comparison to the multitude of alternative U.S. workplaces, the university setting and its population is unique and its representation is lacking in the existing body of literature concerning WHPs. Therefore, there is a need for research to assess various factors influencing WHPs in a university setting. This research study specifically examined employees' feedback regarding their program participation, or lack thereof, and if a difference existed between full-time faculty and full-time staff's attitudes, awareness, and satisfaction with their WHP (CDC, 2012b; Hanks et al., 2013). Without this valuable data, it would likely be difficult for the university's WHP leaders to identify program components that work best in their specific workplace environment.

Chapter Three: Methodology

Overview

The purpose of this study was to conduct an analysis of a Liberal Arts University WHP, to assess employees' feedback regarding program participation, or lack thereof, and whether a difference existed between full-time faculty and full-time staff attitudes, awareness, and satisfaction with the WHP (CDC, 2012b; Hanks et al., 2013). The study also aimed to identify potential program gaps through the utilization of the HSC. The study builds upon existing research and provides a foundation for future research on WHPs, specifically in a university setting. Chapter Three includes a review of the problem statement, research design, research instruments, research participants, data collection, and analysis procedures.

While there was an abundant amount of research supporting the need for and benefits of a WHP, little empirical research existed regarding WHPs in a university setting (Watts, 1992). Compared to other WHP environments, the university setting is unique in that the employee population consists of both faculty and staff, with various work schedules, job responsibilities, and demographics. According to the NIHCM (2011), employees' participation and engagement were both fundamental components to the success of a WHP. Therefore, it is crucial WHP practitioners understand the needs, desires, and uniqueness of their employee population and the differences that exist amongst them. Identifying the differences between the faculty and staff attitudes, awareness, and satisfaction with the WHP may provide wellness leaders in this, and other university settings with key information leading to the discovery of factors involved in employee participation and engagement, or lack thereof.

Research Design

The PI conducted this mixed-methods exploratory study in two phases. During the first phase, two quantitative assessments took place, the HSC and an anonymous web-based survey. As recommended by the CDC (2014b), a team of university employees who were directly and indirectly responsible for worksite health promotion completed the first quantitative assessment, measured by the HSC. The PI sent the second assessment, an anonymous web-based survey, to all full-time faculty and staff at the University's main campus via the university email system.

After the PI collected and analyzed the quantitative data, phase two, focus group qualitative data collection began. The purpose of conducting the focus group assessments was to explore further employees' feedback regarding their program participation, or lack thereof, and whether a difference existed between full-time faculty and full-time staff attitudes, awareness, and satisfaction with the WHP. In an effort to eliminate bias and elicit the most uninhibited responses, the research committee selected two qualified and experienced moderators to conduct two of the four focus groups each. Both moderators had previous experience conducting focus groups and understood the purpose of the study, however, neither were directly associated with the University's WHP.

Null Hypotheses

To assess the WHP's current program offerings compared to similar-sized WHP program offerings, as reported in the *CDC's Worksite Health ScoreCard*, and whether a difference existed in the attitudes, awareness, and satisfaction with the WHP between

full-time faculty and full-time staff, the PI analyzed data to address the following hypotheses:

H_{01}: As measured by the CDC's Worksite Health ScoreCard, the WHP total score will not be lower than the average total score for similar size WHPs.

H_{02}: As measured by the researcher-designed survey, a difference will not exist between full-time faculty and full-time staff attitudes towards the program.

H_{03}: As measured by the researcher-designed survey, a difference will not exist between full-time faculty and full-time staff awareness of the program.

H_{04}: As measured by the researcher-designed survey, a difference will not exist between full-time faculty and full-time staff satisfaction with the program.

Research Questions

In an effort to further explore employees' feedback regarding their program participation, or lack thereof, and whether a difference existed between full-time faculty and full-time staff attitudes, awareness, and satisfaction with the WHP, the PI investigated the following research question and sub questions.

Main Research Question: How do employees' awareness, attitudes, and satisfaction with their workplace wellness program effect their participation and engagement in the program?

Sub Questions:

1) Does awareness effect an employee's participation and engagement in the workplace wellness program?

2) Do attitudes effect an employee's participation and engagement in the workplace wellness program?

3) Does satisfaction effect an employee's participation and engagement in the workplace wellness program?

Instrumentation

Paper Survey. The PI obtained the HSC (Appendix B) through the CDC and Prevention (2014) website. According to the CDC (2014b), the purpose and explanation of validity and reliability of the tool, is as follows:

> The *CDC Worksite Health ScoreCard* (HSC) is a tool designed to help employers assess whether they have implemented evidence-based health promotion interventions or strategies in their worksites to prevent heart disease, stroke, and related conditions such as hypertension, diabetes, and obesity. The tool was developed by the CDC Division for Heart Disease and Stroke Prevention in collaboration with the Emory University Institute for Health and Productivity Studies (IHPS), the Research Triangle Institute, the CDC NCCDPHP Workplace Workgroup, and an expert panel of federal, state, academic, and private sector. (p. 5)
>
> To ensure the validity and reliability of the tool, a validation study was conducted by Emory University's IHPS. This study involved a national sample of 93 employers of variable size, who agreed to pilot test the survey and provide feedback on the survey's content and structure. (p. 5)

Furthermore, the tool was designed to assist WHP practitioners with identifying potential programming gaps and organizing programming strategies aimed at preventing chronic health conditions, such as stroke and heart disease, all in an effort to maintain a "healthy workforce" (CDC, 2014b, p. iii). The HSC contained 125 questions, all of which were

broken down into the following 16 categories; also shown, in parentheses, are the number of questions found in each category: (1) Organizational Supports (34); (2) Tobacco Control (23); (3) Nutrition (21); (4) Physical Activity (23); (5) Weight Management (11); (6) Stress Management (14); (7) Depression (19); (8) High Blood Pressure (17); (9) High Cholesterol (17); (10) Diabetes (15); (11) Signs and Symptoms of Heart Attack and Stroke (4); (12) Emergency Response to Heart Attack and Stroke (17); (13) Lactation Support (15); (14) Occupational Health and Safety (22); (15) Vaccine Preventable Disease (18); and (16) Community Resources (3, not scored).

Each question, if answered as 'yes,' was assigned a predetermined amount of points, between 1 and 3 (1 = good, 2 = better, and 3 = best). "This point value reflects the level of impact that the strategy has on the intended health behaviors or outcomes and the strength of scientific evidence supporting this impact" (CDC, 2014b, p. 9). Questions answered as 'no,' simply received zero points. At the completion of the HSC, two scores were determined; a score for the sum of the 15 scored categories and a separate score for each individual category. Then, as recommended by the CDC (2014b), WHP practitioners were able to compare their scores to similar-sized worksites that participated in the validation study, to see how they compare to the norm, as well as use the information to assist in program planning.

Web-based Survey. The web-based survey tool utilized for this study was an adapted version of Utah State University's (USU) survey administered and reported in the "An Analysis of the Utah State University Employee Wellness Program" (Hanks et al., 2013). See Appendix C for documentation of permission to utilize items or concepts from the USU study. USU's analysis focused on employees' awareness, attitudes, and

perceptions of USU's employee wellness program. The analysis also evaluated employees' participation rates and satisfaction levels.

The adapted version of USU's survey, created for this study and referred to as the web-based survey (see Appendix E), assessed employees' feedback regarding their program participation, or lack thereof, and whether a difference existed between full-time faculty and full-time staff attitudes, awareness, and satisfaction with the WHP. The survey consisted of 17 questions. Two of the 17 questions addressed full-time faculty and staff attitudes toward the university WHP, three addressed their awareness of the program, one addressed their satisfaction with the program, and two addressed their participation, or lack thereof. To allow for further data analysis, the participants also provided demographic data, such as gender, range of age, number of years employed at the university, and highest level of education.

Focus groups. To gain further understanding of employees' feedback regarding their program participation and whether a difference existed between full-time faculty and full-time staff attitudes, awareness, and satisfaction with the WHP, the PI collected data from four separate focus groups. In an effort to understand the views of those with personal experience participating in the WHP and those who had none, the PI separated the participants into the following four focus groups: Focus group 1, Faculty who participated in the university WHP; Focus group 2, Faculty who did not participate in the university WHP; Focus group 3, Staff who participated in the university WHP; and Focus group 4, Staff who did not participate in the university WHP. See Appendix F for the focus group consent form, Appendix G for the 'non-participating' focus group script and questions, and Appendix H for the 'participating' focus group script and questions.

Participants

Study participants included full-time faculty and staff at the University's main campus. The PI invited all full-time employees, approximately 506, to complete the web-based survey. All full-time faculty and staff also received an invitation to participate in one of the four focus groups; however, focus group participation was limited to the first four to eight volunteers (Fraenkel, Wallen, & Hyun, 2012). The focus group participants in each of the four groups represented a purposive sampling of the full-time faculty and staff of the university who had either never participated in the WHP, or who had participated in the WHP. Lastly, a team of university employees who were directly and indirectly responsible for worksite health promotion completed the HSC (CDC, 2014b).

Data Collection

All study related data collection took place at the University's main campus. The PI utilized three different instruments for study related data collection: The *CDC* HSC, a web-based survey, and four focus groups. In accordance to the recommendations from the CDC (2014b) on collecting data for the HSC, a team of University employees who were directly and indirectly responsible for worksite health promotion met in person, or utilized their university email account, to complete the HSC.

Approximately 506 full-time faculty and staff received an invitation to participate in the web-based survey via the university email system. Employees received the survey link, along with the informed consent, in their university email account. Those who chose to participate clicked on the survey link to open the survey and were able to answer the survey questions immediately. Pilot runs indicated the estimated time to complete the survey was between 10 to 15 minutes.

All four focus groups were audio recorded and took place in a private conference room in a university building. In order to maintain confidentiality, participants did not reveal their names during the session. Due to the PI's unfamiliarity in focus-group facilitation, and the fact that the PI was directly associated with the university's WHP, the PI's research committee recommended an experienced focus group facilitator who was not directly related to the WHP facilitate the focus group sessions. Therefore, the PI selected two qualified and experienced moderators to conduct two of the four focus groups each.

At the beginning of each focus group session, the moderators reminded the participants that their participation in the focus group was voluntary and they could withdraw from the study at any time. The moderators also reminded the participants of the study's purpose, how they would be involved in the session, and that their identity would remain confidential. After the focus groups concluded, a transcriptionist who did not have an affiliation with the WHP nor the study, transcribed the data. Additionally, the focus group transcriptionist assigned each focus group study participant a unique identification (UI) number. The audio recordings were stored in a secure location accessible only by the study's dissertation committee chairperson.

Data Analysis

In accordance with the recommendations from the CDC (2014b) on scoring the HSC, the PI compared the scores from the WHP to the normative scores for similar-sized WHPs. The tool contained 125 questions, three of which did not receive a score; therefore, they were not included in the study analysis. All questions assessed how the worksite's health promotion strategies were implemented (CDC, 2014b). From this

assessment, the PI was able to identify areas in the program that fell short from the norm score of similar-sized WHPs. The PI also applied a Chi-squared test for homogeneity of proportions to determine if a significant difference existed between the total normative score and the WHP's total score, and to determine if a significant difference existed for each of the 15 topics assessed in the HSC.

The PI grouped the web-based survey data by question into one of four categories: attitudes, awareness, satisfaction, and participation. The PI applied Chi-squared tests for homogeneity of proportions to determine if significant differences existed between the full-time faculty and staff attitudes, awareness, satisfaction, and participation in regards to the WHP. Attitudes and satisfaction levels were assessed using Likert scale-based questions; therefore, independent sample *t*-tests were also applied to assess whether significant differences existed between faculty and staff. Results of the independent sample t-tests were no different than the results of the Chi-squared tests for homogeneity. The PI also applied Chi-squared tests for homogeneity of proportions to determine if significant differences existed between the full-time faculty and staff demographic data. Demographic data analyzed included age, gender, number of years employed with the university, and highest level of education.

The PI analyzed the focus group data through the process of coding, which resulted from multiple processing steps (Maxwell, 2013). First, the PI copied and pasted the participants' answers to the focus group questions from each group's transcript to one document to examine each participant's response to the same question. The PI kept the participant's UI with each response, to allow knowledge of which UI response came from which UI of a particular group: participating faculty (PF), non-participating faculty

(NPF), participating staff (PS), and non-participating staff (NPS). Then, the PI read each statement, taking notes and developing tentative ideas about similarities and differences in the participants' responses (Maxwell, 2013). As the PI progressed through the transcription, common themes began to emerge. The PI then grouped the similar responses into categories (Maxwell, 2013). The study chair and a third party experienced with focus group data analysis also examined the focus group transcripts to develop their own themes independently. The PI then compared the themes for validity purposes.

Summary

This was a mixed-methods exploratory study assessing employees' feedback regarding their program participation, or lack thereof, and whether differences existed between full-time faculty and full-time staff attitudes, awareness, and satisfaction with the WHP. The study also sought to assess the research site's existing WHP resources compared to similar-sized WHPs. Additionally, focus group analysis provided the opportunity to gain further understanding of full-time faculty and staff awareness, attitudes, and satisfaction with the WHP and their explanations for participation, or lack thereof. The overall aim of the study was to assess the research site's existing WHP in an effort to gain a better understanding of full-time faculty and staff needs. Results of this study may assist program leaders in this and other university settings with the development of program goals and the implementation of appropriate intervention strategies, in an effort to increase future participation and engagement.

Chapter Four: Results

Introduction

The main purpose of this study was to conduct an analysis of a Liberal Arts University WHP, to assess employees' feedback regarding their program participation, or lack thereof, and whether a difference existed between full-time faculty and full-time staff attitudes, awareness, and satisfaction with the WHP (CDC, 2012b; Hanks et al., 2013). The study also aimed to identify potential program gaps through the utilization of the HSC. All research participants were either full-time faculty or full-time staff of the University. The PI collected data with a mixed methods approach using the HSC, an anonymous web-based survey, and four focus groups. The PI applied statistical analysis to the quantitative data collected from the HSC and the web-based survey. The PI then coded and organized themes from the qualitative source of focus groups. This chapter presents the hypothesis statements, the research question and sub questions, and the quantitative and qualitative results of analysis.

Null Hypotheses

To assess the WHP's program offerings compared to similar-sized WHP program offerings, as reported in the *CDC's Worksite Health ScoreCard* (2014b), the PI researched the following null hypotheses:

H_{01}: As measured by the CDC's Worksite Health ScoreCard, the WHP total score will not be lower than the average total score for similar size WHPs.

H_{02}: As measured by the researcher-designed survey, a difference will not exist between full-time faculty and full-time staff attitudes towards the program.

H_{03}: As measured by the researcher-designed survey, a difference will not exist between full-time faculty and full-time staff awareness of the program.

H_{04}: As measured by the researcher-designed survey, a difference will not exist between full-time faculty and full-time staff satisfaction with the program.

Research Questions

In an effort to further explore employees' feedback regarding their program participation, or lack thereof, and whether a difference existed between full-time faculty and full-time staff attitudes, awareness, and satisfaction with their WHP, the PI investigated the following research question and sub questions:

Main Research Question: How do employees' awareness, attitudes, and satisfaction with their workplace wellness program effect their participation and engagement in the program?

Sub Questions:

1) Does awareness effect an employee's participation and engagement in the workplace wellness program?

2) Do attitudes effect an employee's participation and engagement in the workplace wellness program?

3) Does satisfaction effect an employee's participation and engagement in the workplace wellness program?

The CDC Worksite Health ScoreCard

Five university employees who were directly and indirectly responsible for worksite health promotion completed the HSC (CDC, 2014b). In accordance to the recommendations from the CDC (2014b) on scoring the HSC, the PI compared the

WHP's scores to the normative scores for similar-sized WHPs. At the completion of the HSC two types of scores were determined, a score for the sum of the 15 scored categories and a separate score for each of the 15 individual categories. Chi-squared test for homogeneity of proportions was applied to determine if a significant difference existed between the WHP's total score and the total norm score of the HSC. Chi-squared tests for homogeneity of proportions were also applied to determine if a significant difference existed in the WHP's scores and the normative scores in each of the 15 individual categories assessed in the HSC. Data obtained from the HSC (Appendix B) addressed Null Hypothesis H_{01}: As measured by the CDC *Worksite Health ScoreCard*, the WHP total score will not be lower than the average total score for similar size WHPs.

CDC Worksite Health ScoreCard: Total Score: The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's total HSC score to the normative total score for similar-sized WHPs. The test value was 26.668 compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.000. Since the test value exceeded the critical value, there was a significant difference in the percentage of agreement between the two groups. Therefore, the PI rejected the null hypothesis. The study university's WHP sample scored significantly lower than the normed score for similar-sized WHPs.

Though the PI did not test a specific hypothesis to address the WHP's scores in each of the 15 individual categories, analysis was conducted to investigate whether a significant difference existed between the WHP's score and the norm scores.

***CDC Worksite Health ScoreCard Category One: Organizational Supports*.** The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's

score for category one, organizational supports, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 5.965, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.0146. Since the test value exceeded the critical value, there was a significant difference in the percentage of the two scores, and the PI rejected the null hypothesis. The study WHP sample scored significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category Two: Tobacco Control. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category two, tobacco control, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 14.786, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.0001. Since the test value exceeded the critical value, there was a significant difference in the percentage of the two scores, and the PI rejected the null hypothesis. The study WHP sample scored significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category Three: Nutrition. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category three, nutrition, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 5.081, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.0242. Since the test value exceeded the critical value, there was a significant difference in the percentage of the two scores, and the PI rejected the null hypothesis. The study WHP sample scored significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category Four: Physical Activity. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category four, physical activity, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 0.965, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.3259. Since the test value did not exceed the critical value, there was no significant difference in the percentage of the two scores, and the PI did not reject the null hypothesis. The study WHP sample did not score significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category Five: Weight Management. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category five, weight management, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 0.000, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 1.00. Since the test value did not exceed the critical value, there was no significant difference in the percentage of the two scores, and the PI did not reject the null hypothesis. The study WHP sample did not score significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category Six: Stress Management. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category six, stress management, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 7.036, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.0080. Since the test value exceeded the critical value, there was a significant difference in the percentage of the two scores, and

the PI rejected the null hypothesis. The study WHP sample scored significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category Seven: Depression. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category seven, depression, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 2.171, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.1406. Since the test value did not exceed the critical value, there was no significant difference in the percentage of the two scores, and the PI did not reject the null hypothesis. The study WHP sample did not score significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category Eight: High Blood Pressure. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category seven, depression, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 1.889, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.1693. Since the test value did not exceed the critical value, there was no significant difference in the percentage of the two scores, and the PI did not reject the null hypothesis. The study WHP sample did not score significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category Nine: High Cholesterol. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category nine, high cholesterol, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 1.074, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.3001. Since the test value did not exceed the

critical value, there was no significant difference in the percentage of the two scores, and the PI did not reject the null hypothesis. The study WHP sample did not score significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category 10: Diabetes. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category 10, diabetes, to the HSC's normative score for the same category in similar sized WHPs. The test value was 1.200, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.2733. Since the test value did not exceed the critical value, there was no significant difference in the percentage of the two scores, and the PI did not reject the null hypothesis. The study WHP sample did not score significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category 11: Signs and Symptoms of Heart Attack and Stroke. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category 11, signs and symptoms of heart attack and stroke, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 2.667, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.1025. Since the test value did not exceed the critical value, there was no significant difference in the percentage of the two scores, and the PI did not reject the null hypothesis. The study WHP sample did not score significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category 12: Emergency Response to Heart Attack and Stroke. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category 12, emergency response to heart attack and

stroke, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 0.125, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.7242. Since the test value did not exceed the critical value, there was no significant difference in the percentage of the two scores, and the PI did not reject the null hypothesis. The study WHP sample did not score significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category 13: Lactation Support. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category 13, lactation support, to the HSC's normative score for the same category in similar sized WHPs. The test value was 3.968, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.0464. Since the test value exceeded the critical value, there was a significant difference in the percentage of the two scores, and the PI rejected the null hypothesis. The study WHP sample scored significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category 14: Occupational Health and Safety. The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category 14, occupational health and safety, to the HSC's normative score for the same category in similar sized WHPs. The test value was 3.300, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.0693. Since the test value did not exceed the critical value, there was no significant difference in the percentage of the two scores, and the PI did not reject the null hypothesis. The study WHP sample did not score significantly higher than the normed score for similar-sized WHPs.

CDC Worksite Health ScoreCard Category 15: Vaccine Preventable Disease.

The PI applied a Chi-squared test of homogeneity of proportions in comparing the WHP's score for category 15, vaccine preventable disease, to the HSC's normative score for the same category in similar-sized WHPs. The test value was 0.000, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 1.000. Since the test value did not exceed the critical value, there was no significant difference in the percentage of the two scores, and the PI did not reject the null hypothesis. The study WHP sample did not score significantly higher than the normed score for similar-sized WHPs.

Table 2 represents a summary of the WHP's total score and scores in each of the 15 individual categories, along with the normative scores for the similar-sized (250-750 employees) WHPs that participated in the CDC's validation study. As indicated, statistical analyses demonstrated a significant difference between the WHP's total score χ^2 (1, n=540) = 25.668, p<.000, and the normative scores of similar size WHPs in five of the 15 topics. They are as follows: organizational supports χ^2 (1, n=68) = 5.965, p<.05, tobacco control χ^2 (1, n=46) = 14.786, p<.001, nutrition χ^2 (1, n=42) = 5.081, p<.05, stress management χ^2 (1, n =28) = 7.036, p< .01 and lactation support χ^2 (1, n = 30) = 3.968, p< .05. In each case, the university's WHP scored significantly lower than the norms provided by similar-sized WHPs.

Table 2.

Chi-Squared Test of Homogeneity: CDC Worksite Health Score Card

	WHP		Average Score for Medium Size WHPs		χ^2	p
	n	%	n	%		
Total Score (270)	106	39.3	166	61.5	26.668	.000***
Organizational Supports (34)	14	41.2	24	70.0	5.965	.015*
Tobacco Control (23)	1	4.3	13	56.5	14.786	.0001***
Nutrition (21)	4	19.0	11	52.4	5.081	.024*
Physical Activity (23)	18	78.3	15	65.2	.965	.326
Weight Management (11)	8	72.7	8	72.7	.000	1.000
Stress Management (14)	4	28.6	11	78.6	7.036	.008**
Depression (19)	3	15.8	7	36.8	2.171	.141
High Blood Pressure (17)	6	35.3	10	58.8	1.889	.169
High Cholesterol (17)	6	35.3	9	52.9	1.074	.300
Diabetes (15)	6	40.0	9	60.0	1.200	.273
Signs and Symptoms of Heart Attack and Stroke (4)	0	0.0	2	50.0	2.667	.103
Emergency Response to Heart Attack and Stroke (17)	10	58.8	11	64.7	.125	.724
Lactation Support (15)	2	13.3	7	46.7	3.968	.046*
Occupational Health and Safety (22)	9	40.9	15	68.2	3.300	.693
Vaccine Preventable Disease (18)	15	83.3	15	83.3	.000	1.00

Note. *p<.05 **p < .01 ***p<.001

Web-based Survey

Seventy-five web-based survey respondents identified themselves as full-time faculty, and 82 identified themselves as full-time staff. Based on group frequencies, the two groups, full-time faculty and full-time staff, were homogeneous in regards to gender representation. However, the groups were not homogeneous in regards to demographics of age, number of years employed at the university, and highest level of education.

The PI applied a Chi-squared test of homogeneity of proportions in comparing the percentage of male faculty and staff respondents to percentage of female faculty and staff respondents. The test value was 0.141, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.707. Since the test value did not exceed the critical value, the PI did not reject the null hypothesis, and there was not a significant difference in gender representation between the two groups (see Table 3).

Table 3.

Survey Respondents Demographics: Gender

	Full-Time Faculty		Full-Time Staff		χ^2	p
	n	%	n	%		
Male	37	49.3	38	46.3	.141	.707
Female	38	50.7	44	53.7		

The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' self-reported range of age. The test value was 21.168, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.000. Since the test value

exceeded the critical value, the PI rejected the null hypothesis, and there was a significant difference in age representation between the two groups (see Table 4).

Table 4.

Survey Respondents Demographics: Age

	Full-Time Faculty		Full-Time Staff		χ^2	p
	n	%	n	%		
18-24	0	0	4	4.9	21.168	.000**
25-34	8	10.7	30	36.6		
35-49	22	29.3	24	29.3		
50-64	30	40	21	25.6		
65+	15	20	3	3.7		

Note. ***p < .001

The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' self-reported number of years employed with the university. The test value was 11.52, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.021.

Table 5.

Survey Respondents Demographics: Number of Years Employed at the University.

	Full-Time Faculty		Full-Time Staff		χ^2	p
	n	%	n	%		
0-5	24	32	46	56.1	11.52	.021*
6-10	26	34.7	24	29.3		
11-15	9	12	5	6.1		
16-20	10	13.3	5	6.1		
20+	6	8	2	2.4		

Note.*p < .05.

Since the test value exceeded the critical value, the PI rejected the null hypothesis, and there was a significant difference in the number of years employed with the university between the two groups (see Table 5).

The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' self-reported highest level of education. The test value was 28.5, compared to the critical value of 5.991, with an alpha of 0.05 and a p-value of 0.000. Since the test value exceeded the critical value, the PI rejected the null hypothesis, and there was a significant difference in the level of education between the two groups (see Table 6).

Table 6.

Survey Respondents Demographics: Highest Level of Education

	Full-Time Faculty		Full-Time Staff		χ^2	p
	n	%	n	%		
High School Diploma or Equivalent	0	0	12	14.6	28.5	.000**
Associates/Bachelor Degree	0	0	14	17.1		
Graduate Degree or Higher	75	100	56	68.3		

Note. ***p < .001

Attitudes

The web-based survey assessed the attitudes of the full-time faculty and staff through questions, using a Likert scale. Each question stated, 'Please rate how you feel about the following statements on a scale of 1 to 5 (5 being strongly agree),' followed by ten statements reflecting attitudes towards the WHP. Data obtained from these questions (see Appendix E) addressed Null Hypothesis H_{02}: As measured by the researcher-

designed survey, there will be no difference between full-time faculty and full-time staff's attitudes towards the program.

Attitudes statement 1. The WHP directly benefits me. The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentage of level of agreement to the statement. The test value was 1.083, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.8969. Since the test value did not exceed the critical value, the PI did not reject the null hypothesis, and there was no significant difference in the percentage of agreement between the two groups.

Attitudes statement 2. The WHP staff are knowledgeable and helpful. The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentage of level of agreement to the statement. The test value was 2.775, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.5962. Since the test value did not exceed the critical value, the PI did not reject the null hypothesis, and there was no significant difference in the percentage of agreement between the two groups.

Attitudes statement 3. University employees benefit from the WHP. The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentage of level of agreement to the statement. The test value was 3.975, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.4094. Since the test value did not exceed the critical value, the PI did not reject the null hypothesis, and there was no significant difference in the percentage of agreement between the two groups.

Attitudes statement 4. My participation in my WHP should lower my monthly health insurance premium. The PI applied a Chi-squared test of homogeneity

of proportions in comparing the two groups' percentage of level of agreement to the statement. The test value was 9.968, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.0410. Since the test value exceeded the critical value, the PI rejected the null hypothesis, and there was a significant difference in the percentage of agreement between the two groups. Staff indicated a higher agreement with the statement than faculty.

Attitudes statement 5. I think the workplace has a responsibility to offer worksite wellness. The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentage of level of agreement to the statement. The test value was 5.220, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.2655. Since the test value did not exceed the critical value, the PI did not reject the null hypothesis, and there was no significant difference in the percentage of agreement between the two groups.

Attitudes statement 6. I am better able to maintain my health goals when co-workers have similar goal. The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentage of level of agreement to the statement. The test value was 3.532 compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.4731. Since the test value did not exceed the critical value, the PI did not reject the null hypothesis, and there was no significant difference in the percentage of agreement between the two groups.

Attitudes statement 7. I know someone at work who supports my healthy lifestyle improvements. The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentage of level of agreement to the statement. The test

value was 1.398, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.8445. Since the test value did not exceed the critical value, the PI did not reject the null hypothesis, and there was no significant difference in the percentage of agreement between the two groups.

Attitudes statement 8. My direct supervisor supports my involvement in the WHP. The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentage of level of agreement to the statement. The test value was 1.602, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.8085. Since the test value did not exceed the critical value, the PI did not reject the null hypothesis, and there was no significant difference in the percentage of agreement between the two groups.

Attitudes statement 9. The university encourages/promotes wellness at work and at home. The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentage of level of agreement to the statement. The test value was 5.95, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.2029. Since the test value did not exceed the critical value, the PI did not reject the null hypothesis, and there was no significant difference in the percentage of agreement between the two groups.

Attitudes statement 10. Administration is supportive of the WHP. The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentage of level of agreement to the statement. The test value was 13.718, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.0083. Since the test value exceeded the critical value, the PI rejected the null hypothesis, and there was a

significant difference in the percentage of agreement between the two groups. Faculty indicated a higher agreement with the statement than staff.

Table 7 displays the frequencies and percentage of agreement of the faculty and staff responses to each of the above-mentioned statements, as well as each statement's test-value and p-value. One statement response that provided a significant difference in the attitudes between faculty and staff was, 'My participation in my WHP should lower my monthly health insurance premium.' The staff agreement with the statement, 56.1%, was significantly higher than the faculty agreement of 40.0%. The statement, 'Administration is supportive of the WHP,' also provided a significant difference in agreement between the faculty and the staff. Faculty agreement was 58.3%, compared to staff agreement of 31.1%.

Table 7.

Chi-Squared Test of Homogeneity: Attitudes.

	1		2		3		4		5			
	n	%	n	%	n	%	n	%	n	%	χ^2	p
The WHP directly benefits me												
Faculty	2	2.7	3	4	35	46.7	16	21.3	19	25.3		
Staff	2	2.4	3	3.7	45	54.9	15	18.3	17	20.7	1.083	0.897
The WHP staff are knowledgeable and helpful												
Faculty	0	0	0	0	35	46.7	9	12	30	40		
Staff	0	0	1	1.2	42	51.2	14	17.1	25	30.5	2.76	0.596
University employees benefit from the WHP												
Faculty	1	1.3	1	1.3	20	20.7	23	30.7	29	38.7		
Staff	0	0	1	1.2	33	40.2	22	26.8	26	31.7	3.975	0.409
My participation in my WHP should lower my monthly health insurance premium.												
Faculty	7	9.3	2	2.7	33	44	10	13.3	20	26.7		
Staff	1	1.2	3	3.7	32	39	24	29.3	22	26.8	9.968	0.041*
I think the workplace has a responsibility to offer worksite wellness												
Faculty	7	9.3	2	2.7	33	44	10	13.3	20	26.7		
Staff	2	2.4	4	4.9	19	23.2	34	41.5	23	28	5.22	0.266
I am better able to maintain my health goals when co-workers have similar goals												
Faculty	1	1.3	6	8	26	34.7	28	37.3	14	18.7		
Staff	1	1.2	3	3.7	21	25.6	37	45.1	20	24.4	3.53	0.473

Continued

Table 8. Continued.

Chi-Squared Test of Homogeneity: Attitudes.

I know someone at work who supports my healthy lifestyle improvements												
Faculty	1	1.3	3	4	23	30.7	25	33.3	23	30.7		
Staff	1	1.2	5	6.1	26	31.7	31	37.8	19	23.2	1.4	0.845
My direct supervisor supports my involvement in the WHP												
Faculty	3	4	4	5.3	39	52	13	17.3	15	20		
Staff	5	6.1	5	6.1	47	57.3	14	17.1	11	13.4	1.6	0.808
The university encourages/promotes wellness at work and at home.												
Faculty	0	0	4	5.3	27	36	23	30.7	21	28		
Staff	3	3.7	6	7.3	31	37.8	29	35.4	13	15.9	5.95	0.203
Administration is supportive of the WHP.												
Faculty	0	0	3	4	18	24	29	38.7	25	33.3		
Staff	2	2.4	1	1.2	39	47.6	26	31.7	14	17.1	13.72	0.008**

Note. *p < .05 **p < .01

Awareness

The web-based survey assessed the full-time faculty and staff awareness of the WHP through three separate questions. Data obtained from these questions (see Appendix E) addressed Null Hypothesis H_{03}: As measured by the researcher-designed survey, there will be no difference between full-time faculty and full-time staff's awareness of the program.

Awareness question 1. Are you aware of the University's Employee Wellness Program? The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentages in answering either yes or no to the survey prompt. The test value was 5.126, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.0236. Since the test value exceeded the critical value, the PI rejected the null hypothesis, and there was a significant difference in the percentage of yes/no responses between the two groups.

Table 9.

Survey Respondents: Awareness Question 1

	Full-Time Faculty		Full-Time Staff		χ^2	p
	n	%	n	%		
Yes	72	96.0	70	85.4	5.126	.024*
No	3	4.0	12	14.6		

Note.*p < .05

Awareness question 2. If you answered yes to question one, through which of the following resources have you heard about the WHP? Check all that apply. For this survey prompt, participants had five resources to choose from, flier/posters, University Digest, email to your Outlook account, co-worker, and new employee

orientation. The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentages of response for each of the five resources.

Resource 1. Flier/posters. The test value was 5.096, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.0240, indicating a significant difference in the percentage of faculty and staff who said they were aware the WHP through this resource. Therefore, the PI rejected the null hypothesis for resource 1 of awareness question 2.

Resource 2. University Digest. The test value was 3.618, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.0572, indicating no significant difference in the percentage of faculty and staff who said they were aware of the WHP through this resource. Therefore, the PI failed to reject the null hypothesis for resource 2 of awareness question 2.

Resource 3. Email to your Outlook account. The test value was 0.252, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.6159, indicating no significant difference in the percentage of faculty and staff who said they were aware of the WHP through this resource. Therefore, the PI failed to reject the null hypothesis for resource 3 of awareness question 2.

Resource 4. Co-worker. The test value was 0.063, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.8021, indicating no significant difference in the percentage of faculty and staff who said they were aware of the WHP through this resource. Therefore, the PI failed to reject the null hypothesis for resource 4 of awareness question 2.

Resource 5. New employee orientation. The test value was 1.366, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.2425, indicating no significant difference in the percentage of faculty and staff who said they were aware of the WHP through this resource. Therefore, the PI failed to reject the null hypothesis for resource 5 of awareness question 2.

Table 9 summarizes the response rates between the choice of five resources, for both faculty and staff.

Table 10.

Survey Respondents: Awareness Question 2

	Full-Time Faculty		Full-Time Staff		χ^2	p
	n	%	n	%		
Flier/Posters	32	42.7	21	25.6	5.096	.024*
University Digest	58	77.3	52	63.4	3.618	.057
Email to your Outlook account	35	46.1	35	42.7	.252	.616
Co-worker	26	34.7	30	36.6	.063	.802
New Employee Orientation	6	8.0	3	3.7	1.366	.242

Note.*p < .05

Awareness question 3. Below is a list of the WHP's events or activities. Please tell us which ones you were aware of prior to taking this survey. Check all that apply. Participants had eight events/activities to choose from, including the option of none. The other seven included, health screening, group exercise classes, physical activity challenges, Weight Watchers at Work, presentations and workshops on health-related issues, the Go Red luncheon, and the spring employee appreciation banquet. The

PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentages of responses for each of the eight options.

Activity 1. Health screening. The test value was 7.734, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.0049, indicating a significant difference in the percentage of faculty and staff who said they were aware of this activity prior to taking the survey. Therefore, the PI rejected the null hypothesis for activity 1 of awareness question 3.

Activity 2. Group exercise classes. The test value was 0.580, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.446, indicating no significant difference in the percentage of faculty and staff who said they were aware of this activity prior to taking the survey. Therefore, the PI failed to reject the null hypothesis for activity 2 of awareness question 3.

Activity 3. Physical activity challenges. The test value was 3.948, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.047, indicating a significant difference in the percentage of faculty and staff who said they were aware of this activity prior to taking the survey. Therefore, PI rejected the null hypothesis for activity 3 of awareness question 3.

Activity 4. Weight Watchers at Work. The test value was 1.499, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.221, indicating no significant difference in the percentage of faculty and staff who said they were aware of this activity prior to taking the survey. Therefore, the PI failed to reject the null hypothesis for activity 4 of awareness question 3.

Activity 5. Presentations and workshops on health-related issues. The test value was 8.32, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.004, indicating a significant difference in the percentage of faculty and staff who said they were aware of this activity prior to taking the survey. Therefore, the PI rejected the null hypothesis for activity 5 of awareness question 3.

Activity 6. Go Red luncheon. The test value was 0.443, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.506, indicating no significant difference in the percentage of faculty and staff who said they were aware of this activity prior to taking the survey. Therefore, the PI failed to reject the null hypothesis for activity 6 of awareness question 3.

Activity 7. Spring employee appreciation banquet. The test value was 0.483, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.487, indicating no significant difference in the percentage of faculty and staff who said they were aware of this activity prior to taking the survey. Therefore, the PI failed to reject the null hypothesis for activity 7 of awareness question 3.

Activity 8. None. The test value was 5.319, compared to the critical value of 3.841, with an alpha of 0.05 and a p-value of 0.021, indicating a significant difference in the percentage of faculty and staff who said they were not aware of any of the activities prior to taking the survey. Therefore, the PI rejected the null hypothesis for activity 8 of awareness question 3.

Table 10 summarizes the faculty and staff response percentages to the choice between eight options for awareness question 3.

Table 11.

Survey Respondents: Awareness Question 3

	Full-Time Faculty		Full-Time Staff		χ^2	p
	n	%	n	%		
Health Screening	54	72.0	41	50.0	7.934	.005**
Group Exercise Classes	51	68.0	51	62.2	.580	.446
Physical Activity Challenges	43	57.3	34	41.5	3.948	.047*
Weight Watchers at Work	43	57.3	39	47.6	1.499	.221
Presentations and Workshops on Health-related Issues	51	68.0	37	45.1	8.32	.004**
Go Red Luncheon	46	56.1	46	61.3	.443	.506
Spring Employee Appreciation Banquet	38	50.7	37	45.1	.483	.487
None	4	5.3	14	17.1	5.319	.021*

Note. *p<.05. **p < .01

Satisfaction

The web-based survey also assessed full-time faculty and staff satisfaction with five aspects of the WHP, using one Likert-scale question. The question stated, 'Please rate your satisfaction with the following on a scale of 1 to 5 (5 being the most satisfied),' followed by five aspects of the WHP to choose from. The PI applied a Chi-squared test of homogeneity of proportions in comparing the two groups' percentages of responses for each of the five WHP aspects. Data obtained from these questions (see Appendix E) addressed Null Hypothesis H_{04}: As measured by the researcher-designed survey, there

will be no difference between full-time faculty and full-time staff's satisfaction with the program.

Satisfaction aspect 1. The WHP. The test value was 1.146, compared to the critical value of 9.288, with an alpha of 0.05 and a p-value of 0.887, indicating no significant difference in the percentage of faculty and staff responses in regards to satisfaction with WHP. Therefore, the PI failed to reject the null hypothesis for aspect 1 of satisfaction.

Satisfaction aspect 2. The university's facilities. The test value was 5.966, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.202, indicating no significant difference in the percentage of faculty and staff responses in regards to satisfaction with the university's facilities. Therefore, the PI failed to reject the null hypothesis for aspect 2 of satisfaction.

Satisfaction aspect 3. The WHP staff. The test value was 0.026, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.999, indicating no significant difference in the percentage of faculty and staff responses in regards to satisfaction with the WHP staff. Therefore, the PI failed to reject the null hypothesis for aspect 3 of satisfaction.

Satisfaction aspect 4. Presentations and workshops. The test value was 0.626, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.960, indicating no significant difference in the percentage of faculty and staff responses in regards to satisfaction with the presentations and workshops. Therefore, the PI failed to reject the null hypothesis for aspect 4 of satisfaction.

Satisfaction aspect 5. Communication on events. The test value was 0.289, compared to the critical value of 9.488, with an alpha of 0.05 and a p-value of 0.991, indicating no significant difference in the percentage of faculty and staff responses in regards to satisfaction with communication on events. Therefore, the PI failed to reject the null hypothesis for aspect 5 of satisfaction.

Table 11 displays the frequencies of faculty and staff responses to each of the aforementioned aspects related to satisfaction, as well as the associated test values and p-values. There were no significant differences between faculty and staff responses found for any of the five categories: the WHP, university facilities, WHP staff, presentations/ workshops, nor WHP's communication on events.

Table 12.

Chi-Squared Test of Homogeneity: Satisfaction

	1		2		3		4		5			
	n	%	n	%	n	%	n	%	n	%	χ^2	p
The WHP												
Faculty	0	0	1	1.3	36	48	7	9.3	30	40		
Staff	0	0	1	1.2	46	56.1	5	6.1	30	36.6	1.146	0.887
University's facilities												
Faculty	2	2.7	3	4	23	30.7	17	22.7	28	37.3		
Staff	0	0	4	4.9	15	18.3	22	26.8	39	47.6	5.966	0.202
WHP staff												
Faculty	0	0	0	0	34	45.3	4	5.3	36	48		
Staff	0	0	0	0	38	46.3	4	4.9	39	47.6	0.026	0.999
Presentations/Workshops												
Faculty	0	0	0	0	41	54.7	7	9.3	25	33.3		
Staff	0	0	0	0	50	61	8	9.8	23	28	0.626	0.96
WHP's Communication on Events												
Faculty	0	0	5	6.7	22	29.3	16	21.3	29	38.7		
Staff	0	0	4	4.9	26	31.7	18	22	32	39	0.289	0.991

Note. No statistically significant differences

Participation

The web-based survey participants answered two questions regarding their participation in the WHP. The first question stated, 'Which of the following WHP programs/activities have you attended? Check all that apply.' Participants were able to choose from the following eight options: (1) Health screening, (2) Group exercise classes, (3) Physical activity challenges, (4) Weight Watchers 'At Work,' (5) Presentations and workshops on health related issues, (6) Go Red Luncheon, (7) Spring Employee Appreciation Banquet, and (8) I have never participated in any WHP activity.

The second participation question stated, 'What factors would increase your participation in the WHP? Please check all that apply.' Participants were able to choose from the following four options: (1) Times programs are offered, (2) Incentives to participate, (3) Support from supervisor to attend, and (4) Other.

The PI applied Chi-squared tests of homogeneity of proportions for each of the 12 options in comparing the percentages of faculty and staff responses. The PI did not utilize data obtained from these responses to participation to address an original study hypothesis. For this piece of analysis, the null hypothesis addressed was, There will be no difference in percentage of participation among the eight activity options offered in the WHP. Comparison of the p-values for the eight options (0.942, 0.4890, 0.4829, 0.3799, 0.7106, 0.2882, and 0.5037) to the alpha values of 0.01, 0.05, and 0.10, representing confidence levels of 99%, 95%, and 90%, respectively, yielded no significant differences. The null hypothesis was not rejected. Table 12 displays the results.

Table 13.

Survey Respondents: Participation Question 1

	Full-Time Faculty		Full-Time Staff		χ^2	p
	n	%	n	%		
Health Screening	26	34.6	26	31.7	.155	.6939
Group Exercise Classes	17	22.7	19	23.2	.006	.9402
Physical Activity Challenges	14	18.7	19	23.2	.479	.4890
Weight Watchers at Work	5	6.7	8	9.8	.492	.4829
Presentations and Workshops on Health-related Issues	22	29.3	19	23.2	.771	.3799
Go Red Luncheon	24	32.0	24	29.3	.138	.7106
Spring Employee Appreciation Banquet	21	28.0	17	20.7	1.128	.2882
I have never participated in a WHP activity.	36	48.0	35	42.7	.447	.5037

Note. No statistically significant differences

No statistically significant differences existed between faculty and staff responses to any of the eight options, when considering a 99%, 95%, and 90% confidence level in results.

The PI did not utilize data obtained from these responses to incentives to participate to address an original study hypothesis. For this piece of analysis, the null

hypothesis addressed was, There will be no difference in percentage of agreement to factors influencing participation among the four options offered, with regard to the WHP. Comparison of the p-values for the three options (0.3470, 0.0250, 0.0127, 0.1819) to the alpha values of 0.01, 0.05, and 0.10, representing confidence levels of 99%, 95%, and 90%, respectively, yielded significant differences for the alpha values 0.05 and 0.10, at the 95% and 90% confidence levels. The null hypothesis was rejected for the influence factors of Incentive to Participate and Support from Supervisor to Attend. Table 13 displays the results.

Table 14.

Survey Respondents: Participation Question 2

	Full-Time Faculty		Full-Time Staff		χ^2	p
	n	%	n	%		
Times Programs are Offered	52	69.3	51	62.2	.885	.3470
Incentive to Participate	26	34.7	43	52.4	5.023	.0250*
Support from Supervisor to Attend	9	12.0	23	28.0	6.217	.0127*
Other	15	20.0	10	12.2	1.782	.1819

Note.*p < .05

At the 0.05 level of significance, statistically significant differences existed between faculty and staff's responses to 'incentives to participate' and 'support from supervisor to attend.'

Focus Groups

The PI was especially interested in the participants' attitudes, awareness, and satisfaction in regards to the WHP that were not captured in the web-based survey, and how these factors may have influenced their participation and engagement, or lack thereof. Four focus groups were conducted during the study. Table 14 displays the UI assigned to each focus group participant, and gives a brief description of each participant. Table 15.

Focus Group Participant UI

Participant Number	UI	Description of Participant
1	PF1	Participating Faculty #1
2	PF2	Participating Faculty #2
3	PF3	Participating Faculty #3
4	PF4	Participating Faculty #4
5	PF5	Participating Faculty #5
6	NPF1	Non-participating Faculty #1
7	NPF2	Non-participating Faculty #2
8	PS1	Participating Staff #1
9	PS2	Participating Staff #2
10	PS3	Participating Staff #3
11	NPS1	Non-participating Staff #1
12	NPS2	Non-participating Staff #2
13	NPS3	Non-participating Staff #3
14	NPS4	Non-participating Staff #4

As intended, the focus group questions (Appendices G & H) afforded the PI the opportunity to obtain feedback from employees who had, and had not, participated in the WHP in a structured, but unrestricted environment. The participants were encouraged to share their thoughts freely, with the support of their colleagues.

Fourteen full-time employees participated in the four focus groups. Five participated in focus group one, participating faculty (PF); two participated in focus group two, non-participating faculty (NPF); three participated in focus group three, participating staff (PS); and four participated in focus group four, non-participating staff (NPS).

The PI transferred the focus group responses into an Excel spreadsheet, coded, and identified the emerging themes from open-ended statements to address the following research questions.

Main Research Question: How do employees' awareness, attitudes, and satisfaction with their workplace wellness program effect their participation and engagement in the program?

Sub Questions:

1. Does awareness effect an employee's participation and engagement in their workplace wellness program?
2. Do attitudes effect an employee's participation and engagement in their workplace wellness program?
3. Does satisfaction effect an employee's participation and engagement in their workplace wellness program?

Focus group participants' responses resulted in three emerging themes related to the Main Research Question, which was broken down into sub questions, and possible explanations for participation and engagement in the WHP. The emerging themes were as follows: (1) administration/supervisor support, (2) defining the purpose of the WHP, and (3) effective communication and marketing.

Sub Question 1: Does awareness effect an employee's participation and engagement in their workplace wellness program? The third emerging theme 'Effective communication and marketing' provided evidence that awareness does influence participation and engagement in the WHP. Many of the focus group participant's comments, especially the 'non-participating' participants, reflected their lack of awareness of the WHP's events, and the WHP in general. For example, when asked question four, 'What do you know in general about the WHP?', NPF1 said, "I don't know much about it." NPF2 said, in response to NPF1's statement, "I don't either." NPS4 also said, "I don't know anything about the program." Considering all employees, in theory, are privy to the WHP's communications and marketing efforts, these efforts seem to have been ineffective, as many participants reported being unaware of such attempts.

Sub Question 2: Do attitudes effect an employee's participation and engagement in their workplace wellness program? The second emerging theme 'Defining the purpose of the WHP' provided evidence that attitudes influence participation and engagement in the WHP. For example, NPF1 said,

> Part of what kept me out of the WHP is the feeling that they deal with problems that already existed. So, people that maybe put on a few too many pounds would

> walk, and think about their eating. So, it seems like it's more about fixing a problem and that hasn't been my situation. So, to an extent, I get the feeling that the WHP is not for me.

This comment demonstrated how one's attitude influences their participation and engagement in the WHP, and in this case, lack thereof. Furthermore, PF2 said, "Some people don't understand the real message or point of the program," which further supports the notion that lack of understanding or having a particular attitude about the WHP most likely influences whether or not employees participate and engage in the WHP.

Sub Question 3. Does satisfaction effect an employee's participation and engagement in their workplace wellness program? None of the three themes appeared to relate to this question, as those who participated in the program had responses that indicated they were satisfied, and those who had not participated had neutral responses in regards to satisfaction. For example, in response to question 5, 'Are you satisfied with the programs and events the WHP has to offer? Why or why not?' NPF 1 said, "I don't think I know about them, so I don't know that I can say that I'm satisfied or unsatisfied, I guess I don't have enough information."

Lastly, theme one 'Administration/supervisor support' appeared to relate to all three sub questions. Both the 'non-participating' and 'participating' focus group participant's responses included comments regarding support, or lack thereof, in relation to the WHP. It appeared those who felt their supervisors were supportive also seemed to be more aware of the WHP. They also appeared to have positive attitudes and satisfaction with the program. For example, PS4 said, "My supervisor is supportive of

my participation in the WHP." Later in the discussion PS4 also said, in regards to the WHP, "It's a wonderful program and it has changed my life a lot." In contrast, those who reported little or no support, mostly those who had never participated, also reported minimal or no program awareness, a neutral level of satisfaction, and attitudes of indifference.

Summary

This chapter presented an overview of the purpose of and results of the study, as well as the study's methodology and description of the research population. Quantitative data analysis revealed some significant differences between the WHP's HSC scores and the normative scores for similar-sized WHPs. Quantitative data analysis also revealed differences in faculty and staff attitudes and awareness regarding the WHP. Qualitative data analysis revealed three major themes, supervisor/administration support, defining the purpose of the WHP, and effective communication and marketing. In Chapter Five, the PI provides a discussion of the findings, implications of the research and personal reflections, as well as recommendations to the program and future research.

Chapter Five: Discussion and Reflection

The purpose of this study was to conduct an analysis of a Liberal Arts University WHP, to assess employees' feedback regarding their program participation, or lack thereof, and whether a difference existed between full-time faculty and full-time staff attitudes, awareness, and satisfaction with the WHP (CDC, 2012b; Hanks et al., 2013). The PI utilized the CDC's HSC to assess whether the WHP had implemented evidence-based health promotion interventions and to identify potential programming gaps. Quantitative data analysis revealed the WHP's total score on the HSC was significantly different from the normative total score for similar-sized WHPs, with the lower score held by the study WHP. Quantitative data analysis also revealed that differences existed, some of which were statistically significant, between the WHP's full-time faculty and staff attitudes and awareness. Furthermore, the quantitative data revealed minimal differences in regards to faculty and staff satisfaction with the WHP, none of which demonstrated statistical significance. Qualitative data presented three emerging themes, administration/supervisor support, defining the purpose of the WHP, and effective communication and marketing.

This study may contribute to the existing literature regarding WHPs, specifically in a university setting where the literature appeared to be particularly limited. The results of this study also provide relevant information for future researchers in the fields of health and corporate wellness education. The following discussion will review the overall results and supporting rationales, implications of the study, and recommendations to the program and future research.

Hypotheses

The following hypotheses were considered in analysis in the study:

H_1: As measured by the CDC's Worksite Health ScoreCard, the WHP total score will be lower than the average total score for similar size WHPs.

H_2: As measured by the researcher-designed survey, a difference will exist between full-time faculty and full-time staff attitudes towards the program.

H_3: As measured by the researcher-designed survey, a difference will exist between full-time faculty and full-time staff awareness of the program.

H_4: As measured by the researcher-designed survey, a difference will exist between full-time faculty and full-time staff satisfaction with the program.

Research Questions

In an effort to further explore employees' feedback regarding their program participation, or lack thereof, and if a difference existed between full-time faculty and full-time staff's attitudes, awareness, and satisfaction with their WHP, the PI investigated the following research question and sub questions:

Main Research Question: How do employees' awareness, attitudes, and satisfaction with their workplace wellness program effect their participation and engagement in the program?

Sub Questions:

1) Does awareness effect an employee's participation and engagement in the workplace wellness program?

2) Do attitudes effect an employee's participation and engagement in the workplace wellness program?

3) Does satisfaction effect an employee's participation and engagement in the workplace wellness program?

Discussion of the HSC

As intended, the PI utilized the HSC to assess whether the WHP implemented evidence-based health promotion interventions and to identify potential programming gaps. The PI obtained a total score for the WHP, and individual scores for the WHP in each of the 15 categories scored within the HSC. Statistical analysis demonstrated a statistically significant difference between the WHP's total score and the normative total score for similar-sized WHPs. Statistical analysis also demonstrated a statistically significant difference in the WHP's scores and the normative scores for the following five individual topics: (1) organizational supports, (2) tobacco control, (3) nutrition, (4) stress management, and (5) lactation support.

Considering the WHP was not comprehensive in nature and was run primarily by part-time staff, the PI noted that only five of the 15 categories assessed demonstrated a statistically significant difference from the norm scores of similar-sized WHPs. However, as hypothesized, there was a significant difference between the WHP's total HSC score and the normative total HSC score for similar-sized WHPs. The PI hypothesized this would be the case, due to knowledge of the WHP's limited resources, such as part-time staff, and the program's lack of integration into the entire university system. The HSC proved to be a valuable tool, as it not only shed light on the WHP's program strengths, but also created awareness of programming gaps and areas that could use improvement.

Discussion of the Web-based survey

Seventy-five of the web-based survey respondents identified themselves as full-time faculty, and 82 identified themselves as full-time staff. Based on group frequencies, the two groups, full-time faculty and full-time staff, were homogeneous in regards to gender representation. However, the groups were not homogeneous in regards to demographics of age, number of years employed at the university, and level of education.

In regards to age, there was a statistically significant difference between faculty and staff within the age range of 18 to 24. Specifically, 0% of faculty and 4.9% of staff identified themselves in this age range. Though not statistically significant, but perhaps noteworthy, the data also displayed more faculty than staff reported their age to be 50 and older, while more staff than faculty reported their age to be between 18 to 34. In regards to level of education, there was also a statistically significant difference between the two groups. Zero percent of faculty reported their highest level of education to be high school diploma or equivalent, whereas 14.9% of staff identified themselves in this category. Again, though not statistically significant, 100% of faculty reported their highest level of education to be a master's degree or higher, compared to 68.3% of staff that had placed themselves in the same category.

In regards to the number of years employed with the university, in the category of zero to five years, statistical analysis demonstrated a significant difference between the two groups. Thirty-two percent of the faculty reported their number of years of employment at the university as being zero to five years, while 56.1% of staff placed themselves in this category. Though not statistically significant, the data also displayed a

trend of more faculty than staff reporting employment with the university for 11 or more years.

Universities are often comprised of a diverse group of employees; therefore, the demographic differences of the survey participants were not necessarily unanticipated. The differences in age and levels of education were likely due to the varying levels of education and years of experience required of most faculty and staff positions. For example, many staff positions such as grounds keeping, food service, and housekeeping often require little or no experience and/or post-secondary education. Therefore, employees holding these and similar positions may have a range in age and levels of education when compared to faculty. Faculty, on the other hand, due to the level of education required of their positions and the amount of time it takes to gain required experiences, typically have higher levels of education and age. Unfortunately, the data collected did not lend itself to assist in drawing conclusions related to possible causes of the statistical difference in number of years employed with the university. The reality is there could be a number of possible influences. Further speculation warrants explorations not covered in the scope of this particular study.

Though demographic data was of value, the primary focus of the web-based survey was to assess employees' feedback regarding their program participation. The web-based survey assessed the attitudes of the full-time faculty and staff through two questions using a Likert scale. Each question stated, 'Please rate how you feel about the following statements on a scale of 1 to 5 (5 being strongly agree),' followed by five statements, for a total of 10 statements reflecting faculty and staff attitudes towards the WHP. Of the 10 statements, statistical analysis found the following two statements to

have statistically significant differences in attitudes between the two groups: ‘My participation in my WHP should lower my monthly health insurance premiums’ and ‘‘Administration is supportive of the WHP.’

In regards to the first statement, ‘My participation in my WHP should lower my monthly health insurance premiums,’ the significant difference appeared to come from 9.3% of faculty selecting ‘strongly disagree,’ compared to 1.2% of staff selecting the same response. The PI’s personal thought as to why more faculty than staff strongly disagreed with the statement was, perhaps faculty viewed this as an infringement on their rights. The PI is not certain why a faculty member would be more sensitive to infringement than a staff member. As a conjecture, perhaps it has something to do with more faculty than staff reporting to be employed with the university for a longer a period. Therefore, faculty may have felt threatened by the thought of a change to the methods in which their insurance premiums were determined. Furthermore, research supported that utilizing disincentives to elicit WHP participation often had a negative impact on employees (CDC, 2013f). Though this particular question did not indicate whether insurance premiums would increase if an employee did not participate in a WHP, faculty may have perceived this to be the case, possibly explaining why more faculty than staff strongly disagreed with this statement. In a 2011 survey of approximately 600 U.S. employers, approximately 50% reported the use of financial penalties, or planned to implement these penalties within the next three to five years on employees who refrained from participation in their WHP (James, 2013). As the trend was moving in this direction, if and/or when the university does decide to base employees’ health insurance premiums on whether or not they participate in the WHP, it would be of most importance

to provide clear communication and explanations on how such a decision will affect employees' health insurance premiums.

In regards to the second statement, 'Administration is supportive of the WHP,' the significant difference between the two groups appeared to be the result of 33.3% of the faculty selecting 'strongly agree' compared to 17.1% of staff selecting the same response. Administrative support of the WHP at both the departmental and executive level is critical because leaders in these positions not only set the workplace culture, but they also assist with creating policies, attitudes, and awareness that may help to facilitate the desire, as well as a sense of permission to participate in the WHP (Hanks et al., 2013). The existing literature on differences in faculty and staff attitudes regarding administrative and or supervisor support of WHPs eludes to staff feeling less support than faculty, especially in respect to participating in WHP activities while at work (RAND Corporation, 2013). Furthermore, non-exempt employees, those paid by the hour, generally staff, typically have less flexible work schedules than exempt employees, those paid a salary, typically faculty. This idea was somewhat supported by comments made in the study focus groups. For example, NPF1 referred to a difference between faculty and staff, specifically stating, "Faculty have a whole different relationship to the university." NPF2 also eluded to an unfairness factor between faculty and staff because some staff have to clock in and out, while faculty are not required to do so. Therefore, faculty could theoretically come and go as they pleased and some staff would have to "ask to leave to get off the clock to go do that." NPF2 further stated, "That would be unfair, um because they would have to make up their time." The literature also supports this notion, recognizing staff, who are typically non-exempt employees, may feel as though it is less

acceptable for them to participate in their WHP activities because they are “on-the-clock” while at work (Hanks et al., 2013, p. 21).

The PI utilized three separate questions in the web-based survey to assess full-time faculty and staff awareness of the WHP. The first question simply stated, ‘Are you aware of the WHP?’. Participants responded either ‘yes’ or ‘no.’ Statistical analysis demonstrated a significant difference between the two groups. Specifically, the difference lied in the number of faculty and staff who responded ‘no.’ Only 4% of faculty said they were not aware of the WHP prior to taking the web-based survey, while over three times the amount of staff, 14.9 %, responded the same.

The second awareness question stated ‘If you answered yes to question #1, (Prior to taking this survey I was aware of the WHP) through what resources have you heard about the WHP?’ (Check all that apply). Of the five options given, flier/posters, university digest, email to your Outlook email, co-worker, and new employee orientation, the only significant difference in awareness between the two groups was with fliers/posters. More faculty (42.7%) than staff (22.6%) selected this resource.

The third question addressing awareness stated, ‘Below is a list of the WHPs events or activities. Please, tell us which ones you were aware of prior to taking this survey. Check all that apply.’ The options given were health screening, group exercise classes, physical activity challenges, Weight Watchers at Work, presentations and workshops on health-related issues, Go Red Luncheon, Spring Employee Appreciation Banquet, and none. Of the eight options, statistical analysis demonstrated a statistically significant difference between the two groups in the four the following options: (1) health

screening, (2) physical activity challenges, (3) presentations and workshops on health related issues, and (4) none.

Prior to, and at the time of the survey, the WHP utilized the university's general announcement system to make announcements related to the program. Often announcements from this platform were academic in nature; therefore, staff may have overlooked or not taken the time to read the announcements, perhaps thinking the announcements did not apply to them. Another possibility was again, at the time of the survey, a systematic process was not formally in place to introduce new hires to the WHP. As mentioned previously, demographic data collected with the web-based survey demonstrated more staff than faculty had been working for the university for zero to five years; perhaps they simply had not been a part of the community long enough to know of the program's existence, or where to find program information. It is possible these particular staff members had supervisors who also may not have been aware of the program, or perhaps they did not support their staff's participation in the program, and therefore made no mention. A possible explanation for the statistical difference in awareness with fliers is again, at the time of this survey, the WHP often accessed the university's general announcement system to communicate announcements including fliers/posters; therefore, staff may have overlooked this resource more than faculty. Additionally, keeping in mind the results of the 2012 Colonial Life survey, which indicated only 41% of employees surveyed felt they had a 'strong grasp' of the wellness programs their employers offered, it is also possible the WHP simply has insufficient communication and awareness efforts in place (Colonial Life, 2012, p. 12).

The web-based survey assessed full-time faculty and staff satisfaction with the WHP through one question using a Likert scale. The question stated, 'Please rate your satisfaction with the following on a scale of 1-5, with a 5 being the most satisfied.' The options that followed were: the WHP, the university's facilities, WHP staff, presentations/workshops, and the WHP's communication on events. Statistical analysis did not indicate statistically significant differences between the two groups on any of the satisfaction related items.

Given that statistical differences did exist between the faculty and staff's attitudes and awareness, this finding is particularly interesting. Perhaps survey respondents simply did not have an adequate level of experience with the WHP to be able to offer an opinion as to whether or not they were satisfied with the options assessed in the survey. This notion seems to be supported by the large percentage of both faculty and staff who selected 'no opinion/cannot judge' to the majority of the satisfaction related options (see Table 11).

Discussion of the Focus Groups

Focus group participant's responses resulted in three emerging themes related to the faculty and staff attitudes, awareness, and satisfaction in regards to the WHP and possible explanations for their participation in the WHP, or lack thereof. The emerging themes are as follows: (1) administration/supervisor support, (2) defining the purpose of the WHP, and (3) effective communication and marketing. These themes were related to the research questions for the study, which were:

Main Research Question: How do employees' awareness, attitudes, and satisfaction with their workplace wellness program effect their participation and engagement in the program?

Sub Questions:

1. Does awareness effect an employee's participation and engagement in their workplace wellness program?

2. Do attitudes effect an employee's participation and engagement in their workplace wellness program?

3. Does satisfaction effect an employee's participation and engagement in their workplace wellness program?

Theme 1: Administration/supervisor support. Though focus group questions 7 and 8 directly addressed support regarding employee health and wellness policies, and supervisor support of participation in the WHP, the theme of administration/ supervisor support continuously emerged in the participant's responses throughout the focus group sessions. For example, in response to question 2, 'What are the benefits, if any, of having an Employee Wellness Program', NPF1 described being in a meeting within the last year where there was a discussion of the WHP benefiting employees. NPF1 had a memory of someone speaking up and saying (in regards to the WHP benefiting employees) 'That would be true if your supervisor would let you go.' Interestingly, in response to the same question, PF1 stated, "Knowing the institution is supportive of you taking a break and participating in the wellness program makes you feel good about getting out and participating in it." In response to question 3, 'What are the drawbacks, if any, of having an Employee Wellness Program?' NPF1 stated, "Not all departments allow their

employees to participate equally." In response to the same question, PF3 said, "Not all administrators support employees' participation in the program." In response to question 7, 'What policies, if any, does your department have to support employee health and wellness?' NPF2 stated, "I believe I have a comfort level that if I wanted to attend any [WHP] event that would be supported by my department and supervisor." NPS1 stated, "Our previous boss was supportive of participating, but they never mentioned any policy about whether or not we can participate." NPS2 said, "My boss has never said anything to me about [the WHP]." PS1 said, "We don't have any policies, but my supervisor is supportive of my participation." In response to question 8, 'Do your supervisors create a supportive environment for your participation in the WHP?' NPF1 stated, "I would say no because it's never been offered by my supervisor. It has never been raised, they've never offered support, and they've never suggested we participate. In essence, permission has never been given." NPF2 stated, "I don't know that they wouldn't, but it's never come up in my department. They've never said we want you to do this, we want you to participate, and what can we do to allow for you to participate." NPS1 said, "My previous direct supervisor was a participant be she wouldn't really encourage us to participate. It was more like, I'm going to participate, I'll see you all later." PS1 stated, "My dean and associative dean are very supportive of living healthy. They've never told me I cannot participate." When asked "Are there any other comments you have in regards to the WHP", question nine, PS1 stated, "I think our deans and supervisors need to encourage their employees to participate in our wellness related activities." PS3 stated, " I think that if supervisors would be more involved and encouraged us to participate or take a break from work and go for a walk, I would be more inclined to do so."

Theme 2: Defining the purpose of the WHP. The second theme that began to emerge from the focus group data analysis was a lack of clarity regarding the purpose of the WHP and what the WHP offers. Though the WHP had an existing mission statement, a declaration of its purpose and intention, based on the focus group respondents' feedback, many were unaware of exactly what that purpose was. For example, in response to question 1 'What are the benefits, if any, of having a WHP?', NPF2 stated,

> If you have time that allows you to exercise or feel better about yourself, you should be a happier employee and feel better about yourself and be a happier human being. But you know I don't know if that happens here with this program.

In regards to the same question, NF1 stated, "I know there's some kind of physical training program, but I don't know if this is actually a benefit of the program." In response to question 2, 'What are the drawbacks, if any, of having an Employee Wellness Program?', NPS1 said, "This is only something that on-site people can participate in." PF2 said, "Some people don't understand the real message or point of the program." When asked question 4, 'What do you know in general about the WHP?' NPF1 said, "I don't know much about it." NPF2 said, in response to NPF1's statement, "I don't either." NPF1 then said, "The only thing I know about it is, you're kind of in it, or you're not in it. And I'm not in it." NPS4 said, "I don't know anything about the program." A few of the participants, mostly those who had participated in the program, were able to give somewhat of a description of the program. For example, PF2 said, "They bring awareness to different types of health issues." PS1 said, "I know they try to do more holistic wellness, so it's not just about being physically fit." In response to question nine, 'Are there any other comments you have in regards to the WHP?' NPF1 said, "Clarity

needs to be given about the program." NPF2 said, "I guess I wonder how the WHP fits with the overall health of our campus." NPF1 also said,

> Part of what kept me out of the WHP is the feeling that they deal with problems that already existed. So, people that maybe put on a few too many pounds would walk, and think about their eating. So, it seems like it's more about fixing a problem and that hasn't been my situation. So, to an extent, I get the feeling that the WHP is not for me.

Theme 3: Insufficient Effective communication and marketing. The third theme that began to emerge from the focus group data analysis was an apparent lack of effective communication and marketing. This theme was especially apparent among those who had never participated in the WHP. Many of the non-participating focus group participant's comments reflected their lack of awareness of the WHP's events, and the WHP in general. For example, in response to question 5, 'Are you satisfied with the programs and events the WHP has to offer? Why or why not? NPF1 said, "I don't think I know about them, so I don't think I can say I'm satisfied or unsatisfied, I guess I don't have enough information." NPF2 said, "I don't really know about them." NPS1 said, "I don't know much about the program so it's hard to say." In response to question 6, 'Here is a hand out with a list of services that the WHP has offered, what factors have allowed for or prevented your participation in these events?' NPF2 said, "I didn't even know these things were happening." In regards to an annual heart disease awareness event/luncheon, NPF1 said, "I think that lunch is part of the in group where they talk about their points and what they're doing and all that stuff." NPS3 said, "I haven't participated because I haven't known about the program."

The faculty and staff's responses indicated a need for more support from the university's administration and employees' direct supervisors. Many participants reported their direct supervisors had never mentioned the program, while some knew of their supervisor's participation, but did not feel as though they could participate. However, it is important to note, 'participating' faculty and staff, those who had previous experience participating in the WHP, did not report as much of a need for support as their peers who had never participated in the WHP.

Furthermore, focus group participants did not seem clear about the purpose or mission of the WHP; this was particularly the case for those who had never participated in the WHP. Some blatantly said, "I don't really know much about it (the WHP)" and "I guess I wonder how the WHP fits with the overall health of our campus." While others gave vague descriptions touching a bit on the program's mission. For example, one focus group participant said, "They bring awareness to different types of health issues." Another said, "I know they try to do more holistic wellness, so it's not just about being physically fit." Still, few participants were be able to give a concise explanation of the WHP's purpose.

Participants' responses also indicated a need for more effective communication and marketing. Some said they had never seen any WHPs announcements or fliers, while others reported 'peripherally' being aware but unable to describe any of the information, they had seen or heard. Again, more non-participating faculty and staff, seemed to feel this way, however, some "participating" members did mention of a need for more communication.

Implications of the Study

Results of the study provided implications for the researched WHP to address employees' feedback regarding their program participation, or lack thereof, and the differences that did or did not exist between the full-time faculty and staff attitudes, awareness, and satisfaction with the WHP. Differences in faculty and staff attitudes towards, and awareness of, the WHP indicated a need for more effective communication to help employees understand the purpose the program as well as the program's offerings. These differences also indicated a need for increased leadership support of the WHP. Administrative support of the WHP at both the departmental and executive level is critical because leaders in these positions not only set the workplace culture, but they also assist with creating policies, attitudes, and awareness that may help to facilitate the desire, as well as a sense of permission to participate in the WHP (Hanks et al, 2013). Results of the study further implicated the WHP lacked several evidence-based health promotion interventions or strategies as recommended by the CDC. According to the CDC (2014b), such best practices and strategies will assist workplaces in preventing their employees from acquiring chronic health diseases, as well as address employees' health and safety needs while at work (CDC, 2014b).

Recommendations to the Program

Based on the results of the WHP's total and individual category HSC scores, the web-based survey, and study focus groups, there is an indication multiple program components require further attention. However, the PI believes there is a need to take a step back even further and address the WHP's infrastructure. The PI would first recommend the WHP's program leaders, along with key university stakeholders, meet to

develop program objectives that will guide the direction and purpose of the program. Though pertinent, the program's existing mission statement is simply not a strong enough foundation from which to build an effective and successful WHP. After program objectives are set, the next step the PI would recommend is to design a detailed plan for the program's infrastructure. The PI would begin with designating the program's home, for example, the Human Resources Department, and then move to determine budgetary and staffing needs, as well as other considerations such as leadership support, policies, and health improvement action plans (CDC, 2014b). Once these structural factors are set in place, program leaders should theoretically have the foundation needed to move forward with additional program recommendations and work toward building an effective and successful program.

The next recommendation to the WHP is to encourage university employees, specifically those who are participating in the university's health insurance program, to complete an HRA. As discussed in chapter two, HRAs not only provide employees with a look into their personal health risks, but they also provide WHP leaders with key information often utilized in the development of intervention outcomes-based programs (HMRC, 2009). Such programs strive to assist employees in changing health risk behaviors that if not changed, often lead to the acquisition of costly and life-threating chronic health diseases.

After the aforementioned recommendations have taken place, the PI believes it would then be appropriate to move forward with recommendations to the program that are as a direct result of data obtained from this study. The results of the WHP's total HSC score demonstrated a significant difference from the total normative score of

similar-sized WHPs, indicating room for additional program strategies to assist with reducing employees' overall risks of chronic disease acquisition. The results further demonstrated a significant difference between the WHP's scores for organizational supports, tobacco control, nutrition, stress management, and lactation support compared to the normative scores of similar sized WHPs. Therefore, the PI would begin with efforts to reduce programming gaps in these five categories.

Organizational supports, as reported by the CDC (2014b), "describes a number of organizational strategies that provide the infrastructure to ensure program objectives are achieved, employee health risks are appropriately managed, and the company's resources are used responsibly" (p. 51). Specific strategies include the designation of "senior leadership support" to serve as role models for the program, as well as a WHP coordinator and a WHP committee to "oversee and manage the program" (CDC, 2013e, p. 1). The CDC (2013e) further recommended the development of the following organizational supports: (1) workplace health improvement plan, (2) identification of the resources needed to "execute" the program, (3) clear and consistent communication, and (4) workplace health informatics system to collect that can be utilized for program planning and evaluation (p. 1).

Tobacco control initiatives may include one or more of the following: (1) tobacco cessation programs provided by the worksite, (2) tobacco use prevention programs, and (3) reduction of workplace tobacco exposure through the adoption of tobacco-free policies (CDC, 2014a).

However, it is important to note, such initiatives take time and special considerations to design and implement. At the time of this research, the WHP did have

an existing tobacco-free campus committee in place, and had been through several steps in the approval process to bring such an initiative to the WHP. However, at the time of this writing, no such efforts have been approved, thus leading to a below average score for the WHP in this particular category. The CDC recommended the use of 'best practices' when undertaking such an endeavor and has created the helpful guide, *Best Practices for Comprehensive Tobacco Control Programs,* 2014, to support communities and organizations who wish to initiate tobacco control programs. Though this particular WHP seems to be well on its way to bringing forth such initiatives, this guide may provide those leading the effort with helpful advice and strategies needed to move the initiative through the approval process.

Nutritional supports at the workplace can come in a variety of forms. Some examples include educational workshops and fliers about nutrition, places at the worksite where employees can purchase foods, nutritional labeling on foods offered at the worksite, healthier options offered during work meetings in which food is served, and providing employees with areas in which they can store and prepare food (CDC, 2014b). While the WHP does offer some of these options, areas that could use specific attention or improvement include healthier options in vending machines, nutritional information on the foods offered at the WHP's cafeteria such as sodium, calories, and trans fats, and designated places for food storage and preparation.

Similar to nutritional supports, there are many options for stress management supports in the workplace. Some examples include providing employees with a dedicated space for relaxation, hosting social events throughout the year, offering stress management programs, provide training for managers on identifying and reducing stress

in the workplace, and providing employees the opportunity to participate in organizational decisions regarding issues at the workplace that affect work-related stress (CDC, 2014b). The WHP has a few such offering in place, such as an EAP, social events throughout the year, and opportunities to participate in activities aimed and reducing stress, for example yoga classes and group relaxation sessions. However, the WHP could improve its stress reduction and identification training for managers and provide employees the opportunity to participate in organizational decisions regarding issues at the workplace that affect work related stress.

Lactation support for working mothers who are breastfeeding was lacking at the WHP. At the time of this study, the only support breastfeeding employees had at the WHP was flexible time for pumping breast milk. The PI would recommend improving lactation support beginning with a written policy regarding breastfeeding while at work and providing employees with a private space designated for pumping breast milk.

Based on the web-based survey and focus group data, the PI would make the following recommendations to the program: (1) increase top down leadership support, (2) create policies regarding participation in the WHP while at work, and (3) improve effective communication and marketing efforts, including communicating the program's purpose and goals, as well as information regarding the program's offerings and events.

Results of the web-based survey demonstrated a significant difference between faculty and staff in regards to the statement 'administration is supportive of the WHP.' Though the survey did not address specific thoughts from the survey respondents regarding this particular topic, data obtained during the focus group resulted in a theme similar in nature. While some focus group participants indicated they felt support to

participate in the program, many felt the opposite and were unclear as to whether or not they had permission to participate in the WHP during their workday. Support in the form of written polices, verbal encouragement, and program participation from administrative leaders and employee supervisors will likely lead to employees feeling supported to participate in the WHP.

Results of the web-based survey also demonstrated a significant difference between faculty and staff awareness of the WHP in general, with less staff than faculty being aware. There were also significant differences between the two groups in the following awareness related items: se of posters and fliers for program communications and WHP events and offerings. Similar to administrative/leadership support, data obtained during the focus group discussion also further supported this finding as many of the focus group participants reported they were unaware of several WHP related items.

There are likely many ways to go about awareness improvement efforts however; the PI would recommend the WHP begin with the following three suggestions: (1) designation of voluntary wellness ambassadors for each department, (2) WHP literature mailed to employees' homes, and (3) a designated area in each campus building for employee related announcements

Voluntary wellness ambassadors can have a large impact in creating awareness with minimal time taken away from their primary responsibilities. Simply taking one to two minutes to make a quick verbal announcement during a department meeting, or passing out fliers to co-workers within the department can assist WHP leaders with wellness promotion and awareness efforts. Sending WHP literature to employees' homes would not only be an additional avenue to increase employees' awareness of the WHP

while at work, it may also help to create wellness and program awareness while employees are home. After all, WHPs by design, intend to support employee wellness both in and out of the workplace. Lastly, universities often utilize designated billboards, or in some buildings, digital monitors, to display announcements pertinent to the study body. It seems feasible for the university to use similar methodologies for the use of displaying employee related announcements. A central location where employees frequent, such as the cafeterias, seem to be the most logical location for such communications.

Recommendations for Future Research

Though this study may contribute to the existing literature regarding WHPs, specifically in a university setting, results of the study also indicate a need for additional research to assess WHP participation and engagement. Lack of employee participation and engagement is, in some ways, the Achilles' heel of a WHP. While the study did explore WHP participation, it did not directly investigate how to increase or create program participation and engagement. Research of this nature will contribute to the industry's existing literature related to WHP best practices, and assist WHP practitioners in discovering program methodologies that may work best to elicit maximal participation in their particular WHP environment (Baicker et al., 2010; Berry, 2010; Hanks et al., 2013; Utah Department of Health Bureau of Health Promotion, n.d.). Such assessments are vital to the ongoing evaluation of WHPs, and are a crucial component to chronic disease management efforts in the U.S. (Sorensen, 2004).

Conclusion

The main purpose of this study was to conduct an analysis of a Liberal Arts University WHP, to assess employees' feedback regarding their program participation, or lack thereof, and whether a difference existed between full-time faculty and staff attitudes, awareness, and satisfaction with the WHP (CDC, 2012b; Hanks et al., 2013). The results of this study indicated differences do exist, some of which are statistically significant, between the WHP's full-time faculty and staff attitudes and awareness. Study results further indicated a need for increased administration/supervisor support and effective communication, as well as refinement of the WHP's purpose.

Due to the large number of working U.S. adults who have, or are at risk of acquiring a chronic disease, effective WHPs are essential to positively influence the future health of our nation. While this may be a strong statement regarding the direction of our nation's health, WHPs are an opportunity to improve health indicators of the entire working population. According to the CDC (2014b), evidence-based comprehensive WHPs that include "individual risk reduction programs, coupled with environmental supports for healthy behaviors and is coordinated and integrated with other wellness activities" is the WHP approach that has been proven to be most effective (p. 5). Research has repeatedly cited the importance of understanding the uniqueness of workplaces and their employee population when administering WHPs. Furthermore, properly designed, and well-managed wellness programs do likely offer a positive ROI, not only in potential monetary savings related to health insurance costs, but also in the overall well-being of the employee (Mudge-Riley, 2013). Lastly, healthy employees, who choose to pursue their personal highest quality of life, not only benefit their families

and communities, as they are better able to care for their loved ones and make meaningful contributions to the communities in which they live.

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Appendix A

University of Michigan Health Management Research Center Health Risk Appraisal

https://www.summithealth.com/University%20of%20Michigan%20HRA.pdf

Appendix B

The CDC Worksite Health ScoreCard

http://www.cdc.gov/dhdsp/pubs/docs/HSC_Manual.pdf

Appendix C

Permission to utilize items or concepts from the USU study

From: Steven Hanks [Steven.Hanks@usu.edu]

Sent: Thursday, September 26, 2013 4:56 PM

To: Walters, Linda

Cc: Dayna Barrett

Subject: Utilization of materials from USU Wellness Study

Linda,

Please feel free to utilize survey items or concepts from the USU study, citing as appropriate. We are in the midst of conducting a second study at present. Have you conducted a literature review as a foundation for your dissertation that you could share with us? We would love to see what you have learned from your review of the existing literature in the field?

Thanks,

Dr. Steven Hanks

Steven H. Hanks, Ph.D.

Director, Graduate Studies in Human Resources

Jon M. Huntsman School of Business

Utah State University

Logan, UT 84322-3555

Telephone: 435-797-2373

Appendix D

The Web-based Survey Informed Consent

You are invited to participate in a research study with the purpose of examining employees' attitudes, awareness, and satisfaction related to the university's employee wellness program. Your participation will take approximately 10 minutes to respond to survey questions.

There are no anticipated risks associated with this research. There are no direct benefits for you participating in this study. However, your participation will contribute to the existing knowledge regarding university employee wellness programs, which may support future programs that may help program participants.

Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

We will do everything we can to protect your privacy. The researcher will not know who has responded to surveys. As part of this effort, your identity will not be revealed in any publication or presentation that may result from this study and the information collected will remain in the possession of the investigator in a safe location.

If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Linda Walters, 636-627-2958, or the Supervising Faculty, Dr. Annie Alameda, 636-949-4152. You may also ask questions or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Jann Weitzel, Vice President for Academic Affairs at 636-949-4846.

Thank you in advance for your participation in completing this survey.

Sincerely,

Linda Walters

Appendix E

The Web-based Survey

This survey has been created to assist in the analysis of the University's Employee Wellness Program. Its purpose is to examine employees' attitudes, awareness, and satisfaction related to the program.

Your responses to the questions in this survey are extremely valuable to the analysis of the program. This survey is entirely anonymous. The research team will receive a summary report in which all survey entries are aggregated. Unless you type your name within a comment window, your responses cannot be identified.

Should you have any questions, please contact Linda Walters at lwalters@lindenwood.edu.

Thank you in advance for your participation in completing this survey.

Sincerely,

Linda Walters

Please answer the questions to the best of your knowledge.

1. Are you aware of the University's Employee Wellness Program?
   Yes
   No

2. If you answered yes to question #1, through which of the following resources have you heard about the program? (Check all that apply)
   Flier/posters
   University Digest
   Email to your Lindenwood Outlook Email
   Co-worker
   New employee orientation

3. Below is a list of the programs and activities. Please tell us which ones you were aware of before taking this survey. (Check all that apply)
   Health Screening
   Group Exercise Classes
   Physical Activity Challenges
   Weight Watchers at Work
   Presentations and workshops on health related issues
   Go Red Luncheon
   Spring Employee Appreciation Banquet

4. Which of the following programs/activities have you attended? (Check all that apply).
   Health Screening
   Group Exercise Classes
   Physical Activity Challenges
   Weight Watchers at Work
   Presentations and workshops on health related issues
   Go Red Luncheon
   Spring Employee Appreciation Banquet
   I have never participated in an activity

5. How would you prefer to receive information related to the program? (Check all that apply)
   University Digest
   Fliers/Posters
   Email sent directly to your university email inbox
   Email sent directly to your personal email inbox
   Mail sent to your home

I would rather not hear about information related to the University Employee Wellness Program

6. Please rate your satisfaction with the following on a scale of 1 to 5 (5 being the most satisfied)

	Dissatisfied	Somewhat Satisfied	No opinion/ cannot judge	Somewhat Satisfied	Satisfied
	1	2	3	4	5
The Program					
University facilities (fitness center, locker room, walking paths)					
Program Staff					
Wellness Presentations/Workshops					
Communication on events					
Other: Please specify					

7. Please rate how you feel about the following statements on a scale of 1 to 5 (5 being strongly agree).

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	5
The program directly benefits me.					
The program staff are knowledgeable and helpful.					
University employees benefit from the University Employee Wellness Program					

My participation in the University Employee Wellness Program should lower my monthly health insurance premium.					

8. Please rate how you feel about the following statements on a scale of 1 to 5 (5 being strongly agree).

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	5
I think the workplace has a responsibility to offer worksite wellness					
I am better able to maintain my health goals when co-workers have similar goals					
I know someone at work who supports my healthy lifestyle improvements					
My direct supervisor supports my involvement in the University Employee Wellness Program					
The university encourages/promotes					

wellness at work and at home					
Administration is supportive of the University Employee Wellness Program					

9. What factors would increase your participation in the University Employee Wellness Program? (Please check all that apply)
   Times programs are offered
   Incentives to participate
   Support from supervisor to attend
   Other:

10. Would you be willing to serve as a Wellness Ambassador (advocate for wellness at the university)? If yes, please contact Linda Walters lwalters@lindenwood.edu.

11. Would you be willing to participate in a study focus group to further express your opinions? If yes, please contact Linda Walters lwalters@lindenwood.edu.

12. Is there any additional information that you would like to share with us about the University Employee Wellness Program?

13. Gender
    Male
    Female

14. Age
    18-24
    25 – 34
    35 - 49
    50 - 64
    65 and over

15. How long have you been employed with the university?
    0 – 5 years
    6 – 10 years
    11 – 15 years
    16 – 20 years
    More than 20 years

16. What is your highest level of education?
    High school diploma or equivalent
    Associate/bachelor degree
    Graduate degree or higher

17. What is your employment classification?
    Full-Time Executive
    Full-Time Faculty
    Full-Time Staff

Thank you for taking the time to complete this survey. Your answers will be submitted once you select the submit button.

Appendix F

Focus Group Informed Consent

You are invited to participate in a research study regarding the University's Employee Wellness Program. The purpose of this study is to examine employees' attitudes, awareness, and satisfaction related to the program. Your participation will take approximately 45-60 minutes to respond to focus group questions.

There are no anticipated risks associated with this research, and there are no direct benefits to you for your participation. However, your participation will contribute to the knowledge that currently exists regarding university employee wellness programs, which may support future programs and benefit future program participants.

Your participation is voluntary and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

We will do everything we can to protect your privacy. The session will be audio recorded and transcribed by a third party, therefore, the researcher will not be able to identify any comments you make. Additionally, as part of this effort, your identity will not be revealed in any publication or presentation that may result from this study, and the information collected will remain in the possession of the investigator in a safe location.

If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Linda Walters, 636-627-2958, or the Supervising Faculty, Dr. Annie Alameda, 636-949-4152. You may also ask questions or state concerns regarding your participation to the Institutional Review Board (IRB) through contacting Dr. Jann Weitzel, Vice President for Academic Affairs at 636-949-4846.

Thank you in advance for your participation in this focus group.

Sincerely,

Linda Walters

Participation in this research study is voluntary. I am free to decline to participate in this research study, or I may withdraw my participation at any point without penalty. My decision whether or not to participate in this research study will have no influence on me present or future status at the university.

Signature _____ Date _____
Research Participant

Appendix G

"Non-Participating" Focus Group Script and Questions

Introduction:

Hello and thank you for coming! My name is _____. I am a _____at the university. You have been asked to participate in this focus group to assist in the analysis the university's Employee Wellness Program. I appreciate your willingness to participate in this focus group.

I will be recording this focus group. Please be assured that any comments you share will remain confidential. My objective is to identify university employees' awareness, attitudes, and satisfaction in regards to the Employee Wellness Program.

There will be 9 questions with each question allowing for no more than 5 minutes of discussion. I will facilitate us moving to the next question as we approach the 5 minute time frame. I will not participate in the discussion, but will be able to provide clarification if needed.

I want you to feel comfortable and invite you to share your opinions freely. Please help yourself to the refreshments that have been provided. In addition, if you have a cell phone please turn it off or put it in silent mode.

Moderator: Let's begin!

1. What is your first thought when you hear the word "Wellness"?
2. What are the benefits, if any, of having an Employee Wellness Program?
3. What are the drawbacks, if any, of having an Employee Wellness Program?
4. What do you know, in general, The University's Employee Wellness Program?
5. Are you satisfied with the programs and events The University's Employee Wellness Program has to offer? Why or why not?

Moderator: Here is a hand out with a list of services that The University's Employee Wellness Program has offered…

6. What factors have prevented your participation in these services?

Moderator: The next two questions focus on support in your work environment.

7. What policies, if any, does your department have to support employee health and wellness?

8. Do your supervisors create a supportive environment for your participation in the University's Employee Wellness Program?

Moderator: The last question I have for you…

9. Are there any other comments you have in regards to the University's Employee Wellness Program?

Moderator: Thank you for your participation.

Appendix H

"Participating" Focus Group Script and Questions

Introduction:

Hello and thank you for coming! My name is _____. I am a _____at the university. You have been asked to participate in this focus group to assist in the analysis of the University's Employee Wellness Program. I appreciate your willingness to participate in this focus group.

I will be audio recording this focus group. Please be assured that any comments you share will remain confidential. My objective is to identify university employees' awareness, attitudes, and satisfaction in regards to the Employee Wellness Program.

There will be 9 questions with each question allowing for no more than 5 minutes of discussion. I will facilitate us moving to the next question as we approach the 5 minute time frame. I will not participate in the discussion, but will be able to provide clarification if needed.

I want you to feel comfortable and invite you to share your opinions freely. Please help yourself to the refreshments that have been provided. In addition, if you have a cell phone please turn it off or put it in silent mode.

Moderator: Let's begin!

1. What is your first thought when you hear the word "Wellness"?

2. What are the benefits, if any, of having an Employee Wellness Program?

3. What are the drawbacks, if any, of having an Employee Wellness Program?

4. What do you know, in general, about the University's Employee Wellness Program?

5. Are you satisfied with the programs and events the University's Employee Wellness Program has to offer? Why or why not?

Moderator: Here is a hand out with a list of services that the University's Employee Wellness Program has offered….

6. What factors have led to your participation in these services?

Moderator: The next two questions focus on support in your work environment.

7. What policies, if any, does your department have to support employee health and wellness?

8. Do your supervisors create a supportive environment for your participation in the University's Employee Wellness Program?

Moderator: The last question I have for you…

9. Are there any other comments you have in regards to the University's Employee Wellness Program?

Moderator: Thank you for your participation.

Vitae

Linda Walters is from St. Louis, Missouri. She has held professional positions in clinical research, post-secondary education, and corporate wellness. She has a strong passion for pursuing a life of optimal well-being and has spent the past 18 years studying various health and wellness theories and methodologies, as well as the dimensions of wellness (occupational, physical, social, intellectual, emotional, and spiritual) and how they relate to the achievement and maintenance of one's personal well-being. She enjoys sharing her passion and helping others who are also in pursuit of discovering ways to achieve fulfillment in life and their personal well-being.

Linda graduated from Southern Illinois University, Edwardsville, in 2004, with a Bachelor of Science degree in Kinesiology, with an emphasis in health and wellness. In 2012, she earned a Master of Arts degree in Teaching from Lindenwood University and obtained her teaching certificate for K-12 health and physical education. She completed her Educational Doctorate in Instructional Leadership with an emphasis in Andragogy from Lindenwood University in the Summer of 2015.