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Complementary and Integrative Health Approaches: an Exploratory Study of Graduate Social Work Faculty Attitudes

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COMPLEMENTARY AND INTEGRATIVE HEALTH APPROACHES: AN EXPLORATORY STUDY OF GRADUATE SOCIAL WORK FACULTY ATTITUDES

by

Jennifer L. Williams

2016

A Dissertation submitted to the Ellen Whiteside McDonnell School of Social Work in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

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An Abstract of

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The use of complementary and integrative health approaches (CIHA) is increasing worldwide and public interest in the mind-body connection continues to grow. A recent national survey reported that over one-third of Americans are utilizing these health approaches (U.S. Department of Health and Human Services, 2016). There is a growing body of empirical literature on the mind-body connection reporting the benefits of the practices on physical and mental health. In addition, recent advances in neuroscience are allowing for a greater understanding of the nature of this connection from a brain perspective and affirm the interplay between individual well-being and the physical and social environment. As interest and use of CIHA by consumers continues to grow, concern has increased that health and mental health professionals be adequately informed about these healing approaches so that they can effectively work with their clients (Kreitzer, Kligler, Meeker, 2009). Since social workers provide the majority of mental health services in the United States (NASW, 2015), it is necessary that they have the knowledge and ability to work with clients who use or may benefit from these

approaches. The extent to which integration of CIHA and mental health treatment will occur in the future will be greatly influenced by the attitudes of social work educators. Many health professions have begun to explore the attitudes toward and knowledge of CIHA of the various stakeholders within their professions. This foundational information has enabled health and mental health disciplines to take a closer look at how students, practitioners, and faculty think about and utilize CIHA and its relevance to their professions. However, there is a paucity of research in the social work profession. This study sought to fill the gap in knowledge about the attitudes and knowledge of CIHA among graduate social work faculty. Graduate social work faculty (*N*=208) were surveyed online about their knowledge and attitudes toward CIHA. The results of this study found that graduate social work faculty had positive attitudes toward CIHA, believed that it should be integrated into social worker's clinical practice, and that little risk was associated with use of these approaches. This study found that there was a positive correlation between level of spiritual perspective and attitude as well. Results indicated that there is already some limited integration of CIHA practices within the curriculum of graduate social work programs, primarily in practice courses.

Keywords: complementary and integrative health approaches, graduate social work faculty attitudes

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To my dearest friend, Amy, thank you. Words cannot adequately describe the

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DEDICATION

This dissertation is dedicated to a man who inspired me to further explore the mind-body connection and dedicate my life to researching new paradigms…..

my husband, Adam.

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CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

Americans are spending almost $34 billion out-of-pocket on complementary and integrative health therapies for health and mental health care (Nahin, Barnes, Stussman, & Bloom, 2009). The use of these therapies such as yoga, mindfulness meditation, deep breathing, acupuncture and chiropractic care have increased in recent years (Clarke, Black, Stussman, Barnes, & Nahin, 2015), with a recent national survey reporting that over one-third of Americans are utilizing these health approaches (U.S. Department of Health and Human Services, 2016). The use of these approaches by minority populations has also increased in recent years with between 19 and 37% of Hispanic, Non-Hispanic Black, Non-Hispanic Asian, and Non-Hispanic Pacific Islander reporting use of at least one of these therapies (Clarke, et al., 2015), Complementary and integrative health approaches (CIHA), formerly referred to as complementary and alternative medicine (CAM), is becoming increasingly recognized by health institutions such as Mayo Clinic, Duke University Medical Center, and Children's Memorial Hospital in Chicago, Illinois (Comarow, 2008), as an effective complement to traditional medicine. Studies have shown that the most common use of complementary health approaches are to improve health and well-being (Greene, Walsch, Sirois, & McCaffrey, 2009; McCaffrey, Pugh, & O'Connor, 2007) or to relieve symptoms associated with side effects of conventional medicine or chronic diseases (Lo, Desmond, & Meleth, 2009; Nahin, Byrd-Clark, Stussman, & Kalyanaraman, 2012).

There is a growing demand by consumers seeking services that their health care providers are aware and knowledgeable about complements to western medical

approaches for symptom relief and healing when their health is compromised (Gehlert & Browne, 2006). Interestingly, more than 40% of people surveyed who used complementary approaches to address a serious medical condition admitted to doing so without disclosing use to medical staff (Block, 2006). The lack of disclosure coupled with an increasing use of CIHA by ethnic and disenfranchised populations (Clarke, et al., 2015; Graham, Ahn, Davis, O'Connor, Eisenberg, & Phillips, 2005) supports the importance of educating the social work profession in complementary and integrative therapies.

Social workers provide most of the direct practice and mental health services in the United States (Gant, Benn, Gioia, & Seabury, 2009; NASW, 2015). They see people within their environment and holistically connect the dimensions that contribute to the overall health and social functioning of a person (CSWE, 2016). Complementary and integrative health approaches (CIHA) are an integral part of this connection. Guided by a person-in-environment framework, the purpose of the profession of social work is to promote both community and human well-being (CSWE, 2016). Social work educators help to shape "the profession's future through the education of competent professionals" (CSWE, 2016, para. 2). In 2005, the Institute of Medicine issued specific recommendations for health care professionals in regards to the scientific and policy implications of use of complementary and integrative health approaches in the United States suggesting: "health profession schools (e.g., schools of medicine, nursing, pharmacy, and allied health) incorporate sufficient information about complementary and alternative medicine into the standard curriculum at the undergraduate, graduate, and

postgraduate levels to enable licensed professionals to competently advise patients about complementary and alternative medicine" (p. 254).

Complementary and integrative health approaches are viable treatment options for trauma victims, for chronic pain, and to improve health and well-being, as advances in neuroscience have begun to show the efficacy of many mind-body therapies (Benson, 2010; McEwen, Eiland, Hunter, & Miller, 2012; McEwen & Gianaros, 2010; Montgomery, 2013; Rossi, & Rossi, 2008; Slagter, Davidson, & Lutz, 2011; Streeter, Jensen, & Perlmutter, 2007;Tang, et al., 2012; Vago, & Silbersweig, 2012; van der Kolk, et al., 2007). The number of people that are using complementary and integrative approaches is on the rise. However, social workers' knowledge of these approaches is lacking (Gant, et al., 2009; Henderson, 2000). In 2000, Henderson conducted a study of the knowledge and use of complementary and alternative practices among clinical social workers. The findings showed that 59% of respondents provided mind-body techniques as direct services, however, only 31% reported having a “great” knowledge of these approaches, suggesting that social workers may be utilizing techniques of which they do not have sufficient knowledge (Henderson, 2000). The National Association of Social Workers (2008) Code of Ethics Standard 1.04 states that social workers should provide competent services within the boundaries of their education and training. Since this time, there have been no studies exploring knowledge, or attitudes towards CIHA in social work. Social workers cannot successfully integrate into their practice toolbox, and advocate for complementary and integrative health therapies, nor understand clients’ prior use of such treatments unless they are familiar with both risks and benefits of these practices. This represents a problem as it is necessary to understand social work

educators' baseline attitudes toward CIHA so that adequate educational programs can be initiated to help mitigate the barriers to incorporating these approaches.

Need for the Study

Numerous current studies address attitudes and perceptions of professionals, faculty, and students in the medical, nursing, psychology, and mental health counseling professions toward complementary and integrative health approaches. (Abbott, et al., 201 1; Akan, et al., 2012; Barnett, & Shale, 2012; Bassman and Uellendahl, 2003; Boutin, et al., 2000; Chang & Chang, 2015; Dougherty, et al., 1999; Halcon, Chlan, Kreitzer, & Leonard, 2003; Jump, et al., 1998; Kim, Erlen, Kim, Sok, 2006; Kreitzer, et al., 2002; Milden & Stokols, 2004; Stapleton, et al., 2015; Topaz, et al., 2012; Wilson, Hamilton, & White, 2012; Wilson & White, 2007; Wilson & White, 2011; Wilson, White, & Hamilton, 2013; Wilson, White, & Obst, 2011). However, in the social work profession, there is a lack of research addressing social work faculty's attitudes related to CIHA despite the fact that these approaches typically are holistic and treat the mind as well as the body. The paucity of research warrants the need for further exploration of graduate social work faculty's attitudes toward complementary and integrative health approaches as it relates to the lack of curricular content in MSW programs.

Purpose of the Study

The study aims to explore the relation of social work faculty knowledge and attitudes towards CIHA to the inclusion of this content in graduate social work curricula. Noteworthy research has been conducted in the medical and allied health and mental health disciplines regarding knowledge, attitudes and beliefs toward CIHA (Abbott, et al., 2011; Akan, et al., 2012; Barnett, & Shale, 2012; Booth-Laforce, Scott, Heitkemper,

Cornman, et al., 2010; Ditte, Schulz, Ernst, & Schmid-Ott, 2011; Halcon, Chlan, Kreitzer, & Leonard, 2003; Kim, Erlen, Kim, & Sok, 2006; Olson, Robinson, Geske, & Springer, 2011; Rojas-Cooley & Grant, 2009; Sierpina, Levine, Astin, & Tan, 2007; Topaz, Johnson, Pinilla, Rand, & George, 2012; Trail-Mahan, Mao, & Bawel-Brinkley, 2013; Wahner-Roedler, Vincent, Elkin, Loehrer, et al., 2006; Wilson, Hamilton, & White, 2012); however, extremely limited research has been conducted in the social work (Henderson, 2000).

Social work educators, through CSWE, determine what CIHA content should be included in both explicit and implicit curricula. Throughout the past 30 years, scholars have addressed the need for CIHA-related content to be included in social work curricula (Behrman, 2012; Berkman, 1984; Collins & Shannon, 1988; Gant, et al., 2009; Henderson, 2000; Keefe, 2011; Lee, Leung, & Chan, 2009; Loveland Cook, Becvar, & Pontious, 2000; MacFadden, 2011; Raheim & Lu, 2014; Starak, 1984; Turner, 1996; Wolf, 2003). Many conceptual articles, presentations, and text books have referenced the emerging evidence in neurobiology that is showing the efficacy of many of these approaches, therefore stating that social work educators must begin to include this in the curricula (Behrman, 2012; Gant, et al., 2009; Keefe, 2011; Lee, et al., 2009; MacFadden, 2011; Raheim & Lu, 2014). However, to date, studies report few courses that address specific skills or courses in complementary or integrative health care (Gant, et al., 2009; Raheim & Lu, 2014). In addition, there has been no research exploring the knowledge, beliefs or attitudes of social work faculty towards CIHA.

CHAPTER II

LITERATURE REVIEW

Introduction

In the past two decades, a paradigm shift has begun in modern medicine and one that Dr. Herbert Benson (2010), mind-body medicine professor of medicine at Harvard University, has referred to as a "mind-body revolution" in the medical world. Complementary and alternative medicine practices, sometimes referred to as integrative health care (IHC) and most recently changed by the National Institutes of Health to Complementary and Integrative Health Approaches (CIHA), in particular, mind-body therapies, are showing to be extremely effective and legitimate approaches to health and mental health care (Benson, 2010; van der Kolk, 2014). Recent advances in technology and neuroscience have begun to validate the efficacy of many mind-body therapies, such as meditation, hypnosis, and mindfulness, as evidenced by demonstrated physiologic changes in the body when these practices are utilized (Rossi, & Rossi, 2008; Slagter, Davidson, & Lutz, 2011; Streeter, Jensen, & Perlmutter, 2007; Tang, Lu, Fan, & Yang, 2012). Similarly, the increased knowledge of trauma has also influenced the rise of complementary and integrative health approaches (Perry, 2010; van der Kolk, 2014; Wynn, 2015).

This has brought into question the manner in which medical, as well as allied health professionals, view and treat physical and mental illness. In fact, this knowledge now has great implications for personal health and the prevention of disease (Eiland, Hunter, & Miller, 2012). There is also a growing body of evidence that is finding that stress has an impact in causing or exacerbating many diseases (Benson, 2010; McEwen et

al., 2012), as well as a direct impact on the immune system (Bhasin, Dusek, Chang, Joseph, Denninger, Fricchione, Benson, & Libermann, 2013). Emerging research indicates that there is a direct connection between the mind, body, and brain and that the mind can heal the body (van der Kolk, Spinazzola, Blaustein, Hopper, Hopper, Korn, & Simpson, 2007; Duros, & Crowley, 2014). Utilizing mind-body techniques, such as mindfulness or the relaxation response, can help clients to prevent life-threatening medical conditions and when used as a complement to medical intervention, can improve a person's physiology, biochemistry, and brain functioning (Holzel, Carmody, Vangel, Congleton, Yerramsetti, Gard, & Lazar, 2011; Benson, 2010).

The potential impact is even more significant for the most vulnerable populations (Anda, Felitti, Bremner, Walker, Whitfield, Perry, Giles, 2006). For example, the psychosocial effects of environmental stress have been attributed to the mental health problems of the urban poor (Ewart & Suchday, 2002). Research has shown evidence that disparities in income and other dimensions of socioeconomic status account for the prevalence of psychopathologies of mood and substance abuse (McEwen & Gianaros, 2010). Also, depending on a person's socioeconomic position, his or her life experience could influence disease risk and well-being through stress related pathways (McEwen & Gianaros, 2010). Key social justice issues such as poverty, abuse, racism, and other forms of oppression are all stressful. Stressful events can affect the structure and function of the brain; affecting normal brain development in newborns and youth, and negatively affecting brain plasticity in adults (McEwen, 2008). The benefits of utilizing mind-body therapies can have the potential to reduce health costs, increase a quality of life, and manifest more optimal level of coping strategies and resiliency (Benson, 2010).

As such, it is critical that social workers working with diverse and vulnerable populations have the requisite skills to engage in conversation with clients that are utilizing these approaches as well as have the knowledge to either integrate into practice or refer to a specialist. This requires that schools of social work adequately prepare students for holistic practice that attends to all aspects of a person's psychological, social, and physical needs, especially when assessing a person's overall well-being. Schools of social work must move beyond the traditional medical model and help students to expand their worldview and explore efficacious mind and body approaches.

Theoretical Framework

This study has been conceptualized under the auspice of two theoretical frameworks: Theory of Planned Behavior (Ajzen, 1991) and Ecological Perspective (Gitterman & Germain, 2008). Literature suggests that both theory and empirical research outcomes will drive the infusion of CIHA into the social work curriculum (Gant, et. al.,2009). The theories that we hold within our professional discipline deeply influences how we explain our attitudes and behavior, interpret data, and design our interventions (Guba & Lincoln, 1986). In order to explore the knowledge and attitudes of graduate social work faculty toward CIHA, a theoretical premise needs to be established. As such, the researcher will discuss the aforementioned theories and articulate the framework for the research study.

Theory of Planned Behavior

The Theory of Planned Behavior is a model that examines people's underlying beliefs that predict human social behavior (Ajzen, 1991) and is well supported in the health and behavioral health fields (Ajzen, 2011; Pawlak, et al., 2008). According to the

Theory of Planned Behavior (TPB), attitude, subjective norms, and perceived behavioral control all feed into and explain behavioral intentions and subsequent behavior (Fig. 1).

Attitudes toward a behavior "are thought to be influenced by behavioral beliefs about the consequences of the behavior and by positive or negative judgments about these consequences" (Pawlak, et al., 2008, p. 60). For example, if a social work educator holds the belief that use of CIHA by clinical social workers is dangerous as it may prevent clients from getting proper treatment, and the social work educator places a high value on proper treatment for clients, the TPB would suggest that their attitude towards utilizing CIHA is negative. This in turn would influence his or her intention to integrate this knowledge into the curricula in which they teach.

Subjective norms refer to the degree to which a person feels social pressure to perform a behavior (Ajzen, 1991). "They are thought to be driven by normative beliefs, beliefs about how significant others would like an individual to act with regard to a particular behavior, and by outcome evaluations, the value the individual places on those normative beliefs" (Pawlak, et al., 2008, p. 60). For example, if a social work educator's colleagues felt that CIHA represented a confused and ill-defined approach and the educator valued his other colleague's opinions, the educator's subjective norm would influence his or her intention to integrate CIHA knowledge into the curricula.

Perceived behavioral control refers to the perception of ease of performing a particular behavior (Ajzen, 1991). "It is influenced both by situational and internal factors that could inhibit or facilitate performing the behavior" (Pawlak, et al., 2008, p. 60). For example, lack of knowledge of CIHA or lack of room in current curriculum to add CIHA content could influence perceived behavioral control. This would then

impact the intention to perform the behavior (including CIHA in the curriculum), and this particular construct is theorized to be the most important predictor of behavior (Ajzen, 1991; Pawlak, et al., 2008).

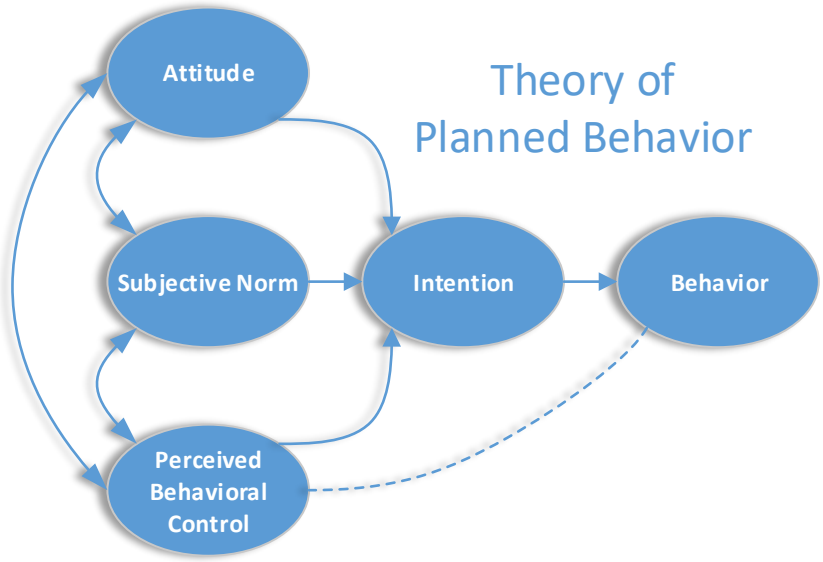

Figure 1 **Theory of Planned Behavior (Ajzen, 1991). *Behavior*- Inclusion of CIHA in graduate social work curricula. *Behavioral intention*- Intention to integrate CIHA into the graduate social work educator's classroom. *Attitude*- a positive or negative score on the PATCAT, assessing attitudes toward CIHA. *Subjective norms*- Social pressure implied by the social work educator's approval or disapproval of engaging in such a behavior, as measured by the Risks subscale on the PATCAT. *Perceived behavioral control*- Perceived ease or difficulty of integrating CIHA into the curricula.**

Using the TPB as a theoretical framework, this study aims to investigate the factors that influence attitudes, including the perceived risks and barriers, and intention to integrate CIHA into graduate social work curricula. Specifically, the study will assess the overall attitude towards CIHA as measured on the PATCAT (Attitude), concerns about the associated risks of use of CIHA as measured by the Risks subscale of the PATCAT (Subjective Norms), and perceived barriers to inclusion of CIHA in their graduate social work curriculum (Perceived Behavioral Control) and explore how each

influences the graduate social work faculty's intention to integrate CIHA in their classroom (Behavioral Intention).

Limitations. While this theory has become one of the most influential models for the prediction of human behavior, it is not without limitations (Ajzen, 2011). It assumes that, regardless of intention, the person has acquired the resources and opportunities to be successful in performing the desired behavior. It does not account for other variables such as past experience, or fear, that factor into behavioral intention. And finally, while it does consider normative influences, it does not take into account economic or environmental factors that may influence a person's intention to perform a behavior (Ajzen, 2011). As such, this study will also use the ecological perspective to explore those factors such as spiritual perspective, institutional auspice, geographic location that may influence a graduate social work faculty member's attitude toward CIHA.

Ecological Perspective

Ecological or ecosystems theory in social work draws from various theoretical foundations including general systems theory and the science of ecology (Gitterman & Germain, 2008). Ecology seeks to explain the reciprocal relationship between organisms and their environment (Gitterman & Germain, 2008). "The ecosystems perspective is a way of seeing case phenomena (the person and the environment) in their interconnected and multilayered reality, to order and comprehend complexity, and avoid oversimplification and reductionism" (Mattaini & Meyer, 1998, p. 5). It provides a way to understand human diversity and explains the relationship between humans and their environments (Mattaini & Meyer, 1998).

Historical Context

Ancient Practices

Mind-body healing is not a new phenomenon in contemporary society. Many ancient and native cultures viewed healing in a holistic manner, connecting the mind, body, and spirit (Harrington, 2008). Dating back to Hippocrates in 4th century BC, it was believed that a combination of a person's attitude, environmental influences, and natural remedies were best for healing (Lycurgus, 2001). Ayurvedic and Chinese medicine, which date back over 2000 years, were rooted in the belief that the mind plays an essential role in healing (Lee, et al., 2009; Harrington, 2008).

Middle Ages

By the 17th century, physicist and philosopher, Rene Descartes, made popular the concept of mind-body dualism, which is the position that the mind and body differ in meaning and as separate entities (van Gijn, 2005; Duncan, 2000). Western medicine became dominated by Descartes's theory of reductionism (van Gijn, 2005). This theory stated the world had clockwork mechanisms like a machine, and that only by examining each of its pieces and then putting them back together to see the larger picture, could this machine be understood (Benson, 2010; Harrington, 2008). This school of thought became known as "Cartesianism" which believed that the mind was merely part of the body machine and did not affect the body (Benson, 2010). According to Benson (2010), this is the current assumption upon which modern Western medical science is still based. This dualistic thinking still permeates everyday Western thinking, including the quest for rationalism and empiricism (Lee, et al., 2009). While this reductionistic way of knowing has led to a great amount of knowledge and technological advances, it promotes a

disconnected and fragmented view of complex systems that are inherently irreducible and require a holistic approach (Lee, et. al, 2009).

Modern Medicine

Until the mid-19th century, folk medicines, as well as a strong reliance on religious faith and prayer, dominated the medical landscape (Benson, 2010). While some of the folk medicines were found actually to have medicinal properties, many other healing remedies, such as bloodletting, were not found to be helpful or ended up causing harm. Benson (2010) suggests that perhaps the reason that some of these folk medicines were effective was not because of medicinal purposes, but because of the power of the mind, or what he refers to as the placebo effect. That is that people believe that something will make them well, and their minds then influence the healing process in their body (Benson, 2010).

The medical discoveries of three scientists in the mid-19th century-Robert Koch, Joseph Lister, and Louis Pasteur- transformed modern medicine by applying scientific discoveries to the understanding, management, and prevention of disease (Harrington, 2008). These scientists placed such a focus on drugs and surgery that other options such as mind and body approaches were disregarded. This period of medical innovation continued well into the 20th century with many cures and medical treatments being discovered (Benson, 2010).

At the beginning of the 20th century, a few scientists began to investigate the mind-body connection (Benson, 2010). One of these researchers, Walter Cannon, discovered the "fight-or-flight response", and hypothesized that there is a physiological response to an emotion such as fear or anxiety (Sternberg, 2002). On the basis of

observation, logic, and deduction, Cannon was "among the first physiologists to apply his scientific background to attempt to explain otherwise inexplicable illnesses and phenomena that that seemed to link to emotions and disease" (Sternberg, 2002, p. 1566). He was never able, though, to progress past the hypothesis stage into the experimental stage in humans, as the tools to do this just did not exist at that time. It is interesting to note that current advances in technology and neuroscience now validate his work (Sternberg, 2002).

Beginning in the 1960s, a wave of scientific mind-body research began (Benson, 2010). Over the next five decades there have been significant medical breakthroughs in mind-body medicine including: identification of the relaxation response, linking mind-body treatments to a number of health conditions and treatments, an expanded understanding of the placebo effect, and interdisciplinary studies showing genetic expression could be altered by utilizing mind-body approaches (Benson, 2010). This evolution undoubtedly led to the National Institutes of Health (NIH) developing a separate division to research promising unconventional medical practices.

The National Center for Complementary and Integrative Health (NCCIH), which is one of 27 centers that make up the National Institutes of Health (NIH), was first established in 1991 as the Office of Alternative Medicine (OAM) for the purpose of investigating “promising unconventional medical practices” (U.S. Department of Health and Human Services, 2016). In 1998, the Office of Alternative Medicine was renamed the National Center for Complementary and Alternative Medicine (NCCAM) (U.S. Department of Health and Human Services, 2016). Over the following sixteen years, the NCCAM continued to grow, conducting rigorous scientific investigations into the

efficacy and safety of many complementary and alternative interventions, including the "largest nationally representative survey to date on Americans' use of complementary health approaches" (U.S. Department of Health and Human Services, 2016). In December 2014, the Center's name was changed to the National Center for Complementary and Integrative Health "to more accurately reflect the Center's research commitment to studying promising health approaches already in use by the American public" (U.S. Department of Health and Human Services, 2016). In collaboration with the Centers for Disease Control and Prevention's National Center for Health Statistics, the NCCIH included questions on the use of complementary health approaches on the National Health Interview Surveys conducted in 2002, 2007, and 2012 (U.S. Department of Health and Human Services, 2016).

The NCCIH provides a revised classification system than that which had been used in the past that divides CIHA modalities into two categories: natural products and mind and body practices (U.S. Department of Health and Human Services, 2016). Natural products include dietary supplements, vitamins, herbs, and probiotics. Mind and body practices "include a large and diverse group of procedures or techniques administered or taught by a trained practitioner or teacher", such as yoga, meditation, hypnotherapy, chiropractic, and tai chi (U.S. Department of Health and Human Services, 2016).

In 2002, the National Center for Complementary and Alternative Medicine (now NCCIH), the Agency for Healthcare Research and Quality, in addition to 15 other NIH (National Institutes of Health) institutes and centers commissioned the Institute of Medicine (IOM) to conduct a study to explore to use of CIHA by the American public

(Institute of Medicine, 2005). A special CIHA committee was created, and over the next year and a half gathered data from various federal agencies, researchers, educators, practitioners, patients, and both the CIHA and conventional medicine communities (Institute of Medicine, 2005). The committee issued a report in 2003 identifying major policy, scientific, and practice issues related to CIHA, as well as recommendations for practice and research communities (Institute of Medicine, 2005). One of the many recommendations included that health profession schools must incorporate information about complementary and alternative therapies into the curriculum at all academic levels (Institute of Medicine, 2005).

Connection to Social Work

The primary mission of the profession of social work is to enhance human well-being with a particular focus on the individual in a social context and the well-being of society (NASW, 2008; Rishel, 2015). A factor that distinguishes social work from other helping professions is its ecological, person-in-environment perspective, as well as the concern of social justice with vulnerable and oppressed populations (Lee, et al., 2009; Rishel, 2014). Historically, social workers have adopted a philosophy of prevention, as seen in settlement house services and the Federal Children's Bureau (Marshall, et al., 2011; McCave & Rishel, 2011; McCave & Rishel, 2013; Rishel, 2015). Efforts aimed at preventing "future problems clearly enhance human well-being, affirming the value of individual persons and promoting the well-being of society" (Rishel, 2014, p. 753). Interventions aimed at reducing social and health disparities are an extremely important aspect to the pursuit of social justice, and they reflect a preventative approach to practice (Bracht, 2000).

A growing body of evidence is beginning to show the efficacy of many complementary and integrative health approaches as preventative measures, especially as it relates to stress (Benson, 2010; Eiland, Hunter, & Miller, 2012; McEwen et al., 2012). Much of this evidence however, is related to interventions utilized in the clinical or micro practice of social work. While social workers today can address human well-being through various roles, some feel that the profession has drifted away from its origins of social justice. Specht and Courtney (1994) make a case in their book that the social work profession has lost its roots in community-level intervention with underserved and oppressed populations in favor of individual psychotherapy. Social work has evolved into a broad profession that is present in many areas of social structure, including healthcare and acceptance of the medical model (Specht and Courtney, 1994).

Empirical Validation of the Mind-Body Relationship

Research continues to mount that complementary and integrative therapies, such as mind-body approaches, are effective in treating many mental health conditions, in particular anxiety and post-traumatic stress disorder (Benson, 2010; Streeter, et. al, 2007; Tang, et al., 2012; Vago, & Silbersweig, 2012; van der Kolk, et al., 2007). This is because trauma occurs deep in the core of the body and the brain (van der Kolk, et al, 2007); therefore, the most effective treatment approaches integrate traditional therapeutic modalities with those that focus on calming the nervous system such as mindfulness, yoga, deep breathing, and eye movement desensitization and reprocessing (Duros, & Crowley, 2014).

In response to a threat of any kind, the amygdala, which is part of the limbic system in the brain, sounds off an alarm (McEwen & Gianaros, 2010). Once the

amygdala sends that alarm, there are several other reactions that automatically begin to happen. The thalamus, which is the major "relay station" for sensory information in the middle of the brain, sends a "wake-up" signal to the brain stem (Arnsten, 2009; McEwen, et al., 2012). The brain stem's response is to begin releasing norepinephrine, a stimulating chemical, throughout the brain (Arnsten, 2009; McEwen, et al., 2012). Signals are then sent by the sympathetic nervous system to all the major organs and muscle groups in the body so that they can be ready to either fight or flee (Lazar, et al., 2000). In turn, the hypothalamus, which regulates the endocrine system, prompts the pituitary gland to signal the adrenal glands to release the stress hormones adrenaline and cortisol (Arnsten, 2009; McEwen, et al., 2012). Cortisol then activates the stress reactions in a feedback loop by causing even further stimulation of the amygdala by the brain stem, producing even more cortisol. Increased production of cortisol suppresses the hippocampus, which signals the amygdala alarm bell and results in even more cortisol production (Jacobs, et al., 2011). This is an automatic process that is particularly significant for people that have experienced trauma. When a person is under constant threat, the amygdala becomes more sensitized and activated leading to a constant state of hyperarousal (Jacobs, et al., 2011).

For example, youth with complex trauma have dysregulated neurobiological stress systems (DeBellis, Keshevan, Clark, Casey, Giedd, Frustaci, & Ryan, 1999), and often utilize maladaptive coping strategies to deal with the elevated levels of stress (Ford, Cortois, Steele, van der Hart, & Mijenhuis, 2005). Cohen, et al., (2012) suggest that therapists help youth affected by trauma to develop more effective coping strategies to reverse longstanding hyperarousal. Kliethermes and Wamser (2012) suggest that

physically-based strategies such as yoga and progressive muscle relaxation may be more useful than cognitive-based ones such as mindfulness, at least in the early coping skills phase. Educating clients to become aware of when they are in hyperarousal and to use tools that will activate their parasympathetic nervous system, which is linked to one's feelings of relaxation or calm, is the key to achieving a sense of peacefulness and well-being (Duros & Crowley, 2014).

Mind-Body Approaches

Many trauma symptoms do not resolve with talk therapy alone (Perry, 2010). Complementary and integrative health approaches may offer alternative options to existing treatment modalities for posttraumatic stress disorder, among other trauma based disorders. Complementary health approaches are defined by the National Center for Complementary and Integrative Health (NCCIH) as "practices and products of non-mainstream origin" (U.S. Department of Health and Human Services, 2016). Integrative health approaches are defined as "incorporating complementary approaches into mainstream health care" (U.S. Department of Health and Human Services, 2016). Complementary health approaches are divided into two categories: natural products and mind and body practices. Mindfulness, meditation, hypnosis, progressive muscle relaxation, and deep breathing are all examples of mind-body therapies (U.S. Department of Health and Human Services, 2016). As natural products include herbs and vitamins and minerals, the focus of this study will be on mind and body practices.

Emerging research is identifying effective mind-body approaches to reduce stress and/or ameliorate the effects of stress and trauma (Duros & Crowley, 2014). It is important to note that each of these approaches are tools that work with the central

nervous system, the limbic system, and brainstem, helping to improve symptoms of PTSD and self-regulation (Duros & Crowley, 2014), further supporting the mind-body connection.

Acupuncture. Emerging evidence is beginning to show the efficacy of acupuncture for chronic pain, as well as a variety of mental health disorders such as posttraumatic stress disorder (Engel, Cordova, Benedeck, et al., 2014; Kim, Heo, Shin, et al., 2013; Pilkington, Kirkwood, Rampes, et al., 2007).

Chiropractic/Spinal Manipulation. Numerous clinical trials have shown that spinal manipulation is as effective as other interventions for improving physical and mental health function and reducing pain (Bialosky, Bishop, Robinson, et al., 2009; Bronfort, Haas, Evans, et al., 2010; Ferreira, Ferreira, Latimer, et al., 2007; Hoiriis, Pfleger, McDuffie, et al., 2004; Hurwitz, Morgenstern, Kominiski, et al., 2006; Machado, Kamper, Herbert, et al., 2009). A recent study found that when compared with placebo and not treatment, spinal manipulation significantly reduced pain sensitivity in adults (Bialosky, George, Horn, et al., 2014).

Hypnosis. Hypnosis involves cognitive processes like imagination in which a person is guided by a hypnotist to respond to suggestions for change (American Society of Clinical Hypnosis, n.d.a.). Sometimes, people are trained in self-hypnosis, in which they learn to guide themselves through a hypnotic procedure. There are two (2) components of a hypnotic procedure: hypnotic induction and hypnotic suggestions. A hypnotic induction is an introduction to hypnosis in which the client is guided through suggestion to relax, concentrate or focus on a particular thing. Hypnotic suggestion is

where the client is guided to undergo changes in experience (American Society of Clinical Hypnosis, n.d.a.).

Although it has been utilized in psychological and medical practice for over 200 years, its definition and acceptance as a form of treatment has changed often and continues to evolve today (Lynn, Rhue, & Kirsch, 2010). Benson, Arns, & Hoffman (1981) state that during the induction period just prior to experiencing hypnotic phenomena, the body experiences physiological changes similar to the relaxation response. A decrease in heart rate, respiratory rate, and blood pressure occur first, and then other hypnotic phenomena, such as perception distortions, age regression, and post-hypnotic suggestion occur (Benson et al, 1981). It is because of these reasons that historically, hypnosis has been used as a direct form of treatment in the alleviation of medical symptoms (Lynn et al., 2010), as a means of accessing dissociated traumatic memories (Gravitz, 1994), and as an anesthetic prior to surgery (Upshaw, 2006). As hypnosis has evolved over time, it has become better known as an adjunctive tool used in combination with other therapeutic approaches such as psychodynamic therapy, cognitive behavioral therapy, or medical treatment, and often is referred to as hypnotherapy (Voit & DeLaney, 2004). The evidence provided by modern neuroscience confirms what we have intuitively known about hypnosis for centuries, that we are what our thoughts make us.

While its development has been valuable in the evolution of hypnosis into a modern therapeutic approach, the difficulties in understanding hypnosis from a biological perspective had been an area of ongoing debate until the advent of neuroimaging technology. Medical pioneers such as Anton Mesmer and James Braid, who originally

explored therapeutic hypnosis as a method of healing, had little understanding of how it worked (Rossi & Rossi, 2008).

Within the past generation, however, the new discipline of neuroscience has emerged with new technologies for the scientific investigation of the natural relationships between mind and body (Rossi & Rossi, 2008). Mirror neurons mediate empathy in psychotherapy and rapport in therapeutic hypnosis. Rossi and Rossi (2006) suggest that Milton Erikson's pantomime techniques on resistant subjects may have very well been activating and utilizing mirror neurons to facilitate their hypnotic induction. It is known that neuroplasticity is the scientific indication of the intuitive underpinnings of mind-body medicine (Doidge, 2007). It is because of this evidence that it is now known that mental experience really can drive fundamental change in brain structure. Hypnotic interventions are evidence-based therapies for many psychological and physical conditions, and hypnosis serves as a research tool in many areas of neuroscience (Vandenberg, 2010).

Findings from a study evaluating the benefits of hypnotherapy with adults with PTSD showed there was a significant main effect of hypnotherapy treatment with PTSD symptoms as measured by the Posttraumatic Disorder Scale. In addition, researchers found that this effect was preserved at follow-up one month later (Abramowitz, Barak, Ben-Avi, & Knobler, 2008). Findings also included decreases in intrusion and avoidance reactions and improvement in all sleep variables assessed (Abramowitz, et al., 2008).

Massage Therapy. Emerging evidence is demonstrating that massage therapy is an effective complementary treatment for reducing stress, muscle tension and pain, as well as increasing weight and positively effecting development in infants (Chaibi, &

Russell, 2014; Field, 2014; Majchrzycki, Kocur, & Kotwicki, 2014; Pan, Yang, Wang, Zhang, et al., 2014; Yang, Zhao, & Wang, 2014). A recent randomized, controlled trial was conducted to assess the effect of massage therapy on the development and growth of infants born to HIV-infected mothers in a low socio-economic community in Cape Town, Africa (Perez, Carrara, Bourne, Berg, et al., 2015). Results showed that massage therapy improved the overall development of the HIV-exposed infants. In addition, this technique also had a significant effect on the speech and hearing of the infants in this study (Perez, et al., 2015).

A systematic review of studies on the biochemistry of massage therapy found that this approach increased levels of serotonin and dopamine and decreased levels of cortisol on a variety of stressful experiences and medical conditions (Field, Hernandez-Reif, Diego, Schanbert, et al., 2004). This review included studies on depression, sexual abuse, HIV, breast cancer, pain syndrome, chronic fatigue, pregnancy stress, and work-related stress. It was concluded that massage therapy has stress-alleviating effects, such as decreasing cortisol levels, and activating effects, such as increasing dopamine and serotonin for the aforementioned conditions (Field, et al., 2004).

Mindfulness and Meditation. For over 2500 years, it has been claimed that meditation can bring about a wide range of benefits to the body and mind (Vago & Silbersweig, 2012). Meditation is a process by which people learn to focus their attention as a way of gaining greater insight into themselves and their surroundings (Vago & Silbersweig, 2012). A survey conducted in 2007 by the National Institutes of Health reported that 9.4% of adults surveyed utilized some form of meditation (Barnes, Bloom, & Nahin, 2008). Mindfulness is considered to be a type of meditation, heavily influenced

by Jon Kabat-Zinn's Mindfulness-Based Stress Reduction (MBSR) course that is an adaptation of Buddhist techniques intended for general stress reduction (Kabat-Zinn, 1990). Mindfulness is a state of being cultivated through a meditation or contemplation practice that encourages presence, openness, compassionate acceptance, witnessing, and non-judgment (Kabat-Zinn, 1994).

Recent neuroscience research has begun to examine the effects of meditation practices, such as mindfulness, on specific areas of the brain through neuroimaging studies (Chen, Berger, Manheimer, et al., 2012; Slagter, Davidson, & Lutz, 2011). It has been shown to develop empathy and compassion centers in the brain, which holds great promise for survivors of complex childhood trauma as they work to cultivate alternative ways of negotiating their lives and relationships. A 2011 study found that people who meditate were able to increase the density of gray matter in the hippocampus of the brain, as well as in other areas related to memory, self-awareness, empathy, and learning (Holzel, Carmody, Vangel, Congleton, Yerramsetti, Card, & Lazar, 2011).

Meditation has been found to be a useful adjunct to treatment of veterans with PTSD (Bormann, Torhp, Wetherell, Golshan, and Lang, 2013) and adult survivors of childhood sexual abuse (Kimbrough, Magyari, Langenberg, Chesney, & Berman, 2010). Statistically significant improvements in depression, mental health status, and spiritual well-being have been found.

Movement Therapies. Movement therapies include a number of approaches that are used to promote mental, physical, spiritual and emotional well-being (U.S. Department of Health and Human Services, 2016). Findings from neuroscience posit that "mental functions cannot be fully understood without reference to the physical body and

the environment in which they are experienced" (Schmalzl, Crane-Godreau, & Payne, 2014, p. 1). Kinesthetic awareness is at the core of many movement based contemplative practices. Although challenges arise when Western researchers study practices that are based on a non-dualistic view of the mind and body, emerging research is beginning to show the efficacy for many movement therapies such as Tai Chi and Qigong in reducing depressive symptoms (Schmalzl, et al., 2014; Ndetan, Evans, Williams, et al., 2014; Liu, Clark, Siskind, et al., 2015).

Relaxation Techniques. The goal of relaxation techniques are "to produce the body's natural relaxation response, characterized by slower breathing, lower blood pressure, and a feeling of increased well-being" (U.S. Department of Health and Human Services, 2016, para. 4). A study conducted in 2013 found that eliciting the relaxation response produces immediate changes in the expression of genes involved in energy metabolism and immune function (Bhasin, Dusek, Chang, et al., 2013).

Yoga. The holistic goal of yoga is to promote physical and mental health, as well as be spiritually and socially conscious. With its origins in ancient India, yoga incorporates physical postures, controlled breathing, deep relaxation and meditation (Javnbakht, Hejazi Kenari, & Ghasemi, 2009). Clinical studies have noted an increase in gamma-aminobutyric acid (GABA) levels in yoga asana sessions (Streeter, Jensen, & Perlmutter, 2007), in addition to a decrease in cortisol, and promotion of frontal electroencephalogram (EEG) alpha wave activity which improves relaxation (Kamei, Toriumi, Kimura, Ohno, Kumano, & Kimura, 2000).

A 2010 study showed that there was a 60% decrease in PTSD symptom severity using yoga breath, concluding that this intervention may help to relieve psychological distress following mass disasters (Descilo, et al., 2010).

A trial study on yoga and mindfulness as a school-based intervention for urban youth was conducted with 97 fourth and fifth graders in four Baltimore City public elementary schools (Mendelson, Greenberg, Dariotis, Feagans Gould, Rhoades, & Leaf, 2010). The intervention group reported significant improvements on the overall responses on a stress scale compared to the control group, as well as significant differences were found on three of the five subscales-rumination, intrusive thoughts, and emotional arousal (Mendelson, et al., 2010). This intervention group's reduction in stress reactions suggests that this intervention is effective in helping youth self-regulate their emotions and reduce worrying thoughts (Mendelson, et al., 2010).

Yoga has been found to be an efficacious complement to PTSD treatment (Wynn, 2015). It has been found to be extremely beneficial when used in response to combat and interpersonal violence to decrease stress and anxiety (Clark, Lewis-Dmello, & Anders, et al., 2014; Staples, Hamilton, & Uddo, 2013). A more recent and significant study was conducted with women diagnosed with treatment-resistant PTSD (van der Kolk, et al., 2014). It was found that when compared to the control group, yoga significantly reduced PTSD symptoms (van der Kolk, 2014).

Mind-body interventions are empirically based and efficacious. Social work increasingly advocates evidence-based practice and the use of empirically tested interventions (Stanhope, Tuchman, & Sinclair, 2011). The preceding discussion identifies several complementary and integrative health approaches that address multiple

critical issues faced by social work clients in contemporary society. As such, social workers need to be knowledgeable of complementary and integrative health approaches and consider utilizing these as a part of their "toolkit". However, many of them lack adequate training, skill, and education (Henderson, 2000). Schools of social work lag behind as the other helping professions have begun to explore factors that influence attitudes toward complementary and integrative approaches, as well as incorporating courses into their curriculum (Booth-Laforce, Scott, Heitkemper, Cornman, et al., 2010; Ditte, Schulz, Ernst, & Schmid-Ott, 2011; Halcon, Chlan, Kreitzer, & Leonard, 2003; Kim, Erlen, Kim, & Sok, 2006; Olson, Robinson, Geske, & Springer, 2011; Rojas-Cooley & Grant, 2009).

Utilization of CIHA in the United States

The prevalence of CIHA use is growing, with the NCCIH reporting on the 2007 National Health Interview Survey that more than one-third of Americans indicated that they used some form of CIHA, spending close to $34 billion out-of-pocket on services or products (Barnes, Bloom, & Nahin, 2008). One possible reason for the increase in use may be due to the rising costs of medications as well as the increasing lack of health insurance (Ananth & Martin, 2006). Because of these reasons, many adults are seeking alternatives to their mental health and health care. Preliminary data from the 2012 survey affirms that approximately 33 percent of adults in the United States used complementary health approaches, with the most common mind and body approaches being yoga, meditation, massage therapy, and chiropractic manipulation (Clarke, Black, Stussman, et al., 2015). The use of yoga among older Americans increased from 5.2 percent in 2002 to 7.2 percent in 2012 (Clarke, et al., 2015), and in children increased from 2.3 percent in

2002 to 3.1 percent in 2012 (Black, Clarke, Barnes, et al., 2015). It also reported that nearly 18 million adults practice meditation (Clarke, et al., 2015).

A recent analysis of the 2007 National Health Interview Survey revealed that adults with lower income levels and education are less likely to know about and use complementary and integrative health approaches (Burke, et al., 2015). It was concluded in this study that if people that had health problems are aware of complementary and integrative health approaches that are clinically appropriate, they may use them. The implication of this finding is that a root of health inequity is the lack of access to health knowledge (Burke, et al., 2015).

Baum, et. al. (2015) found in a recent study of cancer patients that attitudes about CIHA predict use of these therapies. The study also found that attitudes toward CIHA varied by sociodemographic factors such as race, sex, and education (Baum, et al., 2015).

Sociodemographic Factors

Several variables have been identified in the literature as influential with regard to the utilization of CIHA including age, gender, level of education (Baum, et al., 2015; Morano, Giunta, Parikh, et al., 2013; Upchurch & Chyu, 2005), and spiritual and religious beliefs (Curlin, Rasinski, Kaptchuk, Emanuel, Miller, & Tilburt, 2009; Furnham & Beard, 1995). Previous studies of people who utilize complementary and integrative health approaches in America, Canada, and Australia have found that age and gender were predictive of CIHA use, and users were likely to be younger and female (Astin, 1998; Eisenberg, et al., 1993; Kelner & Wellman, 1997; MacLennan, Wilson, & Taylor, 1996; Morano, et al., 2013). Research has also found that younger people perceive CIHA

as less risky and hold more positive attitudes toward CIHA (MacLennan, Myers, & Taylor, 2006).

Studies have demonstrated that CIHA utilization is highest amongst individuals who are female (Morano, et al., 2013), adults aged 30-69, have higher levels of education and higher incomes (Barnes, et al., 2008; Nahin, et al., 2009; Upchurch & Chyu, 2005). Ethnicity also appears to influence the utilization of CIHA in the United States. According to the 2007 National Health Interview Survey, American Indian or Alaska Native adults (50.3%) and White non-Latino adults (43.1%) were more likely to utilize complementary and alternative approaches than Black (25.5%), Latino (23.7%), or Asian adults (39.9%) (Barnes, et al., 2008).

Religiosity and Spirituality

Understanding the biological, psychological, social, and spiritual components of a person's life is an important part of the holistic approach (Freeman, 2005). Often, those that have experienced a traumatic event in his/her life will turn to the use of religion, spirituality, and CIHA as it is perceived that these approaches are more client-centered and holistic than traditional modalities (Adler & Fosket, 1999; Cassileth, et al., 1984; Chandiramani, 2014; Curlin, Rasinski, Kaptchuk, Emanuel, et al., 2009; Heathcote, West, Hall, Trinidad, 2011; Maskarinec, Shumay, & Kakai, 2000; Peres, Moreira-Almeida, Nasello, & Koenig, 2007).

Nicdao and Ai (2014) conducted a study that explored religion and the use of CIHA practices among middle-aged and older cardiac patients. Their findings showed that more than two-thirds of participants (80.9%) utilized at least one form of CIHA, and there was a positive association between religiosity and CIHA use. The researchers also

found that the following variables predicted greater utilization of CIHA: income, education, employment, and religiosity (Nicdao & Ai, 2014).

Knowledge and Attitudes Toward CIHA Among Various Health Professions

Many studies exploring the attitudes of various stakeholders in health and mental health disciplines have helped researchers understand the nature of mind-body medicine in relation to their profession. That has provided a foundation for further research into education, treatment, and the use of CIHA.

Medicine

The greatest amount of literature exploring the knowledge, attitudes, and beliefs of students, professionals, and faculty exist in the medical field, with the majority focusing on medical student or physician attitudes and beliefs (Abbott, et al., 2011; Akan, et al., 2012; Boutin, et al., 2000; Dougherty, et al., 1999; Jump, et al., 1998; Kreitzer, et al., 2002; Milden & Stokols, 2004; Topaz, et al., 2012). Younger, less experienced, female physicians were more likely than their older, more experienced male counterparts to recommend CIHA therapies to their patients (Sewitch, Cepoui, Rigillo, & Sproule, 2008). Sewitch, et al., (2008) found discrepancies between attitudes and clinical practice behaviors, such that positive attitudes toward CIHA was not reflected in physicians' referral patterns. In addition, Brems, Johnson, Warner, & Weiss, 2006, found that rural practitioners were found to have suggested CIHA to their clients more often than urban providers.

Nursing

There is a considerable amount of literature in nursing exploring the knowledge, attitudes and beliefs of students and nurses towards CIHA. In one study, respondents

reported a lack of knowledge or education in CIHA yet held positive attitudes toward CIHA (Chang & Chang, 2015).

Fewer studies have focused on the knowledge, attitudes and beliefs of nursing faculty towards CIHA (Halcon, Chlan, Kreitzer, & Leonard, 2003; Kim, Erlen, Kim, Sok, 2006). Halcon, et al., (2003) conducted a cross-sectional survey exploring the beliefs and attitudes of nursing faculty and graduate students at one school of nursing towards CIHA and the implications for nursing education. More than 95 percent of the 170 respondents expressed positive attitudes towards CIHA, agreeing that clinical care should integrate the best of complementary and alternative medicine with conventional practices (Halcon, et al., 2003). Also, very few respondents had received any formal training for CIHA, and more than 86 percent felt the most important perceived barrier to incorporating CIHA into practice was the lack of evidence (Halcon, et al., 2003). Despite that, other studies have shown a positive correlation between knowledge and attitudes (Chaterji, Tractenberg, Amri, & Lumpkin, 2007; Ricacard & Skelton, 2008; Rosenbaum, Nisly, Ferguson, & Kligman, 2002), these respondents had very favorable attitudes toward integrating CIHA into education and clinical care, but limited personal experience or education (Halcon, et al., 2003).

Another study explored undergraduate and graduate students and faculty members' knowledge of, experience with, and attitudes toward CIHA (Kim, et al., 2006). Of the 153 respondents, more than 85 percent expressed positive attitudes toward integrating CIHA into the undergraduate nursing curricula (Kim, et al., 2006).

Psychology

Numerous studies have explored the knowledge, use, attitudes and beliefs toward complementary and integrative therapies of psychologists (Barnett, & Shale, 2012; Bassman and Uellendahl, 2003; Stapleton, et al., 2015; Wilson, Hamilton, & White, 2012; Wilson, & White, 2007; Wilson & White, 2011; Wilson, White, & Hamilton, 2013; Wilson, White, & Obst, 2011) Findings held that psychologists' attitudes toward CIHA are generally positive (Bassman and Ullendahl , 2003) and that a slight majority were already referring clients to CIHA practitioners (Wilson, White, & Obst, 2011).

Wilson and White (2007) developed a scale titled Psychologist's Attitudes toward Complementary and Alternative Therapies (PATCAT) by adapting several attitude scales developed for use in medicine (Halcon, et al., 2003). The researchers cited the lack of a scale that can assess beliefs and attitudes of psychologists and other mental health professionals as the reason for development. Another reason cited for developing the scale was the need for knowledgeable professionals who can refer, ethically treat, and create policies regarding CIHA. Findings of this study showed that psychologists' attitudes toward CIHA were generally positive and that clinical care should include the best of conventional and complementary modalities. However, psychologists in this study were less likely to agree that knowledge about these therapies should have been integrated into their training or that knowledge of these practices was important to them as a practicing psychologist.

Another study surveyed 1,000 members of the American Psychological Association, asking about attitudes toward, use of and beliefs about complementary and alternative medicine (Bassman & Ullendahl, 2003). The authors concluded that the

respondents were generally positive about these approaches but were also ambivalent and in some cases opposed to the use of these approaches as treatment for mental health issues. The majority of respondents said they were interested in learning more about CIHA, viewed alternative approaches as legitimate, and were already recommending CIHA to clients. The authors of this study made the suggestion that educational programs should be providing more coursework in the area of CIHA.

Marriage and Family Therapy

Two national surveys have explored the practices, attitudes and beliefs of marriage and family therapists and both found this population to have positive attitudes and beliefs about CIHA, as well as the integration of CIHA into clinical practice (Caldwell, et al., 2006; Olson, et al., 2011). Caldwell, et al., (2006) conducted a national study looking at the relationship of marriage and family therapists and CIHA. Participants (*N*=424) were asked about their level of knowledge of several CIHA modalities, attitudes toward CIHA, and beliefs about use in marriage and family therapy. The results indicated that marriage and family therapists had some knowledge of common practices (71%) and were aware of their clients' use of CIHA. Less than half surveyed (46.5%) indicated that they had knowledge of a CIHA provider to whom they could refer, even though a majority (88%) reported that they recommended CIHA to their clients. Only about 20% of the respondents indicated that they were qualified to teach these practices, indicating a gap between interest in CIHA as well as a belief that it could be helpful to clients, and marriage and family therapists' level of knowledge of these practices.

Olson et al., (2011) conducted a study of graduate marriage and family therapy faculty and students (*N*=146). The results indicated that the majority of respondents (96%) believed that mind-body therapies should be taught in graduate marriage and family programs. The majority of respondents (86%) also responded that a lack of education in mind and body therapies was the primary reason that they did not integrate these into clinical practice.

Social Work

Complementary and integrative health approaches literature within the disciplines of medicine, nursing, psychology, and marriage and family therapy is extensive and tends to fall into three categories: (1) attitudes toward CIHA, (2) use of CIHA, and (3) incorporating CIHA into the curriculum. While there is not an established body of literature in mental health counseling, marriage and family therapy, and social work in each of these areas, it is important to note that each has conducted surveys of attitudes toward CIHA of various stakeholders. The exception is social work, and this study seeks to fill this gap.

Why is Social Work Lagging Behind? Despite a preference for an ecological perspective, the social work profession has distanced itself from the motivations and values of the profession's pioneers that were strongly connected to spiritual and religious traditions (Lee, et al., 2009). A large part of this development was due to the profession's aspiration for professionalism in the early 1900's. Dr. Abraham Flexner's report issued in 1915 did not grant professional status to social workers because of concerns regarding a lack of a systematic, scientific knowledge base to govern social work practice (Duffy, 2011). This report transformed the nature of education establishing the biomedical model

as the gold standard of training (Duffy, 2011). The development of social work knowledge "became increasingly influenced by a knowledge-building paradigm dominated by positivism, scientificism, and rationalism, a privileged knowledge paradigm esteemed by professionals and academia in the West" (Lee, et al., 2009, xxiii).

It is possible that many social work educators do not associate complementary and integrative approaches with the epistemology currently upheld by the social work profession. The focus of evidenced-based practice in the profession of social work is one hallmark of professionalization that represents increased rigor of professional practices (Lee, et al., 2009). However, this has developed into social work treatment becoming compartmentalized, distancing the profession even further from its roots of viewing clients as connected and whole beings (Lee, et al., 2009).

NASW Code of Ethics. Increasing the emphasis on the mind-body connection is a critical component of 21st-century social work education (Gant, et al., 2009). Part of that connection is recognizing Complementary and Integrative Health Approaches (CIHA) as possible interventions in a holistic treatment plan for use with clients, especially those of whom have experienced trauma. As interest and use in CIHA by consumers continues to grow, concern has increased that health professionals be adequately informed about these healing approaches so that they can effectively care for clients (Kreitzer, Kligler, Meeker, 2009).

NASW (2008) has identified universal access to health and mental health care as one of social work's top priorities. Health literacy is an important aspect of this movement. As social workers currently provide the majority of mental health services in the United States (Block, 2006; NASW, 2008), it is natural that they initiate a movement

to address more fully mental health literacy, which should include complementary and integrative approaches. Knowledge of these integrative practices offers social workers in all settings the opportunity to provide education and advocacy in seeking client-centered treatment options.

Some mental health practitioners including social workers have been using mind-body techniques, such as guided imagery, for decades; however, absent adequate education, this practice presents an ethical concern (Gant, et al., 2009). As early as 2000, 60 percent (*n*=331) of social workers reported using mind-body techniques with their clients, although without "substantial or great knowledge of their technique" (Henderson, 2000). NASW's Code of Ethics (2008) states that social workers must practice within the boundaries of their education.

The explosion of knowledge in neuroscience and its implications for social work practice has not yet made an impact on social work curricula (Egan, et. al, 2011; Shapiro & Applegate, 2000). CIHA techniques are part of this revolution in social work knowledge and practice, and evidence of their efficacy is mounting (Dziegielewski & Jacinto, 2013; Tang, Lu, Fan, Yan, and Posner, 2012). As developments in neuroscience demand a redesign of social work curricula in human behavior and the social environment(Egan, et. al, 2011; Shapiro & Applegate, 2000), so too does the efficacy of CIHA techniques require a reordering of social work practice methods (Gant, et al., 2009; Raheim & Lu, 2014).

The extent to which integration between CIHA and social work intervention will occur in the future will be greatly influenced by the attitudes, beliefs and knowledge of the social work and allied mental health communities. A few studies have explored these

aspects in psychologists and mental health practitioners and educators, but as of this date, no published studies have been conducted with clinical social workers or social work faculty. If social workers choose to incorporate CIHA treatment into their clinical practice, it is their responsibility to become educated and trained properly in the CIHA treatment approach that they intend on utilizing. It is also the responsibility of schools of social work to incorporate CIHA-related content into its curricula. It is clear through the emerging research from neuroscience, trauma and complementary and alternative medicine that the most effective mental health treatment in the future will be integrative mental health care that combines both conventional and complementary approaches together in a holistic manner.

Conclusion

To conclude, social work has made very little progress in researching the role of CIHA in social work education as evidenced by the limited number of studies within the profession. While conceptual articles exist calling for the integration of complementary and integrative health approaches into social work curricula (Gant, 2009), and limited studies exploring the knowledge and use of CIHA of clinical social workers (Henderson, 2000), no study has been conducted on social work educators and their knowledge and attitudes towards CIHA. Other professions are well ahead of social work in researching and exploring the role of CIHA in professional practice and education and training. They have surveyed the knowledge, attitudes, and beliefs about CIHA of various stakeholders to gain a better understanding about how to meet the growing public demand for these services, their relationship to clinical practice, and the integration of CIHA into curricula and training. This study seeks to fill the gap in social work education by investigating

graduate social work faculty's knowledge and attitudes toward complementary and integrative health approaches so that further strides can be made.

CHAPTER III

RESEARCH METHODS AND PROCEDURES

The purpose of this study was to explore the attitudes and knowledge of graduate social work faculty towards CIHA. This chapter will describe the research methods and procedures that were used to conduct the study. First, the research questions and hypotheses are presented. Next, the study design is described. The population sample is then described and methods for recruiting participants are outlined. Finally, the instrumentation and procedures for collecting and analyzing data are described.

Research Questions

The study was guided by the following research questions and hypotheses:

Q1. What are graduate social work faculty's attitudes toward CIHA?

H1**:** Graduate social work faculty's attitudes toward CIHA will be positive (PATCAT Score > 5).

H1o: Graduate social work faculty's attitudes toward CIHA are neutral.

Q2. What is graduate social work faculty's perceived knowledge of CIHA?

H2: Graduate social work faculty will have some perceived knowledge of CIHA. (Score >3).

H2o: Graduate social work faculty will have no perceived knowledge of CIHA.

Q3. What are the factors that influence attitudes toward CIHA with graduate social work faculty?

Q3a. Is there a relationship between graduate social work faculty's perceived knowledge of CIHA and attitudes toward CIHA?

H3a: There is a positive correlation between perceived knowledge and attitude toward CIHA.

H3o**:** That there is no correlation between perceived knowledge and attitude.

Q3b. Is there a relationship between demographics and attitude towards CIHA?

Q3b1. Is there a relationship between gender and attitude towards CIHA?

H3b1: Gender is related to attitude.

H3b1o: Gender is not related to attitude.

Q3b2. Is there a relationship between age and attitude toward CIHA?

H3b2: There is a correlation between age and attitude.

H3b2o: There is no correlation between age and attitude.

Q3b3. Is there a relationship between years of teaching and attitude towards CIHA?

H3b3: There is a relationship between years of teaching and attitude towards CIHA.

H3b3o: There is no relationship between years of teaching and attitude towards CIHA.

Q3b4. Is there a relationship between institutional auspice and attitude towards CIHA?

H3b4: There is a relationship between institutional auspice and attitude.

H3b4o: There is no relationship between institutional auspice and attitude.

Q3b5. Is there a relationship between geographic location and attitude towards CIHA?

H3b5: There is a relationship between institutional auspice and attitude.

H3b5o: There is no relationship between institutional auspice and attitude.

Q3b6. Is there a relationship between program size and attitude towards CIHA?

H3b6: There is a relationship between program size and attitude towards CIHA.

H3b6o: There is no relationship between program size and attitude towards CIHA.

Q3c. What is the relationship between graduate social work faculty's spiritual perspective and attitude?

H3c: There is a positive correlation between spiritual perspective and attitude.

H3co: There is no correlation between level of spiritual perspective and attitude.

Q4. Is there a relationship between graduate SW faculty attitudes and belief that CIHA should be integrated into graduate social work curricula?

H4: There is a relationship between graduate social work faculty's attitudes and belief that CIHA should be integrated into graduate social work curricula.

H4o: There is no relationship between graduate social work faculty's attitudes and belief that CIHA should be integrated into graduate social work curricula.

Q5. What are graduate social work faculty's concerns about the risk of use of CIHA?

H5: Graduate social work faculty will express some perceived risk about use of CIHA.

Ho: Graduate social work faculty will express no perceived risk about use of CIHA.

Study Design

The study is an exploratory, descriptive study that used a cross-sectional survey design method to collect data via an online survey. Previous explorations on this topic have used cross-sectional designs to capture educators, students, and clinicians' knowledge, attitudes, and beliefs towards CIHA (Booth-Laforce, Scott, Heitkemper, Cornman, et al., 2010; Ditte, Schulz, Ernst, & Schmid-Ott, 2011; Halcon, Chlan, Kreitzer, & Leonard, 2003; Henderson, 2000; Kim, Erlen, Kim, & Sok, 2006; Olson, Robinson, Geske, & Springer, 2011; Rojas-Cooley & Grant, 2009; Sierpina, Levine, Astin, & Tan, 2007; Topaz, Johnson, Pinilla, Rand, & George, 2012; Trail-Mahan, Mao, & Bawel-Brinkley, 2013; Wahner-Roedler, Vincent, Elkin, Loehrer, et al., 2006; Wilson, Hamilton, & White, 2012). .

Cross-sectional survey research is based on observations of a particular group that takes place at a single point in or over a short period of time (Rubin & Babbie, 2014) and is an effective way to evaluate the knowledge and attitudes towards CIHA among a large sample of social work faculty. A strength of this type of study is that it is comparatively inexpensive to conduct and easy to analyze (Kumar, 2014). It is also useful for identifying associations and generating hypotheses for future studies. However, there are some limitations to this methodology. The biggest limitation is that this design cannot measure change or make conclusions about cause and effect or sequence of events (Kumar, 2014).

Participants and Sampling Methods

The study utilized a non-probability, purposive sampling strategy (Rubin & Babbie, 2014). The study population included graduate social work faculty from accredited Council on Social Work Education (CSWE) graduate programs. The inclusion criteria for this study were as follows. All participants had to meet the criterion of being a graduate social work faculty member. That is, be employed as a full-time faculty member a college or university that has a CSWE accredited master of social work program, and teach in the master of social work program. Exclusion criteria included any person that is not employed full-time as a graduate faculty member, students that may teach in the graduate program, and administrators that do not hold a faculty appointment.

The population for this study was 2,783 full-time faculty who teach in 238 MSW programs that are fully accredited by the Council on Social Work Education (CSWE) as of October 2015. A power analysis was performed prior to collecting data (a priori) in order to determine an effect of a given size (Dattalo, 2010). GPower was used to

determine (a priori) sample size with an effect size r=.25, alpha set at p=.05 (medium effect), power of .80, and number of groups=5 which yielded an (a priori) sample size of n=200. This sample was achieved as 208 participants completed the online survey.

Graduate social work faculty were contacted and asked to participate through three different sources. First, program directors for all MSW programs were selected from the CSWE website. The website maintains a list of all accredited programs at universities and colleges from all regions of the United States and provides the email address of each program director, as well as links to their websites. An email was sent to each program director requesting that they forward the e-mail invitation to the faculty members who fit the following inclusion criteria (Appendix A):

1) Participants must be full-time faculty
2) Participants must teach in the graduate program

The email contained a hyperlink to the online survey. This sample then received one email reminder sent 3 weeks after the initial message was sent (Appendix B).

The second method of recruitment involved contacting all graduate social work faculty of the 238 CSWE accredited MSW programs as identified on their institution's website. Each website was accessed through the CSWE website, then each graduate program was located, and graduate social work faculty were searched for within the program. Faculty email addresses were retrieved from their program's website and personalized emails were sent requesting their participation in the study (Appendix C). The total number of full-time faculty with primary teaching responsibility in the MSW program that were contacted was 2,783.

The third method of recruitment involved placing recruitment flyers at the Barry University School of Social Work table at the Council on Social Work Education's Annual Program Meeting for interested participants (Appendix D). The flyer described the study and contained a link, as well as a QR scan code, that directed participants to the online survey.

Measures/Instrumentation

The survey for this study was a six-part questionnaire that incorporated a cover/consent page, demographic and program characteristics section, questions regarding knowledge of CIHA, and two scales (one that assess the participant's spiritual perspective, and the other assesses the participant's attitude towards CIHA), and information about the MSW curriculum (Appendix E). The first section (I) of the survey included a cover page and provides participants with information about the background and purpose of the research, procedures, risks and benefits, confidentiality and privacy, the voluntary nature of the study, contact information, and finally a statement of informed consent.

The second section (II), "demographic section", requested information about the school employed at (auspice), geographic location, gender, age, years of teaching experience, highest level of education, years of clinical practice, current clinical practice, area currently teaching in graduate social work curriculum, and program size.

The third section (III), "Knowledge of CIHA", asked questions about faculty members' perceived knowledge of different therapies of complementary and integrative health approaches. Because no standardized measure of CIHA knowledge exists, a measure of perceived knowledge was designed specifically by the researcher using the

mind-body categories defined by the NCCIH. Because these questions are exploratory, the measure has not been validated.

The fourth section (IV) utilized the "Spiritual Perspective Scale (SPS) (Reed, 1987)" which contained ten questions that measure a person's perspectives on the extent to which spirituality permeates their lives, and they engage in spiritually-related interactions. This scale has been used in many studies measuring spiritual perspectives of healthy adults, as well as with those with various health conditions (Abbasi, Farahani-Nia, Mehrdad, Givari, & Haghani, 2014; Daily & Stewart, 2007; Davison & Jhangri, 2010; Reed, 1986; Reed, 1987). It has also been used in at least one study that connected spiritual perspective with CIHA (Runquist & Reed, 2007) The SPS, previously called the Religious Perspective Scale (Reed, 1986), has an overall Cronbach's coefficient alpha of .93 (Reed, 1986). It yields a single score of individual responses ranging from 1 to 6, with higher scores indicating a higher level of spirituality (Reed, 1987). No published study has been conducted using this instrument with others measuring knowledge, attitudes, and beliefs towards CIHA.

The fifth section (V) of the questionnaire utilized the "Psychologists' Attitudes towards Complementary and Alternative Therapies (PATCAT) scale" (Wilson, White, & Obst, 2011). It is a 10-item scale designed to measure clinician's perceptions and knowledge of complementary and alternative therapies. The PATCAT has an overall Cronbach's coefficient alpha of 0.89.

The PATCAT consists of three subscales: 1) the perceived importance of knowledge about available complementary and alternative therapies, 2) attitudes towards

integration of complementary and alternative therapies with psychological practice, and 3) concerns about associated risk of use (Wilson, White, & Obst, 2011).

Confirmatory factor analysis found support for the three (3) subscales with one exception of an item which "shared some error variance with other items and was removed" (Wilson, White, & Obst, 2011, p. 242). Questions 1, 2, 3, and 7 address the risks perceived with CIHA. Questions 4, 5, and 6 address the faculty member's integration towards CIHA. Moreover, questions 8, 9, and 10 address the faculty member's knowledge of CIHA. The subscale that represents knowledge has an alpha of 0.90. The subscale that represents integration has an alpha of 0.80, and the subscale that represents risks has an alpha of 0.79 (Wilson, White, & Obst, 2011). For an overall score, the possible range is 10 through 70, with higher scores indicating more positive attitudes towards CIHA. The scale was used on Australian psychologists and not normed on the population of interest, which is full-time graduate social work faculty in the United States.

There is a paucity of research in relation to the integration of complementary and alternative medicine (CIHA) that has been conducted with social workers, and no research with social work educators. Previous attitude research related to CIHA has focused on psychologists, clients of psychologists, psychology students, and the medical community in general. Permission has been granted to adapt slightly the scale from psychologist to social work faculty member, as well as from CAT to CIHA (Appendix F).

Data Collection Procedures

The data collection occurred during an 11-week period. This study used a survey method to answer the research questions. MSW program directors were emailed an

introductory email requesting that they forward it to their graduate faculty (Appendix A). The email contained a hyperlink to the survey. At the same time, recruitment flyers were placed at the Barry University School of Social Work table at the Council on Social Work Education's Annual Program Meeting (Appendix D). After three weeks from the initial email, a second email reminder was sent to the program directors (Appendix B). Three weeks later, personalized emails were sent to 2,783 graduate social work faculty, as identified from their institution's website.

Ethics

The survey questionnaire was introduced by a cover letter which detailed what the study entailed, as well as the risks and benefits of participation (Appendix E). This study involved online data collection from Survey Monkey. Participants were made aware that while there was no guarantee of absolute anonymity, no identifying information would be requested on the demographics portion or the knowledge of CIHA, SPS, or PATCAT questionnaires. Also, participants were notified that the feature that identifies the IP address would be disabled, so the PI had no record or linkages to the participant. The cover letter further stated that participants may skip any questions that they did not want to answer, and may quit participation at any time. Data collection procedures were not initiated until receiving approval from the Barry University Institutional Review Board (Appendix G). Permission to use the Wilson & White (2013) survey and Reed (1986) survey were obtained (Appendix H).

Data Analysis

Descriptive statistics were used to describe if graduate social work faculty are incorporating CIHA into their teaching and curriculum and to identify graduate social

work faculty's attitudes toward CIHA. Descriptive statistics were also used to analyze demographic data such as gender, age, as well as CIHA content inclusion in curricula. A variety of inferential statistics were utilized to measure associations and correlations among and between variables. Exploratory univariate analyses were conducted with each independent variable and the dependent variable (attitudes toward CIHA) to identify factors that may potentially impact social work faculty attitudes toward CIHA. The level of significance was established a priori at $p<.05$.

CHAPTER IV

FINDINGS

This chapter summarizes the statistical findings of the data collected from the online survey discussed in Chapter III. First, the response rate and power analysis are presented. Demographics of the population used for analyses, as well as a summary of the study variables used to answer the research questions will then be discussed in detail. Further, results of the data analyses will be presented. A summary will conclude the chapter.

Response Rate and Power Analysis

The survey was emailed to 2,783 full-time faculty who teach in 238 MSW programs that are fully accredited by the Council on Social Work Education (CSWE) as of October 2015. There were 222 respondents, resulting in an 8% response rate. It should be noted that not all faculty answered all questions with the maximum number of incomplete surveys being 14, which resulted in an adjusted response rate of 7% when accounting for incomplete surveys. However, GPower was used to conduct posteriori power analysis with a sample size of 208 to adjust for incomplete surveys, with alpha set at p=.05, effect size = .25 (medium effect), and number of groups (n= 5) yielded sufficient power which was calculated to be power = 0.83. This a posteriori power analysis was based on using the statistical analysis of ANOVA Fixed effects, omnibus, one-way.

Demographics

The sample in this study consisted of 208 full-time faculty members of a college or university that has a CSWE accredited master of social work program, who also teach

in the master of social work program. Table 1 shows a summary of the demographics for the 208 study participants.

Table 1

Summary of Demographics (n = 208)

	n	*Percent*
Gender		
Female	155	74.9
Male	52	25.1
Age Group		
25 – 34 Years	17	8.2
35 – 44 Years	47	22.6
45 – 54 Years	53	25.5
55 – 64 Years	66	31.7
Over 64 Years	25	12.0
Years Teaching		
Less Than 1 Year	4	1.9
1 – 5 Years	58	27.9
6 – 10 Years	44	21.2
11 – 15 Years	28	13.5
16 – 20 Years	31	14.9
More Than 20 Years	43	20.7
Years in Clinical Practice		
Less Than 1 Year	7	3.4
1 – 5 Years	39	18.8
6 – 10 Years	36	17.3
11 – 15 Years	22	10.6
16 – 20 Years	19	9.1
More Than 20 Years	42	20.2
None	43	20.7
Geographical Area		
Rural	27	13.0
Suburban	45	21.6
Urban	136	65.4
Highest Degree		
Doctorate in SW (DSW or PhD)	164	78.8

Table 1

Summary of Demographics (n = 208)

	n	*Percent*
Doctorate in Related Field	31	14.9
MSW	12	5.8
Master's in Related Field	1	.5
Size of Graduate Program		
Less Than 50 Students	8	3.9
51 – 150 Students	47	22.7
151 – 250 Students	51	24.6
251 – 350 Students	36	17.4
351 – 450 Students	17	8.2
Over 451 Students	48	23.2

Study Variables

The dependent variable utilized for analysis was the overall attitude score as measured on the PATCAT. The PATCAT score was created by taking an average of the 10 survey items designed to measure a clinician's perception and knowledge of complementary and alternative therapies. Responses for each of the 10 questions were on a 7-point Likert Scale, ranging from Strongly Disagree (1) to Strongly Agree (7). The overall PATCAT scores are reported in Table 2. For the independent variables, all of the demographic variables were used in the analyses.

Other study variables consisted of the three subscales of the PATCAT: 1) the perceived importance of knowledge about available complementary and alternative therapies (Knowledge Subscale), 2) attitudes towards integration of complementary and alternative therapies with psychological practice (Integration Subscale), and 3) concerns about associated risk of use (Risk Subscale). The Risk Subscale was created by taking an average of questions 1, 2, 3, and 7 used for the PATCAT score; the Integration Subscale

used an average of questions 4, 5, and 6; and the Knowledge Subscale used an average of questions 8, 9, and 10. (See Table 2)

Another study variable used in the study was the "Spiritual Perspective Scale (SPS)" which contained ten questions that measured a person's perspectives on the extent to which spirituality permeates their lives, and they engage in spiritually-related interactions. The SPS score was created by taking an average of these 10 survey items. Responses for each of the 10 questions were on a 6-point Likert Scale, ranging from Not at All/Strongly Disagree (1) to About Once a Day/Strongly Agree (6). (See Table 2).

The final variable that was used for the study included participant responses to "To what level should CIHA be integrated into the Graduate SW curriculum?" Responses for this question were on a 7-point Likert Scale, ranging from Strongly Disagree (1) to Strongly Agree (7). Over all participants, the average "Integration into the Curriculum" score was 4.03 (*SD* = 0.85) (Table 2).

Table 2

Summary of Study Variables (n = 208)

	Mean	*SD*	*Median*	*Mode*
PATCAT Score	5.10	1.08	5.20	5
Risk Subscale	3.23	1.24	3.13	2
Integration Subscale	5.71	1.12	6.00	6
Knowledge Subscale	4.93	1.43	5.00	7
Spirituality Score	4.03	1.53	4.40	5

Table 3

Summary of Additional Questions

	n	*Percent*
Possible Barriers to Inclusion of CIHA Into Graduate Social Work Curriculum?*		
Lack of knowledge of CIHA	158	76.0
Lack of room in current curriculum to add this content	124	59.6
Lack of faculty to teach this content	144	69.2
Personal beliefs and values	44	21.2
Not relevant to social work curriculum	23	11.1
Colleagues not supportive of inclusion of CIHA in curriculum	57	27.4
Other barriers not specified	38	18.3
No Barriers	3	1.4
*Responses were "Check All That Apply," therefore total percent will be greater than 100.		
To what degree do you intend to integrate CIHA into your classroom?		
Intend	37	17.8
Somewhat intend	43	20.7
Neither intend nor not intend	56	26.9
Somewhat not intend	23	11.1
Do not intend	38	18.3

Statistical Analyses

Research question one asked, "What are graduate social work faculty's attitudes toward CIHA?" Descriptive statistics were used to assess this question. Since the PATCAT score ranges from 1 (Strongly Disagree) to 7 (Strongly Agree), a score of 5 (Somewhat Agree) or more would indicate that on average, most graduate social work faculty's attitudes toward CIHA are positive. The results showed that the mean PATCAT score (Mean=5.10, SD=1.08) was slightly greater than 5. This implies that the null hypothesis is rejected, concluding that graduate social work faculty's attitudes toward CIHA are positive.

The second research question, "What is graduate social work faculty's perceived knowledge of CIHA?" To examine graduate social faculty's perceived knowledge of CIHA, participants were asked to indicate their level of knowledge of a list of mind and body practices. Responses ranged from *not knowledgeable at all* (1) to *very knowledgeable* (5). A score of 3 (Somewhat Knowledgeable) or more would indicate on average, a positive level of knowledge. Table 4 shows a summary of average participant responses, exploring their knowledge of mind and body practices. In observing mean responses, faculty perceive knowledge of four mind and body practices: Relaxation Exercises (M = 3.80, SD = 1.08), Meditation/Mindfulness (M = 3.75, SD = 0.99), Yoga (M = 3.38, SD = 1.16), and Massage Therapy (M = 3.04, SD = 1.34).

Table 4

Summary of Knowledge of Mind and Body Practices

	Mean	*SD*
Meditation/Mindfulness	3.75	0.99
Yoga	3.38	1.16
Acupuncture	2.55	1.17
Relaxation Exercises	3.80	1.08

Table 4

Summary of Knowledge of Mind and Body Practices

Hypnotherapy	2.20	1.18
Qigong	1.51	0.81
Tai Chi	2.16	1.11
Chiropractic/Spinal Manipulation	2.36	1.32
Massage Therapy	3.04	1.34
Movement Therapies	2.09	1.16
Energy Therapies	2.17	1.18

In addition to graduate social work faculty's perceived knowledge of CIHA, participants were also asked about their comfort level in teaching mind and body practices. Responses ranged from *not comfortable at all* (1) to *very comfortable* (5). A score of 3 (Somewhat Comfortable) or more would indicate on average, a positive level of comfort. Table 5 shows a summary of average participant responses, exploring comfort of mind and body practices. The two practices that graduate social work faculty are most comfortable with teaching are Relaxation Exercises (M = 3.36, SD = 1.45), and Meditation/Mindfulness (M = 3.29, SD = 1.39).

Table 5

Summary of Comfort in Teaching Mind and Body Practices

	Mean	*SD*
Meditation/Mindfulness	3.29	1.39
Yoga	2.25	1.38
Acupuncture	1.49	0.98
Relaxation Exercises	3.36	1.45
Hypnotherapy	1.51	0.97
Qigong	1.28	0.70
Tai Chi	1.48	0.93
Chiropractic/Spinal Manipulation	1.35	0.80
Massage Therapy	1.72	1.19
Movement Therapies	1.47	0.91
Energy Therapies	1.43	0.93

Research question three asked, “What are the factors that influence attitudes toward CIHA with graduate social work faculty?” To assess this question, the analyses were divided into several sub-analyses (3a through 3c), observing perceived knowledge, gender, age, spirituality score, years of teaching, auspice, geographical location, and program size, will all be observed by PATCAT score. When observing the perceived knowledge and spirituality score by PATCAT score, correlation analyses were used. When observing age, years of teaching, auspice, geographical location, and program size by PATCAT score, a One-Way Analysis of Variance (ANOVA) was used, and when observing gender by PATCAT score, a 2-Sample t-test was used. For each of these analyses, there is an assumption that the underlying data used for analysis is normally distributed, either overall or within the related groups. To examine this, a Shapiro-Wilk test was used to test for normality of the PATCAT score over all participants. Results of the Shapiro-Wilk test showed that the score was not normally distributed (*Shapiro-Wilk test*= 0.98, $p = 0.018$). Therefore, to observe the correlation between PATCAT score with the Spirituality Score, a nonparametric Spearman’s Rank Correlation was used. Additional Shapiro-Wilk tests were used to determine if PATCAT scores were normally distributed within the gender, age, years of teaching, auspice, geographical location, and program size groups. Table 6 shows a summary of the Shapiro-Wilk results, where PATCAT scores were normally distributed within most of the gender, age, years of teaching, auspice, geographical location, and program size groups ($p > 0.05$). But there were a few groups where the data was not statistically normally distributed ($p < 0.05$). In these cases, quantile-quantile plots were also checks, as well as skewness and kurtosis values. After noting these additional factors, the data can be considered normally

distributed. Thus, the assumptions of the Two-Sample t-test and One-Way ANOVA are met.

Table 6

PATCAT Scores by Selected Demographic Variables

	Shapiro-Wilk Test	*p-value*	*Mean*	*SD*
Age Group				
25 – 34 Years	0.93	0.280	5.3	0.95
35 – 44 Years	0.93	0.016	5.2	0.71
45 – 54 Years	0.98	0.466	5.2	0.89
55 – 64 Years	0.95	0.017	4.9	1.35
Over 64 Years	0.96	0.478	5.1	1.08
Years Teaching				
Less Than 1 Year	0.95	0.567	5.2	0.87
1 – 5 Years	0.97	0.231	5.2	0.89
6 – 10 Years	0.93	0.010	5.1	1.25
11 – 15 Years	0.97	0.687	5.5	0.89
16 – 20 Years	0.94	0.130	5.3	1.06
More Than 20 Years	0.97	0.397	4.6	1.30
Auspice				
Private – Other	0.94	0.109	5.3	0.87
Private – Religion Affiliated	0.86	0.001	5.3	0.99
Public	0.98	0.055	5.0	1.14
Geographical Area				
Rural	0.94	0.194	4.9	1.4
Suburban	0.98	0.705	5.2	0.74
Urban	0.98	0.040	5.1	1.12
Size of Graduate Program				
Less Than 50 Students	0.94	0.600	5.3	0.90
51 – 150 Students	0.95	0.043	5.0	1.22
151 – 250 Students	0.97	0.188	5.1	1.02
251 – 350 Students	0.91	0.013	5.2	1.30
351 – 450 Students	0.84	0.010	4.9	0.83

Table 6

PATCAT Scores by Selected Demographic Variables

	Shapiro-Wilk Test	*p-value*	*Mean*	*SD*
Over 451 Students	0.98	0.783	5.2	0.95

$p < .05$

Research question 3a asked, "Is there a relationship between graduate social work faculty's perceived knowledge of CIHA and attitudes toward CIHA?" To assess this question, Spearman's Rank Correlation was used to observe the relationship between PATCAT score and each of the Knowledge questions summarized in Table 4. Results of the analyses showed that the PATCAT score was significantly associated with all of the Knowledge questions. Table 7 shows the Correlations and p-values for each Knowledge question with PATCAT score. Specifically, all correlations were positive and less than 0.4, indicating that as graduate social work faculty's knowledge of CIHA increases, graduate social work faculty's attitudes toward CIHA will also moderately increase. This implies that the null hypothesis can be rejected, concluding that there is a positive correlation between perceived knowledge and attitude toward CIHA.

Table 7

Spearman's Correlations for Knowledge Questions with PATCAT Score

	Correlation	*p-value*
Meditation/Mindfulness	0.19	0.009
Yoga	0.26	< 0.001
Acupuncture	0.34	< 0.001
Relaxation Exercises	0.23	0.001
Hypnotherapy	0.28	< 0.001
Qigong	0.21	0.003
Tai Chi	0.31	< 0.001
Chiropractic/Spinal Manipulation	0.29	< 0.001
Massage Therapy	0.30	< 0.001
Movement Therapies	0.23	0.001
Energy Therapies	0.28	< 0.001

Research question 3b1 asked, “Is there a relationship between gender and attitude towards CIHA?” To assess this question, a Two-Sample t-test was used to observe PATCAT mean between Females and Males. Results of the analysis showed that the PATCAT score was significantly higher for Females (*Mean*=5.2, *SD*=0.99) than Males (*Mean*=4.7, *SD*=1.22) ($t = 2.61$, $p = 0.011$). This implies that the null hypothesis can be rejected, concluding that gender is related to attitude.

Research question 3b2 asked, “Is there a relationship between age and attitude toward CIHA?” To assess this question, a One-Way ANOVA was used to observe PATCAT mean between age groups. Table 6 shows a summary of PATCAT scores within each age group, and results of the analysis showed that there was no significant difference ($p < .05$) among age groups on PATCAT score. Therefore, the null hypothesis is accepted.

Research question 3b3 asked, “Is there a relationship between years of teaching and attitude towards CIHA?” To assess this question, a One-Way ANOVA was used to observe PATCAT mean between years of teaching groups. Table 6 shows a summary of PATCAT scores within each years of teaching group, and results of the analysis showed that the PATCAT score was significantly different between groups *(F*=2.42, *p*=0.038). Specifically, those teaching 11-15 years *(Mean*=5.5, *SD*=0.89) had significantly higher PATCAT scores than those teaching more than 20 years *(Mean*=4.6, *SD*=1.30) Therefore, the null hypothesis is rejected, concluding that there is a relationship between years of teaching and attitude towards CIHA.

Research question 3b4 asked, “Is there a relationship between institutional auspice and attitude towards CIHA?” To assess this question, a One-Way ANOVA was used to

observe PATCAT mean between institutional auspice groups. Table 6 shows a summary of PATCAT scores within each auspice group, and results of the analysis showed that there was no significant difference (p.<.05) between these groups and PATCAT score. Therefore, the null hypothesis is accepted.

Research question 3b5 asked, "Is there a relationship between geographic location and attitude towards CIHA?" To assess this question, a One-Way ANOVA was used to observe PATCAT mean between geographic location groups. Table 6 shows a summary of PATCAT scores within each geographic location group, and results of the analysis showed that PATCAT score was not significantly different between these groups (F = 0.61, p = 0.543). Therefore the null hypothesis is accepted.

Research question 3b6 asked, "Is there a relationship between program size and attitude towards CIHA?" To assess this question, a One-Way ANOVA was used to observe PATCAT mean between program size groups. Table 6 shows a summary of PATCAT scores within each program size group, and analysis showed that there was no significant difference ($p < .05$) between these groups and PATCAT score. Therefore the null hypothesis is accepted.

Research question 3c asked, "What is the relationship between graduate social work faculty's spiritual perspective and attitudes towards CIHA?" To assess this question, Spearman's Rank Correlation was used to observe the relationship between PATCAT score and the Spirituality Score. Analysis showed that there is a significant positive correlation between the PATCAT and Spirituality Score at $r = 0.32$, $p < 0.0001$. This indicates that the higher the level of spirituality among graduate social work faculty the more positive their attitudes toward CIHA, although this correlation is low/moderate.

Therefore, the null hypothesis is rejected, concluding that there is a positive correlation between level of spiritual perspective and attitude.

Research question four asked, "Is there a relationship between graduate SW faculty attitudes and belief that CIHA should be integrated into graduate social work curricula?" To assess this question, Spearman's Rank Correlation was used to observe the relationship between PATCAT score and responses to "To what level should CIHA be integrated into the Graduate SW curriculum." The Spearman's Rank Correlation was used here because PATCAT score was found to not be normally distributed in research question three. Analysis showed a significant ($p < .05$) positive correlation between integration into the curriculum and PATCAT score. Therefore, the null hypothesis is rejected.

Research question five asked, "What are graduate social work faculty's concerns about the risk of use of CIHA?" To assess this question, a One-Sided One-Sample t-test was used to observe the average Risk Subscale. Since the Risk Subscale ranges from 1 (Strongly Disagree) to 7 (Strongly Agree), a score of 5 (Somewhat Agree) or more would indicate that on average, most graduate social work faculty have a greater perceived risk of using the CIHA. Before running the One-Sample t-test, one of the assumptions of a One-Sample t-test is the data must be normally distributed. To examine this, a Shapiro-Wilk test was used to test for normality of the Risk Subscale over all participants. Results of the Shapiro-Wilk test showed that the score was not normally distributed (*Shapiro-Wilk test* = 0.97, $p = 0.001$), therefore a nonparametric Wilcoxon Signed-Rank test was used. Results of the Signed-Rank test showed that Risk Subscale was not significantly greater than 5 (*Signed-Rank test* = -12.02, $p = 0.999$). (Table 8). This

implies that the null hypothesis is accepted, concluding that graduate social work faculty express little risk about use of CIHA. (Risk Subscale > 5).

Table 8

Wilcoxon Signed-Rank Test for Risk Score Greater Than 5

	Mean(SD)	*p-value*
Risk Subscale	3.23 (1.24)	0.999

In addition, participants were asked if they were incorporating CIHA into curricula? And if they are incorporating CIHA into curricula, in which of the five main areas, and if the course is an elective, is it a general CIHA course, or a course on a specific CIHA modality? To determine if graduate social work faculty are incorporating CIHA into curricula, tables were created of participants responses to the following questions, "Into which of the following curricular areas has your graduate social work program integrated CIHA knowledge, skills, and/or behaviors," "Does the graduate social work program in which you teach offer an elective course on general CIHA?," and "Does the graduate social work program in which you teach offer an elective course on a specific CIHA modality/modalities?" Participant responses to all three questions are summarized in Table 9. The most common curricular area that has integrated CIHA knowledge was Practice (22.6%, *n* = 47), followed by Field Education (8.7%, *n* = 18), Research (4.3%, *n* = 9), and Human Behavior and the Social Environment (6.7%, *n* = 14). When asked, "Does the graduate social work program in which you teach offer an elective course on general CIHA?" a majority responded that they do not (81.4%, *n* = 162). And when asked, "Does the graduate social work program in which you teach offer an elective course on a specific CIHA modality/modalities?" a majority also responded that they do not (79.4%, *n* = 158).

Table 9

Summary of Curricular Areas and Electives Related to CIHA (n = 208)

	n	*Percent*
Curricular Areas Integrated CIHA*		
Human Behavior and the Social Environment	14	6.7
Policy	0	0.0
Research	9	4.3
Practice	47	22.6
Field Education	18	8.7
Grad Program Offer Elective on CIHA?		
No	162	81.4
Yes	24	12.1
Don't Know	13	6.5
Grad Program Offer Elective on CIHA modality/modalities		
No	158	79.4
Yes	29	14.6
Don't Know	12	6.0

*Responses were "Check All That Apply," therefore total percent will be greater than 100.

Summary

The main purpose of this study was to explore the attitudes and knowledge of graduate social work faculty towards CIHA. Results of the analyses showed that graduate social work faculty attitudes were somewhat positive towards CIHA, that there was a positive correlation between level of spiritual perspective and attitude, and there was a relationship between graduate social work faculty's attitudes and belief that CIHA should be integrated into graduate social work curricula. Additionally, both gender and years of teaching had significant associations with the PATCAT score. And finally, all perceived

knowledge questions had significant positive correlations to participant attitudes towards CIHA.

CHAPTER V

DISCUSSION, LIMITATIONS, AND IMPLICATIONS

This chapter will discuss the major findings followed by the discussion of implications for social work education and the social work profession. It will then discuss the limitations of the study followed by recommendations for future research. The purpose of the research was to explore the attitudes and knowledge of graduate social work faculty towards CIHA.

Discussion of the Findings

Assessing the attitudes of graduate social work faculty is important because of the role that attitudes play in behavior and behavior change (Ajzen, 1991; Sratton, et al., 2007). In order for social work education to begin to understand the role of CIHA in the profession, attitudes toward these approaches needed to be assessed. Assessing attitudes helps the profession understand the status of attitudes and provides a foundation for integrating these practices into social work education.

The results of this exploratory study found add to the current body of literature on the topic for a number of reasons. Firstly, as mentioned in the review of literature, social work has made very little progress in researching the role of CIHA in social work education (Henderson, 2000). Further, other professions are well ahead of social work in researching and exploring the role of CIHA in professional practice and education and training (Abbott, et al., 2011; Akan, et al., 2012; Barnett, & Shale, 2012; Booth-Laforce, Scott, Heitkemper, Cornman, et al., 2010; Ditte, Schulz, Ernst, & Schmid-Ott, 2011;

Halcon, Chlan, Kreitzer, & Leonard, 2003; Kim, Erlen, Kim, & Sok, 2006; Olson, Robinson, Geske, & Springer, 2011; Rojas-Cooley & Grant, 2009; Sierpina, Levine, Astin, & Tan, 2007; Topaz, Johnson, Pinilla, Rand, & George, 2012; Trail-Mahan, Mao, & Bawel-Brinkley, 2013; Wahner-Roedler, Vincent, Elkin, Loehrer, et al., 2006; Wilson, Hamilton, & White, 2012). In the light of these facts, the findings from the present study about social work faculty's attitude and perceived knowledge of CIHA, the relationship between their attitude and belief about incorporating CIHA into curricula, and the current incorporation status of CIHA into curricula provide a significant contribution to the literature on this topic.

Secondly, guided by the theoretical framework used in this study, it was mentioned in the review of literature that attitude, subjective norms, and perceived behavioral control all feed into and explain behavioral intentions and subsequent behavior (Ajzen, 1991). As the study findings suggest that graduate social work faculty's attitudes toward CIHA are positive, this finding can be used to interpret the findings to mean that this positive attitude toward CIHA may influence the intention of a social work educator to integrate this knowledge into the curricula in which they teach. The Theory of Planned Behavior (TPB) (Ajzen, 1991) would suggest that the subjective norm also influences the intention of the behavior. This study found that there was low risk associated CIHA. Further, it was also noted that lack of knowledge of CIHA or lack of room in current curriculum to add CIHA content could influence perceived behavioral control. This would then impact the intention to perform the behavior (including CIHA in the curriculum), and this particular construct is theorized to be the most important predictor of behavior (Ajzen, 1991; Pawlak, et al., 2008). The findings of this study

show not only the different levels of perceived knowledge of graduate social work faculty with respect to a number of mind and body practices, but also their comfort level in teaching these different mind and body practices. This information is useful as it shows the varying levels of knowledge the participants possess of CIHA which may influence their perceived behavioral control with respect to adding CIHA content in current curriculum. The salient findings are detailed below.

Attitudes Toward CIHA

Attitudes of graduate social work faculty toward CIHA are similar to the attitudes of medical professionals (Kreitzer, et al., 2002), nurses and nursing students (Chang & Chang, 2015), and marriage and family therapists (Olson, et al., 2011) who hold positive attitudes toward CIHA. However, while the mean score for the overall scale was 5.10 (*SD*=1.08), it is on the lower-end of the positive attitudes range. Interestingly, the finding of a study of attitudes of practicing psychologists towards CIHA (Wilson, et al., 2011) was only slightly lower than the present study with a mean score of 4.58 (*SD*=0.91). With a mean score of 4 on the PATCAT representing a neutral attitude towards CIHA, the results of that study indicate that most participants were ambivalent in their attitudes toward CIHA (Wilson, et al., 2011). The reason for the lower positive score in this present study may be the focus of evidenced-based practice in the profession of social work as a hallmark of professionalization that represents increased rigor of professional practices (Lee, et al., 2009). As cited in the literature review, it is possible that many social work educators do not associate CIHA with the epistemology currently upheld by the social work profession.

Graduate social work faculty considered it somewhat important to have an understanding of CIHA. Analysis indicated a generally positive attitude towards integrating CIHA into a social worker's clinical practice. Graduate social work faculty perceived low risk associated with CIHA. Interestingly, these findings are similar to those conducted on a study of practicing psychologists (Wilson, et al., 2011).

Knowledge of CIHA

To examine graduate social faculty's knowledge of CIHA, participants were asked to indicate their level of knowledge of a list of mind and body practices and secondly, their comfort in teaching these practices. Responses showed that the top four mind and body practices in terms of knowledge are Relaxation Exercises, Meditation/Mindfulness, Yoga, and Massage Therapy. The two practices graduate social work faculty are most comfortable with teaching are Relaxation Exercises and Meditation/Mindfulness. Given the nature of these mind-body practices and their relation to clinical social work interventions, such as cognitive-behavioral therapy, it is not surprising that graduate social work faculty would have more knowledge of and report comfort with teaching these CIHA practices.

These findings provide significant data for moving towards utilizing CIHA in the field of social work as possible interventions in a holistic treatment plan for use with clients. These findings are significant as they contribute insights about graduate social work faculty's knowledge of CIHA, especially in the light of the fact that some mental health practitioners including social workers have been using mind-body techniques for decades (Henderson, 2000); however, absent adequate education, this practice presents an ethical concern.

Graduate social work faculty reported having the most knowledge about relaxation exercises (breathing exercises, guided imagery, and progressive muscle relaxation), meditation and mindfulness, yoga, and massage therapy. Interestingly, these are the same practices that marriage and family therapists reported having some familiarity with in the study conducted by Olson, et al. (2011), as well as clinical social workers (Henderson, 2000). Many of the mind-body practices support wellness and health by reducing stress, pain, susceptibility to illness, decreasing depression and anxiety, and increasing one's sense of calm and connection (Benson, 2010; Streeter, et. al, 2007; Tang, et al., 2012; Vago, & Silbersweig, 2012; van der Kolk, et al., 2007).

The goals of these practices overlap with many of the goals of clinical social work practice. The data consistently show that guided imagery, meditation, and progressive muscle relaxation have become part of mainstream clinical practice, and therefore are generally accepted as legitimate techniques and commonly practiced in the social work profession (Henderson, 2000). Therefore, knowledge of these practices may indicate that social workers are aware of the overlap between these practices and mental health. However, more research is needed to better understand why these practices are of most interest and knowledge. In addition, graduate social work faculty self-reported low levels of knowledge of the other mind-body therapies indicated on the survey.

The finding of this study shows that there is a positive correlation between perceived knowledge and attitude toward CIHA. That is, the more knowledge one has, the more likely the person was to have a positive attitude toward CIHA. Studies in other professions have found a relationship between knowledge and positive attitudes toward CIHA (Bassman, & Uellendahl, 2003, Kim, et al., 2006; Olson, et al., 2011; Rosenbaum,

et. al., 2002; Wilson, et al., 2011). One implication of this finding is that basic knowledge of one or more of CIHA practices may change attitudes for the positive. Positive attitudes are associated with qualities like openness, curiosity, receptivity, and willingness to engage (Evans, Valdez, Burns, & Rodriguez, 2002). The implication of this finding is that providing information about CIHA in graduate level education may lead to social workers being more open to a client's curiosity or use of these practices. If over one-third of Americans are utilizing CIHA practices (U.S. Department of Health and Human Services, 2015), and by some estimates 10 to 66% of clients receiving traditional mental health care are simultaneously receiving a CIHA treatment (Kessler, 2001; Simon, et al., 2004; Utnutzer, et al., 2000), then positive attitudes toward CIHA or openness to these practices may be important within the clinical context.

Demographic Variables

Tests were run to consider the relationship between various demographic variables and attitude towards CIHA. Previous studies detailed in chapter two found relationships between certain variables and CIHA attitudes. The results from this study, however, did not concur with most of those findings.

Gender. This study found that with regards to attitudes toward CIHA, there was a significant difference between females and males. Specifically, females had significantly higher attitudes toward CIHA than males. This result concurs with previous studies that have explored differences between female and male attitudes toward CIHA in medicine, psychology, and marriage and family therapy. More research is needed to understand why females may hold more positive attitudes toward these approaches.

Age. Interestingly, the relationship between age and attitude toward CIHA did not follow the trend of previous research. This study found that there was no correlation between age and attitude. Previous studies, especially in medicine, found that age and attitudes are negatively correlated, with older individuals reporting less positive attitudes toward CIHA. These studies speculated that younger generations were more open to CIHA practices because they were more likely to have positive exposure to CIHA than older generations that were perhaps more rooted in a medical philosophy that saw CIHA as too unconventional. One possible explanation of this study's finding is that Western medicine is changing with the emergence of new research, and therefore, the differences between younger and older faculty may be less amplified. Also, previous research found that there was a positive correlation with education and attitude towards CIHA, that is, as the more education a person had, the more positive their attitude was toward CIHA. Since this present study explored the attitudes of a population that is well-educated, it is possible that this not a variable that would be correlated with graduate social work faculty attitudes toward CIHA.

Years of teaching. This study found that there is a relationship between years of teaching and attitude towards CIHA. Specifically, those teaching 11-15 years had significantly more positive attitudes toward CIHA than those teaching more than 20 years. While advances in technology over the past 15 years have led to evidence showing the efficacy of many mind-body therapies, it is possible that those faculty that have been teaching for more than 20 years may be more identified with a philosophy formulated during their education, when CIHA was seen as lacking rigor and was not respected. Future research should consider the length of time in the social work profession along

with the year the degree was earned as possible intervening variables. Additionally, research questions which explore one's level of activity in the profession could be important to ask as well.

Other demographic variables. This study did not find a significant relationship between other demographic variables (institutional auspice, geographic location, and program size) and attitude toward CIHA.

Spiritual Perspective

This study indicates that there is a positive correlation between level of spiritual perspective and attitude toward CHIA among graduate social work faculty. This finding supports previous literature that found a positive association between spiritual perspective and attitude towards CIHA (Nicdao & Ai, 2014). As noted previously, the social work profession attempts to distance itself from the values first expressed by its founding pioneers that were intimately connected with spiritual traditions and religions (Lee, et al., 2009). The movement towards professionalization and secularization that began in the 1920's began to downplay the role of spirituality as the social work profession moved towards a more scientific professional base for practice, knowledge, and research (Lee, et al., 2009). The concept of spirituality is vague and addresses ideas of supernatural or private experiences (Lee, et al., 2009) that may be perceived by some social workers as not being evidence-based practice. Similarly, within the profession of social work, interpretations of the effectiveness of CIHA vary (Mann, et al., 2004), as many of the approaches are beginning to show evidence of their efficacy. While overall attitudes in this study were found to be slightly positive, so were participants' spiritual perspective.

These findings contribute unique and significant data to the literature about the factors that influence graduate social work faculty attitudes toward CIHA.

Integration into the Curricula

The findings of this study indicate that as graduate social work faculty beliefs that CIHA should be integrated into graduate social work curricula increases, so do graduate social work faculty's attitudes toward CIHA. Social work educators are aware of the rapidly expanding utilization of CIHA for mental health and health care and that clients are seeking an integrated approach with otherwise traditional modalities (Gehlert & Browne, 2006). And as advances in neuroscience begin to show evidence for the efficacy of many mind-body therapies, it is natural that this knowledge would lead to beliefs that this is important information for students; therefore, their attitudes towards these approaches would also increase. Future research should explore faculty members, as well as practicing social workers', knowledge of the efficacy of specific complementary and integrative health approaches and explore if this knowledge is correlated with attitudes toward CIHA.

The findings also indicate that possible barriers to inclusion of CIHA into the graduate social work curriculum is lack of knowledge of these approaches and lack of room in the current curriculum to add this content. Given that social work educators are aware of the growing utilizing of CIHA by clients (Gehlert & Browne, 2006), and the reported lack of knowledge of these approaches, it presents a challenge on how to integrate this into the curriculum, especially if there is little room to add courses. It has

been noted in previous literature that both short and long term challenges exist for social work educators on how to prepare students for integrated approaches that infuses the social work profession's signature person-in-environment framework (Hutchinson, 2011) as well as the professional values when incorporating CIHA into the curriculum (Grant, et al., 2009). Grant, et al. (2009), states that offering an elective one time a year may not be meeting the needs of both social work students and the people that they will serve. The majority of respondents in this current study indicated that their programs do not offer CHIA content in either elective or required courses. However, when it is included, CHIA content most often is found in Practice courses. For those social work programs that are integrating CIHA knowledge into the curriculum, future research should explore how social work educators are specifically integrating into these curricular areas such as practice, field education, and human behavior and the social environment.

Barriers to inclusion of CIHA. This study asked participants about possible barriers to inclusion of CIHA into graduate social work curriculum. A majority of respondents reported lack of knowledge of CIHA was a barrier. These findings are similar to those of faculty and graduate students in marriage and family therapy as limited knowledge and training was reported as the top barriers in education (Olson, 2011). Other barriers in the present study included lack of room in current curriculum to add this content and lack of faculty to teach this content.

Implications of the Findings

Implications for Social Work Education

A part that distinguishes social work from other helping professions is its ecological person-in-environment perspective (Rishel, 2014). However, many master's

level social work students interested in pursuing careers in mental health will complete an advanced clinical concentration within a graduate program. "Clinical practice education that focuses solely on a diagnostic and treatment approach to mental health problems does not reflect the historical practice perspective of the social work profession" (Rishel, 2014, p. 755). By adequately preparing students for prevention-focused practice in a time of rapid change in health care services and delivery in the United States, positions the social work profession to act as leaders in this area of mental health. CIHA are an integral part of preventative care, especially in the field of mental health or direct practice. Results from this study showed that graduate social work faculty's attitudes were positive, that faculty felt that it was very important to integrate CIHA into social workers' clinical practice, and that there was little risk involved. In addition, the majority of respondents in this current study indicated that their programs do not offer CHIA content in either elective or required courses. However, when it is included, CHIA content most often is found in Practice courses. Therefore, social work education needs to establish curriculum in CIHA.

Social work educators do face challenges, however, as to how to prepare students for utilizing these approaches in practice that infuse the profession's signature person in environment framework and professional values when incorporating CIHA into the curriculum. The Council on Social Work Education (CSWE) in 2008 adopted a competency-based education framework for its Educational Policy and Accreditation Standards (EPAS). These standards moved from a model of curriculum design focused on content and structure to one focused on student learning outcomes (CSWE, 2016).

The standards recognize a holistic view of competence and would be a good starting place for linking CIHA across the curriculum.

In addition to the content taught in the explicit curriculum, CIHA could be reinforced in many other ways throughout the educational environment through its implicit curriculum. Social work educators could explore the role of mind-body practices in self-care for the graduate student. Emerging evidence exists that mind-body practices like mindfulness increase empathic responses, reduces burnout and stress (Gerdes, K.E., Segal, E.A., Jackson, K.F., & Mullins, J.L., 2011). In addition, studies with counseling students have demonstrated that utilizing practices like mindfulness may help students to be more attentive to the therapy process, and more attuned with themselves and clients (Schure, Christopher, & Christopher, 2008).

Implications for Social Work Practice

Increasing the emphasis on the mind-body connection is a critical component of 21st century social work education. Part of that connection is recognizing complementary and integrative health approaches as possible interventions in a holistic treatment plan for use with clients, especially those who have experienced trauma. As interest and use in CIHA by consumers continues to grow, concern has increased that mental health professionals be adequately informed about these healing approaches so that they can effectively care for clients (Kreitzer, Kligler, Meeker, 2009). These approaches may offer integrative or alternative options to existing treatment modalities for many different disorders, especially posttraumatic stress disorder. It is known that many trauma symptoms do not resolve with talk therapy alone (Perry, 2010). As such, emerging research is identifying effective mind-body approaches to reduce stress and/or ameliorate

the effects of stress, as these approaches are tools that work with the central nervous system, the limbic system and brainstem, helping to improve symptoms of PTSD and self-regulation (Duros & Crowley, 2014). Knowledge of these integrative practices offers social workers in all settings the opportunity to provide education and advocacy in seeking client centered treatment options.

The extent to which integration between CIHA and social work intervention will occur in the future will be greatly influenced by the attitudes, beliefs and knowledge of the social work and allied mental health communities. A few studies have explored these aspects in psychologists and mental health practitioners, but as of this date, no studies have been conducted with clinical social workers. Future research should explore the attitudes, knowledge and utilization of CIHA with practicing social workers.

In addition, if social workers choose to incorporate CIHA into their clinical practice, it is their responsibility to become educated and trained properly in the complementary or integrative health approach that they intend on utilizing. It is clear through the emerging research from neuroscience, trauma and complementary and integrative medicine that the most effective mental health treatment in the future will be integrative mental health care that combines both conventional and complementary approaches together in a holistic way.

Implications for Policy

Advances in neuroscience have begun to show evidence for the efficacy of many complementary and integrative health approaches utilized (Rossi, & Rossi, 2008; Slagter, Davidson, & Lutz, 2011; Streeter, Jensen, & Perlmutter, 2007; Tang, Lu, Fan, & Yang, 2012). In addition, more and more people are seeking some form of non-traditional

approach for healing. Despite the evidence, health insurance companies have been slow to include these approaches as a covered service on the plans that are offered, leaving many to pay a great amount of money out-of-pocket for these services. Several mind-body approaches have been proven to be a safe, effective complement to the treatment of many health conditions, especially stress. A future area of research could identify and evaluate strategies for reducing health disparities by including development of effective service delivery models that include complementary and integrative health approaches.

It is important to add to the research that increases awareness and understanding of factors associated with people's attitudes toward CIHA. Future research could focus on factors associated with CIHA utilization and access, especially with underserved and disadvantaged populations. These factors have the potential to then be modified to help close the health disparities gap among many minority populations.

Also, as complementary and integrative health approaches are becoming more mainstream, regulation, licensure, and certification standards must be considered. Some of these approaches have been untested scientifically, while others have been highly investigated. This brings up the concern for the need of standards that will proactively promote safety. Future research should explore the current laws and policies governing social workers' utilization and integration of CIHA in practice.

Limitations of the Study

There are several limitations of this study. First of all, the response rate was relatively low. Thus, caution should be exercised in generalizing these results to all graduate social work faculty.

Another limitation is that the study utilized a self-report survey. As a result of this, potential issues exist with recall bias and subject reliability. It is not possible to know a person's true level of knowledge about a particular CIHA practice via this self-report survey. This survey simply asked what the person believed their level of knowledge was. Secondly, while a Likert scale was used for many of the questions that allowed respondents to show how strongly they felt about a particular question, it did not allow for in-depth responses.

There are some limitations to the methodology as well. The biggest limitation is that the design could not measure change or make conclusions about cause and effect or sequence of events (Kumar, 2014). Further, as the sampling method used was a nonrandom sampling technique, the findings cannot be generalized. A disadvantage of a purposive sampling method is that it can be prone to researcher bias. While the sample was created based on the judgment of the researcher, it was based on clear criteria of graduate social work faculty that teach in CSWE accredited schools of social work in the United States.

By asking participants what their overall attitude towards CIHA is, it is possible that the data has been skewed. For example, one's attitude towards meditation and mindfulness may vary greatly from one's attitude toward energy healing therapies. Future studies should focus on attitudes toward specific CIHA practices.

Similarly, asking a faculty member's comfort level in teaching these practices may need to be further defined. This double barreled survey question not have been clear as to whether a faculty member was comfortable teaching about the practice in his/her course, or actually teaching how to do the practice. One faculty member may be able to

discuss the different approaches available, but not have the knowledge or comfort level to actually teach how to utilize the approach or integrate it into social work practice.

The comparison of demographics such as age, gender, and years teaching to national data would make for a stronger study. However, this information was not available to the researcher.

Finally, this study measured perceptions, beliefs, and attitudes by self-report, which is inherently biased. This bias is likely to exist especially for non-traditional practices by graduate social work faculty. It is possible that faculty may be unwilling to admit their support for unconventional or non-empirically based practices. Therefore, reactivity and social desirability to the measures may have influenced the findings.

Recommendations for Future Research

Throughout the discussion above, suggestions have been offered about future research. Here, some general recommendations regarding future research in this area are made. The present study assessed a graduate social work faculty member's perceived knowledge of CIHA by self-report. A future study could assess actual knowledge of CIHA utilizing an exam that tests the participant's knowledge of individual complementary and integrative health approaches. In addition, a future study should explore if a faculty member's attitude improves after instruction of various complementary and integrative health approaches. A pre- and post- test of the PATCAT could be utilized as the measure. This could also be used with practicing social workers as a study conducted by Henderson (2000) showed that their knowledge of CIHA was low, despite the National statistics that show that more than one-third of the American

public are utilizing these approaches (U.S. Department of Health and Human Services, 2016).

Another future study could explore faculty and social workers' knowledge and utilization of CIHA to see if a person's knowledge influences their use. Previous research conducted on various stakeholders from the medicine, nursing, psychology, and marriage and family therapy have shown a correlation between the knowledge and utilization of CIHA practices. Again, since more than one-third of the American public are utilizing these approaches, with some such as natural products (herbs and vitamins) having serious side effects with many medications, it is important for social workers to have knowledge of these approaches to best work with their clients.

While the present study's quantitative nature lent to a general overview of the attitudes and knowledge of CIHA of graduate social work faculty, future research could use these findings as a guide, inquiring more deeply about the practices that they indicated they had the most knowledge about. In addition, a qualitative study could explore the factors that are causes of and barriers to reducing disparity in access to CIHA. This could include socioeconomic status, attitudes toward CIHA, languages spoken, community, and the extent of formal education.

In order to capture information about a broad set of practices from a large group of people, this study focused on mind-body practices as defined by the National Center for Complementary and Integrative Health (NCCIH, 2016). Future research could use these findings as a guide, inquiring more deeply about the practices that graduate social work faculty indicated they had the most knowledge of, exploring each approach individually.

References

Abbasi, M., Farahani-Nia, M., Mehrdad, N., Givari, A., & Haghani, H. (2014). Nursing students' spiritual well-being, spirituality and spiritual care. *Iranian Journal of Nursing and Midwifery Research, 19*(3), 242-247

Abbott, R.B., Hui, K.K., Hays, R.D., Mandel, J., Goldstein, M., Winegarden, B., Glaser, D., & Brunton, L. (2009). Medical student attitudes toward complementary, alternative, and integrative medicine. *Evidence-Based Complementary and Alternative Medicine, 2011*, 1-14. doi: 10.1093/eam/nep195

Adler, S., & Fosket, J.R. (1999). Disclosing complementary and alternative medicine use in the medical encounter: a qualitative study in women with breast cancer. *Journal of Family Practice, 48*, 453-458.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*, 179-211. doi: 10.1016/0749-5978(91)90020-T

Ajzen, I. (2011). The theory of planned behaviour: reactions and reflections. *Psychology and Health, 26*(9), 1113-1127. doi: http://dx.doi.org/10.1080/08870446.2011.613995

Akan, H., Izbirak, G., Kaspar, E.C., Kaya, C.A., Aydin, S., Demircan, M., Bucaktepe, P.G., Ozer, C., Sahin, H.A., & Hayran, O. (2012). Knowledge and attitudes towards complementary and alternative medicine among medical students in Turkey. *BMC Complementary and Alternative Medicine, 12*, 115-122.

Anda, R.F., Felitti, V.J., Bremner, J.D., Walker, J.D., Whitfield, C., Perry, B.D., & Giles, W.H. (2006). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience, 256*, 174-186. doi: 10.1007/s00406-005-0624-4

Astin, J.A. (1998). Why patients use alternative medicine: Results of a national study. *JAMA: Journal of the American Medical Association, 279*, 1548-1553. http://dx.doi.org/10.1001/jama.279.19.1548

Barnes, P.A., Bloom, B., & Nahlin, R.L. (2008). Complementary and alternative medicine use among adults and children: United States, 2007. *National Health Statistics Reports, 12*, 1-23.

Barnett, J.E., & Shale, A.J.(2012). The integration of complementary and alternative medicine (CIHA) into the practice of psychology: A vision for the future. *Professional Psychology: Research and Practice, 43*, 576-585. http://dx.doi.org/10.1037/a0028919

Bassman, L.E., & Uellendahl, G. (2003). Complementary/alternative medicine: ethical, professional, and practice challenges for psychologists. *Professional Psychology: Research and Practice, 34*, 264-270. http://dx.doi.org/10.1037/0735-7028.34.3.264

Baugniet, J., Boon, H., & Ostbye, T. (2000). Complementary/alternative medicine: Comparing the views of medical students with students in other health care professions. *Family Medicine, 32*(3), 178-184.

Bauml, J.M., Chokshi, S., Schapira, M., Im, E.O., Li, S.Q., Langer, C.J., Ibrahim, S.A., & Mao, J.J. (2015). Do attitudes and beliefs regarding complementary and alternative medicine impact its use among patients with cancer? A cross-sectional survey. *Cancer, 121*(14), 2431-2438. doi: 10.1002/cncr.29173

Behrman, G. (2012). *Integrating complementary and alternative medicine into the curriculum.* Paper presented at the North American Association of Christians in Social Work, St. Louis, MO.

Bell, I.R., Caspi, O., Schwartz, G.E., Grant, K.L., Gaudet, T.W., Rychener, D., Maizes, V., & Weil, A. (2002). Integrative medicine and systematic outcomes research: issues in the emergence of a new model for primary health care. *Archives of Internal Medicine, 162*(2), 133-140

Benson, H. (2010). *Relaxation revolution: enhancing your personal health through the science and genetics of mind body healing.* New York, NY: Scribner

Berkman, B. (1984). Mind and body: New life for an old idea. *Health & Social Work, 9*(4), 250-251.

Bhasin, M.K., Dusek, J.A., Chang, B., Joseph, M.G., Denninger, J.W., Fricchione, G.L., Benson, H., & Libermann, T.A. (2013). Relaxation response induces temporal transcriptome changes in energy metabolism, insulin secretion and inflammatory pathways. *PLoS ONE, 8*(5), 1-13.

Bialosky, J.E., Bishop, M.D., Robinson, M.E., Zeppieri, G., & George, S.Z. (2009). Spinal manipulative therapy has an immediate effect on thermal pain sensitivity in people with low back pain: a randomized controlled trial. *Physical Therapy, 89*(12), 1292-1303. doi: 10.2522/ptj.20090058

Bialosky, J.E., George, S.Z., Horn, M.E., Price, D.D., Staud, R., & Robinson, M.E. (2014). Spinal manipulative therapy-specific changes in pain sensitivity in individuals with low back pain. *The Journal of Pain, 15*(2), 136-148. doi: 10.1016/j.jpain.2013.10.005

Booth-Laforce, C., Scott, G.S., Heitkemper, M.M., Cornman, B.J., Lan, M.C., Bond, E.F., & Swanson, K.M. (2010). Complementary and alternative medicine (CAM) attitudes and competencies of nursing students and faculty: Results of integrating CAM into the nursing curriculum. *Journal of Professional Nursing, 26*(5), 293-300. doi: 10.1016/j.profnurs.2010.03.003

Boutin, P.D., Buchwald, D., Robinson, L., & Collier, A.C. (2000). Use of and attitudes about alternative and complementary therapies among outpatients and physicians at a municipal hospital. *Journal of Alternative and Complementary Medicine, 6*, 335-343.

Black, L.I., Clarke, T.C., Barnes, P.M., Stussman, B.J., & Nahin, R.L. (2015). Use of complementary health approaches among children aged 4-17 years in the United States: National health interview survey, 2007-2012. *National Health Statistics Reports, 78*, 1-19.

Block, P. (2006). Alternative, complementary, and integrative medicine in a conventional setting. In S. Gehlert & T.A. Browne (Eds.), *Handbook of health social work* (pp. 673-707). Hoboken, NJ: John Wiley & Sons.

Bracht, N. (2000). Prevention: Additional thoughts. *Social Work in Health Care, 30,* 1–6.

Brems, C., Johnson, M. E., Warner, T. D., & Weiss Roberts, L. (2006). Patient requests and provider suggestions for alternative treatments as reported by rural and urban care providers. *Complementary Therapies in Medicine, 14*, 10-19

Bronfort, G., Haas, M., Evans, R., Leininger, B. & Triano, J. (2010). Effectiveness of manual therapies: the UK evidence report. *Chiropractic and Osteopathy, 18*(3), 1-33. doi:10.1186/1746-1340-18-3.

Buchanan, P.A. & Ulrich, B.D. The Feldenkrais method: a dynamic approach to changing motor behavior. *Research Quarterly for Exercise and Sport, 72*(4), 315-323.

Burke A, Nahin, R.L., & Stussman, B.J. (2015). Limited health knowledge as a reason for non-use of four common complementary health practices. *PLoS One, 10*(6):e0129336.

Canda, E.R. (1990b). Afterword: Spirituality re-examined. *Spirituality and Social Work Communicator, 1*(1), 13-14.

Cassileth, B., Lusk, E.J., Strouse, T.B. & Bodenheimer, B.J. (1984). Contemporary unorthodox treatments in cancer medicine: a study of patients, treatments, and practitioners. *Annals of Internal Medicine, 101*, 105-112.

Chaibi, A., & Russell, M.B. (2014). Manual therapies for primary chronic headaches: a systematic review of randomized controlled trials. *The Journal of Headache and Pain, 15*(67), 1-8. doi: 10.1186/1129-2377-15-67.

Chandiramani, K. (2014). Resilience and spirituality among sexually abused victims. *Indian Journal of Positive Psychology, 5*(2), 169-172.

Chang, H.Y., & Chang, H.L. (2015). A review of nurses' knowledge, attitudes, and ability to communicate the risks and benefits of complementary and alternative medicine. *Journal of Clinical Nursing, 24*, 1466-1478. doi: 10.1111/jocn.12790.

Chaterji, R., Tractenberg, R.E., Amri, H., & Lumpkin, M. (2007). A large-sample survey of first and second year medical student attitudes toward complementary and alternative medicine in the curriculum and in practice. *Alternative Therapies in Health and Medicine, 13*(1), 30-35.

Chen, K.W., Berger, C.C., Manheimer, E., Forde, D., Magidson, J., Dachman, L., & Lejuez, C.W. (2012). Meditative therapies for reducing anxiety: a systematic review and meta-analysis of randomized controlled trials. *Depression and Anxiety, 29*(7), 545-562. doi: 10.1002/da.21964

Clark, C.J., Lewis-Dmello, A., Anders, Parsons, A., Nguyen-Feng, V., Henn, L., & Emerson, D. (2014). Trauma-sensitive yoga as an adjunct mental health treatment in group therapy for survivors of domestic violence: a feasibility study. *Complementary Therapies in Clinical Practice, 20*(3), 152-158. doi: 10.1016/j.ctcp.2014.04.003

Clarke, T.C., Black, L.I., Stussman, B.J., Barnes, P.M., & Nahin, R.L. (2015). Trends in the use of complementary health approaches among adults: United states, 2002-2012. *National Health Statistics Reports, 79*, 1-16.

Collins, S.K., & Shannon, C. (1988). Teaching beyond the medical model: What social workers in health care need to know. *Journal of Teaching in Social Work, 2*, 131-144.

Comarow, A. (2008, January 9). Top hospitals embrace alternative medicine. *U.S. News and World Report.* Retrieved from http://health.usnews.com/health-news/managing-your-healthcare/pain/articles/2008/01/09/embracing-alternative-care

Cooksey, G. (2009). Trager Psychophysical Integration. In L. J. Fundukian (Ed.), *The Gale Encyclopedia of Alternative Medicine* (3rd ed., Vol. 4, pp. 2259-2261). Detroit: Gale.

Council of Social Work Education. (2016). Educational policy and accreditation standards. http://www.cswe.org/

Curlin, F., Rasinski, K., Kaptchuk, T., Emanuel, E., Miller, F., & Tilburt, J. (2009). Religion, clinicians, and the integration of complementary and alternative medicines. *The Journal of Alternative & Complementary Medicine, 15*, 987-994.

Creswell, J.D., Baldwin, M., Eisenberger, N.I., Lieberman, M.D. (2007). Neural correlates of dispositional mindfulness during affect labeling. *Psychosomatic Medicine, 69*, 1-6.

Daily, D.E., & Steward, A.L. (2007). Psychometric characteristics of the spiritual perspective scale in pregnant African-American women. *Research in Nursing & Health, 30*(1), 61-71.

Dattalo, P. (2010). Ethical dilemmas in sampling. *Journal of Social Work Values and Ethics, 7*(1), 1-12.

Davison, S.N. & Jhangri, G.S. (2010). Existential and religious dimensions of spirituality and their relationship with health-related quality of life in chronic kidney disease. *Clinical Journal of the American Society of Nephrology, 5*(11), 1969-1976. doi: 10.2215/CJN.01890310

Di Lorenzo, C.E., (2011). Pilates: what is it? Should it be used in rehabilitation? *Sports Health, 3*(4), 352-361. doi: 10.1177/1941738111410285

Ditte, D., Schulz, W., Ernst, G., & Schmid-0tt, G. (2011). Attitudes towards complementary and alternative medicine among medical and psychology students. *Psychology, Health & Medicine, 16*(2), 225-237. doi: 10.1080/13548506.2010.532559

Dougherty, K., Touger-Decker, R., & O'Sullivan Maillet, J. (1999). Personal and professional beliefs and practices regarding herbal medicine among the full time faculty of the Newark-based schools of the University of Medicine and Dentistry of New-Jersey. *Integrative Medicine, 2,* 57-64.

Duffy, T.P. (2011). The Flexner report- 100 years later. *Yale Journal of Biology and Medicine, 84*(3), 269-276.

Duncan, G. (2000). Mind-body dualism and the biopsychosocial model of pain: what did Descartes really say? *Journal of Medicine and Philosophy, 25*(4), 485-513.

Duros, P., & Crowley, D. (2014). The body comes to therapy too. *Clinical Social Work Journal.* doi: 10.1007/s10615-014-0486-1

Eisenberg, D.M., Kessler, R.C., Foster, C., Norlock, F.E., Calkins, D.R., & Delbanco, T.L. (1993). Unconventional medicine in the United States: Prevalence, costs, and

patterns of use. *The New England Journal of Medicine, 328,* 246-252. http://dx.doi.org/10.1056/NEJM199301283280406

Engle, C.C., Cordova, E.H., Benedek, D.M., Liu, X., Gore, K.L., Goertz, C.M. (2014). Randomized effectiveness trial of a brief course of acupuncture for posttraumatic stress disorder. *Medical Care, 52*(12-5) 57-64.

Ernst, E. (2007). Commentary on Bishop: The fascination of complementary and alternative medicine (CAM). *Journal of Health Psychology, 12,* 868-870. doi:10.1177/1359105307082448

Evans, M.P., Valdez, A.A., Burns, S. & Rodriguez, V. (2002). Brief and nontraditional approaches to mental health counseling: Practitioner's attitudes. *Journal of Mental Health Counseling, 24*(4), 317-321.

Ewart, C.K., Suchday, S. (2002). Discovering how urban poverty and violence affect health: Development and validation of a neighborhood stress index. *Health Psychology, 21*(3), 254-262. doi: 10.1037/0278-6133.21.3.254

Ferreiira, M.L., Ferreira, P.H., Latimer, J., Herbert, R.D., Hodges, P.W., Jennings, M.D., Maher, C.G., & Refshauge, K.M. (2007). Comparison of general exercise, motor control exercise and spinal manipulative therapy for chronic low back pain: a randomized trial. *Pain, 131*(1-2), 31-37

Field, T. (2014). Massage therapy review. *Complementary Therapies in Clinical Practice, 20*(4), 224-229. doi: 10.1016/j.ctcp.2014.07.002

Field, Hernandez-Reif, Diego, Schanberg, & Kuhn (2004). Cortisol decreases and serotonin and dopamine increase following massage therapy. *International Journal of Neuroscience, 115*(10), 1397-1413.

Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.

Furnham, A., & Beard, R. (1995). Health, just world beliefs and coping style preferences in patients of complementary and orthodox medicine. *Social Science & Medicine, 40*, 1425-1432.

Freeman, J. (2005). Towards a definition of holism. *British Journal of General Practice, 55*, 154-155.

Gant, L. Benn, R., Gioia, D., & Seabury, B. (2009). Incorporating integrative health services in social work education. *Journal of Social Work Education, 45*(3), 407-425

Gehlert, S., & Browne, T.A. (Eds.). (2006). *Handbook of health social work.* New York: John Wiley & Sons.

Gerdes, K.E., Segal, E.A., Jackson, K.F., & Mullins, J.L. (2011). Teaching empathy: A framework rooted in social cognitive neuroscience and social justice. *Journal of Social Work Education, 47*(1), 109-131. doi:10.5175/JSWE.2011.200900085

Gitterman, A. & Germain, C.B. (2008). *The life model of social work practice*. New York: Columbia University Press

Graham, R.E., Ahn, A.C., Davis, R.B., O'Connor, B.B., Eisenberg, D.M., & Phillips, R.S. (2005). Use of complementary and alternative medical therapies among racial and ethnic minority adults: Results from 2002 National Health Interview Survey. *Journal of the National Medical Association, 97*(4), 535-545.

Great Data (2015). *Rural Urban Suburban Data*. Retrieved from: http://greatdata.com/rural-urban-data

Greene, A.M., Walsch, E.G., Sirois, F.M., & McCaffrey, A. (2009). Perceived benefits of complementary and alternative medicine: a whole systems research perspective. *Open Complementary Medicine Journal, 1*, 35-45.

Guba, E. & Lincoln, Y. (1986). Research, evaluation, and policy analysis: Heuristics for disciplined inquiry. *Policy Studies Review, 5*(3), 546-551.

Halcon, L.L., Chlan, L.L., Kreitzer, M.J., & Leonard, B.J. (2003). Complementary therapies and healing practices: Faculty/student beliefs and attitudes and the implications for nursing education. *Journal of Professional Nursing, 19*, 387-397. doi: 10.1016/S8755-7223(03)00133-9

Hansen, A.B., Price, K.S., Loi, E.C., Buysse, C.A., Jaramillo, T.M., Pico, E.L., & Feldman, H.M. (2014). Gait changes following myofascial structural integration (Rolfing) observed in 2 children with cerebral palsy. *Journal of Evidence-Based Complementary and Alternative Medicine, 19*, 297-300. doi: 10.1177/2156587214540466

Henderson, L. (2000). The knowledge and use of alternative therapeutic techniques by social work practitioners: A descriptive study. *Social Work in Health Care, 30*(3), 55-71.

Hilpinen, R. (1970). Knowing that one knows and the classical definition of knowledge. *Synthese, 21*(2), 190-132.

Hirschkorn, K. A., & Bourgeault, I. L. (2005). Conceptualizing mainstream health care providers' behaviours in relation to complementary and alternative medicine. *Social Science and Medicine, 61*(1), 157–170.

Hoiriis, K.T., Pfleger, B., McDuffie, F.C., Cotsonis, G., Elsanqak, O., Hinson, R. & Verzosa, G.T. (2004). A randomized clinical trial comparing chiropractic adjustments to muscle relaxants for subacute low back pain. *Journal of Manipulative and Physiological Therapeutics, 27*(6), 388-398.

Holzel, B.K., Carmody, J., Vangel, M., Congleton, C., Yerramsetti, S.M., Gard, T., & Lazar, S.W. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research: Neuroimaging, 191*(1), 36-43.

Hurwitz, E.L., Morgenstern, H., Kominski, G.F., Yu, F., & Chiang, L.M. (2006). A randomized trial of chiropractic and medical care for patients with low back pain: eighteen-month follow-up outcomes from the UCLA low back pain study. *Spine, 31*(6), 611-621

Institute of Medicine (2005). *Committee on the use of complementary and alternative medicine by the American public*. Washington, DC: National Academies Press.

Jacobs, T.L., Epel, E.S., Lin, J., Blackburn, E.H., Wolkowitz, O.M., Bridwell, D.A., Zanesco, A.P., Aichele, S.R., Sahdra, B.K., MacLean, K.A., King, B.G., Shaver, P.R., Rosenberg, E.L., Ferrer, E., Wallace, B.A., Saron, C.D. (2011). Intensive meditation training, immune cell telomerase activity, and psychological mediators. *Psychoneuroendocrinology, 36*, 664-681. doi: 10.1016/j.psyneuen.2010.09.010

Jump, J., Yarbrough, L., Kilpatrick, S., & Cable, T. (1998). Physicians' attitudes toward complementary and alternative medicine. *Integrative Medicine, 1*, 149-153.

Keefe, T. (2011). Meditation and social work treatment. In *Social work*

treatment: Interlocking theoretical approaches (5th ed., pp. 293-314). New York: Free Press.

Kelner, M., & Wellman, B. (1997). Health care and consumer choice: Medical and alternative therapies. *Social Science & Medicine, 45*, 203-212. http://dx.doi.org/10.1016/S0277-9536(96)00334-6

Kessler, R.C., Davis, R.B., Foster, D.F., Van Rompay, M.I., Walters, E.E., Wilkey, S.A., Kaptchuk, T.J., & Eisenberg, D.M. (2001). Long-term trends in the use of complementary and alternative medicine therapies in the United States. *Annals of Internal Medicine, 135*(4), 262-268.

Kim, S.S., Erlen, J.A., Kim, K.B., Sok, S.R. (2006). Nursing students' and faculty members' knowledge of, experience with, and attitudes toward complementary and alternative therapies. *Journal of Nursing Education, 45*(9), 375-378.

Kim, Y-D., Heo, I., Shin, B-C, Crawford, C., Kang, H-W, & Lim, J-H (2013). Acupuncture for posttraumatic stress disorder: a systematic review of randomized controlled trials and prospective clinical trials. *Evidence-Based Complementary and Alternative Medicine, 2013,* 1-12. doi: 10.1155/2013/615857

Klein, S.D., Bayard, C., & Wolf, U. (2014). The Alexander Technique and musicians: a systematic review of controlled trials. *BMC Complementary and Alternative Medicine, 14,* 1-11.

Kreitzer, M.J., Kliger, B., Meeker, W.C. (2009). Health professions education and integrative health care. Commissioned for the Institute of Medicine (IOM) Summit on Integrative Medicine and the Health of the Public

Kreitzer, M.J., Mitten, D., Harris, I., & Shandeling, J. (2002). Attitudes toward CAM among medical, nursing, and pharmacy faculty and students: A comparative analysis. *Alternative Therapies in Health and Medicine, 8,* 44-53.

Kumar, R. (2014). *Research methodology: a step-by-step guide for beginners* (4th ed.). Thousand Oaks, CA: Sage Publications.

Lazar, S.W., Bush, G. Gollub, R.L., Fricchione, G.L., Khalsa, G., & Benson, H. (2000). Functional brain mapping of the relaxation response and meditation. *NeuroReport, 11*(7), 1581-1585.

Lee, M. Y., Siu-man, N., Leung, P. P. Y., & Chan, C. L. W. (2009). *Integrative body–mind-spirit social work: An empirically based approach to assessment and treatment.* New York: Oxford University Press.

Lo, C.B., Desmond, R.A., & Meleth, S. (2009). Inclusion of complementary and alternative medicine in US state comprehensive cancer control plans: baseline data. *Journal of Cancer Education, 24*(4), 249-253.

Loveland Cook, C.A., Becvar, D.S., & Pontious, S.L. (2000). Complementary alternative medicine in health and mental health: Implications for social work practice. *Social Work In Health Care, 31*(3), 39-57.

Lycurgus, D.M. (2001). The oath of hippocrates: an historical review. *Neurosurgery, 49*(3), 554-566.

MacFadden, R. (2011). Hypnosis and social work practice: Incorporating new perspectives from neuroscience. In *Social work treatment: Interlocking theoretical approaches* (5th ed., pp. 271-278).

Machado, L.A.C., Kamper, S.J., Herbert, R.D., Maher, C.G., & McAuley, J.H. (2009). Analgesic effects of treatments for non-specific low back pain: a meta-analysis of placebo-controlled randomized trials. *Rheumatology (Oxford/England), 48*(5), 520-527. doi: 10.1093/rheumatology/ken470

MacLennan, A.H., Wilson, D.H., & Taylor, A.W. (1996). Prevalence and cost of alternative medicine in Australia. *The Lancet, 347*, 569-573. http://dx.doi.org/10.1016/S0140-6736(96)91271-4

Majchrzycki, M., Kocur, P., & Kotwicki, T. (2014). Deep tissue massage and nonsteroidal anti-inflammatory drugs for low back pain: a prospective randomized trial. *The Scientific World Journal, 2014*, 1-7. doi: 10.1155/2014/287597

Marshall, J. W., Ruth, B. J., Sisco, S., Bethke, C., Piper, T. M., Cohen, M., & Bachman, S. (2011). Social work interest in prevention: A content analysis of the professional literature. *Social Work, 56*, 201–211.

Maskarinec, G. Shumay, D.M., & Kakai, H. (2000). Ethnic differences in complementary and alternative medicine use among cancer patients. *Journal of Complementary and Alternative Medicine, 6*, 531-538.

McCaffrey, A.M., Pugh, G.F., & O'Connor, B.B. (2007). Understanding patient preference for integrative medical care: Results from patient focus groups. *Journal of General Internal Medicine, 22*(11), 1500-1505.

McCave, E., & Rishel, C. W. (2011). Prevention as an explicit part of the social work profession: A systematic investigation. *Advances in Social Work, 12*, 226–240.

McCave, E. L., Rishel, C. W., & Morris, M. (2013). Prevention as an explicit part of the social work profession: Part two of a systematic investigation. *Advances in Social Work, 14*, 544–555.

McEwen, B.S., Eiland, L., Hunter, R.G., Miller, M.M. (2012). Stress and anxiety: Structural plasticity and epigenetic regulation as a consequence of stress. *Neuropharmacology, 62*, 3-12. doi: 10.1016/j.neuropharm.2011.07.014

McEwen, B.S., Gianaros, P.J. (2010). Central role of the brain in stress and adaptation: Links to socioeconomic status, health, and disease. *Annals of the New York Academy of Sciences, 1186*, 190–222. doi:10.1111/j.1749-6632.2009.05331.x

McLaughlin, K.A., Costello, E.J., Leblanc, W., Sampson, N.A., & Kessler, R.C. (2012). Socioeconomic status and adolescent mental disorders. *American Journal of Public Health, 102*(9), 1742-1750.

Meyer, C. & Mattaini, M. (1998). "The ecosystems perspective: implications for practice." In *The Foundations of Social Work Practice*, 2nd ed., edited by Mark Mattaini, Christine Lowery, and Carol Meyer, 3-19. Washington, DC: NASW, 1998.

Milden, S.P., & Stokols, D. (2004). Physician's attitudes and practices regarding complementary and alternative medicine. *Behavioral Medicine, 30* 73-82.

Montgomery, A. (2013). *Neurobiology essentials for clinicians*. New York, NY: Norton.

Nahin, R.L., Barnes, P.M., Stussman, B.J., & Bloom, B. (2009). Costs of complementary and alternative medicine (CAM) and frequency of visits to CAM practitioners: United States, 2007. *National Health Statistics Reports, 18*, 1-16.

Nahin, R.L., Byrd-Clark, D., Stussman, B.J., & Kalyanaraman, N. (2012). Disease severity is associated with the use of complementary medicine to treat or manage type-2 diabetes: data from the 2002 and 2007 national health interview survey. *BMC Complementary and Alternative Medicine, 12*, 193.

National Association of Social Workers (2015). *Clinical Social Work*. Retrieved from https://www.socialworkers.org/practice/clinical/default.asp

National Association of Social Workers. (2008). *Code of ethics of the National Association of Social Workers*. Washington, DC. NASW Press.

Nicdao, E.G., & Ai, A.L. (2014). Religion and the use of complementary and alternative medicine (CAM) among cardiac patients. *Journal of Religion and Health, 53*, 864-877. doi: 10.1007/s10943-013-9681-6

Olson, M.M., Robinson, W.D., Geske, J.A., & Springer, P.R. (2011). Mind-body therapy: Attitudes, beliefs and practices of graduate faculty and students from accredited marriage and family therapy programs in the U.S. and Canada. *Explore, 7*(5), 320-325. doi:10.1016/j.explore.2011.06.003

Pan, Y.Q., Yang, K.H., Wang, Y.L., Zhang, L.P., & Liang, H.Q. (2014). Massage interventions and treatment-related side effects of breast cancer: a systematic review and meta-analysis. *International Journal of Clinical Oncology, 19*(5), 829-841. doi: 10.1007/s10147-013-0635-5

Pawlak, R., Brown, D., Meyer, M.K., Connell, C., Yadrick, K., Johnson, J.T., & Blackwell, A. (2008). Theory of planned behavior and multivitamin supplement use in caucasian college females. *Journal of Primary Prevention, 29*, 57-71. doi: 10.1007/s10935-008-0127-y

Peres, J.F.P., Moreira-Almeida, A., Nasello, A.G., & Koenig, H.G. (2007). Spirituality and resilience in trauma victims. *Journal of Religion and Health, 46*(3), 343-350

Picard, M., Sabiston, C.M., & McNamara, J.K. (2011). The need for a transdisciplinary, global health framework. *The Journal of Alternative and Complementary Medicine, 17*(2), 179-184. doi: 10.1089/acm.2010.0149

Pilkington, K., Kirkwood, G., Rampes, H., Cummins, M., & Richardson, J. (2007). Acupunture for anxiety and anxiety disorders – a systematic literature review, *Acupuncture in Medicine, 25*, 1-10.

Raheim, S., & Lu, J.J. (2014). Preparing MSW students for integrative mind-body-spirit practice. *Clinical Social Work Journal, 42*(3), 288-301. doi: 10.1007/s10615-014-0484-3

Ranjan. (1998). Magic or logic: Can "alternative" medicine be scientifically integrated into modern medical practice? *Advances in Mind-Body Medicine, 14*, 43-73.

Reed, P.G. (1986). Religiousness in terminally ill and healthy adults. *Research in Nursing & Health, 9*(1), 35-41.

Reed, P.G. (1987). Spirituality and well-being in terminally ill hospitalized adults. *Research in Nursing & Health, 10*, 335-344.

Reiss, T.J. (1996). Denying the body? Memory and the dilemmas of history in descartes. *Journal of the History of Ideas, 57*(4), 586-607.

Riccard, C., & Skelton, M. (2008). Comparative analysis of 1st, 2nd, and 4th year MD students' attitudes toward complementary and alternative medicine (CAM). *BMC Research Notes, 1*(84). Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/18799010

Rishel, C.W. (2015). Establishing a prevention-focused integrative approach to social work practice. *Families in Society: The Journal of Contemporary Social Services, 96*(2), 125-132. doi: 10.1606/1044-3894.2015.96.15

Rishel, C.W. (2014). Teaching note- Integrating prevention content into clinical social work practice courses. *Journal of Social Work Education, 50*, 752 – 762.

Robbins, S., Chatterjee, P., & Canda, E. (198). *Contemporary human behavior theory: A critical perspective for social work*. Needham Heights, MA: A Viacom Company

Rojas-Cooley, M.T., & Grant, M. (2009). Complementary and alternative medicine: Oncology nurses' knowledge and attitudes. *Oncology Nursing Forum, 36*(2), 217-224.

Rose, J.Hl, O'Toole, E.E., Skeist, R., Pfeiffer, B., & Carlsen, W.R. (1998). Complementary therapies for older adults: An exploratory survey of primary care physicians' attitudes. *Clinical Gerontologist, 19*, 3-19.

Rosenbaum, M.E., Nisly, N.L., Ferguson, K.J., & Kligman, E.W. (2002). Academic physicians and complementary and alternative medicine: An institutional survey. *American Journal of Medical Quality*, *17*(1), 3-9.

Rossi, E.L, & Rossi, K.L. (2008). *The new neuroscience of psychotherapy, therapeutic hypnosis & rehabilitation: A creative dialogue with our genes.* Los Osos, CA: Author.

Rothschild, B. (2000). *The body remembers: The psychophysiology of trauma and trauma treatment*. New York, NY: Norton.

Rubin, A., & Babbie, E. (2014). *Research methods for social work* (8th ed.). Belmont, CA: Brooks/Cole.

Schwartz, G.E. & Russek, L.G. (1997). Dynamical energy systems and modern physics: fostering the science and spirit of complementary and alternative medicine. *Alternative Therapies in Health Medicine, 3*(3), 46-56.

Schure, M.B., Christopher, J., & Christopher, S. (2008). Mind-body medicine and the art of self-care: teaching mindfulness to counseling students through yoga, meditation, and qigong. *Journal of Counseling & Development, 86*, 47-56.

Sewitch, M.J., Cepoiu, M., Rigillo, N., & Sproule, D. (2008). A literature review of health care professional attitudes toward complementary and alternative medicine. *Complementary Health Practice Review, 13*(3), 139-154.

Shinnick, P. (2006). Qigong: where did it come from? where does it fit in science? what are the advances? *The Journal of Alternative and Complementary Medicine, 12*(4), 351-353.

Sierpina, V., Levine, R., Astin, J., & Tan, A. (2007). Use of mind-body therapies in psychiatry and family medicine faculty and residents: attitudes, barriers, and gender differences. *Explore (NY), 3*, 129-135.

Simon, G.E., Cherkin, D.C., Sherman, K.J., Einsberg, D.M., Deyo, R.A., & Davis, R.B. (2004). Mental health visits to complementary and alternative medicine providers. *General Hospital Psychiatry, 26*(3), 171-177.

Slagter, H.A., Davidson, R.J., & Lutz, A. (2011). Mental training as a tool in the neuroscientific study of brain and cognitive plasticity. *Frontiers in Human Neuroscience, 5*, 1-12.

Specht, H., & Courtney, M.E. (1994). *Unfaithful Angels: How Social Work Has Abandoned Its Mission.* New York, NY: Free Press.

Stanhope, V., Tuchman, E., & Sinclair, W. (2011). The implementation of mental health evidence based practices from the educator, clinician and researcher perspective. *Clinical Social Work Journal, 39*(4), 369-378.

Staples, J.K., Hamilton, M.F., & Uddo, M. (2013). A yoga program for the symptoms of post-traumatic stress disorder in veterans. *Military Medicine, 178*(8), 750-756.

Starak, Y. (1984). Strategies for mind and body health in social work education and practice. *Mental Health in Australia, 1*(13), 19-22.

Sternberg, E.M. (2002). Walter B. Cannon and " 'voodoo' death": a perspective from 60 years on. *American Journal of Public Health, 92*(10), 1564-1566.

Stratton, T.D., Benn, R., Lie, D., Zeller, J., & Nedrow, A. (2007). Evaluating CAM education in health professions programs. *Academic Medicine, 82*(10), 956-961. doi: 10.1097/ACM.0b013e31814a5152

Streeter, C.C., Jensen, J.E., & Perlmutter, R.M. (2007). Yoga asana sessions increase brain GABA levels: a pilot study. *Journal of Complementary and Alternative Medicine, 13,* 419-426.

Tang, Y., Lu, Q., Fan, M., & Yang, Y., (2012). Mechanisms of white matter changes induced by meditation. *Proceedings of the National Academy of Sciences of the United States of America, 109*(26) 10570-10574.

Taylor-Piliae, R.E., Haskell, W.L, Waters, C.M., & Sivarajan Froelicher, E. (2005). Change in perceived psychosocial status following a 12-week Tai Chi exercise programme. *Issues and Innovations in Nursing Practice,* 313-329.

Topaz, M., Johnson, A., Pinilla, R., Rand, C., & George, M. (2012). Primary care providers' attitudes and beliefs about patients' complementary and alternative

medicine use for asthma self-management: An exploratory study. *Journal of Asthma & Allergy Educators, 3*(6), 255-263.

Trail-Mahan, T., Mao, C.L., & Bawel-Brinkley, K. (2013). Complementary and alternative medicine: Nurses' attitudes and knowledge. *Pain Management Nursing*, *14*(4), 277-286.

Turner, F.J. (1996). *Social work treatment: Interlocking theoretical approaches* (4th ed.). New York: Free Press.

Utnutzer, J., Klap, R., Stturm, R., Young, A.S., Marmon, T., Shatkin, J., & Wells, K.B. (2000). Mental disorders and the use of alternative medicine: Results from a national survey. *The American Journal of Psychiatry, 157*(11), 1851-1857.

Upchurch, D.M., & Chyu, L. (2005). Use of complementary and alternative medicine among American women. *Women's Health Issues, 15*, 5-13.

U.S. Department of Health and Human Services, National Institutes of Health, National Center for Complementary and Integrative Health (2016). *Complementary, alternative, or integrative health: what is in a name?* Retrieved from http://nccih.nih.gov/.

U.S. Department of Health and Human Services. (2016). *National health statistics reports: Trends in the use of complementary health approaches among adults: United States, 2002-2012* (Report No. 79). Retrieved from National Health Statistics Reports website: https://nccih.nih.gov/research/statistics/NHIS/2012

Vago, D.R., & Silbersweig, D.A. (2012). Self-awareness, self-regulation, and self-transcendence (S-ART): a framework for understanding the neurobiological

mechanisms of mindfulness. *Frontiers in Human Neuroscience, 6*, 1-30. doi:10.3389/fnhum.2012.00296

van der Kolk, B. (2014). *The body keeps the score: brain, mind, and body in the healing of trauma.* Westminster, MD: Penguin Random House

van der Kolk, B., Spinazzola, J., Blaustein, M.E., Hopper, J.W., Hopper, E.K., Korn, D.L., & Simpson, W.B. (2007). A randomized clinical trial of eye movement desensitization and reprocessing (EMDR), fluoxetine, and pill placebo in the treatment of posttraumatic stress disorder: Treatment effects and long-term maintenance. *Journal of Clinical Psychiatry*, *68*(0). 1-10.

van der Kolk, B., Stone, L., West, J., Rhodes, A., Emerson, D., Suvk, M., & Spinazzola, J. (2014). Yoga as an adjunctive treatment for posttraumatic stress disorder: a randomized controlled trial. *The Journal of Clinical Psychiatry*, *75*(6), e559-565. doi: 10.4088/JCP.13m08561

van Gijn, J. (2005). Pioneers in neurology: rene descartes (1596-1650). *Journal of Neurology, 252*, 241-242. doi: 10.1007/s00415-005-0775-2

Wahner-Roedler, D., Vincent, A., Elkin, P.L., Loehrer, L.L., Cha, S.S., & Bauer, B.A. (2006). Physicians' attitudes toward complementary and alternative medicine and their knowledge of specific therapies: A survey at an academic medical center. *Advance Access Publication*

Wilson, L. A. M., Hamilton, K., & White, K. M. (2012). Psychological students' beliefs about integrating complementary and alternative therapy (CAT) into their future psychology practice. *Psychology, 3*, 208– 212.

Wilson, L. A. M., & White, K. M. (2007). Development of an Attitudes Towards

Complementary Therapies Scale for psychologists. *Clinical Psychologist, 11*, 37–44. http://dx.doi.org/10.1080/13284200701411544

Wilson, L. A. M., & White, K. M. (2011). Integrating complementary and alternative therapies into psychological practice: A qualitative analysis. *Australian Journal of Psychology, 63*, 232–242. http://dx.doi.org/ 10.1111/j.1742-9536.2011.00022.x

Wilson, L. A. M., White, K. M., & Hamilton, K. (2013). Predicting psychologists' intentions to integrate complementary and alternative therapies into their practice. *Australian Psychologist, 48*, 149–158. http://dx.doi.org/10.1111/j.1742-9544.2011.00058.x

Wilson, M. L., White, K.M., & Obst, P. (2011). An examination of the psychologists' attitudes towards complementary and alternative therapies scale within a practitioner sample. *Australian Psychologist, 46*, 237-244. doi: 10.1111/j.1742-9544.2010.00009

Wolf, D.B. (2003). The Vedic theory of clinical social work. *Indian Journal of Psychiatric Social Work, 64*, 333-349.

Wynn, G.H. (2015). Complementary and alternative medicine approaches in the treatment of PTSD. *Current Psychiatry Reports, 17*(62), 1-7. doi: 10.1007/s11920-015-0600-2

Yang, X., Zhao, H., & Wang, J. (2014). Chinese massage (Tuina) for the treatment of essential hypertension: a systematic review and meta-analysis. *Complementary Therapies in Medicine, 22*(3), 541-548. Doi: 10.1016/j.ctim.2014.03.008

APPENDIX A

EMAIL TO PROGRAM DIRECTORS

Dear Dr. ,

My name is Jennifer Williams and I'm a doctoral candidate in the School of Social Work at Barry University. For my dissertation, I hope to collect data that adds to the literature on the factors that influence graduate social work faculty's attitudes toward complementary and integrative health approaches. The survey should take no more than 20 minutes to complete. I would greatly appreciate it if you would consider forwarding the following description of my study to the full-time faculty that teach in your MSW program.

Thank you very much for your time and consideration!

Jennifer Williams

Dear graduate faculty member,

My name is Jennifer Williams and I'd like to invite you to participate in a study that helps in understanding the factors that influence a graduate faculty member's attitudes toward complementary and integrative health approaches.

This study is expected to take about 20 minutes. To participate in this study, you need to:

- Be a full-time faculty member
- Teach in a CSWE accredited MSW program

This survey is completely anonymous. All of your responses will be recorded directly into a secure password-protected web-based database through Surveymonkey.com that will not include any references to your identity. The web server is password protected and secure at all times. There are no risks associated with answering this survey. You can refuse or stop participating any time without penalty or consequence.

To participate, please click on the link listed below or cut and paste it into your browser:

https://www.surveymonkey.com/r/CAM_GradSWFac

The study has been approved by the Institutional Review Board of Barry University. (Please see attached.) If you have any questions, please contact Jennifer Williams, Principal Investigator, at jennifer.williams2@mymail.barry.edu. Thank you very much for your time!

Sincerely,

Jennifer Williams, LCSW
Doctoral Candidate
School of Social Work
Barry University

APPENDIX B

REMINDER EMAIL TO PROGRAM DIRECTORS

Dear Dr. ,

I am resending this survey link for a research study on the factors that influence graduate social work faculty's attitudes toward complementary and integrative health approaches. The survey should take no more than 20 minutes to complete. I would greatly appreciate it if you would again consider forwarding the following description of my study to the full-time faculty that teach in your MSW program.

Thank you very much for your time and consideration!

Jennifer Williams

Dear graduate faculty member,

My name is Jennifer Williams and I'd like to invite you to participate in a study that helps in understanding the factors that influence a graduate faculty member's attitudes toward complementary and integrative health approaches.

This study is expected to take about 20 minutes. To participate in this study, you need to:

- Be a full-time faculty member
- Teach in a CSWE accredited MSW program

This survey is completely anonymous. All of your responses will be recorded directly into a secure password-protected web-based database through Surveymonkey.com that will not include any references to your identity. The web server is password protected and secure at all times. There are no risks associated with answering this survey. You can refuse or stop participating any time without penalty or consequence.

To participate, please click on the link listed below or cut and paste it into your browser:

https://www.surveymonkey.com/r/CAM_GradSWFac

The study has been approved by the Institutional Review Board of Barry University. (Please see attached.) If you have any questions, please contact Jennifer Williams, Principal Investigator, at jennifer.williams2@mymail.barry.edu. Thank you very much for your time!

Sincerely,

Jennifer Williams, LCSW
Doctoral Candidate
School of Social Work
Barry University

APPENDIX C

EMAIL TO GRADUATE SOCIAL WORK FACULTY MEMBER

Dear Dr. ,

My name is Jennifer Williams and I'd like to invite you to participate in a study that helps in understanding the factors that influence a graduate faculty member's attitudes toward complementary and integrative health approaches.

This study is expected to take about 20 minutes. To participate in this study, you need to:

- Be a full-time faculty member
- Teach in a CSWE accredited MSW program

This survey is completely anonymous. All of your responses will be recorded directly into a secure password-protected web-based database through Surveymonkey.com that will not include any references to your identity. The web server is password protected and secure at all times. There are no risks associated with answering this survey. You can refuse or stop participating any time without penalty or consequence.

To participate, please click on the link listed below or cut and paste it into your browser:

https://www.surveymonkey.com/r/CAM_GradSWFac

The study has been approved by the Institutional Review Board of Barry University. (Please see attached.) If you have any questions, please contact me at jennifer.williams2@mymail.barry.edu. Thank you very much for your time!

Sincerely,

Jennifer Williams, LCSW
Doctoral Candidate
School of Social Work
Barry University

APPENDIX D

RECRUITMENT FLYER

Barry University

School of Social Work

RESEARCH STUDY: VOLUNTEERS NEEDED

Complementary and Integrative Health Approaches: An Exploratory Study of Graduate Social Work Faculty Knowledge and Attitudes

You will be asked to complete a brief demographic questionnaire and a survey on your knowledge of complementary and integrative health approaches (CIHA), spiritual perspective, and attitude towards CIHA.

To participate, you must be:
1) A full-time faculty
2) Teach in the graduate SW program

OR SCAN THE QR CODE:

TO PARTICIPATE FOLLOW THE LINK TO BELOW:
https://www.surveymonkey.com/r/CAM_GradSWFac

For questions or concerns regarding the study or your participation in the study, you may contact:
Ms. Jennifer Williams at 305-899-3941 or jwilliams@barry.edu
You may also contact the Institutional Review Board point of contact, Barbara Cook at (305) 899-3020 or bcook@mail.barry.edu.

APPENDIX E

COVER LETTER AND SURVEY

Section I-Cover Page

Dear Research Participant:

Your participation in a research project is requested. The title of the study is Complementary and Integrative Health Approaches: An Exploratory Study of Graduate Social Work Faculty Attitudes. The research is being conducted by Jennifer Williams, LCSW, doctoral candidate with the School of Social Work at Barry University, and it is seeking information that will be useful to inform clinical practice, policy, and educational initiatives.

The purpose of this research is to explore the factors that influence attitudes of graduate social work faculty towards Complementary and Integrative Health Approaches (CIHA). Participation is entirely voluntary and you may at any time withdraw from participation. I am asking you to complete the attached electronic survey. More specifically, you will be asked to rate your knowledge of CIHA, questions about your spiritual perspective, questions about your attitude towards CIHA, and a brief demographic survey.

There are no potential benefits of this study and no potential risks of participating in this study. However, there can be no guarantee of absolute anonymity due to the medium of this second party - SurveyMonkeyTM. Nevertheless, SurveyMonkeyTM emphatically declares “Our privacy policy states that we will not use your data for our own purposes." In addition, I will request that SurveyMonkeyTM "disable the SSL" before data collection thereby assuring the fact that the results I will receive will be truly anonymous and there will be no record kept of your IP address nor linkages I could utilize to identify you. It will take about 20 minutes to complete this survey.

Your responses will be automatically compiled in a spreadsheet format and cannot be directly linked to you. All data will be stored in a password protected electronic format. In addition, SurveyMonkeyTM employs multiple layers of security to ensure that my account and the data associated with the account are private and secure. In addition, a third-party security firm is consistently utilized by the survey tool administration (SurveyMonkeyTM) to conduct audits of security. The company asserts that the latest in firewall and intrusion prevention technology is employed. Hence, any concerns regarding potential invasion of your privacy and access to your responses other than I, the investigator should be allayed due to these protections. I trust you feel confident to answer the attached survey questions as honestly as you can.

As a research participant, information you provide is anonymous, that is, no names or other identifiers will be collected. SurveyMonkey.com allows researchers to suppress the delivery of IP addresses during the downloading of data, and in this study no IP address will be delivered to the researcher. However, SurveyMonkey.com does collect IP addresses for its own purposes. If you have concerns about this you should review the privacy policy of SurveyMonkey.com before you begin.

Again, you are free to withdraw your participation at any time without penalty. Thank

you for your participation in advance. If you have any questions, feel free to contact me, Jennifer Williams, at 305-899-3941 or jwilliams@barry.edu or the Institutional Review Board point of contact, Barbara Cook, at (305) 899-3020 or bcook@mail.barry.edu.

Thank you for your participation.
Sincerely,
Jennifer Williams, LCSW
Doctoral Candidate

By clicking on the "I agree" button below and by submitting a completed survey, you are giving permission to use your data record in this study. Participant must click on either the "I agree" button or "I do not agree" button to confirm consent or refusal. Once the "I agree" button is clicked, participant is directly linked to the Survey. If you click on the "I do not agree" button, you will immediately exit this site.

Section II-Demographics (12 Questions)

Q1.

Are you a full-time faculty member that teaches in a CSWE accredited MSW program?	1= Yes 2= No
Institutional Auspice	1=Public 2=Private-Religion Affiliated 3=Private-Other
Institution a historically black college or university (HBCU)?	1=Yes 2=No
Geographic Location	1=Urban 2=Suburban 3=Rural
Gender	1=Male 2=Female 3=Transgender 4=Other
Age	1= Under 25 years 2= 25-34 years 3= 35-44 years 4= 45-54 years 5= 55-64 years 6= Over 64 years
Year of Teaching	1= Less than 1 year 2= 1-5 years 3= 6-10 years

	4= 11-15 years 5= 16-20 years 6= More than 20 years
Highest Level of Education	1= MSW 2= Master's in related field 3= Doctorate in Social Work (DSW or PhD) 4= Doctorate in related field
Years of Clinical Practice	1= Less than 1 year 2= 1-5 years 3= 6-10 years 4= 11-15 years 5= 16-20 years 6= More than 20 years
Are you currently in practice as well as teaching?	1= Yes 2= No
Which area in the graduate social work curriculum do you primarily teach?	1= Human Behavior and the Social Environment 2= Policy 3= Research 4= Practice 5= Field Education
Approximately what size is the *graduate program* in which you teach?	1= Less than 50 students 2= 51-150 students 3= 151-250 students 4= 251-350 students 5=351-450 students 6= Over 451 students

Section III-Knowledge of and Comfort Level of Teaching CIHA (11 Questions)

The term complementary and integrative health approaches (CIHA) refers to a group of diverse medical and health care systems, practices, and products that are not generally considered to be part of conventional medicine. The National Center for Complementary and Integrative Health (NCCIH) has divided most complementary health approaches into two categories: natural products and mind and body practices, such as meditation, yoga, tai-chi, chiropractic, acupuncture, and massage. (U.S. Department of Health and Human Services, 2016).

The following are examples of Mind-Body Practices:

Meditation/Mindfulness, Yoga, Acupuncture, Relaxation Exercises (Breathing Exercises, Guided Imagery, Progressive Muscle Relaxation), Hypnotherapy, Qigong, Tai Chi, Chiropractic/Spinal Manipulation, Massage Therapy, Movement Therapies (Feldenkrais method, Alexander technique, Pilates, Rolfing Structural Integration, and Trager

psychophysical integration), Energy Therapies (Magnet Therapy, Light Therapy, Reiki, Healing Touch)
Q2.

Please indicate your **level of knowledge** of each of the following mind and body practices:					
	Not Knowledgeable At	**Not Very Knowledgeable**	**Somewhat Knowledgeable**	**Knowledgeable**	**Very Knowledgeable**
Meditation/Mindfulness	**1**	**2**	**3**	**4**	**5**
Yoga	**1**	**2**	**3**	**4**	**5**
Acupuncture	**1**	**2**	**3**	**4**	**5**
Relaxation Exercises (Breathing Exercises, Guided Imagery, Progressive Muscle Relaxation)	**1**	**2**	**3**	**4**	**5**
Hypnotherapy	**1**	**2**	**3**	**4**	**5**
Qigong	**1**	**2**	**3**	**4**	**5**
Tai Chi	**1**	**2**	**3**	**4**	**5**
Chiropractic/Spinal Manipulation	**1**	**2**	**3**	**4**	**5**
Massage Therapy	**1**	**2**	**3**	**4**	**5**
Movement Therapies (Feldenkrais method, Alexander technique, Pilates, Rolfing Structural Integration, and Trager psychophysical integration)	**1**	**2**	**3**	**4**	**5**
Energy Therapies (Magnet Therapy, Light Therapy, Reiki, Healing Touch)	**1**	**2**	**3**	**4**	**5**

Comfort level in teaching CIHA (11 Questions)

Q3.

Please indicate your **level of comfort in teaching** for each of the following mind and body practices:					
	Not Comfortable at all	**Not Very Comfortable**	**Somewhat Comfortable**	**Comfortable**	**Very Comfortable**
Meditation/Mindfulness	**1**	**2**	**3**	**4**	**5**

Yoga	**1**	**2**	**3**	**4**	**5**
Acupuncture	**1**	**2**	**3**	**4**	**5**
Relaxation Exercises (Breathing Exercises, Guided Imagery, Progressive Muscle Relaxation)	**1**	**2**	**3**	**4**	**5**
Hypnotherapy	**1**	**2**	**3**	**4**	**5**
Qigong	**1**	**2**	**3**	**4**	**5**
Tai Chi	**1**	**2**	**3**	**4**	**5**
Chiropractic/Spinal Manipulation	**1**	**2**	**3**	**4**	**5**
Massage Therapy	**1**	**2**	**3**	**4**	**5**
Movement Therapies (Feldenkrais method, Alexander technique, Pilates, Rolfing Structural Integration, and Trager psychophysical integration)	**1**	**2**	**3**	**4**	**5**
Energy Therapies (Magnet Therapy, Light Therapy, Reiki, Healing Touch)	**1**	**2**	**3**	**4**	**5**

Section IV-Inclusion of CIHA in graduate social work curricula (7 Questions)

Q4. Does the graduate social work program in which you teach offer an elective course on *general* CIHA?

a. **Yes**
b. **No**
c. **Don't Know**

Q5. Does the graduate social work program in which you teach offer an elective course on a *specific* CIHA modality/modalities?

a. **Yes**
b. **No**
c. **Don't Know**

Q6. Does the graduate social work program in which you teach integrate CIHA into the curriculum?

a. **Yes (if yes, please answer next question)**
b. **No (if no, please skip next question)**
c. **Don't Know**

Q7. Into which of the following curricular areas has your graduate social work program integrated CIHA knowledge, skills, and/or behaviors. Please check all that apply.

Human Behavior and the Social Environment	

Policy	
Research	
Practice	
Field Education	

Q8. What do you perceive, if any, as possible barriers to inclusion of CIHA into graduate social work curriculum? Please check all that apply.

Lack of knowledge of CIHA	
Lack of room in current curriculum to add this content	
Lack of faculty to teach this content	
Personal beliefs and values	
Not relevant to social work curriculum	
Colleagues not supportive of inclusion of CIHA in curriculum	
Other barriers not specified	
No barriers	

Rate your level of agreement with the following statement:

Q9. CIHA should be integrated into graduate social work curriculum:

1- **Strongly agree**
2- **Agree**
3- **Somewhat agree**
4- **Somewhat disagree**
5- **Disagree**
6- **Strongly disagree**

Q10. To what degree do you intend to integrate CIHA into your classroom?

1- **Intend**
2- **Somewhat intend**
3- **Neither intend or not intend**
4- **Somewhat not intend**
5- **Do not intend**

Section V-SPS (10 questions)

(Statements are adapted with permission from the author: Reed, P.G. (1987). Spirituality and well-being in terminally ill hospitalized adults. Research in Nursing & Health, 10, 335-344.)

Q11.

Please check one for each of the following:

Item	**Not at all**	**About once a year**	**About once a month**	**About once a week**	**About once a day**	**DK/NA**
In talking with family and friends, how often do you mention spiritual matters?	1	2	3	4	5	6
How often do you share with others the problems and joys of living according to your spiritual beliefs?	1	2	3	4	5	6
How often do you read spiritually-related materials?	1	2	3	4	5	6
How often do you engage in private prayer or meditation?	1	2	3	4	5	6
	Strongly Disagree	**Disagree**	**Disagree more than agree**	**Agree more than agree**	**Agree**	**Strongly Agree**
Forgiveness is an important part of my spirituality.	1	2	3	4	5	6
I seek spiritual guidance in making decisions in my everyday life.	1	2	3	4	5	6
My spirituality is a significant part of my life.	1	2	3	4	5	6
I frequently feel very close to God or a “higher power” in prayer, during public worship or at important moments in my daily life.	1	2	3	4	5	6
My spiritual views have had an influence upon my life.	1	2	3	4	5	6
My spirituality is especially important to me because it answers many	1	2	3	4	5	6

questions about the meaning of life.						

Section VI- PATCAT (10 questions)

The term complementary and integrative health approaches (CIHA) refers to a group of diverse medical and health care systems, practices, and products that are not generally considered to be part of conventional medicine. Complementary medicine includes mind and body practices, such as meditation, chiropractic, acupuncture, and massage (U.S. Department of Health and Human Services, 2016).

How much do you agree with each of the following statements?

(Statements are adapted with permission from the authors: Wilson, L., M., & White, K., M. (2007). Development of an Attitudes towards Complementary Therapies Scale for Psychologists. Clinical Psychologist 11(2) 37-44).

Please circle one number on each line

Q12.

Do you agree that…?	**Strongly disagree**	**Disagree**	**Somewhat disagree**	**Neither agree nor disagree**	**Somewhat agree**	**Agree**	**Strongly Agree**
Complementary therapies should be subject to more scientific testing before they can be accepted by social workers	1	2	3	4	5	6	7
Complementary therapies can be dangerous in that they may prevent people getting proper treatment	1	2	3	4	5	6	7
Complementary therapy represents a confused and ill-defined approach	1	2	3	4	5	6	7
Clinical practice should integrate the best of	1	2	3	4	5	6	7

conventional and Complementary practices							
Complementary therapies include ideas and methods from which conventional psychotherapy could benefit	1	2	3	4	5	6	7
A number of Complementary and Alternative approaches hold promise for the treatment of psychological conditions	1	2	3	4	5	6	7
Complementary medicine is a threat to public health	1	2	3	4	5	6	7
Social work professionals should be able to advise their clients about commonly used Complementary therapy methods	1	2	3	4	5	6	7
Information about complementary therapy practices should have been included in my social work degree curriculum	1	2	3	4	5	6	7
Knowledge about Complementary therapies is important to me as a social work educator	1	2	3	4	5	6	7

Thank you for your time and participation!

APPENDIX F

PERMISSION TO USE SURVEYS

Psychologists Attitudes Toward Complementary and Alternative Therapies Scale

From: lee-Ann Wilson [mailto:booksandtides@gmail.com]
Sent: Wednesday, September 02, 2015 7:15 PM
To: Williams, Jennifer L
Subject: Re: Requesting permission to use PATCAT scale for dissertation

Hi Jennifer,

That would be fine, as long as you cite my original research.

Best of luck with your work. How did your previous study go?

Kind regards,

Lee-Ann

On Thu, Sep 3, 2015 at 4:37 AM, Williams, Jennifer L <JWilliams@barry.edu> wrote:

Dear Dr. Wilson,

Last year I received your permission to use the PATCAT scale on graduate students enrolled in mental health programs. I am now conducting a study for my dissertation and would like to adapt the scale to use with graduate Social Work faculty in the United States. I'm respectfully requesting your permission to adapt the scale slightly by changing "psychology" to "social work", and "practicing clinical psychologist/student/future practicing health professional" to "graduate social work faculty".

I look forward to hearing from you.

Best,
Jennifer

Jennifer Williams, LCSW

Spiritual Perspective Scale

From: Pamela Reed (preed@email.arizona.edu)

To: Williams, Jennifer L;

Sun 9/13/2015 1:50 AM

Hello Jennifer,

You are most welcome to use the SPS. I have sent it to you along with some background information on its use. As you may know, many researchers have used it with success. It's quite easy to administer and score, and the reliability is strong. Instructions on scoring are in the packet I've sent you, but if you have any questions, please let me know.

Best wishes in your doctoral research in social work -- it sounds very interesting and original!

Sincerely,
Pam

Pamela G. Reed, PhD, RN, FAAN
Professor
The University of Arizona
College of Nursing
1305 N. Martin St.
Tucson, AZ 85721-0209
USA
preed@arizona.edu

From: Williams, Jennifer L <JWilliams@barry.edu>
Sent: Saturday, September 12, 2015 11:28 AM
To: Reed, Pamela G - (preed)
Subject: Requesting permission to use Spiritual Perspective Scale

Good afternoon, Dr. Reed,

I am a third year PhD student at Barry University in the School of Social Work and am intending on exploring the knowledge of and attitudes toward complementary and alternative medicine among graduate social work faculty. I am interested in using your Spiritual Perspective Scale in my study and am respectfully requesting your permission to do so. In addition, would you be willing to share the questionnaire and scoring information with me?
I look forward to hearing from you.
Best regards,
Jennifer

Jennifer Williams, LCSW

APPENDIX C
IRB APPROVAL

Barry University
Division of Academic Affairs

Office of the Provost
11300 NE 2nd Avenue, Miami, FL 33161
P: 305.899.3020 or 1.800.756.6000, ext. 3020
F: 305.899.3026
www.barry.edu

Research with Human Subjects
Protocol Review

To:	Ms. Jennifer Williams 5232 SW 155th Ave. Miramar, FL 33027
From:	David Feldman, PhD Chair, Institutional Review Board
Date:	October 12, 2015
Protocol Number:	150907
Protocol Title:	Complementary and Alternative Medicine: An exploratory Study of graduate social work faculty knowledge and attitudes.

Dear Ms. Williams:

Thank you for sending the request for modifications indicating that you would like to make changes to your protocol regarding:

New title: Complimentary and Integrative Health Approaches: An Exploratory Study of Graduate Social Work Faculty Knowledge and Attitudes.

The above changes are accepted. You may proceed with your collection of data. The approval granted expires on October 15, 2016.

Sincerely,

David M. Feldman, PhD
Chair, Institutional Review Board
Barry University –Dept. of Psychology

Cc: Joanne Whelley, PhD

If you have any questions, please contact Barbara Cook at: 305-899-3020
****

Note: The investigator will be solely responsible and strictly accountable for any deviation from or failure to follow the research protocol as approved and will hold Barry University harmless from all claims against it arising from said deviation or failure.

GLOSSARY

Attitude: "An attitude represents a person's general feeling of favorableness or unfavorableness toward some stimulus object. …as a person forms beliefs about an object, he automatically and simultaneously acquires an attitude toward that object" (Fishbein, & Ajzen, 1975, p. 216).

Beliefs: "…beliefs refer to a person's subjective probability judgments concerning some discriminable aspect of his world; they deal with the person's understanding of himself and his environment" (Fishbein & Ajzen, 1975, p. 131).

Complementary and alternative medicine (CAM): According to the National Center for Complementary and Integrative Health (NCCIH) (formerly known as the National Center for Complementary and Alternative Medicine), CAM is defined as "a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine" (U.S. Department of Health and Human Services, 2016).

Complementary: The NCCIH defines complementary medicine as a "non-mainstream practice that is used together with conventional medicine" (U.S. Department of Health and Human Services, 2016).

Alternative: The NCCIH states that, "If a non-mainstream practice is used in place of conventional medicine, it's considered alternative" (U.S. Department of Health and Human Services, 2016).

Conventional medicine: According to the NCCIH, "Medicine as usually practiced by holders of M.D. (medical doctor) or D.O. (doctor of osteopathic medicine) degrees and by their allied health professionals such as physical therapists, psychologists, and registered nurses" (U.S. Department of Health and Human Services, 2016).

Integrative Medicine: The NCCIH states that integrative medicine brings "conventional and complementary approaches together in a coordinated way" (U.S. Department of Health and Human Services, 2016). This term is often used when discussing "incorporating complementary approaches into mainstream health care" (U.S. Department of Health and Human Services, 2016).

CIHA categories: The NCCIH has divided most complementary health approaches into two categories: natural products and mind and body practices. Both categories are defined below and were retrieved from the NCCIH website, page title: Complementary, alternative, or integrative health: what is in a name?:

Natural products: "This group includes a variety of products, such as herbs (also known as botanicals), vitamins and minerals, and probiotics. They are widely marketed, readily available to consumers, and often sold as dietary supplements" (U.S. Department of Health and Human Services, 2016).

Mind and body practices: "Mind and body practices include a large and diverse group of procedures or techniques administered or taught by a trained practitioner or teacher" (U.S. Department of Health and Human Services, 2016). Examples of mind and body practices include: yoga, meditation, hypnotherapy, breathing exercises, progressive muscle relaxation, guided imagery, chiropractic and osteopathic manipulation, tai chi, healing touch, and movement therapies.

Holism: This term was first coined by South African philosopher Jan Christian Smuts in 1926 in opposition to reductionist approaches that seemed to be trending in biology and science at that time (Shannon, 2002). Holism means that "the whole is more than the sum of the individual parts" (Shannon, 2002, p. 26).

Integrative Body-Mind-Spirit Social Work: This approach "attempts to expand beyond existing social work practice models and to integrate a more holistic orientation based on Eastern philosophies and therapeutic techniques to create effective, positive, and transformative changes in individuals and families" (Lee, Siu-man, Leung, & Chan, 2009, p. xxxvi).

Knowledge: According to Roderick M. Chisholm, knowledge is "justified true belief, or true opinion combined with reason" (Hilpinen, 1970).

NCCIH: The National Center for Complementary and Integrative Health, a division of the National Institutes of Health, and formally called the National Center for Complementary and Alternative Medicine, seeks to "define, through rigorous scientific investigation, the usefulness and safety of complementary and integrative health interventions and their roles in improving health and health care" (NCCIH Facts-at-a-Glance and Mission, 2015).

Spirituality: Canda (1990b), distinguishes religion from spirituality stating it is "the gestalt of the total process of human life and development, encompassing biological, mental, social, and spiritual aspects. It is not reducible to any of these components; rather, it is the wholeness of what it is to be human. ……The spiritual relates to the person's search for a sense of meaning and morally fulfilling relationships between oneself, other people, the encompassing universe, and the ontological ground of existence, whether a person understands this in terms that are theistic, atheistic, nontheistic, or any combination of these" (p. 13).