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Expanding the Mind and Body: Educating Social Work Students on Yoga as a Complementary Practice to Traditional Therapeutic Approaches

Abstract

Social work practice has prided itself in supporting a holistic approach to treatment which considers the dynamic interactions between the biological, psychological, and social aspects of human discourse. Despite being grounded in this theoretical approach, literature has revealed that formal social work education and practice have insufficiently incorporated complementary and alternative approaches to treatment. In response to the growing demand to consider and incorporate complementary and alternative methods with more traditional treatment approaches, and the potential efficacy of these methods, this dissertation seeks to develop a graduate level social work course that integrates yoga as a complementary therapy for treating individuals with diverse mental health diagnoses. A comprehensive literature review and findings from a survey conducted by the National Association of Deans and Directors (NADD) on Integrative Mind-Body-Spirit (I-MBS) in social work practice informed the design of this 14-week MSW elective course on yoga as a complementary therapy. The proposed curriculum explores central aspects of yoga philosophy and practice, provides a brief introduction of complementary and alternative treatment approaches, offers a historical overview of yoga, and discusses yoga as it relates to specific mental health services including the treatment of trauma, anxiety, depression, and psychosis. The curriculum is grounded in the biopsychosocial approach, utilizing yoga as a way for social workers to focus on the well-being of the whole person physically, mentally, socially, and spiritually, and offers both academic perspectives on and direct experiences with yoga. The intended learning outcomes for this course are to augment students' knowledge of the benefits associated with using yoga to complement traditional therapeutic approaches, and to think critically about traditional and alternative approaches to social work practice.

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**Expanding the Mind and Body: Educating Social Work Students on Yoga as a
Complementary Practice to Traditional Therapeutic Approaches**

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February 2019

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ABSTRACT

EXPANDING THE MIND AND BODY: EDUCATING SOCIAL WORK STUDENTS ON
YOGA AS A COMPLEMENTARY PRACTICE TO TRADITIONAL THERAPEUTIC
APPROACHES

Nicki Grossman, MSW, LCSW

Marcia Martin, PhD

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and spiritually, and offers both academic perspectives on and direct experiences with yoga. The intended learning outcomes for this course are to augment students' knowledge of the benefits associated with using yoga to complement traditional therapeutic approaches, and to think critically about traditional and alternative approaches to social work practice.

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CHAPTER 1: INTRODUCTION

Statement of Purpose

For the reason that human beings and the challenges they face are complex and heterogeneous, clinicians and researchers alike have a responsibility and an obligation to consider the diverse nature of each individual and their unique likelihood to benefit from a variety of treatment methodologies. My interest in considering the use of complementary and alternative treatment approaches for treating clients was born out of my work as a yoga instructor and a psychotherapist with the New York City Fire Department (FDNY) Counseling Service Unit (CSU), treating first responders and their families. My work consisted primarily of treating individuals suffering from trauma related to the events of September 11th, 2001 and other traumas inherent to being a member of the FDNY. During my time at the FDNY CSU and teaching a wide range of populations for many years, I recognized the importance of considering and utilizing alternative and complementary treatments in a holistic approach to treating survivors of trauma due to the complex nature of the sequelae associated with trauma and the heterogenous nature of clients.

As a social worker, educator, and yoga instructor, I have always been drawn to the integration of mind-body approaches into a holistic clinical practice and how to merge the parallels of mental and physical health that exist in these two similar, yet very different, worlds. Yoga is one method for augmenting awareness of the body. The parallels between yoga and psychotherapy encourage the individual to tap into deep emotional and psychological experiences; I have elected to focus on yoga rather than other methods of increasing body awareness because it is a systematic, well-recognized method for integrating mind-body relationships. This dissertation seeks to present an argument that highlights the importance of

providing further education and training for social workers on utilizing yoga as a complementary healing therapy to be used in parallel with more traditional approaches. Furthermore, this paper will present the design of a course for exposing graduate level social work students to yoga as a complementary treatment for individuals, including children, who have, and continue to experience trauma, anxiety, depression, and psychiatric disorders.

In recent years, there has been growing interest in the potential benefits of yoga to help individuals cope with a wide range of mental health diagnoses. Many studies point to yoga as an effective adjunctive treatment for a multitude of medical disorders, including chronic pain, heart disease, cancer, and asthma (van der Kolk, et al., 2014). Limitations in the effectiveness of psychopharmacologic and psychotherapeutic approaches have sparked interest in exploring methods that extend beyond the confines of these traditional approaches. Emerging research suggests that yoga may be a feasible adjunctive therapy in treating mental illness (Cabral, Meyer, & Ames, 2011). “While a growing number of randomized controlled trials of yoga have been published, few studies have evaluated the feasibility, acceptability and effectiveness of yoga programming in real-world clinical settings” (Schulz-Heik et al., 2017, p.2).

In researching alternative therapies used by social workers, Henderson (2000) found that only 30% of a sample of 321 members of the National Association of Social Workers (NASW) reported having considerable knowledge of these techniques, however, 80% of the sample used or referred clients to Complementary and Alternative Medicine (CAM) services. The NASW Code of Ethics standard 1.04 states that, “social workers should provide services and represent themselves as competent only within the boundaries of their education, training, license, certification, consultation received, supervised experience, or other relevant professional experience.” Despite professing the application of varying complementary modalities to meet the

unique needs of each client (Gant, Benn, Gioia, & Seabury, 2009), social workers generally possess a limited understanding of and/or training in these less traditional areas.

As such, there is a need to develop a curriculum that will educate social work students about the use of yoga as a complementary therapy to more traditional approaches in the holistic treatment of clients to ensure compliance with the NASW Code of Ethics and the Council on Social Work Education (CSWE). The methodological design used in this dissertation is to develop a specific curriculum within the broader field of clinical social work education that will consider ways in which we can integrate these practices into clinical settings. Specifically, I will create an elective MSW course designed to educate students on yoga as a complementary therapy in an effort to increase clinicians' awareness and understanding of a holistic framework that promotes sensitivity to the complex nature of psychological diagnoses and the heterogeneity of clients' needs.

Introduction and Background

The social work profession has historically encouraged practitioners to consider the dynamic interactions between biological, psychological, and social aspects of development referred to as the biopsychosocial approach. Embracing an interdisciplinary framework such as the biopsychosocial perspective enables social workers to focus on the well-being of the whole person physically, mentally, socially, and spiritually (Haight & Taylor, 2013). Despite being grounded in this theoretical approach, social work education and practice alike seem to ignore the experience of the body in relation to the biological and sociological experience (Mensinga, 2011). As the social work profession remains committed to an ecological perspective that recognizes human differences, it demands that "social workers increase their knowledge of

mind-body-spirit approaches and their ability to work with clients who may use or benefit from these practices” (Raheim & Lu, 2014, p.288).

According to Gant, Benn, Gioia, & Seabury (2009), social workers in the United States are doing a majority of the front-line work in treating individuals with mental illness. Due to their unique role, social workers have an obligation to provide clients with comprehensive information on their rights, offer health education, promote wellness, and serve as advocates on behalf of their clients. As a result, this often leaves social workers to “routinely provide knowledge to patients and health care professionals; assist clients in changing problematic attitudes; and teach effective help-seeking behaviors such as problem solving, improved communication, and advocacy” (Gant, Benn, Gioia, & Seabury, 2009, p. 411).

Ancient practices demonstrate the integration of varied approaches to health and healing for individuals presenting with physical and behavioral health concerns (Raheim & Lu, 2014). At present, mind-body techniques have been considered as complementary and/or alternative to traditional western medicine (Chiapelli, Prolo, & Cajulis, 2005). Complementary and Alternative Medicine (CAM) is best understood as:

a broad domain of resources that encompasses health systems, modalities, and practices and their accompanying theories and beliefs, other than those intrinsic to the dominant health system of a particular society or culture in a given historical period. CAM includes such resources perceived by their users as associated with positive health outcomes. Boundaries within CAM and between the CAM domain and the domain of the dominant system are not always sharp or fixed (Defining and Describing Complementary and Alternative Medicine, 1997, p. 49, as cited in Institute of Medicine, 2005).

With a growing interest in CAM-based approaches, the National Institute of Health (NIH) and the National Center for Complementary and Alternative Medicine (NCCAM) have funded grants for the past two decades that highlight the importance of incorporating CAM practices into educational curricula of health care professionals (Elder et al., 2008). These educational

initiatives have worked to “investigate and evaluate promising unconventional medical practices” (National Center for Complementary and Alternative Medicine, p. 2013), exposing health care professionals to a wide range of mind-body techniques.

In their research on the preparation of MSW students for integrative mind-body-spirit (IMBS) practices, Raheim & Lu (2014) state that the “IMBS paradigm supports the use of all appropriate approaches within a holistic framework to promote health and healing. Few social workers have had the opportunity to study this paradigm and related modalities during their graduate training” (p. 289). The IMBS approach mirrors that of the biopsychosocial approach in its efforts to seek equilibrium in all aspects of life — physical, mental, emotional, and spiritual. Additionally, this perspective aligns with social work’s ethical standards to promote culturally competent and sensitive practice by “recognizing the importance of unique personal and cultural histories and acknowledging the healing practices of communities of color that have been historically marginalized” (Raheim & Lu, 2014, p.290).

Despite the growing popularity of yoga in Westernized culture and its documented efficacy, there has been a dearth of research focusing on the mind-body connection as it relates to social work practice (Mensinga, 2011). van der Kolk (2015) posits that body awareness allows us to communicate and understand our inner world more intimately. An increased appreciation of bodily sensations helps one to connect more profoundly with the oscillations of one’s emotional state and to effectively manage it. Additionally, he believes that memories are often stored within the body and must be physically released in an effort to increase a sense of safety before traditional talk therapy can commence (van der Kolk, 1994).

As the search and demand for non-pharmacological, clinically efficacious, safe, cost-effective, and patient-acceptable treatments grows, more individuals are turning toward yoga for

symptom reduction and to promote physical and mental health (Balasubramaniam, Telles, & Doraiswamy, 2013). Seeing that social work programs continue to promote health and wellness, there is a need for social work curricula to acknowledge and embrace complementary and alternative practices based on the growing research base, changing demographics in the U.S., and the ever-evolving mental health field (Gant, Benn, Gioia, & Seabury, 2009).

Purpose of the Study

The purpose of this dissertation is to develop an elective MSW course that will enable students to consider the benefits of incorporating the use of yoga as a complementary therapy in treating individuals with diverse mental health diagnoses. The goal is to augment students' knowledge base regarding the benefits associated with using yoga to complement traditional therapeutic approaches. To determine if a course utilizing yoga as a complementary therapy will be advantageous for master's level social work students, existing literature will be critically reviewed and analyzed. Additionally, this researcher will evaluate data gathered from a survey conducted by the National Association of Deans and Directors (NADD) member schools that explores curricular efforts to incorporate integrative mind-body-spirit (I-BMS) into social work practice.

Following this evaluation, I will outline the design of an MSW elective course that introduces students to yoga as a complementary treatment in social work practice guided by the literature and my personal experiences to date. The course will introduce Complementary and Alternative Medicine (CAM) and explore the application of yoga as a specific CAM intervention in treating trauma, depression, anxiety, and psychiatric disorders in adults and children.

CHAPTER 2: LITERATURE REVIEW

Complementary and Alternative Medicine

Complementary and Alternative Medicine (CAM) includes a wide range of practices which include mind-body-spirit, energy-based, and biologically-based treatments that are not traditionally included in the Western medical model of treatment as they fall outside of conventional medicine. CAM is comprised of many different areas, which include, but are not limited to, yoga, meditation, mindfulness, acupuncture, tai chi, chiropractic and osteopathic medicine, massage therapy, and herbal medicine. When these practices are used in conjunction with conventional treatment approaches to medicine/mental health care they are considered ‘complementary’; if they are used as a substitute for conventional treatment approaches to medicine/mental health care, they are considered ‘alternative’ in nature (Groden, Woodward, Chatters, & Taylor, 2017). Ideally, healthcare delivery systems seek to consider the holistic nature of the individual and aim to extend beyond conventional biomedical treatment models by including CAM practices to meet the unique needs of each individual (Cook, Becvar, & Pontious, 2000).

As the popularity and utilization of CAM grows, understanding the historical origins of these practices provides context when considering the prevalence of these approaches at present. While CAM dates to the early 19th century, it remained largely underutilized in the United States until the 1970’s (Rosenbaum, 2007). This is largely attributed to the Flexner report, a 1910 survey of medical education in the U.S. and Canada that standardized medical education, requiring strict adherence to protocols of mainstream science in both teaching and research (Maizes, Rakel, & Niemiec, 2009). Non-biomedical and alternative approaches to medicine were eliminated from medical education completely (Cowen & Cyr, 2015). The publication of this

report resulted in approximately 60% of medical schools closing over the next 25 years, and institutions providing training in alternative and complementary medicine were almost completely abolished (Maizes, Rakel, & Niemiec, 2009).

The popularity of CAM increased in the 1970's when political suppression from mainstream healthcare professionals was overshadowed by the growing evidence base supporting the use of these modalities (Rosenbaum, 2007). The reemergence of CAM ultimately prompted professionalization efforts for alternative medicine. At present, CAM is included in varying capacities in the curricula of select medical schools aiming to provide a working knowledge about CAM, to assist physicians in providing better counsel to patients about their health choices, and to feel better prepared to make referrals to CAM practitioners (Cowen & Cyr, 2015). However, in researching current trends of CAM in medical school education, Cowen & Cyr (2015) found that fewer medical schools offer CAM courses than reported in previous surveys, suggesting that “there is either less enthusiasm for CAM at present or there was potential bias in terms of over-reporting in previous surveys” (p. 116).

While the prevalence and body of literature supporting CAM continues to grow, there remains a lack of research evidence to support CAM practices. Lake & Turner (2017) state that “relatively few CAM therapies have been substantiated by consistent positive findings from large, well-designed, placebo-controlled studies. Furthermore, most CAM therapies are limited by incomplete knowledge of mechanisms of action, small study sizes, inconsistent research findings, and—in some cases—safety concerns” (p. 19). This demonstrates a need for continued exploration and consideration of CAM-based approaches that investigate their safety and effectiveness.

Utilization of CAM

The state of healthcare in the United States is rapidly changing with practices extending outside of conventional systems of care. CAM has emerged as a possible resolution to address the shifting demands and deficiencies that exist, with individuals recognizing the value of their use in conjunction with traditional practices (Cook, Becvar, & Pontious, 2000). A combination of social trends, scientific advances, and accessibility of CAM has allowed for the increasing acceptance of these therapies (Lake & Turner, 2017). The growing popularity of CAM in the US is reflected in prevalence surveys that report yearly adult use of approximately 34-39% and 12% for children (Lorenc, Ilan-Clarke, Robinson, & Blair, 2009). According to a study conducted in 2005, Americans made 629 million visits to alternative health care providers, almost doubling the number of annual visits to primary care physicians (Groden, Woodward, Chatters, & Taylor, 2017).

While there is broad consensus about the benefits of CAM, an evidence gap has interfered with the formal application and clinical appropriation of CAM practices due to an absence of empirical data. Complicating matters further, research suggests that over 50% of individuals diagnosed with mood or anxiety disorders, use CAM therapies to regulate symptoms, however, very few disclose their CAM use to their health care practitioners (Lake & Turner, 2017). While the increasing acceptance and application of CAM therapies is evident, Lake & Turner (2017) explore how the limited evidence base leads to an “absence of consensus on research priorities and clinical practice guidelines, few residency training programs addressing CAM and integrative medicine, the paucity of reliable safety and efficacy information on many CAM and integrative modalities, and limited involvement of relevant government agencies in shaping health care policy reform” (p. 6). These factors are likely to interfere in generating a

collaborative care model that enables consumers to feel safe and supported in exploring alternatives to traditional treatment approaches.

While CAM is thought to be utilized by a diverse range of people, findings suggest otherwise, revealing that “typical CAM consumers are white and 25-49 years of age, with some college education and an income above \$35,000” (Rosenbaum, 2007, p.1256). The aforementioned findings substantiate studies which demonstrate significant differences in CAM use by race/ethnicity in adults with moderate mental distress (Rhee, Evans, McAlpine, & Johnson, 2017). Su & Li (2011) noted the “expanding gap in CAM use across racial and ethnic groups” (p. 307), calling attention to the need to better understand the health consequences of CAM therapies. Bishop and Lewith (2010) found that CAM use increases with each stratum of education and wealth. In their study on CAM use among US adults, Honda and Jacobson (2005) found “that individual psychological characteristics such as personality, coping, and perceived social support may influence CAM use” (p. 50). Their research revealed that personality characteristics of being open to experience and social support from friends were correlated with increased CAM use. By successfully identifying a relationship between trait-oriented and cognitive-oriented characteristics, the authors have allowed for improved understanding in the decision-making processes related to CAM use (Honda & Jacobson, 2005).

Cultural considerations have been largely overlooked within the context of the application, acceptability, appropriateness, and use of CAM therapies among racial and ethnic groups. There has been tremendous variation among racial and ethnic groups in the use of CAM therapies, with clinical trials historically focusing on maximizing minority participation, neglecting to “examine the impact of race or ethnicity as a moderator of efficacy” (Park, 2013, p.58). There has been a failure to consider how diverse cultural backgrounds may influence a

client's preferences as they relate to CAM. In their review, Bishop and Lewith (2008) were unable to draw any conclusions regarding race and ethnicity in relation to CAM. However, they noted that the different ways that race and ethnicity were assessed interferes with interpretation across studies.

Trends suggest an increase in CAM use among older adults, however, little research has been conducted to examine the use of CAM with this population. While questions regarding older adults' use of CAM remain, Groden, Woodward, Chatters, & Taylor (2017) suggest that the "generational status (i.e., baby boomers versus pre-boomers) and sociodemographic factors (e.g., gender, socioeconomic status, and race) may be important for understanding CAM use among older adults" (p.1394). The lack of investigation on the efficacy of CAM use by older adults should indicate to future researchers that they should consider generational status, sociodemographic factors, and the ways in which age cohorts shape healthcare behaviors and service use. Further research on CAM modalities for this population remains necessary to meet the growing demands of the baby boomer population and to provide support to make informed decisions on treatment options.

Recent surveys of US adults demonstrate that many are utilizing some form of CAM but are reticent to discuss this aspect of their treatment with their physicians. This is possibly attributed to not being questioned about participation in CAM by practitioners or personal hesitations to discuss usage based on the non-conventional nature of CAM therapies (Cowen & Cyr, 2015).

CAM in Mental Health

In their report, Lake & Turner (2017) found that most people with mental illness in the US and globally are receiving inadequate care with limited efficacy in treatment approaches. CAM is frequently used in treating mental health conditions such as anxiety and depression, particularly when individuals do not respond well to conventional treatment approaches or experience delay in obtaining treatment (Rhee, Evans, McAlpine, & Johnson, 2017). In the past 30 years, CAM therapies have gained greater acceptance in Western medicine (Park, 2013). In 1999, the U.S. government allotted ten million dollars to the National Institutes of Health to create five centers for the study of “Mind/Body Interactions and Health” (Arias et al., 2006). Research trends reveal the undeniable impact of psychological distress on medical conditions/outcomes. In addition to greater acceptance and appreciation of the biopsychosocial model of care, this more holistic approach has contributed to the increased utilization of CAM (Park, 2013).

Lake & Turner posit that current systems of care for mental health treatment “fail to adequately address the complex biological, social, cultural, and spiritual dimensions of mental illness” (p.22), proposing an urgent need for “broadening the current paradigm of mental health care to include evidence-based integrative treatments incorporating conventional and CAM modalities and implementing a collaborative care model on a large scale in primary care settings aimed at wellness, prevention, and treatment of specific psychiatric disorders” (p.19).

The absence of adequate research to support the use of CAM, undetermined practice guidelines, and limited access to educational opportunities supporting CAM and/or integrative medicine highlight the need for further consideration of how to further develop and integrate CAM approaches into systems of mental health care (Lake & Turner, 2017).

CAM in Social Work Practice

As CAM services continue to expand and gain attention, social workers would benefit from better understanding these practices. The social work perspective offers similarities with CAM as both emphasize a whole-person approach, empowerment, self-determination, and a focus on the therapeutic relationship. The foundation of social work practice has been grounded in a sensitivity and consideration of the physical, mental, environmental, emotional, spiritual and cultural contexts that shape people's lives (Cook, Becvar & Pontious, 2000). As the social work profession remains committed to an ecological perspective that recognizes human differences, it requires that social workers continue to expand their awareness to include CAM practices.

While mental health and healthcare providers are uniquely positioned to discuss and/or recommend CAM treatment options, there has been little research that focuses on the attitudes, beliefs or knowledge of CAM among mental health practitioners (Clevenger, 2018). As such, there is a need for "improving understanding, competence and attitude regarding CAM approaches as a target for professional education opportunities" (Clevenger, 2018, p. 13). Integrative medicine "seeks to build a bridge between conventional and alternative medical systems and to find therapeutic and cost-effective ways to combine them so as to have 'the best of both worlds,' while still maintaining the integrity of each system" (Maizes, Rakel, & Niemiec, 2009, p. 278-279). In an effort to bridge the gap between treatment paradigms between CAM and traditional Western medicine, professional education is necessary (Cook, Becvar, & Pontious, 2000).

Cook, Becvar & Pontious (2000) note that the "further integration of CAM content into social work curriculum is needed, as well as courses that focus almost exclusively on this approach to health and well-being. Education is not limited solely to academic settings, however.

As traditional health care providers are treating more and more patients who use CAM services, social workers can informally teach these providers about these services on a case-by-case basis” (p.51). In providing education to mental health practitioners, the hope is to increase communication regarding the value, benefits, contraindications and risks associated with integrating and/or utilizing CAM (Clevenger, 2018). There is a growing need to train and educate mental health providers on CAM for the purposes of symptom reduction, improved communication, and consideration of a holistic approach to treatment.

To date, there has been limited documentation regarding the formal integration of CAM into social work curricula. The National Association of Deans and Directors of Schools of Social Work (NADD) released a report titled ‘Integrative Mind-Body-Spirit Social Work Initiative’ (2014). As part of their research they surveyed MSW programs to inquire about program offerings of CAM and/or Integrative Health and Mental Health courses and continuing education opportunities. They surveyed 231 accredited MSW programs in 2014, with 56 MSW programs responding to the survey. While the most recent survey indicated that more MSW programs are offering I-BMS courses, especially in Mindfulness related to CBT, these findings demonstrate a lack of faculty expertise, resources, and curriculum support. A more fulsome discussion on the findings from this survey will be presented and discussed in the methodology section.

Lee et al. (2009) advocate for the social work profession to include integrative mind-body-spirit practices, honoring the core values of social work practice of being client-centered and strengths based. The evidence indicates that many Americans extend beyond conventional treatment methodologies to include CAM in their healing process furthering the notion that CAM is crucial to integrate into social work practice (Cook, Becvar, & Pontious, 2000). Clients deserve education on options available and referrals to appropriate CAM providers. The social

work profession's longstanding "commitment to effective practice across a wide range of human differences (i.e., culturally competent practice) require that social workers increase their knowledge of MBS approaches and their ability to work with clients who use or may benefit from these practices" (Raheim & Lu, 2014, p.288).

Albeit limited, advancements in bridging the knowledge gap that exists have been made as evidenced by Raheim & Lu's (2014) development and implementation of an elective course titled "Integrative Social Work Practice—Mind–Body-Spirit Approaches". This course was offered at an unidentified graduate school of social work in the U.S. during the spring terms of 2012 and 2013. This course was created to introduce MSW students "to I-MBS practice and encouraged critical reflection on the underlying assumptions related to integrative and allopathic approaches to health and well-being" (p. 291). The authors administered pre-test/post-test assessments for the course where students (n=37) reported increased practice knowledge, skills, and values of I-MBS/CAM practices. Additionally, students reported a willingness to support clients' exploration of these alternative approaches to treatment.

Despite some advancements in educational developments for the incorporation of CAM into social work practice, NADD (2014) findings indicate that "given the role of social work graduate programs in preparing the profession's leaders, researchers, and educators, it is imperative that the I-BMS approach and practices be infused into graduate curricula" (p. 6).

Definition of Yoga

Among the many definitions of the word "Yoga" are "union" and "to yoke", suggesting the interconnection of body, mind, and spirit. Feuerstein (2001) states that "yoga is a spectacularly multifaceted phenomenon, and as such it is very difficult to define because there

are exceptions to every conceivable rule” (p.3). Yoga is best thought of as a comprehensive system of mind-body techniques that incorporate the use of asanas (physical postures), pranayama (breathing techniques), concentration, and meditation. The ancient practice of yoga has been studied and practiced for thousands of years in India due to the physical and mental benefits which are associated with practice (Telles & Naveen, 1997). The Indian sage, Patanjali, is credited with creating the *yoga sutras*, which consist of 194 aphorisms, which highlight consciousness and the human condition (Iyengar, Evans, & Abrams, 2005). Patanjali’s *yoga sutras* have allowed for yoga to become catalogued and manualized, stating that its ultimate purpose is to still the inevitable fluctuations of the mind (Thirhalli & Rao, 2016; Satchidananda & Patañjali, 1990). Historically, yoga appears to be one of the oldest continuous disciplines studying voluntary physical and mental control (Rama, Ajaya, Ballentine, 1976).

The physical practice of yoga seeks to connect each asana to the next in a sequence, which synchronizes the breath with movement. In doing so, one is thought to draw inward and provide an opportunity to quiet and still the modifications of the mind (Strauss & Northcut, 2014). The postures practiced during yoga are thought to strengthen, stretch and align the physical body, while the mental discipline of yoga requires attention to detail that helps develop and sharpen observation skills. Yoga practitioners are encouraged to employ mindfulness techniques to seek a state of active and open attention to the present. Being mindful enables the individual to practice observing thoughts in the present moment from a distance and without judgment (Iyengar, 1966).

While many different schools of yoga exist, hatha yoga is the most familiar yoga practiced in Western culture. This style of yoga emphasizes the physical postures, seeking to offer balance to polarities that exist within the body. Research indicates that asanas (physical

postures), pranayama (breathing techniques), concentration, and meditation affect neurobiological functioning (van der Kolk, et al., 2014) and thus, there may be a physiological basis for the usefulness of yoga as a complementary treatment to address diverse mental health diagnoses. The practice of hatha yoga is intended to use the body as a path to generate balance among the physical, emotional, and spiritual aspects of the self.

While several styles of hatha yoga exist, classes developed for the proposed curriculum will focus on alignment-based postures (asanas) in an effort to cultivate body awareness, strength, flexibility, and balance while seeking to maintain safety. Classes will emphasize breathing techniques (pranayama) throughout asana practice and participants will be encouraged to go at their own pace and honor needs specific to their individual bodies.

Yoga in Mental Health Services

The primary mission of the CSWE is supporting quality social work education to “ensure and enhance the quality of social work education for a professional practice that promotes individual, family and community well-being, and social and economic justice.” The CSWE mission can be accomplished through a broad range of strategies, including alternative and holistic modalities. Henderson (2000) explains that “alternative and holistic healing strategies refer to techniques that are variously termed non-traditional, complementary or alternative techniques that take a holistic and preventive view of an individual’s problems” (p. 56). Even though these approaches and techniques consider the interconnectedness of all aspects of the individual, they are not taught in schools of social work and require further training outside of professional social work education (Henderson, 2000).

There are many theoretical reasons to consider yoga as a form of therapy for treating mental health conditions. Cramer et al. (2016) point out that “Yoga has been adapted for use as a complementary and integrative medicine therapy in North America, Australia, and Europe,” and regarded as a “mind-body practice, promoting physical and mental well-being” (p.230). As a therapeutic tool, yoga seeks to synchronize body and breath, slow the heart and respiration rate, lower blood pressure, and manipulate the sympathetic and parasympathetic nervous systems to quiet the mind (Somerstein, 2010).

In 2007, the National Health Interview Survey (NHIS) reported that yoga was one of the 10 most frequently used CAM modalities in the US. In their study investigating the prevalence, patterns, and predictors of yoga use in the U.S. general population, Cramer et al. (2016) concluded that the number of yoga practitioners has increased considerably in the U.S. and the main health reasons for practicing yoga are stress and musculoskeletal conditions. Additionally, systematic reviews of randomized control trials (RCTs) of diverse study populations indicate that various yoga interventions generally decrease symptoms of anxiety, depression, and stress with no reported harmful side effects (Skowronek, Mounsey, & Handler, 2014).

For centuries, non-Western cultures have endorsed healing traditions like yoga that activate and use physical movement and breath as they help to regulate emotional and physiological states (van der Kolk, 2006). In the United States alone, it is estimated that yoga is regularly practiced by upwards of 26 million individuals and is among the most widely practiced complementary health modalities (Van der Kolk, et al., 2014). The growing popularity of yoga in Westernized culture for its potential therapeutic effects has sparked a substantial increase in clinical research attesting to the various advantages and health benefits of yoga (Salmon, Lush, Jablonski, & Sephton, 2008). Thirthalli & Rao (2016) refer to the natural connection between

mental health and yoga, stating that “yoga demonstrated significant clinical effects in a variety of psychological states, from pre-clinical symptoms to established syndromes or disorders” (p. 231).

As the popularity of yoga continues to grow, many are discovering that yoga “may be suitable for people with mental health concerns as it includes a broad focus on mind–body or lifestyle intervention, and is viewed as a way to promote both physical and mental health, rather than just a treatment of a mental illness” (de Manincor et al., 2016, p.817). Again, it is important to state that when practiced properly, yoga is relatively safe with few side effects. Much remains to be discovered regarding alternative and complementary treatment modalities such as yoga and mindfulness techniques and the extent to which they exert their influence on psychiatric symptoms (Mitchell, et al., 2014). Emerging literature has consistently supported findings of benefits in quality of life, mood, and overall well-being when these complementary modalities were utilized (Rao, Varambally & Gangadhar, 2013).

Yoga for Trauma

Definition of PTSD

The quest to better understand the long-term effects of traumatic experiences and treatment approaches best suited for addressing symptoms of trauma endures (Follette, Palm, & Pearson, 2006). Posttraumatic Stress Disorder (PTSD) is a debilitating condition that develops after exposure to a traumatic event that is thought to be severely psychologically distressing. Adults with a diagnosis of PTSD exhibit symptomatic behaviors that negatively impact their social, occupational, and cognitive functioning (Burriss, Ayers, Ginsberg & Powell, 2008). Jindani, Turner & Khalsa (2015) found that lifetime prevalence of PTSD among adults in the

United States is estimated to be 8%, costing over 45 billion U.S. dollars annually in medically-related costs. Individuals with PTSD are more apt to develop comorbid anxiety, depression, mood, and substance disorders, in addition to remaining at higher risk of suicide (Dick, Niles, Street, DiMartino & Mitchell, 2014). Thus, there is an urgent need to improve our understanding of PTSD and develop treatments that can help ameliorate the emotionally and psychologically distressing features of this devastating disorder.

The diagnosis of Posttraumatic Stress Disorder (PTSD) is characterized by a combination of mental health symptoms that may include, but are not limited to, hyperarousal, re-experiencing, avoidance, mood lability, irritability, and sleep disturbance. These mental health symptoms may develop in the wake of a traumatic event that is experienced or witnessed and involves actual or perceived threat to one's life or physical integrity (Foa, Hembree, & Rothbaum, 2007, American Psychiatric Association, 2013). PTSD is often accompanied by a physiological response from the body that is thought to contribute to dysfunction in the stress response and emotional regulatory systems (Jindani, Truner & Khalsa, 2015). According to Herman (1992), "Traumatic events produce profound and lasting changes in physiological arousal, emotion, cognition, and memory" (p. 34).

Definition of Complex PTSD

Complex psychological trauma is best understood as involving traumatic stressors that are "(1) repetitive or prolonged; (2) involve direct harm and/or neglect and abandonment by caregivers or ostensible responsible adults; (3) occur at developmentally vulnerable times in the victim's life, such as early childhood' and (4) have great potential to compromise severely a child's development" (Courtois & Ford, 2009, p. 1). The presentation of complex PTSD (CPTSD) extends well beyond the traditional diagnosis of PTSD as defined in the DSM 5,

therefore making it more difficult to treat. Herman (1997) cites that survivors with CPTSD experience difficulties with emotional regulation and encounter alternations in consciousness, self-perception, view of the perpetrator, and formation/maintenance of relationships with others and challenge to their systems of meaning.

Based on the complexities and intensity of CPTSD and the controversy surrounding the authentication of the diagnosis, existing interventions are limited and often fail to fully address the difficulties associated with CPTSD. While standard evidence-based treatments for PTSD are used to treat CPTSD, Herman (2015) argues that working on the restoration of the loss of control and power is necessary for recovery.

Treatment of Trauma

The complexities associated with PTSD heavily influence its treatment model. Due to the debilitating nature of PTSD, empirically supported treatments have been developed and evaluated. Traditionally, research has focused on such outpatient evidence-based treatments (Szafranski, Gros, Menefee, Wanner, & Norton, 2014) as cognitive processing therapy (CPT) and prolonged exposure (PE). These evidence-based trauma-informed psychotherapies are the most efficacious treatments (Dick, Niles, Street, DiMartino, Mitchell, 2014), demonstrating effectiveness in symptom reduction in individuals with a diagnosis of PTSD (Mitchell, et al; 2008). However, studies indicate that approximately half of the individuals treated for PTSD never fully recover (McGuire, Lee, & Drummond, 2104) and establish that while exposure therapies can be beneficial in reducing symptoms of PTSD, these therapies do not contribute to overall improvement in social, health, and occupational functioning (Jindani & Khalsa, 2015).

Presently, many treatments for PTSD are informed by cognitive and psychopharmacological models; these traditional approaches fail to consider somatic regulation

and body awareness (van der Kolk, et al., 2014). Individuals who are survivors of acute and/or prolonged trauma often struggle to regain a sense of control and balance in their lives. Within the Department of Veterans Affairs, CAM approaches are frequently used to treat PTSD (Schuman, 2016). As a nonpharmacological treatment, yoga offers survivors an opportunity to practice on their own, which assists with regaining a sense of control and increasing self-dependence (Telles, Singh, & Balkrishna, 2012). According to Jindani, Truner & Khalsa (2015), “mind-body practices may enhance the ability of a person with PTSD to tolerate unpleasant feelings and reduce stress” (p. 1). Offering yoga as a complementary treatment may help to treat individuals who do not respond to traditional psychotherapy, enhance pre-existing empirically supported interventions, or help to better prepare individuals for trauma-focused therapy (Mitchell, et al., 2014). Preliminary research using trauma-sensitive yoga “has shown a reduction in severity of PTSD symptoms and frequency of dissociative symptoms, and gains in vitality and body attunement,” (Clark, et al., 2014, p.152) suggesting that yoga has the potential to serve as an effective intervention for survivors of trauma (Clark, et al., 2014). Yoga emphasizes a practitioner’s attention to their emotional and physical response, which in turn, could benefit individuals with PTSD. Moreover, the non-invasive nature of yoga minimizes risks associated with medication side effects and is relatively inexpensive compared to other more traditional treatment approaches.

Jindani & Khalsa (2015) state that the “anxiety and emotional overwhelm associated with PTSD lends to difficulty attuning the body” (p. 406). van der Kolk (2006) hypothesized that yoga may be a particularly useful tool for individuals with PTSD as it has the potential to increase their tolerance for internal sensitizations and perceptions and enable them to become more present oriented.

Psychopharmacological interventions remain secondary to evidence-based psychotherapies based on limited evidence, effectiveness, and side effects. However, medication interventions have proven to reduce some symptoms of PTSD (McGuire, Lee, & Drummond, 2104). Medications help to modulate various symptoms of PTSD, though drugs have been unsuccessful in being able to *correct* the abnormalities underlying the diagnosis (van der Kolk, 2006). These findings demonstrate a need to expand upon PTSD's primary treatment modalities of psychopharmacology and psychotherapy.

Despite the existence of empirically supported Evidence Based Treatments (EBT) for PTSD, studies reveal that some patients who participate in PE or CPT treatments continue to experience symptoms of PTSD, do not experience clinically significant gains from treatment and/or demonstrate high attrition rates. The data indicate that EBTs may lead to improvement but not to recovery in all cases (Cook, et al., 2013; van Minnen, Arntz, & Keijsers, 2002). Therefore, there is a need to consider additional treatments to accompany EBTs as well as interventions to address symptoms of PTSD (Staples, Hamilton, & Uddo, 2013).

While there are several theoretical and practical reasons to consider yoga as a form of treatment for PTSD, existing research has provided little information on the potential benefits of alternative and complementary therapies to address symptoms of PTSD. Thus, it is important to determine if applying alternative treatment techniques in PTSD treatment leads to improvement in overall functioning. Despite often-high attrition rates, alternative/complementary approaches seek to maintain participation in an effort to reduce symptoms.

Over the past decade, the number of complementary and alternative treatments sensitive to somatic regulation and interoceptive awareness that have been developed to treat the growing number of individuals suffering from PTSD and other trauma-related disorders have increased

significantly (Wynn, 2015). Emerging literature suggests that mindfulness-based interventions may augment existing empirically supported interventions for PTSD (Dick, Niles, Street, DiMartino, & Mitchell, 2014). Mindfulness is based on Buddhist meditation that seeks to draw “awareness and acceptance of internal and external aspects of the present” (Delgado, et al., 2009, p.874). Mindfulness-based interventions are thought to contribute to reducing symptoms of re-experiencing, avoidance, and hyperarousal; all of which are characteristic of a PTSD diagnosis. The practice of yoga has contributed to the development of mindfulness for individuals with PTSD (Dick, Niles, Street, DiMartino, Mitchell, 2014). Techniques such as yoga “encourage mindful awareness, increase acceptance and tolerance of emotions thereby improving emotional regulation and normalizing perceptions of stress, critical for trauma recovery” (Jindani, Turner, and Khalsa, 2015, p. 1-2).

Yoga for Anxiety

Definition of Anxiety

Although anxiety and fear are common reactions to life’s complications, if unaddressed, anxiety can evolve into a chronic and debilitating condition. Like many mental health conditions, anxiety disorders develop and evolve based on a complicated set of internal and external stimuli that fluctuate in nature. Anxiety disorders, which are often categorized as distressing subjective experiences (Roy-Byrne, 2015), are the most common psychiatric disorders in the United States, and are associated with high psychic costs (Bandelow, Michaelis, & Wedekind, 2017). While the clinical presentation of anxiety is varied among clients, the DSM-5 has subdivided anxiety disorders into the following categories: separation anxiety disorder, selective mutism, generalized anxiety disorder, panic disorder, agoraphobia, social phobia, and specific phobia

(American Psychiatric Association, 2013). Among the varying characterizations of anxiety, clinical phenomena may include feelings of excessive worry, restlessness, apprehension, distress, sleep disturbance, difficulty concentrating, or irritability; “all of these disorders center on an intense, unwarranted fear for a defined period of time and affect approximately 18% of Americans in any given year” (Li & Goldsmith, 2012, p.22). Other research studies find a lifetime prevalence rate of 33.7% in the United States (Kessler et al., 2012).

To meet diagnostic criteria for an anxiety disorder, one must have marked fear or anxiety that is excessive and/or out of proportion to the actual threat posed, persistent and associated with clinically significant distress or impairment in social, occupational, or other key areas of functioning (American Psychiatric Association, 2013). If unaddressed, “anxiety and stress have unfavorable effects on the body that may progress into chronic conditions if left untreated; anxiety has been connected to coronary heart disease, decreased quality of life and suicidal behavior” (Li & Goldsmith, 2012, p.22).

Considering the complex presentation and varying sequelae, “categorical diagnostic criteria can be clinically useful, anxiety is a dimensional construct, and the distinction between what is normal and abnormal rests on clinical judgments of severity, frequency of occurrence, persistence over time, and degree of distress and impairment in functioning” (Craske & Stein, 2016, p. 3048).

Treatment for Anxiety

Efficacious treatments for anxiety disorders have been well established. Cognitive Behavioral Therapy (CBT) has been widely researched with many controlled studies (Bandelow, Michaelis, & Wedekind, 2017) and is the first-line psychotherapeutic treatment for anxiety disorders (Roy-Byrne, 2015). Boettcher et al. (2014) reports that “meta-analyses consistently

show the positive effects of CBT for anxiety disorders in randomized controlled trials and in the clinical setting” (p.242). In addition to CBT, psychotropic medications have also proven to be effective in managing the intensity and frequency of symptoms associated with anxiety disorders (Wu, Wang, Katz & Farley, 2013).

CBT is considered a relatively short-term, goal-oriented, and skills-based treatment that stresses the cognitive processes as determinants of behavior. Treatment focuses on affect, behaviors and cognitions of individuals (Powers, de Kleine, Rianne, & Smits, 2017). Carpenter et al. (2017) states that “for anxiety disorders specifically, cognitive models posit that exaggerated appraisal of threat is a core element underlying pathological anxiety” (p. 502). CBT interventions for anxiety focus on changing maladaptive beliefs about the probability and impact of foreseen threats by using such methods as cognitive restructuring and exposure techniques. Several meta-analytic reviews demonstrate that CBT serves as an effective treatment for anxiety allowing for considerable improvement in symptoms for social anxiety disorder, generalized anxiety disorder, and panic disorder (Carpenter et al.,2017). Conversely, other meta-analyses demonstrate large variance among subjects in their response to CBT for treating anxiety.

In addition to cognitive behavioral treatments, psychopharmacologic treatments have proven to be effective in treating anxiety. Wu, Wang, Katz & Farley (2013) state that “clinical guidelines recommend pharmacologic treatments as first-line therapy for anxiety disorders” (p. 163). The use of psychotropic medications to treat anxiety disorders has increased in the United States, offering symptom reduction with relatively few side effects (Wu, Wang, Katz & Farley, 2013). “Though efficacy may vary by anxiety disorder, these agents are broadly effective across multiple aspects of these disorders, i.e., cognitive symptoms, phobic/avoidant symptoms, and physiologic/autonomic symptoms” (Roy-Byrne, 2015, p.2).

Despite a solid foundation of evidence-based treatments for reducing anxiety, there are varying degrees of empirical support for these approaches. The etiology of anxiety disorders is not well understood and the diversities within clinical presentation can make treating anxiety difficult; anxiety disorders are often unrecognized and underdiagnosed (Bandelow, Michaelis, & Wedekind, 2017). Complicating matters further, individuals seeking treatment to alleviate symptoms of anxiety are often eager to receive immediate relief from their distress, serving as an additional challenge to the treatment providers (Roy-Byrne, 2015). Boettcher et al. (2014) thus noted that “the improvement of existing treatments and the development of alternative treatment approaches are therefore warranted” (p. 242).

The physiological responses associated with anxiety often prompt treatment, demonstrating the clear connection between mind and body. In their systematic review and meta-analysis of yoga for anxiety, Cramer et al. (2017) found that “yoga might be beneficial in the short-term for improving intensity of anxiety when compared to untreated controls or active comparators. Overall, the application of yoga was not associated with increased injury or increased anxiety symptoms, with the caveat that only three RCTs reported safety-related data” (Cramer et al., 2017, p.9). Findings regarding the practicality of yoga to reduce anxiety, however, are inconsistent (Li & Goldsmith, 2012). “While most studies demonstrated a significant decline from baseline in subjects’ anxiety scale scores after intervention, these studies have many inherent weaknesses” (Li & Goldsmith, 2012, p. 22). Despite the limitations that interfere with the validity and ability to generalize findings, preliminary studies suggest a correlation between reduction in stress and anxiety associated with yogic practices. “Yoga may be considered a possible adjunctive therapy for those experiencing stress and anxiety. Due to its good compliance and lack of drug interactions, yoga appears to be safe and could be encouraged

to improve quality of life and, perhaps, the symptoms of stress and anxiety” (Li & Goldsmith, 2012, p.33-34).

While CBT and psychopharmacological interventions remain the first line of treatment for anxiety disorders, complementary therapies such as yoga have gained attention based on ease of implementation, symptom reduction, and low-costs. Craske & Stein (2016) state that “mindfulness and acceptance-based approaches are growing in popularity, but conclusions are hampered by the low quality of the studies and paucity of randomized controlled trials” (p. 3048). Due to the prevalence, cost, burden, inconsistencies in symptoms, and the often-chronic nature of anxiety, the research into complementary treatments for symptom and condition management has been limited, indicating a need for further research.

In their review, Li & Goldsmith (2012) found that a direct relationship between the practice of yoga and reduction in anxiety has yet to be supported by statistically significant RCTs, thus suggesting a demand for further investigation. Their review suggests “that yoga as a supplement to pharmacologic therapy may improve stress and anxiety symptoms” (Li & Goldsmith, 2012, p.33). These findings posit that yoga may serve as an effective and safe intervention for individuals experiencing anxiety.

Yoga for Depression

Definition of Depression

Depression is a debilitating public health issue that “is the second most common chronic condition treated by primary care providers, with an estimated 12% of primary care patients experiencing major depression” (Rossom et al., 2016, p.1362). “Depression is the most prevalent of all psychiatric disorders affecting up to 25% of women and 12% of men during their lifetimes.

Over the next 20 years, depression is projected to be the leading cause of disability in the United States” (Schuver & Lewis, 2016, p.85). “Moreover, depression is characterized by high comorbidity with several chronic conditions like addictions, neurodegenerative diseases or different psychiatric diseases” (Cramer et al., 2017, p. 70). Given these alarming statistics, there is a need to better understand leading treatments for this public health issue.

The DSM-5 categorizes depressive disorders to include disruptive mood dysregulation disorder, major depressive disorder (MDD), persistent depressive disorder (dysthymia), premenstrual dysphoric disorder, substance/medication-induced depressive disorder, depressive disorder due to another medical condition, other specified depressive disorder, and unspecified depressive disorder (American Psychiatric Association, 2013).

Depression is a common but serious mood disorder that often impacts day-to-day activities of the sufferer. The symptoms associated with depression often range from moderate to severe and are often characterized by (but not limited to) overwhelming feelings of sadness, despair, hopelessness, impending doom, and/or apathy.

Treatment for Depression

Despite ranking amongst the most common mental health disorders affecting the general population (da Silva, Ravindran & Ravindran, 2009) and the availability of evidence-based treatments, many depressed individuals do not experience adequate treatment outcomes (Rossom et al., 2016). As such, a trend in utilizing complementary and alternative medicine therapies have grown substantially in recent years in an effort to augment possibilities of symptom relief for depression.

Traditional treatments for depressive disorders have included the use of psychopharmacological antidepressant therapy and psychotherapy, or a combination of both.

Both psychotherapy and antidepressants “are effective for treating depression; however, a recent review found high dropout rates, low remission rates, and placebo responses for these therapies” (Schuver & Lewis, 2016, p. 85). Additionally, Streeter et al. (2017) found that “up to 50% of individuals treated with antidepressant medications for MDD do not achieve full remission. Thus, the currently available treatments for depression do not effectively or sufficiently reduce the associated morbidity or mortality” (p. 202).

Meta-analytic outcome studies posit that all researched forms of psychotherapy are effective evidence-based treatments and boast comparable benefits. Despite advances, depressive disorders remain prevalent throughout the world with the World Health Organization predicting “that unipolar depressive disorders will be the leading disorder in the global burden of disease by 2030” (Celie, Koeys, Desmet & Verhaeghe, 2017, p.9). Several factors are likely to contribute to discrepancies that exist within the research. These include a lack of funding, poor access to adequate and effective treatments, stigma associated with depression that interferes with the willingness of sufferers to seek treatment, and the potential amplification of the effectiveness of EBTs (Celie, Loeys, Desmet & Verhaeghe, 2017). In their analysis of 362 RCTs for treating depression, Celie, Loeys, Desmet & Verhaeghe (2017) established multiple methodological and statistical shortcomings within each study, stating that “decades of quantitative research might not allow us to conclude that psychological EBTs for depression are effective” (p. 9). The uncertainties in these findings should prompt further research that will allow for different kinds of research and alternatives to treating depression (Celie, Loeys, Desmet & Verhaeghe, 2017).

Yoga offers increased development of mindfulness and attention to bodily sensations; these have been the expected mechanisms for decreasing depressive symptoms (Schuver & Lewis, 2016). However, “the literature examining the effect of yoga and mindfulness-based

therapies on depression has been criticized methodologically. Limitations included short interventions, small sample sizes, no randomization in some studies, lack of standardized interviews to diagnose depression, and some studies lacked a control or comparison group” (Schuver & Lewis, 2016, p. 85). Therefore, despite the possibility of efficacy and strengths associated with utilizing yoga in treating depression, there is a need to further investigate yoga as a tool for decreasing the symptoms of depression. Based on their research, Schuver & Lewis (2016) suggest:

Future research in yoga and depression should include diverse and larger sample sizes, longer interventions, and long-term follow-ups. The dose response of yoga with varying frequency, duration, intensity, and type should also be explored. Yoga relative to traditional treatments should also be examined. Researchers should examine if severity of depressive symptoms plays a role in the efficacy of yoga interventions. This study incorporated a gentler form of hatha yoga. Perhaps vigorous styles of yoga would be more efficacious for mild to moderate levels of depression than gentler forms of yoga (p. 90).

With these caveats in mind and in an effort to reduce the burdens associated with depression, emphasis on complementary therapies has grown in recent years. Several scientific studies have explored the use of yoga in treating depressive disorders (da Silva, Ravindran & Ravindran, 2009). In their systematic review of the effectiveness of yoga in treating depression, Pilkington et al. (2005) concluded that despite limitations associated with the studies reviewed, yoga-based interventions may be a viable option in treating depressive disorders. Research suggests an overall positive correlation between using yoga and the reduction in symptoms associated with depression, warranting further investigation (Pilkington, et al., 2005). In a comparison study examining the effects of yoga and antidepressants, subjects “in the yoga groups had a decrease in cortisol levels, and in the yoga alone group the cortisol decrease

correlated with decreased depression scores” (Field, 2016, p.151). Observations such as this suggest that yoga has the potential to play an important role in treatment of depression.

Yoga for Psychosis

Definition of Psychosis:

Reports suggest that approximately 1% of the population worldwide experiences psychosis, including those diagnosed with schizophrenia (Varambally et al., 2013). The burdens associated with psychosis include psychological and social suffering for individuals and their families, in addition to financial responsibilities and strain on health care resources (Varambally et al., 2013). Carr, McKernan, Hillbrand, & Hamlett (2018) state that “individuals with psychosis often suffer the greatest psychological distress in society, but are frequently overlooked in psychological theory and clinical applications of psychotherapy” (p.154). Individuals with chronic psychotic symptoms experience repetitive inpatient psychiatric hospitalizations that are typically treated *only* with antipsychotics, thus failing to consider other methods that might assist in symptom reduction (Carr, McKernan, Hillbrand, & Hamlett, 2018).

Individuals with a diagnosis of schizophrenia experience “a greatly increased number of physical comorbidities and experience a substantial premature mortality gap compared to the general population, with recent estimates suggesting a deficit of 15–20 years. Several factors have been proposed to account for the mortality gap, including high levels of smoking, alcohol use, a sedentary lifestyle, limited access to healthcare and exercise facilities” (Vera-Garcia et al., 2015, p.828). Additionally, individuals with schizophrenia often struggle with side effects from medications, impairing their overall standard of living (Visceglia & Lewis, 2011).

Treatment for Psychosis

Treatment for psychosis has historically utilized the medical model which understands mental disorders as biological abnormalities that seek stabilization through psychopharmacology, symptom management, and risk reduction (Carr, McKernan, Hillbrand, & Hamlett, 2018). “The heterogeneity of the schizophrenic population, the uncertain etiology of the disease, as well as mixed and partial success of psychopharmacologic intervention all indicate a need for improved treatment for schizophrenia” (Visceglia, & Lewis, 2011, p. 601). Research indicates that symptoms of psychosis are persistent in nature, with relapses often occurring due to non-compliance with medications underscoring a need to consider multimodal care (Vancampfort et al., 2012). Due to the complexities often associated with psychosis, there is a growing trend of utilizing complementary and alternative medicine in inpatient psychiatric facilities (Visceglia, & Lewis, 2011).

While awareness is growing that yoga may serve as a beneficial adjunctive in treating schizophrenia specifically, the efficacy of yoga as an intervention in treating individuals with psychosis has yet to be researched. Despite the growing interest in yoga therapy for psychiatric conditions, the challenges associated with researching this subject matter are ample. Restricted objective markers for those with psychiatric conditions make the effects of yoga difficult to adequately determine as the capacity to practice mindfulness and the length of a yoga session pose difficulties for individuals with psychiatric conditions (Thirthalli & Rao, 2016).

Due to the complex sequelae of psychotic disorders, there is a need to consider alternative and/or complementary therapies that might assist with symptom reduction and reduce the cyclical nature of relapse suffered by this patient population. While medical interventions for schizophrenia may be beneficial for positive symptoms, little progress has been made in treating

negative symptoms, including apathy, anhedonia, restricted emotional range, and social withdrawal. In a study conducted for psychiatric in-patients with functional non-affective psychosis, Manjunath, Varambally, Thirthalli, Basavaraddi, & Gangadhar (2013) found that adding yoga as an intervention to standard pharmacological treatment is advantageous and may be useful in the acute stage of psychosis. Symptoms in individuals with schizophrenia-spectrum disorders are exacerbated by increased stress, a decrease in interpersonal functioning and a reduction in emotional wellbeing; therapeutic yoga has proven helpful in targeting and decreasing these symptoms (Visceglia, & Lewis, 2011).

When used as an adjunctive to more traditional psychiatric treatments, therapeutic yoga “reduced psychopathology and improved aspects of quality of life in schizophrenic inpatients, likely due to the powerful stress reduction and autonomic nervous system modulation yoga can produce” (Visceglia, & Lewis, 2011, p. 605).

Yoga for Children

As expectations and demands on children continue to increase, so does the probability of heightened stress levels (Hagen & Nayar, 2014). Findings indicate that most psychiatric disorders are diagnosed during childhood or adolescence (Butzer et al., 2015) with one in five adolescents having a diagnosable mental health disorder (McIlvain et al., 2015). Weaver and Darragh (2015) found that “an estimated 21% of children and adolescents in the United States have a diagnosable psychiatric disorder resulting in at least minimal impairment, and upward of 4 million youths have a serious psychiatric disorder that causes significant functional impairments across social, familial, and community domains” (p. 1). Research trends

demonstrate that the current cohort of young adults in the United States is experiencing higher levels of stress than previous generations.

Yoga may be a valuable tool to help children cope with stressors and improve physical and mental well-being, mood, resilience, and self-regulation (Hagen & Nayar, 2014). In their article Hagen & Nayar (2014) state:

The evidence of yoga practice among children indicates improved benefits in concentration, stress alleviation, self-awareness, consciousness, self-regulation, behavioral and emotional maturity, and self-confidence in everyday life. There are also some proofs where yoga has worked as an adjunct to medical treatment of mental illness with positive effects. Yoga as a standalone therapy requires further research, although there are quite affirmative indications (p.3).

In the United States alone, Weaver & Darragh (2007) found that more than 1.5 million children were engaging in some type of yoga program and hypothesized that this number will continue to rise as more programs are introduced within community studios, educational institutions, and clinical settings. With approximately 12% of children engaging in some type of complementary or alternative medicine (McIlvain et al., 2015) and the growing popularity of yoga for children and adolescents, there is a need for further investigation in this area. Despite the increase of mental health disorders, funding for behavioral health services continues to decline (McIlvain et al., 2015). McIlvain et al. (2015) states:

Healthcare providers and caregivers are challenged to look for evidence-based and innovative, yet cost-effective, ways to help adolescents manage stress. While yoga is an effective intervention in some adult behavioral health conditions, yoga studies including adolescents with diagnosed mental illness receiving inpatient treatment are very limited (p.200).

In reviewing nine RCTs for yoga with grade school children, Field (2016) found that “results suggested that the grade school children experienced reduced tension and anxiety and improved self-esteem and mood following yoga” (p.147). However, when yoga was compared to physical exercise for grade school children, no significant difference was found. In their

systematic review of evidence-based yoga interventions in addressing anxiety among children and adolescents, Weaver and Darragh (2015) found that nearly all the studies reported reduced anxiety following the yoga intervention.

Jensen & Kenny (2004) investigated the effects of yoga on boys aged 8-13 with a diagnosis of attention-deficit hyperactivity disorder that had been stabilized on medications. The results of the study demonstrated significant improvements from pre-test to post-test for the yoga group and not for the control group, specifically when medications are absent during evening hours. In surveying school-based yoga programs, Butzer et al. (2015) identified 36 yoga programs within schools that might provide “large-scale preventive intervention that may target early risk factors for psychological and physical health problems in both childhood and adulthood” (p.24). These findings suggest that not only can yoga be incorporated into school systems, but that it is viewed as acceptable by children, school bureaucracies and parents (Butzer et al., 2015).

CHAPTER 3: METHODOLOGY

A comprehensive literature review and findings from a survey conducted by the National Association of Deans and Directors (NADD) member schools on Integrative Mind-Body-Spirit (I-MBS) in social work practice informed the design of a 14-week MSW elective course on yoga as a complementary therapy for treating individuals with diverse mental health diagnoses.

The literature review demonstrated several areas which deserve attention. There is a significant body of evidence which supports the use of CAM and/or I-BMS practices in addressing psychological needs and overall wellbeing/health. Despite the growing acceptance, popularity, and evidence base of CAM and/or I-BMS, these treatment options are not typically included in formal social work education or practice. These findings suggest a need for educational programs within social work programs to prepare students to better understand and expand their awareness to include CAM and I-BMS practices.

In an effort to better understand the utilization of CAM and/or I-BMS practices in social work programs at present, a 2014 survey of 231 NADD member accredited MSW programs was analyzed and referenced. Of the 231 accredited MSW programs, 56 programs responded, representing a total response rate of 24%. While this survey may not be representative because of the low response rate, the survey responses indicate that only 3 of the 56 responding programs surveyed include courses that integrate body movement and/or manipulation such as yoga, massage and physical exercise. When queried about their interest in offering I-BMS practices within their programs, 27 schools or 11.1% of the total queried responded yes; this was the second highest areas of interest behind Mindfulness at 18.5%, revealing that body movement and/or manipulation such as yoga, massage and physical exercise was the second highest area of interest. Of note, 29 programs elected to skip this question, perhaps revealing a lack of interest

in or knowledge of the incorporation of I-BMS practices into the curriculum. Additionally, the survey explored programs' justifications for not offering any I-BMS courses. Of the 26 respondents, 33% indicated that they were unable to add additional content to their curriculum, 24% stated that they lack the resources, 22% cited a lack of faculty expertise, 14% identified a lack of curriculum support and 7% reported that they were planning on launching or are in the process of developing a course.

While some of the evaluated programs stated that they do not offer a specific course on I-BMS, I-BMS content is integrated in some capacity into other courses offered within the curriculum. However, very few of the programs identified plans to incorporate yoga, massage, physical exercise or other body movement and/or manipulation into current course offerings. The programs also indicated minimal I-BMS offerings within continuing education programs and/or workshops. Despite having only nominal I-BMS content, programs expressed ample interest in adding to and/or expanding I-BMS offerings. Forty-six programs responded to the final survey question about adding to or expanding their I-BMS content: 37% responded "Yes", 35% replied "Would Consider or Maybe" and the remaining 28% percent responded "No" (NADD, 2014).

The findings from this survey suggest both a demand and an opportunity for social work education programs to incorporate I-BMS and CAM material into curricula. Despite the needs highlighted by the survey, few schools have made strides to include these practices into their curriculum. Social work graduate programs are uniquely positioned to prepare and provide students with innovative approaches that consider the interactions between the physical, emotional, mental, and spiritual aspects of individuals. Master's level programs have an obligation to prepare the profession's future leaders, practitioners, educators, and researchers by

providing holistic approaches for social work practice. The findings from this survey suggest that there is a lack of master's level courses that include broad CAM or I-BMS content or specific yoga material. The primary aim of this dissertation is to create a curriculum that remedies these deficiencies.

Course Format:

A 14-week MSW elective course has been developed to enable students to explore the benefits of incorporating the use of yoga as a complementary therapy in treating individuals with diverse mental health diagnoses. The intended learning outcomes for this course are to augment students' knowledge of the benefits associated with using yoga to complement traditional therapeutic approaches.

It should be noted that the intention of this course is *not* to teach students how to be yoga instructors and/or yoga therapists but to illustrate the benefits of yoga as a complementary therapy. Students will learn the research supporting the theoretical underpinnings of yoga as it relates to treating trauma, depression, anxiety, and psychotic disorders in work with both adults and children. Each of these topics will be explored further through the utilization of case studies, the incorporation of asana practice, and group discussions.

The overall objective of the course is to educate and prepare social work students to consider yoga as a complementary practice to more traditional therapeutic approaches. The course will provide students with a comprehensive and experiential understanding of the theoretical and scientific training of yoga philosophy and teaching and its relevance to the mental health field. The curriculum is grounded in the biopsychosocial approach, utilizing yoga as a

way for social workers to focus on the well-being of the whole person physically, mentally, socially, and spiritually.

The syllabus was developed around the following main components: course description, educational objectives, course requirements and grading policies, assignments, and readings & schedule of class topics. The design of the course seeks to enhance the social work curriculum by exploring the history of yoga, yoga postures, breathing techniques, and the application of yoga in assisting adult clients with managing symptoms associated with diagnoses of trauma, depression, anxiety, psychosis, and in working with children.

The subject areas will be reviewed through the use of lectures, case presentations, group discussions and experiential learning and relevant readings and written assignments will enable students to become more aware of their preferences, values, beliefs, and assumptions. The weekly topics for the course are as follows:

- Week 1: Introduction to Yoga/Course Overview & Expectations
- Week 2: Complementary and Alternative Medicine: historical overview & current state
- Week 3: Yoga in Mental Health Services
- Week 4: Yoga Theory for Trauma
- Week 5: Applications for Yoga for Treating Trauma
- Week 6: Yoga Theory for Anxiety
- Week 7: Applications of Yoga for Anxiety
- Week 8: Yoga Theory for Depression
- Week 9: Applications of Yoga for Depression
- Week 10: Yoga Theory for Psychosis
- Week 11: Applications of Yoga for Psychosis
- Week 12: Yoga Theory for Children
- Week 13: Applications of Yoga for Children
- Week 14: Future Directions

Educational Policy and Accreditation Standards (EPAS):

The Council on Social Work Education (CSWE) is the accrediting agency for social work education in the United States. The CSWE uses the Educational Policy and Accreditation

standards (EPAS) that support academic integrity by requiring that all MSW programs develop and administer curriculum that seek to prepare graduates for practice by adhering to nine core competencies. Each competency is designed to reflect the skills, values, and awareness required by social workers along with related analogous “cognitive and affective processes” (CSWE, 2015, p.7).

While all competencies will be considered and integrated into the content of this course in some capacity, the course will focus broadly on:

Competency 1: Demonstrate Ethical and Professional Behavior

Competency 2: Engage in Diversity and Difference in Practice

Competency 4: Engage in Practice-Informed Research and Research Informed Practice

Competency 6: Engage with Individuals, Families, Groups, Organizations, and Communities

Competency 9: Evaluate Practice with Individuals, Families, Groups Organizations, and Communities

In addition to integrating core competencies, the 2015 EPAS has included “adapting and extending the Social Work Competencies for practice with a specific population, problem area, method of intervention, perspective or approach to practice. Specialized practice augments and extends social work knowledge, values, and skills to engage, assess, intervene, and evaluate within an area of specialization” (EPAS, 2015, p.12). Educational policy 2.1, Specialized Practice, seeks to incorporate specialized practices into generalized practice (as described in educational policy 2.0) and will be considered throughout the course on yoga as a complementary treatment.

CSWE Core Competencies Matrix

Core Competencies	Week(s) Covered	Practice Behavior	Method(s)
<p>Competency 1: Demonstrate Ethical and Professional Behavior</p>	<p>1, 3, 5, 7, 9, 11 & 13</p>	<ul style="list-style-type: none"> - Make ethical decisions by applying the standards of the NASW Code of Ethics, relevant laws and regulations, models for ethical decision-making, ethical conduct of research, and additional codes of ethics as appropriate to context - Use reflection and self-regulation to manage personal values and maintain professionalism in practice situations 	<ul style="list-style-type: none"> - Case presentations will include one or more principles of ethical decision making as a way to encourage students to consider ways in which they would manage their own responses and reactions to ethical dilemmas that are often endemic in social work practice - Utilize weekly practice log to record reflections to manage personal values and maintain professionalism. This log will enable students to understand how their personal experiences and reaction influence their professional behavior
<p>Competency 2: Engage in Diversity and Difference in Practice</p>	<p>1, 2, 6, 10 & 14</p>	<ul style="list-style-type: none"> - Apply and communicate understanding of the importance of diversity and difference in shaping life experiences in practice at the micro, mezzo, and macro level - Present themselves as learners and engage clients and constituencies as experts of their own experiences - Apply self-awareness and self-regulation to manage the influence of personal biases and values in working with diverse clients and constituencies. 	<ul style="list-style-type: none"> - Generate in class discussion how cultural considerations have been largely overlooked within the context of the application, acceptability, appropriateness, and use of CAM therapies among racial and ethnic groups. - Reflective essays encourage students to identify personal values, beliefs, and assumptions that they hold and how this can impact their work with clients

<p>Competency 4: Engage in Practice-Informed Research and Research Informed Practice</p>	<p>1, 3, 4, 6, 8, 10 & 14</p>	<ul style="list-style-type: none"> - Use practice experience and theory to inform scientific inquiry and research - Apply critical thinking to engage in analysis of quantitative and qualitative research methods and research findings - Use and translate research evidence to inform and improve practice, policy, and service delivery 	<ul style="list-style-type: none"> - Student-led discussion regarding current research and their elucidations for the lack of evidence-based research for yoga as a complementary practice in therapy to more traditional approaches in the holistic treatment of clients - The term paper requires a literature review to explore the relationship between yoga and mental health/social work practice - Discuss theories and the effectiveness of them in working with clients with varying mental health diagnoses as it relates to yoga
<p>Competency 6: Engage with Individuals, Families, Groups, Organizations, and Communities</p>	<p>1, 2, 3, 5, 7, 9, 11 & 14</p>	<ul style="list-style-type: none"> - Apply knowledge of human behavior and the social environment, person-in-environment, and other multidisciplinary theoretical frameworks to engage with clients and constituencies - Use empathy, reflection, and interpersonal skills to effectively engage diverse clients and constituencies 	<ul style="list-style-type: none"> - In class discussion regarding the importance of considering the holistic needs of clients and how complementary treatment approaches are working to expand traditional treatment methodologies - Use of journal, reflective essays, and term paper
<p>Competency 9: Evaluate Practice with Individuals, Families, Groups Organizations, and Communities.</p>	<p>1, 3, 6, 10, 13 & 14</p>	<ul style="list-style-type: none"> - Select and use appropriate methods for evaluation of outcomes - Apply knowledge of human behavior and the social environment, person-in-environment, and other multidisciplinary theoretical frameworks in the evaluation of outcomes - Critically analyze, monitor, and evaluate intervention and program processes and outcomes - Apply evaluation findings to improve practice effectiveness at the micro, mezzo, and macro levels 	<ul style="list-style-type: none"> - Group work followed by student led discussion to consider and evaluate the ways in which students might consider implementing yoga as a complementary treatment approach in the future - Use of reflective essays and term paper - Generate list of resources for referrals and consider ways to allocate information to clients - Utilize weekly practice log to identify learning needs based on evaluation of personal yoga practice

Limitations

Park, Braun & Siegel (2015) systematically reviewed fifty-five studies to examine demographic, health-related, and psychosocial factors associated with yoga practice and found that “in aggregate, these studies present a picture of the typical yoga practitioner as female, upper socioeconomic status, educated, middle-aged and white” (p. 463). Existing studies are limited and include small sample sizes, the absence of a well-designed control condition, studies that are restricted to adult female participants, and include insufficient assessment at follow-up (van der Kolk, et al., 2014; Dick, Niles, Street, DiMartino, & Mitchell, 2014; Mitchell, et al., 2014). In comparing yoga practitioners with non-practitioners, Cramer et al. (2016) also found that “lifetime yoga practitioners were more likely female, younger, non-Hispanic white, college educated, higher earners, living in the West, and of better health status” (p. 230). While most studies evaluate the effects of yoga on mental health and well-being, little is known about the characteristics of individuals who elect to practice yoga. Park, Braun & Seigel state that “understanding who practices yoga may be useful in developing yoga interventions tailored to appeal to different groups, and suggest future research directions regarding the effects of yoga on various aspects of well-being as well as potential mechanisms through which such effects are achieved” (p.460-461). Additionally, understanding more about who is *not* practicing yoga may assist in targeting these cohorts for promotion and outreach in the future.

Given the growing evidence base supporting yoga’s potential to mitigate suffering associated with mental and physical conditions, consideration of these demographic factors may shed light upon impediments to participation (Park, Braun & Siegel, 2015). These limitations suggest that yoga has not been adequately evaluated as a potential complementary treatment

approach especially with diverse populations and point out some of the directions in which yoga can proceed as a potential intervention for individuals with mental health diagnoses.

Integrating Yoga into Social Work Practice

Although it may not seem intuitive to the practitioner, there are many ways in which yoga, or aspects of the practice, can be integrated into a holistic approach to working with clients. A necessary first step is for clinicians to receive education regarding yoga which includes further exploration of the benefits, risks, and research that are relevant to the topic. The objective is to orient practitioners to view yoga not as an alternative treatment for mental health conditions but rather as a tool to complement treatment in hopes of reducing the overall frequency and intensity of symptoms associated with various mental health diagnoses.

Social workers who have a comprehensive understanding of yoga (and its various forms), are well-positioned to consider the unique needs of their clients and make recommendations/referrals for yoga as an adjunct to psychotherapy. Barnett, Shale, Elkins & Fisher (2014) suggest that “topics for discussion include a review of the various schools of yoga, the amount of time and effort involved, how yoga principle and philosophy can be integrated into daily life, the possible benefits of practicing yoga over time, and potential risks and limitations” (p. 102). Providing psychoeducation on yoga to clients can help them in better understanding relevant research on the possible benefits of yoga can assist in managing client expectations about what the experience might entail (Barnett, Shale, Elkins, & Fisher, 2014).

Future Directions

While mind-body practices may benefit individuals by reducing symptoms associated with mental health diagnoses, there are shortcomings in the literature when considering the potential benefits of yoga-based interventions. The growing popularity of yoga in Western culture has sparked a substantial increase in clinical research attesting to the various advantages and health benefits of yoga (Salmon, Lush, Jablonski, & Sephton, 2008). The expanding literature base on yoga and mental health demonstrate continued momentum in integrating the use of yoga into clinical practice (Thirthalli & Rao, 2016). Given the increased popularity of integrating yoga into clinical practice, there is a demand for further research, consideration of standardized yoga interventions, and improved accessibility for individuals with mental health diagnoses (Varambally & Gangadhar, 2016; Thirthalli & Rao, 2016).

In light of our society's heightened focus on physical fitness and yoga's popularity, cost effectiveness, non-invasive nature, and minimal potential for adverse effects, it would behoove the mental health field to integrate yoga into training curricula. "Despite advances in the pharmacological and psychological treatment of mood and anxiety disorders, a significant percentage of patients remain refractory to treatment, which often leads to a chronic course of illness and long-term functional impairment" (da Silva, Ravindran & Ravindran, 2009, p.7). The study of the role that yoga therapy can play in mental health settings is in its infancy. Clinicians are recognizing the need to expand upon traditional treatment methodologies and are turning to yoga therapy to encourage practitioners to embrace mind-body integration, which may play a role in the comprehensive holistic approach to healing.

The field of clinical social work is expeditiously evolving and would benefit from considering complementary, alternative, and holistic healing strategies. The rapidly expanding

use of complementary and alternative treatment approaches demands that educators and practitioners have access to training and education on these subjects. Research indicates that a considerable number of social workers are practicing complementary techniques in which they have limited training or knowledge (Henderson, 2000). This dissertation seeks to bridge this gap by creating a course that focuses on using yoga as a complementary therapy in treating individuals with diverse mental health diagnoses.

EXPANDING THE MIND AND BODY: YOGA AS A COMPLEMENTARY PRACTICE TO TRADITIONAL THERAPEUTIC APPROACHES

CLASS TIME & LOCATION:

DAY:

TIME: (CLASS LENGTH 2.5 HOURS ONCE A WEEK)

LOCATION:

INSTRUCTOR:

NAME:

E-MAIL:

PHONE:

OFFICE HOURS:

I. COURSE DESCRIPTION

The purpose of this course is to introduce, broaden and deepen participants' understanding of yoga as a complementary approach to traditional therapeutic approaches used in social work practice. This course explores central aspects of yoga philosophy and practice, provides a brief introduction of complementary and alternative treatment approaches, offers a historical overview of yoga, and discusses yoga as it relates to mental health services. Topics covered in this course will include further exploration of yoga theory and the application of yoga in assisting adult clients with managing symptoms associated with diagnoses of trauma, depression, anxiety, and psychosis as well as helping them to engage with children. Students will learn yoga theory by exploring the benefits, risks and research that supports and opposes utilization of yoga for various mental health conditions. Classes on the application of yoga will include an experiential element, where students will practice yoga postures (asanas), breathing exercises, and meditation techniques that align with topics being covered each week. The course is not intended to be a yoga training but rather designed to explore the importance of considering practices which serve to complement traditional treatment approaches and how to integrate these aspects into clinical work. The course will employ case presentations, assignments, readings, class discussions, and physical yoga practice. Students will be required to maintain a yoga practice outside of the classroom in an effort to heighten their awareness of their own responses to yoga, better understand how yoga relates to their clinical training, and deepen their understanding of the material covered in the course.

II. EDUCATIONAL OBJECTIVES

This course is intended to introduce students to yoga as a complementary practice to traditional therapeutic approaches utilized in social work practice. Throughout the course, students will be encouraged to apply core social work values to readings, class discussions, written assignments, case material, and experiential practices. The course intends to support students who wish to utilize yoga practices more fully in their professional and personal lives.

Upon completion of this course students are expected to have:

- An understanding of the strengths, weaknesses, and treatment goals for yoga as they compare to traditional therapeutic approaches
- An understanding of yoga and the ways in which it relates to working with trauma, anxiety, depression, and psychosis in adults and to working with children more broadly
- Ability to describe and identify mind-body practices which support psychological health
- An understanding of the mental and physical benefits of yoga practice
- A thorough understanding of the application of yoga in treating various mental health diagnoses
- Ability to explain the state of the evidence on associations between yoga and various mental health diagnoses/risk factors
- Capacity to describe and communicate conceivable mechanisms by which yoga may impact mental health and wellbeing
- Understanding of the strengths and weaknesses of current research on yoga and mental health

III. COURSE REQUIREMENTS AND GRADING POLICY

Expectations:

Students are expected to be active participants in their own learning. Students are expected to attend each class, arrive on time to class, and be in attendance for the full class. If you are unable to attend class for any reason, please notify the instructor and propose how you will make up the content you have missed. Excessive absenteeism (i.e., missing more than two classes) is a grave issue that the instructor will handle by meeting with the students and determining whether the student's educational adviser should be notified. Excessive absenteeism could result in course failure.

Students are expected to:

- (A) Participate substantively in class discussions
- (B) Read on a weekly basis and come to class prepared to discuss the reading assignments
- (C) Submit assignments by the due date in accordance with the specified format
- (D) Participate in all in-class asana practices and attend one yoga class per week either online or in a studio setting.

* PLEASE NOTE: If a student enrolled in this class is unable to participate in the physical (asana) portion of this class for any reason, it will not preclude them from enrolling. If a student has physical restrictions that would interfere with their ability to participate/engage in the asana portion of class, the instructor will offer modifications for asanas in effort to make the class accessible for all students. Alternatively, students could observe classes in lieu of participating physically.

Grading Distribution:

Class attendance, participation and preparedness	20%
Reflective essays (2)	25%
Weekly practice log	30%
Final paper	25%

IV. ASSIGNMENTS

A. Reflective Essays (Due Weeks 6 & 10):

Students will prepare two reflective essays, completed by the end of the day of Classes 6 and 10. All papers must be submitted by the due date; late submissions will not be accepted. These essays will be no longer than 2-3 double-spaced pages, following APA formatting guidelines. They are to be submitted electronically to the instructor with the instructor replying in the same manner. The essays are confidential and will only be read by the instructor. The essays will include:

1. **Essay 1: (Date Due)**- Reaction to class discussions and/or physical asana practice that is relevant to professional and/or personal life.
2. **Essay 2: (Date Due)**- Critical reaction to at least **one of the required readings** from previous classes that was useful in understanding and/or coping with personal and/or professional topic utilized in the first reflective essay.

Note: These essays are intended to serve as an opportunity to become more aware of your personal preferences, values, beliefs, assumptions, and to develop critical analysis skills

B. Weekly Practice Log

Students are required to attend one yoga class outside of class each week. Students can participate in yoga classes by using an online yoga subscription to YogaGlo (\$18/month) or attending one yoga class per week in a studio of your preference.

Logs are to be submitted electronically to the instructor each week; logs are confidential and will be read only by the instructor.

Students will complete a weekly log to track their yoga practice that considers the following elements:

- Date, length, time, and style of class taken
- General observations of the practice/style
- Thoughts, feelings, and sensations that arose during practice
- Thoughts, feelings, and sensations after practice

* Please note that in-class asana sessions are not applicable to weekly practice log

C. Term Paper

The term paper will be 5-7 double-spaced pages in length, due on the 13th session. In their term papers, students will consider the ways in which yoga can be incorporated into social work practice. Papers should include a literature review on the relationship between yoga and mental health/social work practice, personal feelings about yoga as complementary treatment approach, and consider the ways in which the student might envision including (or excluding) yoga in their professional careers.

Format for Written Assignments:

All papers must be typewritten, in 12-point font, double-spaced, page-numbered, with 1" margins at the left, right, top and bottom. The cover page (not included in the page limit) should include the title of the paper, student's name, professor's name, and date submitted. **Papers must be proofread carefully** for clarity, organization, spelling, punctuation, and other potential errors before submission.

In-text citations following APA style guidelines are required for all written assignments, with the specific source including authors' last names and year of publication, regardless of whether students are paraphrasing or using specific quotes. Direct quotes must have the specific source as above but with page number(s). **A list of references cited or consulted must be included at the end of each paper in proper APA bibliographic form.**

V. READINGS & SCHEDULE OF CLASS TOPICS

Required Text

Iyengar, B.K.S. (1966). *Light on yoga*. New York: Random House.

* Please note: While this text will be used minimally for assigned class readings, it is the only required text as it provides complete descriptions and illustrations of the asanas and pranayama techniques that will be incorporated into classes throughout the semester.

Required Course Materials:

Students will be required to have:

- A yoga mat for classes involving asana practice
- Comfortable/stretchy/baggy clothing for classes with asana practice
- A signed liability waiver to participate in physical practice of yoga (to be provided)
- Optional materials/props: blanket, blocks, and/or belt
- A subscription to YogaGlo (\$18 /month) or to have taken one class per week at a studio of your preference

* *Should acquiring these items pose a financial burden, please speak with the instructor*

Suggested Readings:

Emerson, D., & Hopper, E. (2011). *Overcoming trauma through yoga: Reclaiming your body*. Berkeley, CA, US: North Atlantic Books.

Forbes, Bo. (2011). *Yoga for emotional balance: simple practices to relieve anxiety and depression*. Boston, MA: Shambhala.

Horovitz, E., & Elgelid, S. (2015). *Yoga therapy: Theory and practice*. New York, NY: Routledge.

Lee, M. Y., Chan, C. L. W., Leung, P., & Ng, S. (2009). *Integrative body-mind-spirit social work: An empirically based approach to assessment and treatment*. US: Oxford University Press.

van der Kolk, B. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York: Viking.

Weintraub, A. (2004). *Yoga for depression: A compassionate guide to relieve suffering through Yoga*. New York: Broadway Books.

Session 1: (Date of lecture): Introduction to Yoga/Course Overview & Expectations

- * Overview of the course, assignments, expectations and required course materials
- * Class introductions
- * Introduction to yoga: What is yoga?
- * What is yoga therapy?
- * End class with a breathing exercise

Required readings:

Iyengar, B.K.S. (1966). *Light on yoga*. New York: Random House. **(Part I, pp. 19-53)**

Horovitz, E., & Elgelid, S. (2015). *Yoga therapy: Theory and practice*. New York, NY: Routledge. **(Chapter 2, pp. 18-26)**

Session 2: (Date of Lecture): Complementary and Alternative Medicine

- * What is Complementary and Alternative Medicine (CAM)?
- * Explore the growing popularity of CAM in Western culture
- * Examine yoga as a form of CAM
- * Introductory asana practice (30 min)

Required readings:

Lee, M. Y., Chan, C. L. W., Leung, P., & Ng, S. (2009). *Integrative body-mind-spirit social work: An empirically based approach to assessment and treatment*. US: Oxford University Press. **(Introduction: pp. 25-75)**

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. **(pp. 407-425)**

Session 3: (Date of Lecture): Yoga in Mental Health Services

- * How does yoga benefit mental health?
- * Benefits of yoga for mental health:
 - Physical benefits, relaxation, emotional control, body awareness, and attention/concentration
- * Risks, safety concerns, and contraindications
- * 30-minute asana practice

Required Readings:

Varambally, S., & Gangadhar, B. (2016). Current status of yoga in mental health services. *International Review of Psychiatry*, 28(3), 233-235 (pp. 233-235)

Horovitz, E., & Elgelid, S. (2015). *Yoga therapy: Theory and practice*. New York, NY: Routledge. (Chapter 13, pp. 151-162)

Manincor, M., Bensoussan, A., Smith, C. A., Barr, K., Schweickle, M., Donoghoe, L., Bouchier, S., & Fahey, P. (2016). Individualized yoga for reducing depression and anxiety, and improving well-being: A randomized controlled trial. *Depression and Anxiety*, 33(9), 816-828 (pp. 816-828)

Session 4: (Date of Lecture): Yoga Theory for Trauma

- * How can yoga help in treating trauma?
- * What is trauma-informed/ trauma-sensitive yoga?
- * Explore current findings supporting the use of yoga for survivors of trauma

Required Readings:

van der Kolk, B. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York: Viking. (pp. 1-39)

Emerson, D., & Hopper, E. (2011). *Overcoming trauma through yoga: Reclaiming your body*. Berkeley, CA, US: North Atlantic Books. (pp 35-52)

Nguyen-Feng, V. N., Clark, C. J., & Butler, M. E. (2018). Yoga as an intervention for psychological symptoms following trauma: A systematic review and quantitative synthesis. *Psychological Services*. (pp. 1-12)

Session 5: (Date of Lecture): Applications of Yoga for Treating Trauma

- * 60-minute asana practice utilizing sequence in trauma-sensitive yoga
- * Small group work to process reactions to asana practice
- * Case presentation on yoga for trauma

Required Readings:

West, J., Liang, B., & Spinazzola, J. (2017). Trauma sensitive yoga as a complementary treatment for posttraumatic stress disorder: A qualitative descriptive analysis. *International Journal of Stress Management*, 24(2), 173-195. (pp. 173-195)

Emerson, D., & Hopper, E. (2011). *Overcoming trauma through yoga: Reclaiming your body*. Berkeley, CA, US: North Atlantic Books. (pp 59-118)

Session 6: (Date of Lecture): Yoga Theory for Anxiety

- * How can yoga help in treating anxiety?
- * Exploration of current findings supporting the use of yoga for sufferers of anxiety

***REFLECTIVE ESSAY # 1 DUE**

Required Readings:

Cramer, H., Lauche, R., Anheyer, D., Pilkington, K., de Manincor, M., Dobos, G., & Ward, L. (2018). Yoga for anxiety: A systematic review and meta-analysis of randomized controlled trials. *Depression and Anxiety* (pp. 830-843)

Li, A. W., & Goldsmith, C. W. (2012). The effects of yoga on anxiety and stress. *Alternative Medicine Review: A Journal of Clinical Therapeutic*, 17(1), 21. (pp. 21-35)

Nurriestearns, M & Nurriestearns, R. (2015). *Yoga for anxiety: Meditations and practices for calming the body and mind*. Oakland, CA, US: New Harbinger Publications. (pp. 43-74)

Session 7: (Date of Lecture): Applications of Yoga for Anxiety

- * 60-minute asana practice utilizing sequence for anxiety
- * Small group work to process reactions to asana practice
- * Case presentation on yoga for anxiety

Required Readings:

Williams-Orlando, C. (2013). Yoga therapy for anxiety: A case report. *Advances in Mind-Body Medicine*, 27(4), 18-21. (pp. 18-21)

Nurriestearns, M., & Nurriestearns, R. (2015). *Yoga for anxiety: Meditations and practices for calming the body and mind*. Oakland, CA, US: New Harbinger Publications. (pp. 101-173)

Forbes, Bo. (2011). *Yoga for emotional balance: simple practices to relieve anxiety and depression*. Boston, MA: Shambhala. (pp.164-186)

Session 8: (Date of Lecture): Yoga Theory for Depression

- * How can yoga help in treating depressive disorders and/or symptoms of depression?
- * Exploration of current findings supporting the use of yoga for depression

Required Readings:

Pilkington, K., Kirkwood, G., Rampes, H., & Richardson, J. (2005). Yoga for depression: The research evidence. *Journal of Affective Disorders*, 89(1), 13-24. (pp. 13-24)

Cramer, H., Lauche, R., Langhorst, J., & Dobos, G. (2013). yoga for depression: A systematic review and meta-analysis. *Depression and Anxiety*, 30 (1068-1083) (pp. 1068-1083)

Session 9: (Date of Lecture): Applications of Yoga for Depression

- * 60-minute asana practice utilizing sequence for depression
- * Small group work to process reactions to asana practice
- * Case presentation on yoga for depression
- * How stress and mood impact the nervous system

Required Reading:

Nyer, M., Gerbarg, P. L., Silveri, M. M., Johnston, J., Scott, T. M., Nauphal, M., Owen, L., Nielsen, G., Mischoulon, D., Brown, R., Fava, M., & Streeter, C. C. (2018). A randomized controlled dosing study of Iyengar yoga and coherent breathing for the treatment of major depressive disorder: Impact on suicidal ideation and safety findings. *Complementary Therapies in Medicine*, 37, 136-142 (pp. 136-142)

Uebelacker, L., Kraines, M., Broughton, M., Tremont, G., Gillette T., Epstein-Lubow, G., Abrantes, A., Battle, C., & Miller, I. W. (2017). Perceptions of hatha yoga amongst persistently depressed individuals enrolled in a trial of yoga for depression. *Complementary Therapies in Medicine*, 34, 149-155. (pp. 149-155)

Kinser, P. A., Goehler, L. E., & Taylor, A. G. (2012). How might yoga help depression? A neurobiological perspective. *Explore: The Journal of Science and Healing*, 8(2), 118-126. (pp.118-126)

Forbes, Bo. (2011). *Yoga for emotional balance: simple practices to relieve anxiety and depression*. Boston, MA: Shambhala. (pp.189-210)

Session 10: (Date of Lecture): Yoga Theory for Psychosis

- * How can yoga help in treating psychosis?
- * Exploration of current findings supporting the use of yoga for psychosis

***REFLECTIVE ESSAY # 2 DUE**

Required Readings:

Sistig, B., Lambrecht, I., & Friedman, S. H. (2015). Journey back into body and soul – an exploration of mindful yoga with psychosis. *Psychosis*, 7(1), 25-36. (pp. 25-36)

Chawala, R. (2018). Efficacy of yoga as an add-on treatment of schizophrenia. *Indian Journal of Health and Wellbeing*, 9(2), 267-271. (pp. 267-271)

Session 11: (Date of Lecture): Applications of Yoga for Psychosis

- * 60-minute asana practice utilizing sequence for psychosis
- * Small group work to process reactions to asana practice
- * Case presentation on yoga for psychosis

Required Readings:

Rathod, S., Pradhan, B., & Pinninti, N. (2016). Brief interventions for psychosis: A clinical compendium. Cham: Springer. (pp. 55-87)

Lin, J., Chan, S., Lee, E., Chang, W., Tse, M., Su, W., Sham, P., Hui, C., Joe, G., Chan, C., Khong, P., So, K., Honer, W., & Chen, E. (2015). Aerobic exercise and yoga improve neurocognitive function in women with early psychosis. *NPJ Schizophrenia*, 1, 15047. (pp. 1-7)

Session 12: (Date of Lecture): Yoga Theory for Children

- * How can yoga help in the treatment of children?
- * Exploration of current findings supporting the use of yoga with children

Required readings:

Hagen, I., & Nayar, U. (2014). Yoga for children and young people's mental health and well-being: Research review and reflections on the mental health potentials of yoga. *Frontiers in Psychiatry*, 5, 35. (pp. 1-6)

Weaver, L. L., & Darragh, A. R. (2015). Systematic review of yoga interventions for anxiety reduction among children and adolescents. *The American Journal of Occupational Therapy: Official Publication of the American Occupational Therapy Association*, 69(6) (pp. 1-9)

Khalsa, S. B. S., Hickey-Schultz, L., Cohen, D., Steiner, N., & Cope, S. (2012). Evaluation of the mental health benefits of yoga in a secondary school: A preliminary randomized controlled trial. *The Journal of Behavioral Health Services & Research*, 39(1), 80-90. (pp. 80-90)

Session 13: (Date of Lecture) Applications of Yoga for Children

*** TERM PAPER DUE**

- * 60-minute asana practice utilizing sequence for children
- * Small group work to process reactions to asana practice
- * Case presentation on yoga in working with children

Required readings:

Neiman, B. (2015). *Mindfulness & yoga skills for children and adolescents: 115 activities for trauma, self-regulation, special needs & anxiety*. Retrieved from <https://proxy.library.upenn.edu:2457> (pp. 1-22)

White, L. S. (2009). Yoga for children. *Pediatric Nursing*, 35(5), 277-295. (pp. 277-295)

Session 14: (Date of Lecture): Future Directions

- * Explore future directions of research on yoga as a complementary practice
- * Open group discussion on reactions from class experiences throughout the semester and desire to continue with integrating yoga into clinical practice
- * Embracing the mind-body-spirit connection in clinical practice
- * End with 45-minute asana practice incorporating multiple elements considered throughout the semester

Required Readings:

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. (pp. 55-71)

Mensinga, J. (2011). The feeling of being a social worker: Including yoga as an embodied practice in social work education. *Social Work Education*, 30(6), 650-662. (pp. 650-662)

ANNOTATED BIBLIOGRAPHY OF SOURCES USED IN THE COURSE:

Class 1: Introduction to Yoga/Course Overview & Expectations

Iyengar, B.K.S. (1966). *Light on yoga*. New York: Random House. **(Part I, pp. 19-53)**

Horovitz, E., & Elgelid, S. (2015). *Yoga therapy: Theory and practice*. New York, NY: Routledge. **(Chapter 2, pp. 18-2)**

The readings for this session seek to answer the question examined in the first lecture: What is yoga? The assigned readings explore the definition of yoga and the historical and philosophical underpinnings associated with the ancient practice. Iyengar (1966) seeks to define yoga by exploring the historical background, nature, philosophy, objectives of practice, stages of yoga, and how yoga has evolved over time. In exploring India's ancient yogic traditions and the earliest understanding of yoga, Iyengar provides the reader with historical context for yoga practices as they continue to grow support and popularity.

In their second chapter, Horovitz & Elgelid define yoga therapy, the growing momentum in this field, and encourage readers to better understand how the application of yogic principles seek to achieve psychological, physiological, and/or spiritual goals. This reading will facilitate a conversation regarding the intentions of the course. It will reiterate that the objective is *not* to be a yoga therapist or to view yoga as an alternative treatment for mental health conditions but rather to educate clinicians on the benefits, risks, and research relevant to the topic. Horovitz & Elgelid explore the practices and teachings of yoga, how yoga therapy differs from Western/allopathic medicine, and the benefits of incorporating yoga into therapeutic settings.

Class 2: Complementary and Alternative Medicine

Lee, M. Y., Chan, C. L. W., Leung, P., & Ng, S. (2009). *Integrative body-mind-spirit social work: An empirically based approach to assessment and treatment*. US: Oxford University Press. **(Introduction: pp. 25-75)**

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. **(pp. 407-425)**

Lee, Chan, Leung & Ng explore how traditional social work treatment has taken a more holistic or integrative view in understanding the presenting problems that clients experience. However, the authors reveal that “despite an overarching person-in-environment perspective adopted by the social work profession, social work practice research pertaining to a holistic framework is often lacking” (p. 54-55). In their introduction, Lee et al. (2009) provide an argument which calls for a paradigm shift in social work to include integrative body-mind-spirit practices. They propose that I-BMS practices work to support clients by balancing all aspects of their lives and drawing upon the established client-centered, strengths-based perspectives at the crux of social work practice.

Gant, Benn, Gioia & Seabury define complementary and alternative medicine (CAM) and explore its increased use within the United States. The authors explore how social workers generally lack an understanding of CAM despite their roles requiring them to “provide most front-line health, mental health, and psychological referral and direct practice in the United States” (p. 407). This article posits that social workers must draw upon “critical thinking skills both to investigate and guide consumers in integrating complementary therapies into their health care plans and to facilitate whole person healing” (p. 421).

Class 3: Yoga in Mental Health Services

Varambally, S., & Gangadhar, B. (2016). Current status of yoga in mental health services. *International Review of Psychiatry*, 28(3), 233-235 (pp. 233-235)

Horovitz, E., & Elgelid, S. (2015). *Yoga therapy: Theory and practice*. New York, NY: Routledge. (Chapter 13, pp. 151-162)

Manincor, M., Bensoussan, A., Smith, C. A., Barr, K., Schweickle, M., Donoghoe, L., Bouchier, S., & Fahey, P. (2016). Individualized yoga for reducing depression and anxiety, and improving well-being: A randomized controlled trial. *Depression and Anxiety*, 33(9), 816-828 (pp. 816-828)

Varambally, S., & Gangadhar, B. (2016) provide the reader with a brief definition of yoga and discuss the recent applications of yoga with clinical populations. The authors explore the research supporting yoga-based interventions for such mental health conditions as depression, anxiety, psychosis, and other psychiatric disorders. This paper discusses yoga as a therapeutic strategy in the holistic approach to mental health, the need for more evidence, and the challenges inherent to researching the field.

Chapter 13 in Horovitz & Elgelid's book explores the narrowing gap between the traditional biomedical treatment and the application of yoga for clinical purposes. This reading cites the increase in yoga training programs for mental health professionals, which have largely focused on trauma and mood disorders. The author of this chapter posits that yoga can empower clients to be active participants in their emotional regulation, strengthen the therapeutic relationship, create balance, and assist clients in preparing for success in treatment.

Manincor et al. (2016) question the effectiveness and suitability of standard treatment protocols in treating anxiety and depression, which ultimately prompted research to investigate the effects of individualized yoga interventions. The design was a two-group RCT with a sample of 101 people experiencing symptoms of anxiety and/or depression and compared this population to a 6-week yoga intervention with a waitlist control group. The findings demonstrated the

effectiveness of individualized yoga, specifically in reducing symptoms of depression. While further research is necessary, the authors note that the applications of yoga “interventions may be beneficial in mental health care in the broader community” (p.826).

Class 4: Yoga Theory for Trauma:

van der Kolk, B. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York: Viking. (pp. 205-231 & 265-278)

Emerson, D., & Hopper, E. (2011). *Overcoming trauma through yoga: Reclaiming your body*. Berkeley, CA, US: North Atlantic Books. (pp 35-52)

Nguyen-Feng, V. N., Clark, C. J., & Butler, M. E. (2018). Yoga as an intervention for psychological symptoms following trauma: A systematic review and quantitative synthesis. *Psychological Services*. (pp. 1-12)

This lecture will briefly explore traditional approaches in the treatment of trauma and provide a rationale for the use of yoga for survivors of trauma. Using elements of van der Kolk’s book, the reader begins to consider the psychological and physiological impacts of trauma, the importance of establishing safety, understanding trauma through a neurobiological lens, and the body’s interpretation of and reaction to trauma. In chapter 16, van der Kolk provides a rationale for utilizing yoga to counteract trauma’s lasting impact on the body by exploring the benefits of yoga practice. He communicates the importance of incorporating yoga to increase relaxation, emotional regulation, body awareness, and creating safety.

Emerson & Hopper (2011) examine the evidence-based complementary treatment approach of trauma-sensitive yoga used in addressing the physiologic and emotional impacts of trauma on survivors. They begin by identifying the key themes of trauma-sensitive yoga: “experiencing the present moment, making choices, taking effective action, and creating rhythms” (p. 39) and provide support for these themes with case examples. Nguyen-Feng, Clark,

& Butler (2018) systematically assess the effectiveness of yoga interventions for psychological symptoms experienced subsequent to trauma. The researchers reviewed 12 articles and did not find strong evidence for the effectiveness of yoga due to the low quality and high risk of bias encountered in each study. Despite the growing popularity of and potential for yoga to assist with the management of symptoms associated with trauma, this review identifies a need for more rigorous research designs in the future to better understand how the use of yoga impacts survivors of trauma.

Class 5: Applications of Yoga for Treating Trauma:

West, J., Liang, B., & Spinazzola, J. (2017). Trauma sensitive yoga as a complementary treatment for posttraumatic stress disorder: A qualitative descriptive analysis. *International Journal of Stress Management*, 24(2), 173-195. (pp. 173-195)

Emerson, D., & Hopper, E. (2011). *Overcoming trauma through yoga: Reclaiming your body*. Berkeley, CA, US: North Atlantic Books. (pp 59-118)

This class will begin with a 60-minute asana practice designed for survivors of trauma followed by small group discussions for students to process their reactions to the physical practice. Readings from this week will concentrate on Trauma-Sensitive Yoga (TSY) in an effort to provide a foundation for students to better connect with the practice and lecture. West, Liang & Spinazzola evaluate peer-reviewed empirical evidence to examine the efficacy of Trauma-Sensitive yoga for women with a diagnosis of PTSD. “All of the studies reported yoga participant satisfaction, as well as physical and emotional safety” (p.39). While this review provides tentative support for the use of trauma-sensitive yoga in treating women, the authors acknowledge the scarcity of research in the subject matter and the need to use larger and more diverse samples and rigorous study designs.

Emerson and Hopper provide context in developing a TSY program in chapter 5. They explore the readiness of survivors to participate in this program, while providing the rationale for asanas selected for the trauma-sensitive yoga sequence provided within the chapter. In chapter 6 of their text, Emerson & Hopper explore ways for clinicians to integrate yoga-based practices *into* the therapeutic process. They begin by providing simple physical techniques which seek to help clients reduce stress, increase self-awareness and remain grounded in the present.

Class 6: Yoga Theory for Anxiety:

Cramer, H., Lauche, R., Anheyer, D., Pilkington, K., de Manincor, M., Dobos, G., & Ward, L. (2018). Yoga for anxiety: A systematic review and meta-analysis of randomized controlled trials. *Depression and Anxiety* (pp. 830-843)

Li, A. W., & Goldsmith, C. W. (2012). The effects of yoga on anxiety and stress. *Alternative Medicine Review: A Journal of Clinical Therapeutic*, 17(1), 21. (pp. 21-35)

Nurriestearns, M., & Nurriestearns, R. (2015). *Yoga for anxiety: Meditations and practices for calming the body and mind*. Oakland, CA, US: New Harbinger Publications. (pp. 43-74)

This lecture will explore traditional approaches used in the treatment of anxiety disorders, while providing literature to support the use of yoga as a complementary treatment approach for anxiety. In their review, Cramer et al. (2018) systematically assess and analyze the effectiveness and safety of yoga as a treatment for anxiety disorders with results remaining inconclusive. Additionally, in their review Li & Goldsmith (2012) focus on the role of yoga in improving the signs/symptoms of stress and anxiety. Their findings suggest that there are clear benefits to using yoga as an intervention for anxiety as evidenced by significant reduction of symptoms related to anxiety and/or stress in 25 out of the 35 trials reviewed. While the data suggest valuable outcomes from the use of yoga to manage symptoms of stress and/or anxiety, limitations inherent within research designs have interfered with generalizability and an ability to

draw definitive conclusions. Asking students to consider the findings from these articles is intended to generate class discussion on the implications of these preliminary findings, support the use of yoga for treating anxiety disorders and emphasize the need for more evidence and higher-quality studies.

Nurriestearns & Nurriestearns (2015) offer a chapter on how yoga heals anxiety. The reading seeks to provide the reader with an introduction to how yoga helps to increase consciousness by witnessing the innermost self through a heightened focus on breathing and observing thoughts, emotions, and physical sensations. Case studies are included throughout the chapter that highlight the process of generating internal consciousness through the use of yoga.

Session 7: Applications of Yoga for Anxiety:

Williams-Orlando, C. (2013). Yoga therapy for anxiety: A case report. *Advances in Mind-Body Medicine*, 27(4), 18-21. (pp. 18-21)

Nurriestearns, M., & Nurriestearns, R. (2015). *Yoga for anxiety: Meditations and practices for calming the body and mind*. Oakland, CA, US: New Harbinger Publications. (pp. 101-173)

Forbes, Bo. (2011). *Yoga for emotional balance: simple practices to relieve anxiety and depression*. Boston, MA: Shambhala. (pp.164-186)

This class will begin with a 60-minute asana practice designed to alleviate symptoms of anxiety followed by small group discussions for students to process their reactions to the physical practice. Readings from this week will concentrate on the application of yoga in treating anxiety in an effort to provide a foundation for students to better connect with the practice and lecture. Williams-Orlando present a case that demonstrates the clinical efficacy of using yoga to treat anxiety and panic disorder in an adolescent female. Results from this case study point to the safe and effective nature of yoga, stating that “yoga therapy can serve to

reduce clinical levels of anxiety and panic” (p. 20). The case allows the reader to consider holistic approaches to treating anxiety. While this case study is singularly focused on an individual, it shows promise by indicating that the approach should be able to be applied more broadly.

Chapters 5 & 6 in Nurriestearns & Nurriestearns (2015) explore practices for calming the mind and body. The authors have selected a series of yoga postures designed to reduce anxiety by generating comfort, control, and reducing overwhelming experiences within the physical body. These chapters explore the benefits of a yoga practice designed to reduce anxiety by introducing postures which encourage grounding, strength and stability.

In the final reading for this session, Forbes (2011), provides a sequence of yoga postures which seek to balance anxiety for the practitioner. Chapter 8 provides a series of physical postures that feature restorative poses which seek to ground, calm and soothe the body.

Session 8: Yoga Theory for Depression

Pilkington, K., Kirkwood, G., Rampes, H., & Richardson, J. (2005). Yoga for depression: The research evidence. *Journal of Affective Disorders*, 89(1), 13-24. (pp. 13-24)

Cramer, H., Lauche, R., Langhorst, J., & Dobos, G. (2013). yoga for depression: A systematic review and meta-analysis. *Depression and Anxiety*, 30 (1068-1083) (pp. 1068-1083)

This session will explore traditional approaches in the treatment of depression and the need for considering alternative approaches. Pilkington et al. (2005) review five randomized control trials that explore yoga-based interventions for the treatment of depression. The authors concluded that despite limitations associated with the studies, yoga-based interventions will likely benefit individuals coping with depressive disorders. The review suggests a need for continued research, stating that “the aim of future studies should be to identify which of the

potential yoga-based interventions is most effective and what levels of severity of depression are likely to respond to this approach” (p.22).

More recently, Cramer et al. (2013) systematically reviewed and meta-analyzed 12 studies utilizing different forms of yoga for individuals with depressive disorders or who report elevated levels of depression. This review supports findings from previous reviews that yoga seems to be effective in the treatment of depressive disorders, but that more rigorous research methodology is required. Despite the obvious drawbacks highlighted in the review, yoga could still be considered as an ancillary treatment for depressive disorders.

Session 9: Applications of Yoga for Depression

Nyer, M., Gerbarg, P. L., Silveri, M. M., Johnston, J., Scott, T. M., Nauphal, M., Owen, L., Nielsen, G., Mischoulon, D., Brown, R., Fava, M., & Streeter, C. C. (2018). A randomized controlled dosing study of Iyengar yoga and coherent breathing for the treatment of major depressive disorder: Impact on suicidal ideation and safety findings. *Complementary Therapies in Medicine*, 37, 136-142 (**pp. 136-142**)

Uebelacker, L., Kraines, M., Broughton, M., Tremont, G., Gillette T., Epstein-Lubow, G., Abrantes, A., Battle, C., & Miller, I. W. (2017). Perceptions of hatha yoga amongst persistently depressed individuals enrolled in a trial of yoga for depression. *Complementary Therapies in Medicine*, 34, 149-155. (**pp. 149-155**)

Kinser, P. A., Goehler, L. E., & Taylor, A. G. (2012). How might yoga help depression? A neurobiological perspective. *Explore: The Journal of Science and Healing*, 8(2), 118-126. (**pp.118-126**)

Forbes, Bo. (2011). *Yoga for emotional balance: simple practices to relieve anxiety and depression*. Boston, MA: Shambhala. (**pp.189-210**)

This class will begin with a 60-minute asana practice designed to help reduce symptoms of depression followed by small group discussions for students to process their reactions to the physical practice. Readings from this week will concentrate on the application of yoga in

treating depression in an effort to provide a foundation for students to better connect with the practice and lecture. Nyer et al. (2018) explore the safety of a randomized controlled dose-finding trial of a 12-week Iyengar yoga class that offers coherent breathing interventions for the treatment of major depressive disorder (MDD). The results provide “preliminary data concerning the safety and efficacy of yoga-based interventions as a potential treatment for individuals with MDD and SI without intent” (p.140). Larger RCTs are necessary to confirm and generalize these findings.

Uebelacker et al. (2017) explore participants’ perceptions and responses from a randomized control trial where individuals were assigned to 10 weeks of hatha yoga classes or to the control group consisting of classes on health education. Following the 10 weeks of yoga classes, qualitative research methods were used to query participants regarding their experiences from classes. Results demonstrate that the elements of yoga classes that may alleviate symptoms for depressed individuals include the class atmosphere, the instructors willingness to provide individualized attention, and the instructor’s level of warmth. Depression related themes that were introduced throughout the classes (breathing techniques, mindfulness, and generating a home practice) may also help in targeting depressive symptoms.

Kinser, Goehler & Taylor (2012) explore how traditional treatment approaches are limited in their ability to successfully treat symptoms of depression. This article explores neurobiological findings associated with how the nervous systems regulates mood and stress and how the practice of yoga might help to mitigate symptoms associated with depression. The authors explore how yoga can help in the management of depression, stating that “techniques learned in yoga may help an individual change the perception and appraisal of a stressor, altering his or her affective and physiological reactions to the situation” (p.123). While yoga should

continue to be considered for treating depressive symptoms, further investigation in this area is necessary to better understand specific mechanisms of yoga effectiveness.

In the final reading for this session, Forbes (2011), provides a sequence of yoga postures which seek to lift depressive symptoms for the practitioner. Chapter 9 provides a series of physical postures that include both back-bending and restorative poses designed to open, energize and uplift the body.

Session 10: Yoga Theory for Psychosis

Sistig, B., Lambrecht, I., & Friedman, S. H. (2015). Journey back into body and soul – an exploration of mindful yoga with psychosis. *Psychosis*, 7(1), 25-36. (pp. 25-36)

Chawala, R. (2018). Efficacy of yoga as an add-on treatment of schizophrenia. *Indian Journal of Health and Wellbeing*, 9(2), 267-271. (pp. 267-271)

This class will briefly explore traditional approaches to treating psychosis, while exploring the value of utilizing yoga to reduce symptoms associated with this condition. Sistig, Lambrecht, & Friedman (2015) conducted a study where they implemented a yoga program in a mental health rehabilitation center where 10 psychiatric inpatients practiced 30-minute yoga sessions twice a week for seven weeks. The researchers conducted semi-structured interviews with patients and encouraged weekly journal entries by participants to gather data on their reactions to the program. Findings suggest that participants experienced increased relaxation, reduced stress, enhanced energy, elevated focus, and heightened motivation to engage in life. Despite the small sample size, the preliminary nature of these findings supports the use of yoga in treating individuals with psychosis and warrants further research to determine the applicability for larger studies.

Chawala, (2018) reviews current research and observes the benefits of yoga as an add-on treatment for individuals with serious mental illnesses. This review specifically explores the complexities associated with schizophrenia and the difficulties encountered when individuals with this diagnosis have persistent symptoms, experience multiple relapses, and struggle with adherence to prescribed medications. These obstacles to recovery indicate that complementary treatments approaches should be considered and Chawala suggests that such psychosocial and physical therapies as yoga should be considered as a way to reduce symptoms and improve quality of life. The author explores how yoga has been proven to have few side effects and has been useful in treating negative symptoms often associated with schizophrenia.

Session 11: Applications of Yoga for Psychosis

Rathod, S., Pradhan, B., & Pinninti, N. (2016). Brief interventions for psychosis: A clinical compendium. Cham: Springer. (pp. 55-87)

Lin, J., Chan, S., Lee, E., Chang, W., Tse, M., Su, W., Sham, P., Hui, C., Joe, G., Chan, C., Khong, P., So, K., Honer, W., & Chen, E. (2015). Aerobic exercise and yoga improve neurocognitive function in women with early psychosis. *NPJ Schizophrenia*, 1, 15047. (pp. 1-7)

This class will begin with a 60-minute asana practice focused on reducing symptoms associated with psychosis followed by small group discussions for students to process their reactions to the physical practice. Readings from this week will concentrate on the application of yoga in treating psychosis broadly and schizophrenia specifically in an effort to provide a foundation for students to better connect with the practice and lecture. In their book, Rathod, Pradhan, & Pinninti (2016) include a chapter on yoga and mindfulness-based cognitive therapy for psychosis. The authors suggest that the treatment of psychosis should be comprehensive in nature, considering both biological and psychosocial interventions. They state that “yoga and mindfulness-based cognitive therapy for psychosis (Y-MBCTp©) is a self-exploratory, client-

centered translational therapy that combines together the pragmatism and methodology of brief CBT with the scriptural philosophies and techniques described in Patanjali's eight-limbed Yoga and Buddha's mindfulness meditation" (p. 82). The authors note significant limitations in the preliminary findings and suggest the need for further replication with larger trials.

Although research findings for yoga and psychosis remain scarce, researchers have begun to consider this topic more seriously. In their research, Lin et al. (2015) explore how yoga and aerobic exercise benefit the memories of female patients with early psychosis. The researchers explore the cognitive impairments and clinical symptoms in a group of stable, medicated females with early psychosis. The randomized control study had 124 female participants that did either 12 weeks of yoga or aerobic exercise compared to a waitlist group. At follow up, both groups demonstrated improvement in working memory and decreased depressive symptoms, but the yoga participants exhibited additional benefits in verbal acquisition and attention. While findings remain inconclusive, this study also suggests that yoga as an adjunctive treatment in early psychosis merits further consideration.

Session 12: Yoga Theory for Children

Weaver, L. L., & Darragh, A. R. (2015). Systematic review of yoga interventions for anxiety reduction among children and adolescents. *The American Journal of Occupational Therapy: Official Publication of the American Occupational Therapy Association*, 69(6) (pp. 1-9)

Hagen, I., & Nayar, U. (2014). Yoga for children and young people's mental health and well-being: Research review and reflections on the mental health potentials of yoga. *Frontiers in Psychiatry*, 5, 35. (pp. 1-6)

Khalsa, S. B. S., Hickey-Schultz, L., Cohen, D., Steiner, N., & Cope, S. (2012). Evaluation of the mental health benefits of yoga in a secondary school: A preliminary randomized controlled trial. *The Journal of Behavioral Health Services & Research*, 39(1), 80-90. (pp. 80-90)

This class will provide a brief exploration of traditional treatments utilized in working with children while considering yoga as a complementary approach. Weaver & Darragh (2015) consider the prevalence of anxiety disorder among children and youth and the growing interest of yoga interventions in clinical, school, and community settings to treat anxiety. In their systematic review of yoga interventions for anxiety among children and adolescents, they substantiate that yoga interventions have positive effects for reducing anxiety in a wide range of populations but that “large-scale, randomized trials with physiological and psychological measure and long-term follow-up are still needed to enhance this body of evidence” (p.7).

In their review, Hagen & Nayar (2014) explore the use of yoga as a tool for children to regulate emotions and cope with stress in the face of everyday stressors and rapidly shifting demands. They argue that yoga is a necessary tool for children to learn self-awareness and self-reflection in a world that often demands otherwise. The authors review literature that submits that yoga improves children’s mental and physical well-being but acknowledge that future studies on yoga may identify gaps in research and increase the need for empirical evidence.

The final reading is a study conducted by Khalsa et al. (2012) that evaluates the possibility of mental health benefits of yoga for adolescents. Their sample consisted of 121 students, randomly assigned to a semester-long yoga intervention or regular physical education classes. The findings suggest statistical significance for the yoga intervention in measures related to anger control and fatigue/inertia. While the results of the research are not generalizable, they indicate that yoga interventions may be advantageous for adolescents in secondary school in maintaining mental health.

Session 13: Applications of Yoga for Children

Neiman, B. (2015). *Mindfulness & yoga skills for children and adolescents: 115 activities for trauma, self-regulation, special needs & anxiety*. Retrieved from <https://proxy.library.upenn.edu:2457> (pp. 1-22)

White, L. S. (2009). Yoga for children. *Pediatric Nursing*, 35(5), 277-295. (pp. 277-295)

This class will begin with a 60-minute asana practice designed for children followed by small group discussions for students to process their reactions to the physical practice. Readings from this week will concentrate on the benefits of yoga when working with children in effort to provide students with a better connection with the practice and lecture. The first chapter in Neiman's (2015) book offers readers an introduction to the mind-body connection as it relates to children. The author provides physical sequences for children which help to calm the nervous system and enhance sensory regulation in an effort to regulate feelings and behaviors. The second chapter offers readers various yoga interventions and explores the integration and application of yoga in classroom settings, in therapy, and with the profoundly handicapped. Reading these introductory chapters is intended to provide students with a sense of the differences in how yoga is applied when working with children versus adults.

White (2009) explores the growing interest in the application of yoga in interventions with children by exploring the history, philosophical basis, varying styles, safety concerns, components of practice, and challenges of evaluating and locating children-specific yoga programs. White states that while further research is greatly needed, "the practice of yoga serves as a foundation for the nurturing of inner resources and strengths to facilitate lifelong health and well-being" (p. 283).

Session 14: Future Directions

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. (pp. 55-71)

Mensinga, J. (2011). The feeling of being a social worker: Including yoga as an embodied practice in social work education. *Social Work Education*, 30(6), 650-662. (pp. 650-662)

The final session will provide space for students to reflect on what they have learned throughout the semester. Readings for this session will highlight the continued need to consider complementary, alternative, and holistic healing strategies for social work practice and provide the framework for a group discussion on how students imagine incorporating aspects learned from the course following the receipt of more specialized training. Henderson (2000) explores how many social workers are practicing complementary techniques in which they have limited training and/or knowledge. Exploring these findings will enable students to consider the ways in which they can incorporate materials learned throughout the semester.

In the final reading for the class, Mensinga (2011) explores the disconnect that social workers often experience between their bodies and minds. The author implies that this disconnect may negatively bias practitioners when evaluating the benefits of further study of holistic and/or complementary treatment approaches both personally and professionally. This article encourages readers to consider the contributions that yoga might make to *practitioner* health and well-being given the importance placed on reflection and self-awareness. The author believes that “merely acknowledging the role of the body as an important source of knowledge may begin a process of exploration that currently does not exist” (p. 660).

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Arias, A. J., Steinberg, K., Banga, A., & Trestman, R. L. (2006). Systematic review of the efficacy of meditation techniques as treatments for medical illness. *Journal of Alternative and Complementary Medicine*, 12(8), 817-832.
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