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The Impact of Contemplative Practices on Anxiety Level of Middle School Students

Keri Neadom

The College at Brockport, knead1@brockport.edu

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The Impact of Contemplative Practices on Anxiety Level of Middle School Students

Keri E. Neadom

The College at Brockport State University of New York

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Abstract

A review of recent literature has revealed that the anxiety level of middle school students continues to rise. In addition, it has been documented that when anxiety is untreated, it will often lead to significant and crippling disorders throughout adulthood. Contemplative practices, or practices aimed to bring a non-judgmental awareness of one's internal and external experience, are being used across disciplines, professions, and cultures with the intention of relaxation, and bringing oneself to a more tranquil state. Although data collection presents a challenge, recent studies have shown that there is a positive correlation between the use of contemplative practices and the level of relaxation and ease one may experience. Even though this new wave of practice and treatment has become increasingly popular, research concerning the impact of contemplative practices on middle school age children is limited. The current study focused on the impact of contemplative practices on the anxiety level of middle school students in a large suburban middle school in Western, New York. In this study, three participants were exposed to three forms of contemplative practice and were given a pre and posttest to determine if there was a shift in anxiety level pre and post practice. The results showed that there were no significant changes in the anxiety level of any of the participants throughout the study. The primary researcher noted that although the instrument did not reflect change, participants did report positive feedback of their experience. Results suggested that this form of study may be better represented using a different instrument or choosing a qualitative study. The results of this study are being provided to the school that provided participants so that they may use the data to plan future student interventions.

The Impact of Contemplative Practices on Anxiety Level of Middle School Students

Anxiety is the most common of all psychiatric disorders in the United States. Impacting nearly 20% of the population, effects can be life altering, crippling, and in many cases lead to more serious mental disorders when untreated (Grankani, 2006; McGrandles & Duffy, 2012; National Institute for Mental Health [NIMH], 1999). Young adults are not exempt from the impacts of anxiety. More than 3 million adolescent children in the United States experience the effects of a chronic anxiety disorder impacting social, emotional, and academic welfare (Joyce et al., 2010; Sulkowski et al., 2012; Van Gastel & Ferdinand, 2008; White, 2012).

Sulkowski et al. (2012) emphasized the need for early intervention of anxiety in order to ingrain coping strategies, as well as, combat the potential for more significant disorders later in life. With the exception of outside therapy, schools are perhaps the greatest way to address anxiety of children at a young age. Many forms of anxiety treatment exist, however, recent studies show that people are looking to “new age” treatments such as contemplative practices, among others, and finding them to be beneficial, cost effective, and perhaps most importantly, lacking the side effects that often is paired with medicinal treatment (Aaron et al., 2011., McGrandles & Duffy, 2012). While data continues to be produced on the positive impact of contemplative practices, a gap in research is found when considering school age children.

The purpose of the current study was to investigate the use of contemplative practices, meditation, guided relaxation, beholding, and free writing, on the anxiety level of school age children. More directly, this study addressed the question: what is the impact of contemplative practices on the anxiety level of middle school students? This study is significant as it addresses one of the gap areas of research in the field of counseling with contemplative practices.

This study was conducted as a within-subjects design. All subjects were placed into a small contemplative practice group. The group took place over the course of three weeks meeting once per week with the introduction of one or two practices. Each meeting consisted of the following segments: check in, pretest, contemplative practice, posttest, check out.

There were many limitations to this study including: method of selecting participants, sample size, available time with students, instrument selection, and research design. All limitations may be used to help formulate a similar but more successful study in the future.

All ethical standards were considered and followed throughout the process of research. The group met during school in a private school counselor's office. All data was collected during scheduled meeting time using the pretest and posttest. All members agreed to participate in a pretest, contemplative practice, discussion, and posttest. No payments were received for participation. All aspects of research were reviewed and permitted by The College at Brockport Institutional Review Board.

Review of Literature

Numerous researchers have reported anxiety to be the most common of all psychiatric disorders. Research has revealed that within a one-year period, 40 million adults (18%), age 18 and older, experienced some form of an anxiety disorder. In addition, researchers have found that these disorders will most likely be a lifelong struggle for at least 28% of individuals diagnosed by age 18 (Cooley, 2009; Craske et al., 2009; Grankani, 2006; McGrandles & Duffy, 2012; National Institute for Mental Health [NIMH], 1999; Whrenberg, 2008).

Many anxiety disorders are debilitating and significantly impact the quality of life that an individual may experience (Cooley, 2009; Craske, 2009). Young people are no exception to this threat. Approximately 14% of adolescents in the United States have experienced the affect of a chronic anxiety disorder that radically impacts social, emotional, and academic wellbeing (Joyce et al., 2010; Sulkowski et al., 2012; Van Gastel & Ferdinand, 2008; White, 2012). As school counselors, it is important to recognize signs, understand diagnoses, and know the impact of anxiety disorders in order to provide the most appropriate intervention for students. Research emphasized that early intervention is paramount, because when anxiety disorders are not treated, they often lead to significant and crippling disorders throughout adulthood (Sulkowski et al., 2012; Van Gastel & Fredinand, 2008).

Anxiety as an Emotion or Disorder

Anxiety is typical, healthy, and most people experience it at some point in their life (Boyde, 2005; Lee et al., 2006; Mcgrandles & Duffy, 2012; McGrandles & McCaig, 2010). Certain circumstances may intensify one's anxiety, such as, an upcoming assessment, making important decisions, or even finding oneself in danger. Walter Bradford Cannon (1914), coined

the phrase commonly used for this situational response as “fight or flight”—a bodily warning sign that enhances senses, response time, and performance. Similarly, McGrandles and Duffy described the benefits of anxiety as evoking a heightened awareness and psychological arousal needed for making quick decisions to protect ones self.

Attention to detail is key when determining if anxiety has evolved from a normal response into a debilitating condition or disorder (Boyde, 2005; Mcgrandles & Duffy, 2012). General uneasiness, lack of sleep, inability to focus, and decrease in appetite are some of the normal responses to anxiety; however, these symptoms are expected to subside and be replaced by a more regular pattern of functioning (McGrandles & Duffy, 2012). Boyde reported, at times, symptoms may not subside, indicating that a more severe issue may be present. Furthermore, Boyde explained the importance of noting the intensity and duration of anxiety relative to the situation, triggers, symptomatic clusters, functional impairment, and subjective distress, as each of these elements will provide important data points when investigating if anxiety has developed into a disorder.

Santrock’s (2007) research about adolescents shows that an adolescent’s emotional reaction may be an exception to Boyd’s (2005) report. Santrock described adolescence as a time of emotional turmoil when young people will frequently experience extreme highs and lows throughout the day. He continued by stating that in many cases an adolescent’s emotional response seems out of proportion to the events that may have elicited them. Eventually, most young people grow out of this stage of development; however, this reality further complicates the process of determining if an anxious behavior is “normal” or reason for concern.

Anxiety Disorders

The Fourth Edition of The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; 2000) included several types of anxiety disorders: panic disorder with agoraphobia, panic disorder without agoraphobia, agoraphobia without history of panic disorder, specific phobia, social phobia, obsessive-compulsive disorder, posttraumatic stress disorder, acute stress disorder, generalized anxiety disorder, anxiety disorder due to a general medical condition, substance-induced anxiety disorder, and anxiety disorder not otherwise specified. Also imbedded in many of these disorders were panic attacks and agoraphobia. Even though many of the symptoms and characteristics of these disorders overlapped, each condition was given its own set of diagnostic criteria.

Anxiety disorders can be understood more universally and holistically as debilitating, significantly impacting the quality of life that an individual may experience (Cooley, 2009; Craske, 2009). Craske defined anxiety as “a future oriented mood state associated with preparation for possible, upcoming negative events” (p. 1067), which resulted in such symptoms as worry, avoidance, and constant physical tension.

Even though there are universally accepted traits, more specific manifestations of anxiety will be explored in more detail throughout this review of literature utilizing the lenses of both adults and adolescents.

Problems with Having an Anxiety Disorder

Although anxiety has been reported to have some short-term benefits, if untreated, it can progress into a serious mental disorder. As previously noted, symptoms of anxiety disorders may become relentless, crippling, and in many cases a barrier to normal daily functioning (Cooley et

al., 2009; Mcgrandles & Duffy, 2012). A closer look at anxiety disorders reveals an array of physical, cognitive, and behavioral challenges (Noordik et al., 2010; O'Donovan, 2004; Scott et al., 2010).

In her anxiety management self-help book, Whenberger (2008) named three groups, which were meant to be used as umbrella terms, for problems associated with anxiety. These three groups are *anxious body*, *anxious mind*, and *anxious behaviors*. Informed by the DSM (2000) and personal research, Whenberger further defined each of her labels. The first group, anxious body encompasses all symptoms causing a negative physical arousal. More specifically, these may include, but are not limited to, social anxiety, constant worry, embarrassment, endless fear, sweating, and blushing. The second group, anxious mind, includes but is not limited to cognitive symptoms causing mental tension rooted in over activity. Anguish, worry, rumination, spinning and cycling are all likely characteristics of an anxious mind. The last group, anxious behavior, refers to symptoms of avoidance in situations that may cause panic, social anxiety, or general worry.

Even though many people have lived with symptoms of anxiety for years, there are undeniable impacts of having an anxiety disorder for a long period of time. Abraham Maslow's Hierarchy of Needs emphasized people's need for friendship, family, self-esteem, confidence, achievement, and respect of others, among other needs (Wood et al., trans. 2005). No matter what symptoms may be present they could potentially impede or block an individual from growth, happiness, or reaching his or her full potential (Wood et al., 2005).

Problems and concerns with having anxiety as an adult. Both short and long term symptoms of anxiety disorders have been known to significantly impact personal and social lives

of those who are stricken with this impairment (Noordik et al., 2010; Scott et al. 2010).

Maslow's Hierarchy of Needs identified the human need to contribute and have a sense of productivity to gain happiness and self-security (Woods et al., trans. 2005). Anxiety may impede these needs and has been noted as a functional disability in the work place, often associated with increased sickness, absences, decreased productivity, and eventual unemployment. In extreme cases, companies have stated that workers suffering with an anxiety disorder are considered to be a financial burden as they reduce their work capacity and often choose early retirement (Cooley et al., 2009; Noordik et al., 2010).

In addition to the ways that anxiety disorders have impacted people's lives socially, emotionally, personally, and in work place productivity, there are further concerns surrounding this type of disorder specific to longevity which includes chronicity, disability, and co-morbidity (Cooley et al., 2009; O'Donovan, 2004; Scott et al., 2010). In 2004, it was documented that 58% of adults diagnosed with an anxiety disorder were also diagnosed with major depressive disorder (MDD). In addition to this finding, O'Donovan reported 80% of individuals diagnosed with an anxiety disorder share and experience MDD overlap symptoms, even if no diagnosis has been given, meaning that many people live with symptoms that have not been treated. In 2012, the Anxiety Disorder Association of America (ADAA) released a statement saying that individuals with anxiety disorders are six times more likely to be hospitalized than those without anxiety disorders.

Problems and concerns with having anxiety as an adolescent. In many ways, the manifestation of anxiety in children mirrors that found in the adult population. Impacting an estimated 14% of adolescents in the United States, which is 2% greater than the adult population.

Researchers have found that millions of young people suffer from the affect of a chronic anxiety disorder (Joyce et al., 2010; Sulkowski et al., 2012; Van Gastel & Fredinand, 2008; White, 2012). Similar to adults, children exhibited a multitude of symptoms related to anxiety disorders, which this literature review will discuss in detail. Moreover, in comparison to adults diagnosed with anxiety disorders, symptoms often had a significant impact on the personal, social, and emotional well being of adolescent children (Jensen, 2012; Sulkowski et al., 2012).

One of the main differences, however, is that adolescent children, who Santrock (2007) defined as individuals ten to eighteen years of age, spend most of their day in a school setting with peers. For this reason, some reported symptoms associated with adolescent anxiety differed from adult anxiety (Barns et al., 2003; Long et al., 2011; Sulkowski et al., 2012). Santrock added to this discussion when he proposed that most adolescent anxiety is rooted in parent/guardian's unrealistic expectations, pressure of academic achievement, more frequent evaluation, a focus on social comparison, and more exposure to trial and failure.

Within the school setting, externalizing anxious emotions were often seen in the form of youth violence, hostility, emotional instability, psychological distress, anger (Barns et al., 2003), disruptive behaviors in the classroom, inattention, hyperactivity, noncompliance, impulsivity, risk taking (Jensen, 2012), chronic depression, drug and alcohol use / abuse (Sulkowski et al., 2012), and low self esteem (White, 2012). Medical manifestations of anxiety included asthma, heart palpitations (Long et al., 2011), and atypical breathing patterns (Jensen, 2012).

Symptoms, if left untreated, often evolved into significant disruptions in socializing, emotional wellbeing, family functioning, and academic success (Sulkowski et al., 2012). Furthermore, when not treated early on, these disorders led to more significant and crippling

disorders throughout adulthood, which were mentioned in the previous section (Sulkowski et al., 2012; Van Gastel & Fredinand, 2008). Therefore, researchers argue that treatment should be implemented as soon as possible following a diagnosis or appearance of anxious symptoms (Sulkowski et al., 2012).

Diagnosis of Anxiety Disorders

When symptoms of an anxiety disorder are present, an individual will typically be examined by a doctor. The doctor will consider and investigate an individual's medical history, physical well-being, behavior, and emotional responses, as well as the duration and intensity of symptoms (McGrandles & Duffy, 2012). After a physical illness is ruled out, a doctor may refer patients to a psychiatrist or psychologist for further examination, as they are better equipped to interview and assess an individual's symptoms and therefore determine if an anxiety disorder is present (Crask, 2009). In the case of school age children, parents or guardians may often be the catalyst to begin the investigation process; however, sometimes it will be the responsibility of the counselor to advocate for the student and begin the dialogue if family members are unaware, or inactive regarding the presence of a possible anxiety disorder.

When conducting an investigation for an anxiety disorder, data is collected in three forms: self-report or interview, reported observations of others, and formal assessment including the use of the DSM (Crask, 2009; Kuehn, 2008; Lee et al., 2006; McGrandles & Duffy, 2012; Van Gastel & Fredinand, 2008).

A self-report of symptoms, or interview, can range in structure. They can be from a series of highly scripted questions to an informal conversation with a mental health specialist (Crask, 2009; Van Gastel & Fredinand, 2008). The strengths of self report include the opportunity for

both the mental health professional and the patient to ask questions, clarify, and share more details than what would have been available on a formal, self composed, written assessment (McGrandles & Duffy, 2012). Following the interview or self report, the mental health professional will then consider all information gathered and begin to identify or rule out diagnoses (Craske, 2009).

Observational reports provide the mental health professional with a more holistic perspective of the client's symptoms as surveyed by others (Lee et al., 2010). Van Gastel and Fredinand (2008) reported the idea of co-sharing, two or more people sharing information about one client. This method is beneficial because it expands the information presented and it creates more perspective for the mental health professional.

Observational reporting may be particularly helpful when considering younger individuals who may not be aware of their behaviors, which are causing concern. School counselors may be a highly influential source of information when these reports are required. Counselors are in a unique position to gather information, in addition to their own, from individuals such as teachers, administration, and staff that interact with and observe a child's behavior throughout the school day. While co-sharing has been reported as simple and highly informative, there are complications and controversies that are affiliated with this format, which will be discussed more extensively in this literature review.

The third form of investigation is formal assessment. There are hundreds of formal instruments used to assess and diagnose anxiety. These instruments vary in length, complexity, population appropriateness, and frequency/ ease of use (McGrandles & Duffy, 2012; Keuhn,

2010). In addition, the DSM provides specific criteria for each diagnosis which must be met, in order to classify an individual (DSM, 2000).

Even though there are many avenues for collecting data to gain the most accurate information possible, there are also challenges that present themselves when attempting to properly diagnosing an anxiety disorder (Craske, 2009; Lee et al., 2006; McGrandles & Duffy, 2012; Van Gastel & Fredinand, 2008). Whether using an interview, self-report, observational report, or formal assessment, all information reported is subjective (Craske, 2009; McGrandles & Duffy, 2012). The issue of using subjective information for diagnosing anxiety disorders is that the information reported may be skewed, exacerbated, marginalized, or in some extreme cases fabricated. Clients may either intensify symptoms in order to gain a diagnosis or minimize symptoms in order to avoid judgment (Van Gastel & Fredinand, 2008).

Another common complication of subjective reporting is the challenge, for both the client and mental health professional, to determine how to discriminate between symptoms relating to anxiety disorders, fear, or depression (Craske, 2009). Often times, symptoms of various anxiety disorders overlap presenting a challenge for diagnosis. Without the appropriate diagnosis the proper treatment cannot begin (Wolitzky – Taylor et al., 2010). In many cases it becomes impossible to differentiate a client's anxious symptoms in contrast to a client's conditioned physiological stress reaction (Craske, 2009; Kuehn, 2008).

Diagnosis of anxiety disorders for adolescents. Research has shown that the diagnostic process for adolescents is parallel to that of adults (Crask et al., 2009; Van Gastel and Ferdinand, 2008). Self reports that address behavioral, cognitive, physiological, and physical data are all gathered in the beginning steps of diagnoses and followed by appropriate referral (Crask et al.,

2009). Van Gastel and Ferdinand also stated that, although using parallel forms of adult assessment is functional, there needs to be more research done to continue making age appropriate changes in the assessment process.

In the past ten years, much knowledge has been gained about the adolescent population through standardized questioners and interviews. As reported by Van Gastel and Fredinand (2008), changes have been made so that questions are more accommodating and age appropriate. The questioners and assessments can now be administered and completed in a timelier manner. They can be done by more than one informant—meaning that a parent/guardian and child can both fill out forms—and are more clearly written to be understood by a younger population. Even with the evolution of assessment, studies showed that it is still unclear which form of data collection is superior supporting the belief that diagnosis should be multidimensional and done with more than one instrument for best results (Craske et al., 2009; Van Gastel & Fredinand, 2008).

Current Intervention Models

This section outlines both agency and school specific models used for determining treatment for clients. The segment briefly explores the “Stepped-Care” Model, Response to Intervention Model (RTI), and The American Counseling Association (ASCA) National Model.

The “stepped-care” model. Many researchers have agreed that it is essential for treatment to match the intensity of any given disorder (Aaron et al., 2011, Cooley et al., 2009; McGrandles & Duffy, 2012; Norton, 2010; Titov et al., 2010). In 2011, The National Institute for Health and Clinical Excellence (NICE) released a “Stepped-Care” model to treat anxiety disorders, which has been used in many agencies as common practice. In three steps, this plan

was designed to offer the most effective intervention with the least amount of invasion on a client's daily life. Step one of the model is called "Assessment and Identification", which involves the gathering of data, considering all information congregated, and determining a proper diagnosis. Step two is called "Low Intensity Interventions", which requires finding the most appropriately fitting treatment that would cause the greatest positive impact on the client's symptoms with minimal drawbacks. Finally, step three is called "Complex Specialist Treatments"; this step mandated a more individualized treatment plan often with the inclusion of numerous interventions.

Response to intervention. Individuals working within a school setting may recognize similar philosophies between the "Stepped-Care" model and the recently instated Response to Intervention (RTI), guidance for New York State school districts (2010). Even though this model was created to focus on academics and behavior management, it is applicable to social and emotional promotion as well. The RTI model uses a three tier, triangular form to represent student population. Tier one, the lowest and largest portion of the triangle representing 80-90% of the population and utilizing universal interventions in order to be proactive and preventative for all students in all settings. Tier two, representing 5-15% of the student population aims to use secondary interventions, small group interventions or individual work, to address students with a greater need for assistance. Tier three, representing 1-5% of the student population uses tertiary interventions, individual treatment only with greater focus and possibly additional assessment, to treat these most intense cases. Each of these research-based tiers, can be used to guide counselors in the best practice of advocacy, collaboration, and intervention (Ryan et al., 2011). Again, even though this program was designed and developed with a focus on academics and behavior, it is

important to see how school counselors play a part in early intervention and preventative services for students (Ryan et al., 2011).

American school counseling association model. The RTI three-tier system is aligned with the American School Counseling Association (ASCA) National Model (2005) which helps to identify and provide the most effective and appropriate level of intervention for each student's level of risk. The ASCA Position Statement on RTI (2008) affirms:

Professional school counselors are stakeholders in the development and implementation of the Response to Intervention (RTI) process. Professional school counselors align with the RTI process through the implementation of comprehensive school counseling program designed to improve student achievement and behavior. (p. 34)

More specifically, the ASCA National Model (2005), similar to RTI emphasizes four areas: foundation, management system, delivery system, and accountability. Each of these areas focuses on certain aspects needed to create the efficient, highest quality, service available to students. Included in the delivery component of the Model is the provision of crisis counseling, group counseling, classroom guidance, and individual student planning. Each of the delivery options are intended to meet the specific needs of each student.

Treatments for Anxiety Disorders

There are several forms of treatment and combinations used in caring for individuals with anxiety disorders (Lakhan & Vieira, 2010; Titov et al., 2010). Many factors such as age, cost, and treatment availability should be taken into account when determining one's treatment plan (McGrandles & Duffy, 2012; Scott et al., 2010). Even though each management plan is

individualized to some extent, the use of alternative and complimentary methods has become increasingly popular (Duff et al., 2012; Lakhan & Vieira, 2010; Schmidt, 2012).

Medicinal intervention. Medicinal intervention, also known as pharmacology, has been used to quickly treat and reduce symptoms of anxiety disorders. Medical intervention includes: anxiety reducing drugs, serotonin, reuptake inhibitors, anti-depressants, benzodiazepines, and beta blockers all of which are intended to subdue the fear circulatory pathways where, physiologically, anxiety is believed to form (Garakani et al., 2006; McGrandles & Duffy, 2012). More so than other methods of treatment, it is imperative that risks are considered when medical interventions are used. Risk of self harm, co-morbidity, accidental or intentional overdose, patient age, cost, side effects, and the potential of dependency or withdrawal symptoms, are a few of the dangers that may be paired with this type of treatment (Lakhan & Vieira, 2010; McGrandles & Duffy, 2012). In addition, this form of anxiety management requires patience as finding a suitable prescription requires experimentation of brand, dose, and frequency (McGrandles & Duffy, 2012).

Research showed that more people are beginning to resist the push towards medicinal intervention (Whenerberg, 2008). With the cost of prescription drugs on the rise and the undesired side effects and withdrawal, many people have turned to holistic practices, alternative medicines, and herbal supplements as a preferred treatment using one or more of the following therapies to manage and combat anxiety symptoms (Lakhan & Vieira, 2010; McGrandles & Duffy, 2012).

Parents/ guardians have often shared a similar distaste for medicinal interventions when considering treatment of their child (Semple et al., 2010; Whenerberg, 2008). The idea of

medication itself is scary for many parents in addition to the side effects and experimental nature of this symptom management. In some cases medication may be necessary to best help a child, however, many parents/ guardians choose alternate, less risky, treatments if possible (Lakhan & Vierira, 2010).

Psychotherapy. Santrock (2007) defined psychotherapy as a form of counseling that focuses on, sub conscious, emotional responses to mental illnesses. Psychotherapy is carried out with a trained mental health professional using strategies to aid in understanding and coping with an individual's disorder. Systematic Desensitization (SD) or the gradual exposure to an anxiety trigger, and visualization therapy are both examples of psychotherapy, neither of which have been proven to have long term impact on clients (Duffy et al., 2007). Psychotherapy therapy is rarely documented as stand alone and is more often one aspect of a Multi Treatment Method (MTM), or the use of two or more methods to treat a disorder (Cooley et al., 2009; Duffy et al., 2007). Although Psychotherapy is an umbrella term for treatment, Cognitive Behavioral Therapy (CBT) has been one of more well known and utilized forms of treatment for anxiety (Cooley et al., 2009; McGrandles & Duffy, 2012; Norton, 2010; Titov et al., 2010).

Cognitive-behavioral therapy (CBT). Cognitive-behavior therapy (CBT) is a type of psychotherapy that has aided people in changing patterns of thought and behavior in an attempt to alleviate troublesome feelings (McGrandles & Duffy, 2012). Cognitive-behavior therapy has often been presented as a piece of MTM combined with other holistic, naturopathic techniques (Cooley et al., 2009). Whenerberg (2008) mentioned that contemporary research on anxiety disorders began to change people's perspective treatment suggesting that individuals have the power to change their own thought patterns by making transforming thoughts, behaviors, and

eventually lifestyle. Some specific practices affiliated with CBT have included deep breathing, relaxation techniques, vitamin and herbal supplementing, and dietary counseling (Cooley et al., 2009; McGrandles & Duffy, 2010).

Other noted descriptions of CBT have included: no side effects, thought correction, the comprehension and elimination of avoidance behaviors, creation of new perspectives (reframing), and confronting worst case scenarios (de-catastrophising; McGrandles & Duffy, 2010; Norton, 2012). Additional benefits noted are the overall flexibility of CBT to be tailored to individual needs; this includes providing services via phone and or e-mail and the transferability to real life situations (Schmidt, 2012). Research has shown a need for more cross therapy experimentation to determine the most effective form of therapy (Cooley et al., 2009; Duffy et al., 2007; McGrandles & Duffy, 2012; Nordic et al., 2010; Norton, 2012; Titov et al., 2010)

New age options. In the past year, Schmidt (2012) emphasized that although much progress has been made in the treatment of anxiety disorders, there have been no drastic changes in the past twenty years, begging the question – have we plateaued? Adding to this inquiry, Farach et al. (2012) stated the small amount of significant improvements found in modern pharmacological treatment for anxiety disorders in the past 30 years despite the billions of dollars spent on research, implying the need to move away from medicinal treatment.

Research has revealed some new forms of therapy that are on the rise including: bibliotherapy – the use of written materials to understand, problem solve, and change behavior (McGrandles & Duffy, 2012), artistic therapy (Aaron et al., 2011), and contemplative practices, among others. These new methods of therapy have an increased appeal as they are extremely cost effective, are adaptable to many ages and ability levels, and have far less, if any risks, to

consider. The remainder of this paper will be used to discuss and create an argument for the use of contemplative practices in schools to reduce anxiety in students.

Overview of Contemplative Practices

In Latin, *contempliar* means to observe, consider, or gaze attentively (Hynes, 2005). Defining contemplative practices beyond the origin of the words has been referred to as a challenge, as the meaning is both ambiguous and often times personal in nature. Current leaders of the alternative treatment field have used phrases such as *non-judgmental awareness of internal* (Van Gastel & Fredinand, 2008) and *external experiences, attention to the present, and activities that bring about feelings of connectedness or a deep state of focus* (Bush, 2010; Repetti, 2010; Salloway & Fisher, 2007; Vick-Johnson, 2010). Contemplative practices are meant to calm inner tensions so that one may make room to take in a farther-reaching appreciation and understanding of themselves and one another. Kirsch (2009), stated “contemplative practices call each of us to bring our whole self that we may gain depth, honesty, faith, courage, and heart” (p.1).

Examples of contemplative practices. Repetti (2010) categorized a diverse range of practices as mindfulness techniques including meditation, free writing, beholding, contemplation, and visualization. Meditation may refer to practice in which an individual focuses and trains the mind. The practices, however, may refer to several other more specific techniques such as gazing at an object, studying a single sound, contemplating a work, beholding an image, free writing, relaxation, or visualization. In addition, Christman, Christopher and Lichtenstien (2009) considered several forms of martial arts such as yoga or Qigong as a form of contemplative practice.

Although the contemplative practices encompass a breadth of techniques, Repetti (2009) offered a unifying characteristic: one-pointedness—focusing one’s attention on a single point. A point may refer to balance, breathing, an object, a sound, or a single thought. Repetti stated that each activity produced meta-cognition by both being engaged in the activity and monitoring your mental processes simultaneously creating inner connectedness and greater understanding of self, an imperative step in healing and self exploration.

Description of the history of contemplative practices. Even though contemplative practices have just begun to enter the counseling profession, these types of practices are deeply rooted. Salloway and Fisher (2007) acknowledged that, within the last ten years, contemplative practices have been found in historical Buddhist literature extending back to seventh century BC. Repetti (2010) expanded upon the deep historical roots noting the use of contemplative practices found in early traditions of Native American, Native Australian, Jewish, Christian, Muslim, and Asian cultures. Lipman (2009) wrote that, historically, Eastern Medicine practices of mindful-wellness and bodily relaxation were, and continue to be, used for healing approaching individual’s health holistically, the mind and body as one.

Where are contemplative practices being used now? In recent, contemplative practices have been used across disciplines, professions, and cultures. The practices have found their way into military, education, recovery, stress management, end of life, and clinical settings, to name a few (Bush, 2010; Haynes, 2005; Miller & Nozawa, 2005). Furthermore many of the practices have become trendy.

In 2009, TIME magazine reported that Americans spent an estimated of \$33.9 billion dollars that year on “complimentary and alternative medicine.” These “complimentary and

alternative medicines” included things such as self-help relaxation guides, herbal supplements, massages, classes, hypnotists, and miscellaneous equipment used for health and wellness.

Although it appears that Eastern style of healing is in fashion, and most people would not argue that they feel revitalized after a massage or yoga class, the question may be asked: is there really something to these contemplative practices?

Recommendations of teaching and leading students through contemplative practices has begun to arise in the school setting. These suggestions however are based mostly on the effectiveness seen in past clinical trials with adults (Joyce et al., 2010). Joyce et al. emphasized the need for more trials with children and adolescents in the school setting. Even though there is a significant gap in published literature, some studies were found, mostly supporting the use of, and stating positive results from implementing contemplative practices in schools.

Delivery of contemplative methods was reported to come in many forms and over many different periods of time. Some schools implemented practices during the school day (Galantino et al. 2008; Jensen, 2012; Reid & Miller, 2009), many through afterschool programs (Berger et al., 2009; Jellesma & Cornellis, 2012; Joyce et al., 2010; Van Der Oord et al., 2012), and some in long term clinical trials (Kragg et al., 2009, Long et al., 2011). Each of these studies also reported different methods of delivery, including: yoga (Berger et al., 2009; Jallesma & Cornellis, 2012), visualization, social exercises, breathing techniques (Jallesma & Cornellis, 2012; Jensen, 2012), relaxation, and meditation training (Joyce et al., 2010; Long et al. 2011, Van Der Oord et al., 2012).

Reid & Miller (2009) reported implementing the use of mindfulness workbooks in a fifth grade classroom. Their hands-off method used an age appropriate

manual to describe and provide activities to promote relaxation and focus to be used during class time. It was found that implementation of these workbooks significantly decreased the students' levels of anxiety and academic stress while increasing classroom focus after practice.

Other studies reported a much more hands on approach. Guided practices such as yoga, stress awareness training, and guided breathing required a more structured learning environment, but were also reported to be highly effective in increasing self awareness while decreasing levels of anxiety and stress (Jellesma & Cornellis, 2012; Jensen, 2012; Long et al. 2012).

Even though the reported results of implementing contemplative practices indicate a nearly undeniable positive impact, all studies indicated a need for more research to be done in this field (Berger et al., 2009; Jellesma & Cornellis, 2012; Joyce et al., 2010; Van Der Oord et al., 2012).

Challenges in the field of contemplative practice with adolescents. One of the greatest challenges that the contemplative practice movement currently faces is finding a way to deliver measurable data indicating effectiveness (Bush, 2010; Repetti, 2010; Salloway & Fisher, 2007; Vick-Johnson, 2010). In an attempt to bring more validity and evidence of the benefits of contemplative practices, individuals across professions have applied scientific research to support and document the physiological effects of contemplative practices (Salloway & Fisher, 2007). Many studies documented that one's application of contemplative practices *may* impact stress-reduction, empathy, connectedness, emotional balance, and self-determination, among other things. It has been difficult, however, to show this through qualitative and quantitative data,

as there are no uniform instruments or terms used to measure and analyze data (Goleman, 1995; Kabat-Zinn, 2005; Ryback, 2006; Seligman & Csikszentmihalyi, 2000).

Summary

The materials examined in this literature review speaks to the current proposed research question on whether the use of contemplative practices have the potential to be significant. The purpose of this study is to produce measurable data on the impact of contemplative practice on the anxiety levels of middle school students. It is hypothesized in the current study that implementation of contemplative practices can impact, and decrease, the anxiety level of middle school students.

Research Questions

1. What impact does contemplative practice have on the overall levels of anxiety of middle school students?
2. What immediate impact does individual contemplative practice sessions have on levels of anxiety of middle school students?

Method

This study was preformed in a suburban middle school. Three students participated in a three week long group focused on using contemplative practices to potentially manage or decrease anxiety. Data was gathered through pre and post tests using a five question abbreviated version of the Screen for Child Anxiety Related Disorders (SCARD). The group met on three separate occasions using the practices of silent meditation, guided relaxation, beholding, and free writing. Each group session consisted of a check in, pre test, practice, post test, discussion, and closing. Data was analyzed using a paired t-test.

Setting

The setting for this study was a suburban middle school in Western New York. The school housed 826 students and had an average class size of 21 students. Nine percent ($N=75$) were eligible for free lunch and 2% ($N=20$) were eligible for reduced lunch price. Ten students in (1%) were limited English proficiency. The racial and ethnic breakdown of this school was: American Indian or Alaska Native 0% ($N = 2$), Balck or African American 6% ($N = 50$), Hispanic or Latino 5% ($N = 44$), Asian or Native Hawian/Other Pacific Islander 12% ($N = 103$), White 74% ($N = 613$) and Multicultural 2% ($N = 14$).

Participant Characteristics

The sample included 3 students from a suburban middle school, who volunteered and did not receive class credit or payment for participation. One hundred percent of the sample was female, and of a minority race. Two of the participants were of African American descent, and one participant of Hispanic descent, all participants indicated English their first language. All participants completed seven years of education and were three-quarters of the way through their

eighth grade year. The participants ranged in age from 13 years to 14 years old. No group members had any prior experience with participating in studies. None of the participants had experienced any training, lessons, or education regarding contemplative practices.

Sampling Procedures

The sampling method for this study was purposive and convenient. Participants were recommended by the sixth thru eight grade counselors. Fifteen students were approached to participate in this group. The fifteen students asked to participate in the contemplative practice group were a mix of 6th, 7th, and 8th graders. The candidates varied in gender and race, Caucasian, African American, Asian, and Hispanic. Of all students approached, 20% ($n = 3$) agreed to participate. Because group participation was by recommendation only, not all students enrolled in the school had an equal chance of being selected for the study.

All groups met during school in a private school counselor's office. All data was collected during group time using the pretest and posttest. All members agreed to participate in a pretest, contemplative practice, discussion, and posttest. No payments were received for participation. All aspects of research were reviewed and permitted by The College at Brockport Institutional Review Board. All ethical standards were considered and followed throughout the process of research.

Sample Size, Power, Precision

The sample size for this research project was three students. There were no separate conditions or control groups used. The target population for this research project was a diverse sample from a suburban school, grades six thru eight. The achieved sample differed from the target population in racial diversity, age, and sex.

Sink (2010), noted that optimal group size for this form of intervention to be between five and ten participants. Considering this, sample size was intentionally targeted to be less than eight in order to proceed with a group counseling as the method for delivering the intervention. No interim analysis or stopping rules were used to modify the desired sample size.

Measure and Covariates

The primary measure for this research was anxiety. The instrument used for this research project was the Screen for Child Anxiety Related Disorders (SCARED; See Appendix A for full version). The SCARED instrument is a survey consisting of 41 self-rated questions related to feelings and thoughts of anxiety. Self ratings included: 0-Not True or Hardly Ever True, 1-Somewhat True or Sometimes True, 2-Very True or Often True. Each of the questions on the survey related to one of five anxiety implications: Anxiety Disorder, Panic Disorder, Generalized Anxiety Disorder, Separation Anxiety Disorder, Social Anxiety Disorder, and Significant School Avoidance. Other measures collected, but not included in the report, were perceived effectiveness of contemplative practices and general feeling pre and post contemplative practice. All included data was collected on pretest and posttest written questioners. Other informal feedback, such as conversation and post practice observation, was noted by the primary researcher and considered for future implications. Due to the limited time available for group meetings, as well as the complexity of the full version of the SCARED instrument, the primary investigator used the statistically equivalent abbreviated version of the instrument as founded by Birmaher et al. (1999). The abbreviated version of the SCARED instrument consisted the following five questions: I get really frightened for no reason at all, I am afraid to be alone in the

house, People tell me that I worry too much, I am scared to go to school, and I am shy (See Appendix B for abbreviated pre/post test).

Research Design

Subjects for this research design were placed into a small contemplative practice group counseling setting. The study was conducted as a within-subject design.

Experimental Manipulations or Interventions

The intervention used in this research project was the presentation of contemplative practices. All participants were informed that they were selected to be a part of a new group along with classmates. Participants were informed that the group topics would be about anxiety, stress, or nervousness, as well as, some relaxation techniques and activities that may be used that may help reduce nervousness and anxiety. Students were informed that the group would meet once per week on a rotating schedule for forty minutes. All participants were informed that participation in the group would have no impact on their grades. See Appendix C for verbatim interventions.

Each intervention was delivered in a private counseling office. Each session was forty minutes with the inclusion of one or two contemplative practice(s). Participants were exposed to each contemplative practice from beginning to end for ten to fifteen minutes. A maximum of five days passed between each intervention for a three week total intervention period. The group was never split or sub grouped. All interventions were administered to the group of three participants by the primary investigator (See Appendix C for interventions and scripts).

Results

Recruitment for this research project began in February of 2013 as school counselors were asked to begin considering which of their students would be an appropriate match for the proposed research project. Recruitment ended in March of 2013. Three students in total agreed to participate in the research group. The group met three times between the period of March 6, 2013 and March 28, 2013.

Statistical and Data Analysis

The data analysis of this study focused on the change in anxiety level. The comparison of data was taken from the change in participants' pre and posttest scores using a paired t-test. Results for each of the pretests and posttests, specifically comparison of the mean scores, are listed in Tables 1-3 for each of the pre and post tests for the SCARED Inventory adapted by Birmaher et al. (1999).

Table 1

SCARED Inventory Pre and Post Scores for Silent Meditation

Question	Pre-Test <i>M</i>	Post-Test <i>M</i>	Δ
1. I get frightened for no reason at all	0.00	0.00	0.00
2. I am frightened to be alone in the house	0.33	0.33	0.00
3. People tell me I worry too much	0.33	0.33	0.00
4. I am scared to go to school	0.00	0.00	0.00
5. I am shy	0.66	0.66	0.00

Note. $N = 3$

Table 2

SCARED Inventory Pre and Post Scores for Guided Relaxation

Question	Pre-Test <i>M</i>	Post-Test <i>M</i>	Δ
1. I get frightened for no reason at all	0.00	0.00	0.00
2. I am frightened to be alone in the house	0.00	0.00	0.00
3. People tell me I worry too much	1.66	1.33	0.33
4. I am scared to go to school	0.33	0.00	0.33
5. I am shy	0.66	0.33	0.33

Note. $N = 3$

Table 3

SCARED Inventory Pre and Post Scores for Beholding and Free Writing

Question	Pre-Test <i>M</i>	Post-Test <i>M</i>	Δ
1. I get frightened for no reason at all	0.00	0.00	0.00
2. I am frightened to be alone in the house	0.00	0.00	0.00
3. People tell me I worry too much	0.33	0.00	0.33
4. I am scared to go to school	0.00	0.00	0.00
5. I am shy	0.33	0.33	0.00

Note. $N = 3$

No change was detected between pretest and posttest for silent meditation. Thus, correlations and t-tests could not be computed. The data reflected that a change did occur between the pretests and post tests for guided relaxation. In a paired samples t-test, however, the difference was insignificant $t(3) = 1.73, p = 0.181$. Similar to guided relaxation, the data for beholding and free writing does not yield any change for questions 1, 2, 4, and 5, however, change was noted for question 3. In the paired t-test, however, the difference was insignificant $t(3) = 1.00, p = 0.391$. The results of this data analysis do not provide evidence that contemplative practices impacted the anxiety level of the participants.

Ancillary Analysis

Although the statistical data analysis does not suggest that any significant changes occurred throughout the process of this research project, the primary investigator noted meaningful conversation with the group members post intervention. Individuals participating in the research study stated that they “enjoyed having quiet time in the middle of the day” and that they felt “more relaxed” post intervention. Although these comments are not reflected in the analysis section of this research, the comments may suggest implications for future research.

Participant Flow

There was no participant flow in this study.

Intervention or Manipulation Fidelity

All interventions, experimental manipulations, and instruments were delivered and used as intended. All three subjects were faithful in participating in group for each of the three sessions.

Baseline Data

For this study, each of the pre-tests served as baseline data for anxiety level of participants pre-intervention.

Statistical and Data Analysis

All participants assigned to conditions were included in this data analysis received treatment. Information for all participants, showing significant change or not, were included in this analysis for the purpose of providing accurate results to this research study. The primary researcher chose to share all results as well as many recommendations for future implications of a repeat study.

Adverse Events

No serious consequences occurred during this research study.

Discussion

The rates of anxiety found in adults, individuals 18 years of age or older, continue to rise from nearly 40% of the population in the United States. It has been found that when treated early, individuals have a greater chance of learning methods to counter and manage anxiety before it evolves into a more serious mental disorder over time (Grankani, 2006; McGrandles & Duffy, 2012; NIMH, 1999).

Joyce et al. (2010) stated that schools could potentially be the greatest forum for reaching young people and offering these early interventions. Considering the diversity in schools, constant decrease in school budget, a growing distaste for medicinal treatment of young people, and a need to decrease the invasiveness, side effects, and risks involved in treatment, the stage has been set for the use of contemplative practice (Joyce et al., 2010, Semple et al., 2010; Whenerberg, 2008).

Recommendations of counselors leading students through contemplative practices has begun to arise in the school setting (Joyce et al., 2010). Ried and Miller (2009) reported that implementation of these practices significantly decreased the students' levels of anxiety and academic stress while increasing classroom focus after practice. Other studies found that guided practices such as yoga, stress awareness training, and guided breathing required a more structured learning environment, but were also reported to be highly effective in increasing self awareness while decreasing levels of anxiety and stress (Jellesma & Cornellis, 2012; Jensen, 2012; Long et al. 2012).

Even though the reported results of implementing contemplative practices indicated a nearly undeniable positive impact, all studies indicated a need for more research to be

conducted in this field (Berger et al., 2009; Jellesma & Cornellis, 2012; Joyce et al., 2010; Van Der Oord et al., 2012).

The current research study aimed to examine the impact of contemplative practices on the anxiety level of middle school students. It was hypothesized from the researcher that contemplative practices would decrease the anxiety level of middle school students. According to the statistical results of this study, contemplative practices did not have a significant impact on the anxiety level of the middle school participants. It is important to consider that this study had a poor sample size and poor measurement instrument; thus, reliability and validity of this study could not be measured. Even though many other researchers have found contemplative practices to be a successful instrument in anxiety reeducation, the current research study did not find similar results (Bush, 2010; Jellesma & Cornellis, 2012; Jensen, 2012; Long et al. 2012; Repetti, 2010; Salloway & Fisher, 2007; Vick-Johnson, 2010).

Limitations and Future Implications

There are many limitations and future implications to be considered when reviewing this study. First, the method of identifying students for this research group was flawed. In the future, one may consider ways in which a greater sample size may be obtained. Suggestions include: pushing into a classroom, soliciting teacher referrals for students who may benefit, facilitating several groups simultaneously, and inviting highly anxious or “over achieving” students that tend to have overwhelming academic and social schedules. In addition, other significant limitations included sample size, time, instrument selection, and research design. Of the fifteen students asked to participate in this experimental group, only three students agreed. Thus, the findings

cannot be generalized to the population. A larger sample size, as well as, a greater range in culture, age, and sex of the students may have increased the chances for measuring difference.

Contemplative practices may require time, rehearsal, and repetition (Jellesma & Cornellis, 2012; Jensen, 2012). Due to various procedures and deadlines, the contemplative practice group was only able to meet for three sessions. Perhaps in the future, more time would be allotted for this group to meet and to practice together in order to gain a better understanding, more comfort, and therefore a more effective practice routine together. Furthermore, a follow up with participants could be conducted to determine if they continued to use contemplative practice in their lives and the impact measured between the pre-test and the end of the follow-up (i.e., end of the school year).

The researcher struggled to find a straightforward and valid instrument for this study. The researcher quickly recognized that the full version of the instrument was too complex for the students to complete in the allotted group meeting time. Unfortunately, even after using the abbreviated version of the instrument, the researcher recognized that the items asked on the instrument were irrelevant to the content addressed in the group counseling. For example, the practices were not designed to address shyness, yet the instrument collected self-reported agreement of shyness. Shyness is a way of being and learning to be different would not likely occur over a three-week period of time. A better measure may have been a Likert-type scale, with a larger range, more directed towards how students are feeling in the moment pre and post practice. Sample questions may include:

1. On a scale from 1 to 10 I feel relaxed
2. On a scale from 1 to 10 I feel nervous

In addition to the use of a different instrument, future implications of this study may suggest that a qualitative research design may provide a more accurate and in depth depiction of the impact of contemplative practices. For this study the researcher found the most meaning in the conversation between students during the discussion portion of the group.

Implications for School Counselors

It is important for school counselors to understand the clinical significance of this study. Even though there were no statistically significant findings, there were implications and support for continuing to use contemplative practices with students, particularly when considering comments and feedback from students post practice. It may benefit counselors to infuse contemplative practices into counseling sessions as well as the counseling curriculum in order to eliminate some of the limitations experienced during the current study (i.e., permission slips and lack of participation), and to extend the longevity of student exposure to the practices.

Educating teachers may also be an effective way to continue the use of contemplative practices outside of counseling sessions or push-in lessons. One example of this may be creating a “Contemplative Practice Cheat Sheet” for teachers to use before anxiety provoking challenges for students (i.e., presentations, exams). Teachers may use this cheat sheet to remind students of some of the contemplative practices learned to help students self-sooth during anxious times.

Finally, in order to more accurately determine the effectiveness of using contemplative practices to impact the anxiety level of middle school students, counselors are encouraged to use a more suitable instrument. Counselors may also want to track additional indicators such as grades, behavior referrals, and attendance in correlation to the use of contemplative practices to evaluate other potentially positive outcomes.

Conclusion

The current study did not support the hypothesis or current literature of contemplative practices impacting or decreasing anxiety. Additional studies, particularly qualitative, should be conducted regarding the potential impacts of contemplative practices on the anxiety level of middle school students.

References

- A Little Anxiety Is Sometimes A Good Thing, Study Shows. (n.d.). *ScienceDaily*. Retrieved November 17, 2012, from <http://www.sciencedaily.com/releases/2008/04/080403104350.htm>
- Aaron, R. E., Rinehart, K. L., & Ceballos, N. A. (2011). Arts-based interventions to reduce anxiety levels among college students. *Arts & Health: International Journal for Research, Policy & Practice*, 3(1), 27–38.
- American School Counselor Association (2003). *The ASCA National Model: A Framework for School Counseling Programs*. Alexandria, VA: Author.
- Barnes, V., Bauza, L., & Treiber, F. (2003). Impact of stress reduction on negative school behavior in adolescents. *Health and Quality of Life Outcomes*, 1(1), 10.
doi:10.1186/1477-7525-1-10
- Berger, D. L., Silver, E. J., & Stein, R. E. K. (2009). Effects of yoga on inner-city children's well-being: a pilot study. *Alternative Therapies In Health And Medicine*, 15(5), 36–42.
- Cooley, K., Szczurko, O., Perri, D., Mills, E. J., Bernhardt, B., Qi Zhou, & Seely, D. (2009). Naturopathic Care for Anxiety: A Randomized Controlled Trial ISRCTN78958974. *PLoS ONE*, 4(8), 1–10.
- Craske, M. G., Rauch, S. L., Ursano, R., Prenoveau, J., Pine, D. S., & Zinbarg, R. E. (2009). What is anxiety disorder? *Depression and Anxiety*, 26(12), 1066–1085.
doi:10.1002/da.20633
- Duff, D. C., Levine, T. R., Beatty, M. J., Woolbright, J., & Sun Park, H. (2007). Testing Public Anxiety Treatments Against a Credible Placebo Control. *Communication Education*,

56(1), 72–88.

Farach, F. J., Pruitt, L. D., Jun, J. J., Jerud, A. B., Zoellner, L. A., & Roy-Byrne, P. P. (2012).

Pharmacological treatment of anxiety disorders: Current treatments and future directions. *Journal of Anxiety Disorders*, 26(8), 833–843.

Galantino, M. L., Galbavy, R., & Quinn, L. (2008). Therapeutic effects of yoga for children: a systematic review of the literature. *Pediatric Physical Therapy: The Official Publication Of The Section On Pediatrics Of The American Physical Therapy Association*, 20(1), 66–80.

Garakani, A., Mathew, S. J., & Charney, D. S. (2006). Neurobiology of Anxiety Disorders and Implications for Treatment. *Mount Sinai Journal of Medicine*, 73(7), 941–949.

Goodwin, R. D., Fergusson, D. M., & Horwood, L. J. (2003). Neuroticism in adolescence and psychotic symptoms in adulthood. *Psychological Medicine*, 33(6), 1089–1097.

Jellesma, F. C., & Cornelis, J. (2012). Mind magic: a pilot study of preventive mind-body-based stress reduction in behaviorally inhibited and activated children. *Journal Of Holistic Nursing: Official Journal Of The American Holistic Nurses' Association*, 30(1), 55–62.

Jensen, P. S. (2012). Respiratory Patterns in Students Enrolled in Schools for Disruptive Behaviour Before, During, and After Yoga Nidra Relaxation. *Journal of Child & Family Studies*, 21(4), 667–681.

Joyce, A., ETTY-Leal, J., Zazryn, T., Hamilton, A., & Hased, C. (2010). Exploring a mindfulness meditation program on the mental health of upper primary children: A pilot study. *Advances in School Mental Health Promotion*, 3(2), 17–25.

doi:10.1080/1754730X.2010.9715677

- Kraag, G., Van Breukelen, G. J. P., Kok, G., & Hosman, C. (2009). “Learn Young, Learn Fair”, a stress management program for fifth and sixth graders: longitudinal results from an experimental study. *Journal Of Child Psychology And Psychiatry, And Allied Disciplines*, 50(9), 1185–1195.
- Kuehn, B. M. (2008). Scientists Examine Primary Care-Based Screening and Treatments for Anxiety. *JAMA: Journal of the American Medical Association*, 299(16), 1886–1887.
- Lakhan, S. E., & Vieira, K. F. (2010). Nutritional and herbal supplements for anxiety and anxiety-related disorders: systematic review. *Nutrition Journal*, 9, 42–55.
- Lee, W. E., Wadsworth, M. E. J., & Hotopf, M. (2006). The protective role of trait anxiety: A longitudinal cohort study. *Psychological Medicine*, 36(3), 345–351.
doi:10.1017/S0033291705006847
- Long, K. A., Ewing, L. J., Cohen, S., Skoner, D., Gentile, D., Koehrsen, J., ... Marsland, A. L. (2011). Preliminary evidence for the feasibility of a stress management intervention for 7- to 12-year-olds with asthma. *The Journal Of Asthma: Official Journal Of The Association For The Care Of Asthma*, 48(2), 162–170.
- McGrandles, A., & Duffy, T. (2012). Assessment and treatment of patients with anxiety. *Nursing Standard*, 26(35), 48–56.
- NICE. “National Institute for Health and Clinical Excellence” Web Guidance. *NICE*. Accessed November 27, 2012. <http://www.nice.org.uk/>.
- Noordik, E., Van der Klink, J. J. L., Klingen, E. F., Nieuwenhuijsen, K., & Van Dijk, F. J. H. (2010). Exposure-in-vivo containing interventions to improve work functioning of workers with anxiety disorder: a systematic review. *BMC Public Health*, 10, 598–607.

- Norton, P. J. (2012). A Randomized Clinical Trial of Transdiagnostic Cognitive-Behavioral Treatments for Anxiety Disorder by Comparison to Relaxation Training. *Behavior Therapy, 43*(3), 506–517.
- O'Donovan, C. (Mar2004 Supplement). Achieving and Sustaining Remission in Depression and Anxiety Disorders: Introduction. *Canadian Journal of Psychiatry, 49*, 5S–9S.
- Reid, E., & Miller, L. (2009). An exploration in mindfulness: Classroom of detectives. *Teachers College Record, 111*(12), 2775–2785.
- Schmidt, N. B. (2012). Innovations in the Treatment of Anxiety Psychopathology: Introduction. *Behavior Therapy, 43*(3), 465–467.
- Scott, T., Mackenzie, C. S., Chipperfield, J. G., & Sareen, J. (2010). Mental health service use among Canadian older adults with anxiety disorders and clinically significant anxiety symptoms. *Aging & Mental Health, 14*(7), 790–800.
- Semple, R. J., Lee, J., Rosa, D., & Miller, L. F. (2010). A Randomized Trial of Mindfulness-Based Cognitive Therapy for Children: Promoting Mindful Attention to Enhance Social-Emotional Resiliency in Children. *Part of a special issue: Mindfulness, Children, and Families, 19*(2), 218–229.
- Sink, C. (2010). *Mental Health Interventions for School Counselors*. Belmont, CA: Brooks/Cole.
- Sulkowski, M., Joyce, D., & Storch, E. (2012). Treating Childhood Anxiety in Schools: Service Delivery in a Response to Intervention Paradigm. *Journal of Child & Family Studies, 21*(6), 938–947.
- Titov, N., Andrews, G., Kemp, A., & Robinson, E. (2010). Characteristics of Adults with Anxiety or Depression Treated at an Internet Clinic: Comparison with a National Survey

- and an Outpatient Clinic. *PLoS ONE*, 5(5), 1–5.
- Van der Oord, S., Bögels, S. M., & Peijnenburg, D. (2012). The effectiveness of mindfulness training for children with ADHD and mindful parenting for their parents. *Journal of Child and Family Studies*, 21(1), 139–147. doi:10.1007/s10826-011-9457-0
- Van Gastel, W., & Ferdinand, R. F. (2008). Screening capacity of the Multidimensional Anxiety Scale for Children (MASC) for DSM-IV anxiety disorders. *Depression and Anxiety*, 25(12), 1046–1052. doi:10.1002/da.20452
- Wall, R. B. (2008). Teaching Tai Chi with mindfulness-based stress reduction to middle school children in the inner city: a review of the literature and approaches. *Medicine And Sport Science*, 52, 166–172.
- Wehrenberg, M. (2008). *The 10 Best-Ever Anxiety Management Techniques: Understanding How Your Brain Makes You Anxious and What You Can Do to Change It* (1st ed.). W. W. Norton & Company.
- White, L. S. (2012). Reducing stress in school-age girls through mindful yoga. *Journal Of Pediatric Health Care: Official Publication Of National Association Of Pediatric Nurse Associates & Practitioners*, 26(1), 45–56.
- Wolitzky-Taylor, K. B., Castriotta, N., Lenze, E. J., Stanley, M. A., & Craske, M. G. (2010). Anxiety disorders in older adults: A comprehensive review. *Depression and Anxiety*, 27(2), 190–211. doi:10.1002/da.20653

Appendix A

(See next 2 pages)

Screen for Child Anxiety Related Disorders (SCARED)
Parent Version—Pg. 1 of 2 (To be filled out by the PARENT)

Name: _____

Date: _____

Directions:

Below is a list of statements that describe how people feel. Read each statement carefully and decide if it is “Not True or Hardly Ever True” or “Somewhat True or Sometimes True” or “Very True or Often True” for your child. Then for each statement, fill in one circle that corresponds to the response that seems to describe your child for the last 3 months. Please respond to all statements as well as you can, even if some do not seem to concern your child.

	0 Not True or Hardly Ever True	1 Somewhat True or Sometimes True	2 Very True or Often True
1. When my child feels frightened, it is hard for him/her to breathe.	○	○	○
2. My child gets headaches when he/she is at school.	○	○	○
3. My child doesn't like to be with people he/she doesn't know well.	○	○	○
4. My child gets scared if he/she sleeps away from home.	○	○	○
5. My child worries about other people liking him/her.	○	○	○
6. When my child gets frightened, he/she feels like passing out.	○	○	○
7. My child is nervous.	○	○	○
8. My child follows me wherever I go.	○	○	○
9. People tell me that my child looks nervous.	○	○	○
10. My child feels nervous with people he/she doesn't know well.	○	○	○
11. My child gets stomachaches at school.	○	○	○
12. When my child gets frightened, he/she feels like he/she is going crazy.	○	○	○
13. My child worries about sleeping alone.	○	○	○
14. My child worries about being as good as other kids.	○	○	○
15. When he/she gets frightened, he/she feels like things are not real.	○	○	○
16. My child has nightmares about something bad happening to his/her parents.	○	○	○
17. My child worries about going to school.	○	○	○
18. When my child gets frightened, his/her heart beats fast.	○	○	○
19. He/she gets shaky.	○	○	○
20. My child has nightmares about something bad happening to him/her.	○	○	○

Screen for Child Anxiety Related Disorders (SCARED)
CHILD Version—Page 2 of 2 (to be filled out by the CHILD)

	0 Not True or Hardly Ever True	1 Somewhat True or Sometimes True	2 Very True or Often True	
21. I worry about things working out for me.	○	○	○	GD
22. When I get frightened, I sweat a lot.	○	○	○	PN
23. I am a worrier.	○	○	○	GD
24. I get really frightened for no reason at all.	○	○	○	PN
25. I am afraid to be alone in the house.	○	○	○	SP
26. It is hard for me to talk with people I don't know well.	○	○	○	SC
27. When I get frightened, I feel like I am choking.	○	○	○	PN
28. People tell me that I worry too much.	○	○	○	GD
29. I don't like to be away from my family.	○	○	○	SP
30. I am afraid of having anxiety (or panic) attacks.	○	○	○	PN
31. I worry that something bad might happen to my parents.	○	○	○	SP
32. I feel shy with people I don't know well.	○	○	○	SC
33. I worry about what is going to happen in the future.	○	○	○	GD
34. When I get frightened, I feel like throwing up.	○	○	○	PN
35. I worry about how well I do things.	○	○	○	GD
36. I am scared to go to school.	○	○	○	SH
37. I worry about things that have already happened.	○	○	○	GD
38. When I get frightened, I feel dizzy.	○	○	○	PN
39. I feel nervous when I am with other children or adults and I have to do something while they watch me (for example: read aloud, speak, play a game, play a sport).	○	○	○	SC
40. I feel nervous when I am going to parties, dances, or any place where there will be people that I don't know well.	○	○	○	SC
41. I am shy.	○	○	○	SC

SCORING:
 A total score of ≥ 25 may indicate the presence of an **Anxiety Disorder**. Scores higher than 30 are more specific. **TOTAL =**
 A score of **7** for items 1, 6, 9, 12, 15, 18, 19, 22, 24, 27, 30, 34, 38 may indicate **Panic Disorder** or **Significant Somatic Symptoms**. **PN =**
 A score of **9** for items 5, 7, 14, 21, 23, 28, 33, 35, 37 may indicate **Generalized Anxiety Disorder**. **GD =**
 A score of **5** for items 4, 8, 13, 16, 20, 25, 29, 31 may indicate **Separation Anxiety SOC**. **SP =**
 A score of **8** for items 3, 10, 26, 32, 39, 40, 41 may indicate **Social Anxiety Disorder**. **SC =**
 A score of **3** for items 2, 11, 17, 36 may indicate **Significant School Avoidance**. **SH =**

For children ages 8 to 11, it is recommended that the clinician explain all questions, or have the child answer the questionnaire sitting with an adult in case they have any questions.

The SCARED is available at no cost at www.wpic.pitt.edu/research_under_tools_and_assessments, or at www.pediatric_bipolar.pitt.edu under instruments.

Appendix B

Contemplative Practice Pre-Test

Question	-0- Not True/ Hardly Ever True	-1- Somewhat True/ Sometimes True	-2- Very True/ Often
1. I get frightened for no reason at all.			
2. I am frightened to be alone in the house			
3. People tell me I worry too much			
4. I am scared to go to school			
5. I am shy			

Contemplative Practice Post-Test

Question	-0- Not True/ Hardly Ever True	-1- Somewhat True/ Sometimes True	-2- Very True/ Often
1. I get frightened for no reason at all.			
2. I am frightened to be alone in the house			
3. People tell me I worry too much			
4. I am scared to go to school			
5. I am shy			

Appendix C

3 Interventions and Scripts

Week 1

Materials Needed: Pre/Post Tests, Script

Check In

Pre- Test

Practice: Silent Meditation

Time: 10 Minutes

Script:

“ Today we will be doing a practice called silent meditation. Has anyone ever heard of this? (Allow time for sharing/ discussion). For those of you who have not heard of silent meditation it is when we sit in a comfortable position while trying to make our minds and bodies still and quiet. Many people choose to sit with their legs crossed and eyes closed. While we sit in silence, I encourage you to try and keep your mind and body focused on your breath and in this moment. It is very normal for our minds to wander onto the past or future when we are in silence. Do not be too hard on yourself for this, just call your mind and body back to being still and quiet. We will sit in silence for 10 minutes. Please find a comfortable position and close your eyes if you are comfortable. Are there any questions (Allow time for questions and final discussion before beginning practice). We will now begin.”

Discussion

Post- Test

Closing

Week 2

Materials Needed: Pre/Post Tests, Script

Check In

Pre- Test

Practice: Guided Muscle Relaxation

Time: 10 Minutes

Script:

“Today we will be doing a guided muscle relaxation. Has anyone ever heard of this or done this before? (Allow time for sharing/ discussion). Guided meditation is a wonderful technique to help us calm our minds and bodies. Similar to last week you will get into a comfortable seated position and close your eyes if you would like. I will be reading a long script of instructions that ask you to tighten and release different muscles in relation to your breathing. Are there any questions (Allow time for questions and final discussion before beginning practice). We will now begin.”

For this relaxation, you sit in a comfortable position and close your eyes. Just make sure that you are warm enough, and that you are comfortable. Let your hands rest loosely in your lap, or by your side. Now close your eyes.

Become aware of your breathing, and notice how your abdomen rises and falls with each breath...

Now take a long slow deep breath in through your nose, all the way down into your stomach. Hold the breath for just a moment, and then exhale through your mouth. Allow your breath to carry away all stress and tension as the air floods out of your lungs.

Take another slow breath in through your nose. Fill your lungs completely. Hold it for a moment...and release the breath through your mouth. Empty your lungs completely with your out-breath.

Take a third deep breath in. Hold it for a moment, and then let it go. Feel that your body has already undergone a change. The tension in your body has begun to loosen and subside.

Now let your breathing rhythm return to normal...and relax....

During this relaxation I will ask you to tense various muscles throughout your body. Please do this without straining. You do not need to exert yourself, just contract each muscle firmly but gently as you breathe in. If you feel uncomfortable at any time, you can simply relax and breathe normally.

Bring your awareness to your feet and toes. Breathe in deeply through your nose, and as you do, gradually curl your toes down and tense the muscles in the soles of your feet. Hold your breath for just a few seconds and then release the muscles in your feet as you breathe out. Feel the tension in your feet wash away as you exhale. Notice how different your feet feel when tensed and when they are relaxed.

Take another deep breath in again, tense the muscles in the soles of your feet and hold this.

Now release. Feel yourself relaxing more and more deeply with each breath. Your whole body is becoming heavier, softer and more relaxed as each moment passes.

Now bring your awareness to your calf muscles. As you draw in a nice deep breath, point your toes up towards your knees and tighten these muscles. Hold for just a moment, and then let those muscles go limp as you exhale.

Once again, draw in a deep breath...and tighten your calf muscles. Hold for a few seconds, and then let it all go. Feel your muscles relax, and feel the tension washing away with your out-breath.

In a moment you will tense the muscles in the front of your thighs. If you are lying down, you can do this by trying to straighten your legs. You'll feel the muscles pulling your kneecap upwards. If you are seated, you can tense these muscles by pushing your heels down onto the floor.

Take a deep breath in, and tense the muscles in your thighs. Hold for just a moment, and then release everything. As you do this, the blood flow to your muscles increases, and you may notice a warm tingling sensation. Enjoy this feeling of soothing relaxation in your thighs.

Again, breathe in deeply and tighten your thigh muscles. Hold for a moment. Now release. Focus on letting your muscles go limp and loose.

Take another breath, and this time, gradually tighten all the muscles in your legs, from your feet to your buttocks. Do this in whatever way feels natural and comfortable to you. Hold it...and now release all these large strong muscles.

Enjoy the sensation of release as you become even more deeply relaxed.

Now bring your awareness to your stomach. Draw in a nice deep breath and then tighten these muscles. Imagine you are trying to touch your belly button to your spine. Now release your breath and let your muscles relax. Notice the sensation of relief that comes from letting go.

Once again, draw in a deep breath and then tighten your stomach muscles. Hold for a few seconds... and then let them relax as you exhale and release all tension.

Bring your awareness to the muscles in your back. As you slowly breathe in, arch your back slightly and tighten these muscles....Now release your breath and let your muscles relax.

Again, draw in a deep breath and then tighten your back muscles. Hold for a few seconds...and then let them relax and release.

Now give your attention to your shoulder muscles and the muscles in your neck. As you slowly draw in a nice deep breath, pull your shoulders up towards your ears and squeeze these muscles firmly. Now breathe out completely, and allow your contracted muscles to go loose and limp.

Again, pull your shoulders up towards your ears and squeeze these muscles firmly. Now feel the tension subside as you relax and breathe out.

Feel the heaviness in your body now. Enjoy the feeling. Feel yourself becoming heavier and heavier. Feel yourself becoming more and more deeply relaxed. You are calm, secure, at peace.

Now it's time to let go of all the tension in your arms and hands. Let's start with your upper arms.

As you breathe in, raise your wrists towards your shoulders and tighten the muscles in your upper arms. Hold that breath and that contraction for just a moment...and then gently lower your arms and breathe all the way out. You may feel a warm, burning sensation in your muscles when you tighten them. Feel how relaxing it is to release that tightness and to breathe away all tension.

As you curl your upper arms again, tighten the muscles as you breathe in. Breathe in deeply. Now relax your arms and breathe out.

Now bring your awareness to your forearms. As you breathe in, curl your hands inwards as though you are trying to touch the inside of your elbows with your fingertips. Now feel the tension subside as you relax and breathe out.

Again, take a deep breath in, and tighten the muscles in your forearms. Hold it for a moment, and then release them. Feel the tension washing away.

Now, take another breath in and tightly clench your fists. When you have finished breathing in, hold for just a few seconds, and then release. Notice any feelings of buzzing or throbbing. Your hands are becoming very soft and relaxed.

Take another deep breath in and clench your fists again. Hold for just a few seconds, and then release. Let your fingers go limp.

Your arms and hands are feeling heavy and relaxed.

Take a couple of nice long slow breaths now, and just relax. Feel yourself slipping even deeper into a state of complete rest.

Now tighten the muscles in your face by squeezing your eyes shut and clenching your lips together. As you do, breathe in fully. Hold it...now breathe out and relax all your facial muscles. Feel your face softening.

Once more, breathe in deeply while you scrunch the muscles in your eyes and lips....and release.

Now bring your awareness to the muscles in your jaw. Take a deep breath in, and then open your mouth as wide as you can. Feel your jaw muscles stretching and tightening. Now exhale and allow your mouth to gently close.

Again, fill your lungs with air and then open your mouth wide. Now let your mouth relax and let your breath flood all the way out.

Please take a few more minutes to rest. Relax. Listen to the sound of your breathing and enjoy the lovely, warm sensation of physical relaxation.

Discussion

Post- Test

Closing

Week 3

Materials Needed: Pre/Post Tests, Script, Rocks, Paper, Pencils

Check In

Pre- Test

Practice: Beholding Rocks/ Free Writing

Time: 10 Minutes

Script:

“ Today we will be using two contemplative practices: Beholding and Free Writing. Have any of you heard of or practiced Beholding or Free Writing before? (Allow time for sharing/ discussion.) Beholding is similar to the meditation that we did on our first meeting together except that now we have a tangible object to help us focus our attention. Today we will be focusing our attention on these rocks. (Have each student pick a rock from bowl.) We will be using our senses to take our time exploring the rock- what does it feel like, what does it look like, why did I choose this rock, etc. We will study the rock for about 3 minutes and immediately after we will be free writing for about 7 minutes. Free writing is when we allow our thoughts to flow from our mind to the paper. We do not judge what we are writing. In other words, it does not need to be in complete sentences or make any sense. Or thoughts are often random and very quick inside our heads, and that is ok to put on paper when we free write. I will let you know when it is time to start and stop each practice. Are there any questions (Allow time for questions and final discussion before beginning practice). We will now begin.”

Discussion

Post- Test

Closing