A YOGA-BASED MENTAL HEALTH WELLNESS PROGRAM FOR
MIDDLE SCHOOL STUDENTS

A graduate project submitted in partial fulfillment of the requirements
For the degree of Master of Science In Counseling,
Marriage and Family Therapy

by

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DEDICATION

This graduate project is dedicated to:

All my family and friends for their support, as well as all the yoga teachers who have inspired me to share their wisdom and inspiration.
ACKNOWLEDGMENT

I would like to thank my committee members who supported my efforts in writing this graduate project.

To my chair, Dr. Diane Gehart,

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ABSTRACT

A YOGA-BASED MENTAL HEALTH WELLNESS PROGRAM FOR MIDDLE SCHOOL STUDENTS

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The purpose of this graduate project is to create a yoga program for middle-school students that provides them the opportunity to learn yoga in order to improve their overall well-being, including their mental and physical health. Many adolescents in our society, particularly in lower socioeconomic areas, face problems with stressors such as obesity, depression, anxiety, and low self-esteem. There is also a growing concern over the high rate of students diagnosed with Attention Deficit/Hyperactivity Disorder (ADHD). Research shows that yoga is beneficial to one’s physical as well as emotional health, and can be an effective treatment and prevention for the stressors mentioned previously. The program, called YogaTime, is taught by a licensed Marriage and Family Therapist with a license to teach yoga once a week during PE class with the help of a few assistants. This project also provides a sample outline with six pre-designed classes, each with a specific theme, to teach to students.
CHAPTER I

Introduction

Dr. Krishna Raman’s book, *A Matter of Health: Integration of Yoga and Western Medicine for Prevention and Cure* (1998), describes yoga as “primarily a philosophical science, born out of man’s seeking to fathom the meaning of existence” (p. 45).

According to Raman, much of the knowledge of yoga comes from the *Yoga Sutras*, written by a man named Pantanjali, who lived in India around 300 BC. The root of the word yoga means “to bind or yoke” (p. 37). Another description of yoga is “an ancient discipline designed to bring balance and health to the physical, mental, emotional, and spiritual dimensions of the individual” (Ross & Thomas, 2010, p. 7). It typically involves poses, called *asanas*, and use of conscious breathing, called *pranayama* (Iyengar, 1976).

Yoga is becoming more popular in the US, with about 4% of respondents from a telephone survey stating they have practiced yoga in the past year, with 48% of them citing specific health conditions and 64% citing wellness as motivation for practice (Saper, Eisenberg, Davis, Culpepper, & Phillips, 2004).

Yoga is an alternative approach to some of the problems facing adolescents today. One such problem is the growing concern about the number of overweight and obese students in the United States today, as the 2007-2008 National Health and Nutrition Examination Survey indicated that 17% of children in the United States between the ages of 2-19 were obese, as well as 32% of adults. (Ogden, Carrol, Curtin, Lamb, and Flegal, 2010). And a study by the Robert Wood Johnson Foundation (2003) found that parents and teachers support the idea of creating new “lifestyle” approaches to physical education that include “activities children can continue to do for the rest of their lives.” Yoga is one
of these “lifestyle” approaches.

Adolescents also face mental health concerns as well, with a study by Middlebrooks and Audage (2008) showing a large number of adolescents with history of emotional, physical, or sexual abuse. Also about 25% of 13-18 year olds have had a lifetime prevalence of an anxiety disorder, and 14% have a lifetime prevalence of a mood disorder (Merikangas et al. 2010), showing a large amount of young people have anxiety and/or depression.

In addition to the physical and mental well-being of adolescents, there is also concern of about the increase in Attention-Deficity/Hyperactivity Disorder in adolescents, which can be as high 16% of students in certain areas (Froehlich et al., 2007), and 66% of those diagnosed taking medication which often have unwanted side effects (CDC, 2010). This has caused many parents to demand other forms of treatment for ADHD (Chan, Rappaport, & Kemper, 2003).

Yoga is an alternative form of treatment for preventative uses in the well-being of healthy adolescents, as well as a therapeutic treatment for specific populations such as students with ADHD. However, yoga is not accessible to many people, as Bidee et al. (2008) reports that the highest percentage of current yoga practitioners in the U.S. today earn more than $65,000 a year, indicating that people with more money practice yoga more, partly because yoga classes can be expensive. As a result of this, yoga studios tend to be located in more affluent areas, so many economically disadvantaged people do not have access to yoga classes.
Statement of the Problem

This project will consider two general problems. The first relates to the overall well-being and physical and mental health of adolescents today. Many of them face problems with their physical health, such as obesity, as well as mental/emotional stressors such as adverse childhood experiences (ACE’s), anxiety, depression, and low self-esteem. The second problem relates to a common disorder seen in adolescents, ADHD, and while traditional treatment approaches such as psychotropic medication and behavior therapy can be effective, they have limitations and side effects that have created a demand from parents for alternative or complimentary forms of treatment.

Purpose of Project

The purpose of this project is to develop a program that meets for one hour, once a week, for eight weeks that teaches middle-school students yoga and related meditation techniques as a preventative treatment for the general well-being of healthy students, as well as an alternative or complimentary form of treatment for students in the class diagnosed with ADHD. The program will emphasize awareness, self-care, and self-management. Each class will consist of a guided meditation, a number of yoga poses and physical movement, followed by a relaxation period at the end of class.

Terminology

Yoga: A philosophy aimed at attaining awareness and tranquility through exercise and postures for physical, emotional, and spiritual well-being (Raman, 1998).

Meditation: To calm the mind and become intently aware, usually by focusing on specific thing, such as breathing (Raman, 1998).

Asanas: the physical practice of yoga which consists of postures (Raman, 1998)
Summary

Chapter 2 includes a review of the literature on the physical health of adolescents, the effects of yoga on their physical health, the mental health of adolescents with regards to adverse childhood experiences, depression, anxiety, and suicide, the effects of yoga on mental health, followed by the prevalence and treatment of ADHD in adolescents, and the effects of yoga on adolescents with ADHD.
CHAPTER II: REVIEW OF LITERATURE

This chapter will examine the research pertaining to the current physical health of adolescents with emphasis on obesity, the physical effects of yoga, the mental health of adolescents today, the effects of yoga on mental health, and finally ADHD and the effect of yoga on students diagnosed with it.

Physical Health of Children and Adolescents

The physical health of children and adolescents today is a concern due to the growing rate of obesity and its negative consequences. Parents and teachers both agree on the importance of physical education in schools, yet physical education is being pushed aside as the pressure to meet academic standards mounts.

Obesity in Children and Adolescents

The Centers for Disease Control defines “overweight” as having a body mass index (BMI) between 25–29.9, or being in the sex-and-age specific 85th to 94th percentiles for weight, while defining “obese” as having a BMI of 30 or greater and being in the 95th percentile or greater. There is a growing concern over the health of our children and adolescents in schools today, as more students have become overweight or obese, according to the United States Department of Health and Human Services (as cited in Trout and Grabner, 2009). They state that the number of overweight children has doubled since 1980, and the number of overweight adolescents has tripled since then. Childhood obesity also leads to greater likelihood of adult obesity, as one study found that 80% of overweight children ages ten to fifteen years were obese by the time they were twenty-five (Whitaker, Wright, Pepe, Seidel, and Dietz, 1997). While the number of overweight and obese people has remained somewhat stable over the past ten years
(Ogden et al, 2010), the high rate of obesity is alarming.

**Causes of Obesity**

The Surgeon General reports that the cause of childhood obesity comes from not getting enough exercise and/or eating unhealthy food, with “genetics and lifestyle both playing important roles in determining a child’s weight” (USDHHS, 2001). With regards to genetics, children with overweight parents are more likely to be overweight, and children’s lifestyles continue to revolve around more sedentary activities such as television, computers, and video games (USDHHS, 2001). According to Strauss, Rodzilsky, Burack, & Colin (2001), U.S. children are inactive 75% of their waking hours, and engaged in vigorous physical activity about 12 minutes per day. This low amount of exercise mixed with high caloric intake, especially from fast foods, has caused this high rate of obesity.

**Consequences of Obesity**

Research has shown that being overweight or obese increases the risk of diabetes, heart disease, cancer, hypertension, asthma, and high cholesterol, as well as many psychological stressors such as depression and low self-esteem (Bray, Bouchard, and James, 1998). Also according to Mokdad, Marks, Stroup, and Gerberding (2004), obesity and being overweight are estimated to cause 400,000 deaths each year in the U.S., making it more lethal than anything else except tobacco use. And a study by Blackwell and Tonthat (1998) examined children’s health and revealed that children whose health status was considered poor were four times more likely to have a learning disability, and three times more likely to be diagnosed with ADHD, than children whose health status was considered good to excellent.
The Role of Exercise in Obesity

A study by LeMura and Maziekas (2002) on overweight and obese children not surprising concluded that exercise reduces body fat composition and helps children maintain current weight levels, if not lose weight. The study also found that “the most favorable alterations in body composition were associated with low-intensity, long-duration exercise and aerobic exercise combined with high-repetition resistance training” (p. 489). It also indicated added benefit from a behavioral strategy, which included family support of exercise, nutrition classes, and positive reinforcement of non-sedentary activities such as walking (LeMura & Maziekas, 2002). This shows how fighting obesity is more effective with support from family and school personnel. Similarly, reducing calorie intake by eating healthier foods including fruits and vegetables and avoiding foods high in sugar and fat has also been found to lower obesity.

Physical Education and Health in Schools

Parents and teachers both agree that physical education and proper nutrition is an important part of school. A poll of teachers and parents conducted by the Robert Wood Johnson Foundation (2003) made a number of key findings:

1. Teachers and parents overwhelmingly support converting the contents of vending machines to healthy foods and beverages.
2. Teachers and parents believe students should be required to take physical education every day at every grade level.
3. Teachers and parents connect physical activity with improved academic performance and behavior.
4. Teachers and parents are in favor of developing new “lifestyle” approaches to physical
education that include activities children can continue to do for the rest of their lives.

5. Teachers and parents agree that P.E. should not be cut for budgetary or academic reasons.

However, it is clear that parent and teachers expectations have not been met. According to the CDC (2000), 76% of schools in the U.S. in 2000 had vending machine with soft drinks, and daily P.E. is offered in every grade for the entire school year in only 8% of elementary schools, 6.4% of middle schools and 5.8% of high schools. P.E. is also getting pushed aside due to budgetary concerns and low academic performance as well, as the No Child Left Behind (NCLB) Act has put pressure on schools to meet academic standards through test scores, and not made P.E. a priority (Smith & Lounsbery, 2009).

The Effects of Yoga on Physical Health

Studies have shown that yoga can have positive effects on physical health, especially flexibility, balance, and relaxation. It also has positive effects on brain functioning and lowers stress, which can have a positive impact on obesity.

Physical Effects of Yoga

A study by Mark Anders for the American Council on Exercise (ACE) in 2005 studied the physical effects of yoga on 34 comparable women divided into two groups, one that participated in yoga classes and the other that did not. The results of the study showed that regular yoga practice did improve flexibility, muscle strength, endurance, and balance, but did not improve cardiovascular fitness (heart rate). The article describes yoga as an “excellent addition to any fitness routine,” primarily because most people lift weights and run, while yoga targets areas often overlooked such as flexibility, balance, and relaxation. Yoga also provides a more relaxing alternative to more competitive
sports that some students may dislike, can be practiced at home, and only requires a yoga mat and a basic knowledge of poses to practice.

A review of comparison studies between yoga and exercise by Ross and Thomas (2010) found that research indicates that yoga may be “as effective or better than exercise at improving a variety of health-related outcome measures.” The review states that yoga has an immediate “downregulating” effect on the hypothalamic-pituitary-adrenal (HPA) and sympathetic nervous system (SNS) axis’, which are systems that activate in response to stress and cause a number of physiological, behavioral, and psychological effects. With repeated stress over time these systems can lead to a number of diseases such as obesity, diabetes, autoimmune disorders, depression, substance abuse, and cardiovascular disease. This is important because there is evidence of a dose-response relationship between obesity and stress (Brunner, Chandola, & Marmot, 2007), which makes sense because there is also evidence that chronic stress leads to an increase in consumption of foods high in fat and sugar content which are direct causes of obesity (Oliver, Wardle, & Gibson, 2000). Because yoga produces a calming effect on stress, Ross and Thomas (2010) suggest that yoga “might be a particularly useful weapon in the arsenal against obesity,” but that more research is needed to determine this.

Other studies have shown some of positive physical effects that yoga can have, such as a study by Benavides and Caballer (2009) that showed that 14 predominately Hispanic children age 8-15 showed decreases in weight after a 12-week yoga program, with improvements in self-esteem as well. And a study by Scime and Cook-Cottone (2008) showed that a program aimed at preventing eating disorders in healthy fifth grade girls that included regular yoga classes demonstrated a significant decrease in overall
body dissatisfaction.

**Mental Health of Children and Adolescents**

*Adverse Childhood Experiences*

The mental health of students today is also a concern. Children and adolescents today also face a lot of stress, as a study conducted by Middlebrooks and Audage (2008) for the Centers for Disease Control that looked at “adverse childhood experiences” (ACE) and the effect it has on children and adolescents found that of the 17,337 children involved in the study the percentages of emotional, physical, and sexual abuse were 10.6%, 28.3%, and 20.7%, respectively, with females having higher rates of emotional and sexual abuse. Also, 14.8% of children experienced emotional neglect, 12.7% witnessed their mother treated violently, 26.9% experienced substance abuse in the household, and 23.3% had a parent separated or divorced. According to the study, these experiences can lead to “toxic stress” which can impair proper brain development and cognitive function, which can lead to lower academic achievement, as well as lower the body’s immune system, which can lead to health problems. The higher number of ACE a child faces the greater risk of depression, suicide attempts, substance abuse, risky behavior, and domestic violence.

*Suicide and Depression in Adolescents*

Suicide and depression are of particular concern for adolescents. According to Mental Health America (formerly the National Mental Health Association) close to 9% of adolescents in the United States and 8.8% in California had a major depressive episode between 2004 and 2005 (Mark, Shern, Bagalman, & Cao, 2007). According to the Centers for Disease Control (2007), after a generally declining rate in suicides among 10-
24 year olds in the U.S., the suicide rate increased by 8% between 2003-2004 to 7.32 out of 100,000 people, the highest increase in 15 years. Also according to the CDC (2007), about 18.7% of U.S. High School females and 10.3% of males have seriously considered suicide, while about 9.3% of females and 4.6% of males have actually attempted suicide.

Self Esteem in Adolescents

Of the numerous physical and emotion problems that children and adolescents face today, many can be linked to self-esteem. A study conducted on 6,346 adolescents in Iceland by Kristjánsson, Sigfúsdóttir, and Allegrante (2010) concluded that self-esteem is associated with academic achievement and vice-versa. The study indicated that lower body mass index (BMI), higher physical activity, and better diet correlated to higher academic achievement, while poorer diets and higher BMI were linked to lower self-esteem and academic achievement. Besides academic achievement, the National Association for Self-Esteem (NASE) cites research that links low self-esteem with crime and violence (Lopez, 1992), teenage pregnancy (Crockenberg & Soby, 1989), substance abuse (Miller 1998), and suicide (Bhatti, Derezotes, Kim, & Specht 1989).

Effects of Yoga on Mental Health

Some of the studies here look at the how yoga affects emotional well-being by looking at self-worth and appearance, mood and anxiety, GABA levels in the brain, and clinical depression in adults. The results for most of the studies are positive.

Emotional Well-Being (Self-Worth and Appearance)

Berger, Silver, and Stein (2009) evaluated emotional well-being of inner-city students in two different after-school programs in the Bronx. The yoga group consisted of 39 predominately Hispanic 4th and 5th graders that received yoga 1 hour per week for 3
months, while the non-yoga control group consisted of thirty-two 4th and 5th graders who did not receive yoga but did partake in other after-school activities. The primary focus of the study was to look at the students emotional well-being, more specifically self-worth and physical appearance, using Harter’s Global Self-Worth and Physical Appearance subscales, which are questionnaires the students filled out before and after. The secondary focus included an “emotional well-being assessment” that included physical health, negative and positive behaviors, focusing/relaxation, and balance. Lastly, students were given a subjective survey about their yoga experience that targeted behaviors directly (such as strength, balance, attention, ability to calm self, liking self, liking way body looks and feels, behavior in class, sleep) and indirectly (getting along with others, eating healthy foods, homework, tests, dealing with aches and pains, stress and worry).

The results show that there was no significant differences found between pre-and-post intervention for the primary focus of self-worth and appearance. One possible explanation for this is that the baseline scores were higher than the researchers initially thought, so there was little room for improvement. However, the researchers found a significant difference in the number of negative behaviors such as talking out in class and in the ability to balance between the yoga and control group. One explanation for the negative behaviors is that yoga “teaches nonviolent mechanisms as alternative coping strategies” and discourages aggression. The results from the subjective survey indicate that direct behaviors improved in every category, particularly for “ability to calm self” and “liking way body feels,” while indirect behaviors stayed the same for every category except “stress and worry.” The qualitative responses from the students were mainly
positive, with such responses as “yoga is very good for your body, it makes you stronger,” and “I’m behaving better in class.” The two negative responses were “yoga is boring” and “sometimes there are [sic] hard stuff.” Because of the success of the subjective survey, the researchers suggested that yoga may “play a role as a preventative and protective tool with regard to children’s emotional and physical well-being.” They acknowledge limitations such as small sample size, short duration, the non-identical after-school programs, and the differences in the baseline data between the two groups. However, they claim that yoga may benefit well-being in children, specifically with a decrease in negative behaviors, better balance, and better perceptions of themselves.

Mood and Anxiety

Studies done on the effects of yoga on psychological health were not surprisingly more difficult to measure, but yielded interesting results. A study by Netz and Lidor (2003) of 322 middle-aged women looked at the differences that mindful exercise (yoga and Feldenkreis) versus aerobic exercise (swimming and aerobic dance) had on mood. They used a computer class as a control group. After the classes, the participants were given and anxiety inventory, depressive symptom inventory, and a subjective well-being inventory. The authors cited previous studies that show a general improvement in mood during aerobic exercise, as well as previous studies that compared aerobic to mindful exercise, including yoga, and found that yoga and other mindful exercises had a greater improvement on mood than aerobic exercises. The results from this study are congruent with the previous studies, as yoga, Feldenkreis, and swimming all yielded lower anxiety and better mood than aerobic dance or computer participants. It was suggested that the absence of competition and repetitive rhythmical movements of swimming were possible
explanations for its positive effects. The authors acknowledged a limitation to the study being that all the participants, as in previous studies, were volunteers and chose what class they wanted which may have impacted their post-class mood, but this also reflected real life conditions.

_GABA Levels_

Streeter et al (2010) studied the effects of yoga on gamma-aminobutyric acid (GABA) levels, which are the main inhibitory (calming) neurotransmitters in the brain, and also affect epinephrine, norepinephrine, and dopamine levels. Healthy subjects were randomly assigned to yoga or a walking intervention for 1 hour, 3 times a week, for 12 weeks. The 19 yoga subjects reported greater improvement in mood and decrease in anxiety than the 15 subjects in the walking group. There were also positive correlations between the changes in mood and the thalamic GABA levels. The article stated that this is the first time that a “behavioral intervention (ie., yoga postures) has been associated with a positive correlation between acute increases in thalamic GABA levels and improvements in mood and anxiety scales.” It also mentions that “pharmacologic agents” such as antidepressants increase the activity of the GABA system and are prescribed to improve mood and decrease anxiety, and since yoga does the same thing it can be an effective alternative or supplement to people who are depressed or anxious.

_Clinical Depression_

Butler et al (2008) studied the effects of psychoeducation with meditation with yoga, group therapy with hypnosis, and psychoeducation alone on 46 participants diagnosed with long-term low to moderate depression (2 years of more of depression without a remission of two months or more). The psychoeducation included readings on
depression and a popular self-help book. After initial screening, a baseline inventory, and randomized division of group members, each group met weekly for about 3 months, and there was a 9-month follow-up. The yoga group learned and practiced hatha yoga, meditation, breathing techniques, and guided imagery. The meditation involved the practice of surrender, in which participants observe their thoughts and feelings and then let go of these thoughts and feelings using visualization and breathing. This practice is used in yoga as well.

The results showed a remission of “diagnostic caseness” (whether participants still met criteria for depression) in 10 of 13 (77%) meditation/yoga participants, 8 of 13 (62%) group therapy/hypnosis participants, and 5 of 14 (36%) control group participants. The article notes that the highest reported remission rate for depression is 73%, using a combination of psychotherapy and anti-depressants (Kocsis, 2000). The results also looked the occurrence of a major depressive episode (MDE) at the 9-month follow-up, and only 3 cases were reported for the control group. However, none of the three groups had any significant change in their depression level symptoms during the course of the study. The article mentioned limitations to the study such as a small sample size, difficulty in recruiting and retaining ideal participants, and differing levels of depression. The article does mention that the results showed promising “preliminary support” of yoga and meditation to improve the diagnostic status of depression and prevent further MDEs.

**Attention Deficit Hyperactivity Disorder**

*Defined*

Attention Deficit Hyperactivity Disorder (ADHD) is a neurobehavioral disorder which American Psychological Association (APA), *The Diagnostic and Statistical*
Manual of Mental Disorders (DSM-IV-TR, 2000) defines as a “persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequently displayed and more severe than is typically observed in individuals at a comparable level of development.”

In addition to inattention and hyperactivity symptoms, which are listed in detail, there need to be some symptoms present before age 7, some impairment from symptoms in two or more settings (school, home, etc), and significant impairment in social, academic, or occupational functioning in order to be diagnosed with ADHD. In addition there are three subtypes: predominantly inattentive, predominantly hyperactive/impulsive, and combined type.

Prevalence

Attention Deficit Hyperactivity Disorder (ADHD) is a well-known and common disorder effecting children today. According to the DSM-IV, it is prevalent in an estimated 3%-7% of school-age children in the United States, although these numbers varied depending on the community. According to Polanczyk, Horta, Biederman, and Yohde (2007) the worldwide rate of ADHD in children is between 8% and 12%, and certain sample sizes in the US can be as high as 16% (Froehlich et al., 2007). ADHD is often co-morbid with other disorders such as Oppositional Defiant Disorder, and many children with ADHD have behavioral problems including non-compliance and aggression, and low academic performance (Barkley, 1997). The prevalence of ADHD has risen in recent years, as the Centers for Disease Control (2010) reports that the rate of ADHD diagnoses’ reported by parents has increased 22% from 2003-2007, with boys having rates of ADHD 2.5 higher than girls.
**Treatment of ADHD**

The use of psychotropic, stimulant medication is the most common treatment of ADHD. The CDC (2010) reported that among children currently diagnosed with ADHD, 66% were taking medication, totaling almost 5% of all children age 4-17. Boys age 11-14 had the highest rates of current medication use. The level of severity of ADHD increased the likelihood of medication use, with 86% of children diagnosed with severe ADHD taking medication. During the 1990’s there was a dramatic increase in children taking ADHD medication, with a five-fold increase in the number of methylphenidate (Ritalin) prescriptions for children with ADHD from 1990-1999 (Gohdse, 1999). Despite the potential side effects, the use of medication has been found to improve symptoms of ADHD in about 80% of children (Barkley 1997), and is considered the most effective treatment for ADHD (Biederman & Faraone, 2005).

There are other forms of treatment for ADHD. Behavior therapy such as Cognitive Behavioral Therapy (CBT) is another approach often used by therapists, parents, and/or teachers in which positive or negative feedback is given for certain behaviors. The use of cognitive-behavior therapy has proven to be effective (Pelham, Wheeler & Chronis, 1998).

**Limitations to Treatment**

Some of the limitations to psychotropic medications include side effects such as insomnia, loss of appetite, dizziness, moodiness and tics (Vance & Luk, 2000), possible abuse and dependency (Goldman et al., 1998), the fact that 10%-20% of children are not responsive to medication (Greenhil et al. 1999), and that the potential long-term side effects of the medications are not known (National Institute of Mental Health, 1998). As
a result parents are seeking Complementary and Alternative Medicine (CAM) therapies (Chan, Rappaport, & Kemper, 2003), such as yoga and mindfulness.

Some of the limitations of behavioral therapies include the relatively large amount of time required to learn and implement the strategies, and the resources needed (Abramowitz & O’Leary 1991). There is also the problem that parents or teachers will fail to consistently implement behavioral strategies, and the fact that treatment is provided by external agents such as the teacher or parent, so children may not learn self-management and self-control strategies and will only respond to outside forces (Singh et al., 2009).

**Effects of Yoga on Adolescents with ADHD**

There have been several studies on the effects of yoga with children diagnosed with ADHD. Jensen and Kenny (2004) looked at 19 medicated ADHD boys age 8-13 who were exposed to weekly one hour yoga classes for 20 weeks. The yoga classes took place at a local hospital, and parents were encouraged to assist in daily practice sessions at home as well. A control group participated in activities focusing on cooperation. The results showed significant improvements pre-to-post test for the yoga group only in five of the Connors Parent Rating subscales including oppositional, Global Index Restless/Impulsive, Global Index Emotional Lability, Global Index Total, and ADHD Index. The article stated that the results suggested that “yoga had a role in stabilizing emotions and reducing oppositional behavior,” but that “more research to support the use of yoga for this population is warranted” because of limitations to the study including small sample size.

A study by Harrison, Manocha, and Rubia (2004) studied the effectiveness of
yoga meditation on children with ADHD. Children diagnosed with ADHD ages 8-12 and their parents participated in two 90-minute sessions using two separate meditations twice a week for 6 weeks, with parents also encouraged to lead their child in meditations at home as well. The results pre and post test showed a decrease in ADHD symptoms according to the Connors Rating Scale, as well as an increase in parent-child relationship quality. Children also reported less anxiety, better sleep patterns, better ability to concentrate, and less conflict. Parents reported feeling happier, less stressed, and better equipped to handle their child’s problems. This family-oriented approach not only provides treatment to children but also to their parents and showed that meditation and yoga can be beneficial to the family system.

A study by Peck, Bray, and Theodore (2005) evaluated the effect of a yoga videotape called “Yoga Fitness For Kids” shown in class to 1st-3rd graders with attention problems twice a week for three weeks. The study looked at time-on-task behavior in the yoga group versus the control group, and results showed large effect sizes of the yoga group, which ranged from 1.5 to 2.7 for the outcome of time-on-task behavior, but no change for the control group. Recently, Abadi, Madgaonkar, and Venkatesan (2008) evaluated the effects of a yoga program for a group of Iranian children age 9-12 diagnosed with ADHD. The children participated in a 45 minute yoga class twice a week for 8 weeks. The results showed a decrease in symptoms of ADHD on both the attentional and hyperactivity subscales.

**Summary**

Almost all the research on the effects of yoga described promising results for the use of yoga, but more research needs to be done. Many mention limitations such as small
sample size. There are also many different types of yoga, and many different ways to
evaluate the effectiveness. The benefits of yoga can be applied to any age, gender, race,
or class, and the benefits of exercise are not specific to any one group of people, but are
universal.
CHAPTER III-PROJECT AUDIENCE AND IMPLEMENTATION FACTORS

Introduction

The yoga program will be taught by a yoga instructor with experience working with children, with the help of one or two assistants. The yoga class will take place during Physical Education (PE) class in the school gym, since it is big enough to accommodate a large number of students. Every student will participate in a yoga class once a week for the duration of the school year.

Development of Project

This project grew out of my own personal involvement and practice of yoga and its impact of my own growth and development. It has helped a lot with my own anxiety and depression, and I want to give others the opportunity to benefit from yoga, especially children from lower socioeconomic status (SES) areas where there is not access to yoga. I wanted to show that everybody could benefit from yoga, as well as specific populations such as those with ADHD.

In the process of developing this project, I observed a yoga program called Headstand based in a middle school in the San Francisco Bay area (www.headstand.org). Every student in the school gets one hour of yoga per week, and one of the English teachers in the school just became the full-time yoga teacher after receiving training in yoga. The school funds half of the program and the other half is from private donations to pay the teacher’s salary. I observed a 5th grade and 8th grade class, and was amazed at the ability and focus of the students in doing yoga. This observation and communication with the program’s founder helped me develop my own program.
Intended Audience

The target population for this project is middle school students from a diverse lower socioeconomic background who do not have access to yoga. Yoga will be taught to a whole class of students to reach as many as possible. Given the high rate of students with ADHD, some of the students in the class are likely to have ADHD, which is another intended population of this project. Because of the nature of yoga, many other students will benefit as well such as those with stress, anxiety, depression, obesity, low self-esteem, etc. Anyone could potentially benefit from the program as long as they are physically able to do the poses.

Personal Qualifications

The qualifications of the person teaching the yoga class include being a licensed Marriage and Family Therapist (MFT) who has experience with yoga and children age 11-14. Ideally the teacher would have completed a yoga teacher training course, and have classroom experience as a teacher. The yoga teacher needs to know how to demonstrate the various poses and meditations, as well as be able to control and deal with disruptive behavior common in middle school students. It is also helpful to have one or more assistants to help the students with the poses and minimize behavioral distractions.

Environment and Equipment

The environment where the yoga class will take place will need to be in a quiet, warm, comfortable room where students feel that they can relax. Bright florescent lights should also be avoided in order to create relaxation and discourage competition among students. The only equipment needed is yoga mats for each student, which hopefully can be found through donation, as well as comfortable clothes worn by the students to allow
them to do the poses, such as clothes worn during physical education.

**Formative Evaluation**

I will get feedback for this project by creating a feedback form (see appendix B) that includes 10 statements, such as “this project will be helpful for this population of students,” with the option to circle *strongly agree, agree, disagree, strongly disagree*. Then there will be a space to write comments for strengths, limitations, and other comments. I will get feedback from three experts in different fields, one from a certified yoga instructor, one from a clinical MFT, and one from a school counselor with an MFT license. I will summarize their results in chapter 4.

**Project Outline**

The following is the outline for the yoga program, with six pre-designed classes. Each class has a theme or focus, and consists of 5 elements: a breathing exercise, yoga poses, yoga-related games, a guided meditation and resting pose, and a psychoeducational component that reinforces the theme of each class. Refer to the appendix A for the complete program.

**CLASS 1:** Introduction to Yoga and Gaining Awareness

- introduction

**Breathing Exercise:** sounding breath

**Poses:** basic poses including Sun Salutation A

**Games:** yogi benders

**Guided Meditation:** awareness exercise

**Psychoeducational Component:** Mindfulness activity throughout week
CLASS 2: Calm (For Anxiety)

**Breathing Exercise:** hissing snake breath

**Poses:** basic poses, warm-ups, and forward bends

**Games:** back to mountain

**Guided Meditation:** tim in: special place

**Psychoeducational Component:** going to special place when anxious throughout week

CLASS 3: Strengthen (For Self-Esteem)

**Breathing Exercise:** balloon breathing

**Poses:** stranding poses

**Games:** fly like a butterfly

**Guided Meditation:** breath and voice

**Psychoeducational Component:** List of strengths

CLASS 4: Focus (for ADHD)

**Breathing Exercise:** breath and voice

**Poses:** balance poses

**Games:** yogi benders

**Guided Meditation:** inner mountain

**Psychoeducational Component:** practice balance poses at home

CLASS 5: Cleanse (For Depression)

**Breathing Exercise:** breath with the earth
Poses: twists

Games: stop the rock game

Guided Meditation: animal friend

Psychoeducational Component: worry basket

CLASS 6: Energize (For Purpose)

Breathing Exercise: breath of fire

Poses: back bends

Games: energy balls

Guided Meditation: inner advisor

Psychoeducational Component: list of accomplishments and future goals
CHAPTER IV-RESULTS

The yoga program targets all students in a middle school setting, and is taught by a Marriage and Family Therapist with the help of one or two assistants during physical education once a week. The program is designed for prevention and the well-being of all students, as well as students with ADHD.

The program was evaluated by two professionals using Appendix Form B. The first evaluator is a certified yoga instructor, the second a Marriage and Family Therapist works in private practice. The first evaluator agreed or strongly agreed with all statements, and listed several strengths of the project. These included the games and the meditations. She also mentioned that she thought the program would be valuable for middle school students by “raising self-esteem, improving energy, and fostering health.” For limitations, she mentioned that some of the breathing exercises such as “breath of fire” are for more advanced practitioners and can make people light-headed if they are not used to it. She also recommended for the “breathing with the earth” exercise to start with 3 counts of breathing in and out, and then building up to 5 or 6. Under other comments, she recommended putting balance poses in every class because they are a great way to quiet a room. She also wrote that each pre-designed class has enough material for 2-3 classes, as guided meditations and breathing exercise always seem to take more time than expected. She mentions that the classes could be repeated with different variation.

The second evaluator agreed or strongly agreed with all statements except for two, which she disagreed, including “the project will help students become less obese” and “the project will help students become less depressed.” She wrote that there are
many issues involved with obesity, and that depression is often characterized by deeper issues. For strengths, she wrote that studies have shown that yoga and meditation are effective with children who have behavioral and mood disorders. She also wrote that the program was well-designed, clear, and descriptive, and particularly liked the breathing and mediation component being extended to outside life.

For limitations, she wrote that there might be problems with parents objecting, and that we’d need parent permission, although Appendix A did mention getting parent permission. Her other concern was behavioral issues, and suggested that certain students might not be appropriate for the program. Under other comments, she wrote if there might be a blurring of boundaries between an MFT and a yoga instructor. She suggested being “squeaky clean” with scope of practice as an MFT. She also mentioned that she could see the program applied to schools and institutions.

The feedback was helpful for me, and I have decided to make the program mandatory only for the first six classes, so that the students can at least try yoga, and then make the program optional for those students who do not want to participate in regular P.E. activities. I think this will make the classes more effective, and students can always choose to participate in future classes if they feel stressed out.
CHAPTER V-DISCUSSION

Summary

The yoga program is geared toward middle school students from a lower SES background that do not have access to yoga. Because of the nature of yoga, every participant who can physically participate will be able to benefit from the program, including students with stress, anxiety, depression, obesity, low self-esteem, etc. The program also targets students with Attention Deficit Hyperactivity Disorder (ADHD), and due to the high rate of students with ADHD, each class will inevitably have some students with ADHD.

The yoga program will ideally be taught by a Marriage and Family Therapist (MFT) who is also a yoga instructor and has experience working with children. The yoga class will take place during Physical Education (PE) class in the school gym, since it is big enough to accommodate a large number of students and does not disrupt class time and academic learning. The PE instructor will also help with any discipline issues that may arise and reinforce good behavior, and ideally the instructor will also have one or two assistants with knowledge of yoga to help children with poses. PE class is also ideal because during PE students wear their PE clothes, which allow for greater movement and comfort during the poses. Every student will participate in a yoga class once a week for the duration of the school year. The only materials needed for the classes are yoga mats, which will hopefully be provided by donations at no cost to the school or the students. Every student will also need a release form signed by a parent in order to participate to avoid any legal ramifications, such as in case of an injury. The first six classes will be mandatory, to give students a chance to try yoga, and from then on the class will be
optional and students will be free to choose yoga or their regular P.E. activities.

In Appendix A there are six pre-designed classes for the yoga instructor to follow. Each class has a unique theme and consists of five main parts: a 3-5 minute breathing exercise to begin class and focus on the breath, 30-35 minutes of yoga poses, 5-10 minutes of different yoga-related games, 5-10 minutes of a guided mediation followed by resting pose, or svasana, and 3-5 minutes of a quick psychoeducational component that reinforces the theme of each class.

**Recommendations for Implementation**

In order to implement the program, there will need to be an agreement with the school, and the school staff needs to be willing to help implement the program. The main issue will be getting parent consent and educating parents about the program and its potential benefits, as getting middle school students to get their parents’ signature can be difficult at times. A consent letter in both English and Spanish needs to be sent home with each student.

Funding the program is another concern, although the only two expenses are yoga mats and the cost to pay the instructors themselves. Given the financial difficulties of our public schools, the most likely source of funding is from private donations. Fortunately, yoga practitioners tend to be wealthy, and the program is for a good cause, so hopefully the necessary funds can be obtained. The reimbursement for the instructor and assistants needs to be determined as well. It is also necessary that the instructor be a licensed MFT, with a certified yoga teaching experience, and experience with children of middle school age in order to be able to handle the demands of the position.

**Recommendations for Future Research**
Given the lack of research on yoga with large sample size over an extended period of time, it would be beneficial to research the effects of the yoga program on the students. However this creates new problems, as parents need to give consent for this too, and researchers need to follow the rules of human subjects research, but it would be helpful to see how students who participated in the program compared to those who did not. Researchers could use pre and post tests to look at emotional effects such as levels of anxiety, self-esteem, and depression, at more concrete measurements such as grades or number of referrals for poor behavior, or look at yoga’s effects on attention and time on task. It is also important to get student feedback on the program to see what students liked and did not like, and how it helped them. It may be necessary to modify the program in order to increase effectiveness and best serve the students.

Conclusion

I would like to see this project be implemented in as many schools as possible, and even become a standard part of the physical education curriculum for the state, if possible. It would probably be a difficult thing to get yoga part of the state curriculum given some of the misconceptions about yoga and the cost of getting yoga teachers in schools, but given the stress that so many students face every day in school, I think it is important to have alternative outlets to release that stress that they may not get in their regular classes. I think yoga helps kids learn to live a healthier life style with less stress, and more awareness of their bodies and minds. I recognize that not everyone will like yoga and feel it benefits them, but I think that there are enough people who would greatly benefit from it that it is worth the effort to give them that option. I think the benefits outweigh the cost, but there needs to be further research on yoga to confirm this.
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APPENDIX A

The YogaTime Program

By Ethan Emerson

Introduction p. 32

Class 1-Introduction to Yoga and Gaining Awareness p. 34

Class 2-Calm (For Anxiety) p. 41

Class 3-Strengthen (For Self-Esteem) p. 45

Class 4-Focus (For ADHD) p. 49

Class 5-Cleanse (For Depression) p. 53

Class 6-Energize (For Purpose) p. 56
YogaTime is geared toward middle school students from a lower SES background that do not have access to yoga. Because of the nature of yoga, every participant will be able to benefit from the program, including students with stress, anxiety, depression, obesity, low self-esteem, etc. The program also targets students with Attention Deficit Hyperactivity Disorder (ADHD), and due to the high rate of students with ADHD, each class will inevitably have some students with ADHD.

The program is ideally taught by a Marriage and Family Therapist (MFT) who also is a yoga instructor and has experience working with children. The yoga class will take place during Physical Education (PE) class in the school gym, since it is big enough to accommodate a large number of students and does not disrupt class time and academic learning. The PE instructor will also help with any discipline issues that may arise and reinforce good behavior, and ideally the instructor will also have one or two assistants to help children with poses. PE class is also ideal because during PE students wear their PE clothes, which allow for greater movement and comfort during the poses. Every student will participate in a yoga class once a week for the duration of the school year. The only materials needed for the classes are yoga mats, which will hopefully be provided by donations at no cost to the school or the students. Each student will also need a release form signed by a parent in order to participate to avoid any legal ramifications, such as in case of an injury.

Before beginning the yoga classes, there are some important tips for the yoga instructor to know. The following comes from Yoga Ed. Mind Body Resources 2nd Edition (2008). It recommends that the instructor introduce himself or herself and tell a little about themselves including how yoga has helped them. It is also good to know a
little about the students, and to check in with their physical and emotional states before class. It is also important to be careful about touching students in order to make adjustments to poses as this may make some students feel uncomfortable. The instructor should always ask the student first if it is okay to touch them and let the student know that it is okay to say no. Explain that the adjustments are for safety reasons, and when possible try to adjust poses through words instead of touch. If school policy prohibits touching students, then the instructor must respect the rule and not touch students.

It is also important to help create a relaxed environment for yoga. Because the classes will probably be held in the school gym, it would be helpful to find an alternative more dimly lit light source to fluorescent lighting, as well as make sure the room is warm and clean, the mats are spread far enough apart to allow personal space, and there is some relaxing music. The students will also need to take off their shoes and socks as well.

Because the class is mandatory, some students may not enjoy it and may become disruptive. If the PE teacher has good class control, they should be able to help with any discipline issues that arise. One technique for a disruptive student is acknowledge that person for being a leader and to ask them to “assist” you during the class. Allow them to think they can be a role model for the class and that they are working with you to help others. This can be effective because it puts them in a position of power while giving them the attention they crave from the class. The assistant in the class can also deal with behavior problems, as well as help students who are having trouble with any poses and help keep the class running smoothly. It is also very important to remember to give praise and positive reinforcement to students who are behaving well and making an effort to do the poses. Lastly, it is helpful to clarify that yoga is not a religion as some think it
is, but can be viewed as a science, practice, or form of exercise.

The following section includes six pre-designed classes for the yoga instructor to follow. Each class has a unique theme and consists of five main parts: a 3-5 minute breathing exercise to begin class and focus on the breath, 30-35 minutes of yoga poses, 5-10 minutes of different yoga-related games, 5-10 minutes of a guided meditation followed by resting pose, or svasana, and 3-5 minutes of a quick psychoeducational component that reinforces the theme of each class.

**SIX PRE-DESIGNED YOGA CLASSES**

**CLASS 1-Introduction to Yoga and Gaining Awareness**

Introduction: the instructor introduces him or herself, the assistant, and briefly describes yoga and how it is beneficial. Remind the students that yoga is non-competitive; the focus is on the process, not the outcome, and every can go at their own pace. Invite the students to ask questions or share experiences with yoga if they’ve had any. It is also helpful to remind students to stay present and be aware of their thoughts, emotions, and their bodies during the practice. Focusing on the breath is the fastest and easiest way to become present in the body, and this where we’ll begin.

Breathing Exercises: (next page)
Sounding Breath

To learn how to do Sounding Breath, open your mouth and exhale as though you were fogging a mirror. Hear the breathy “HAA” sound. Keep your mouth open and make that same sound as you inhale. Practice breathing in and out with your mouth open, making the “HAA” sound for several rounds.

Now, close your mouth and breathe in and out fully and deeply, while making the same breathy sound. You will feel a slight constriction in the back of your throat. Close your eyes and cover your ears to focus on the sound. Enjoy it as though you were listening to the soothing sound of the ocean.

With hands resting in your lap and eyes closed, continue to breathe in this focused way for 1-2 minutes. Count to 5 or 6 as you inhale and the same as you exhale. Notice the flow of life-force going up and down your spine from its base at your tailbone, up to the crown of your head. Feel your energy expanding from your core out into every part and cell of your body.

Sounding Breath calms the nervous system, balances the emotions and warms and relaxes the body. Use this breathing technique anytime you want to center and align yourself. It is also recommended while doing yoga poses as a way to focus the mind on the inner experience of synchronizing breath and movement.

Poses: next we learn the basic yoga flow series, Sun Salutation A that has such poses as mountain, plank, updog, and downdog. However instead of updog, cobra is a better beginner pose. After that begin some warm up poses. The focus is not so much on doing the poses perfectly, but becoming aware of the body, mind, and breath.

(continues on following pages)
Warm-up Sequences

We recommend using these sequences not only to warm-up the spine, back, legs and shoulders but also to practice synchronizing breath and movement. Warm-ups enable students to develop an understanding of alignment in basic postures and build a foundation of kinesthetic awareness. We also suggest vocalizing (using vowel sounds or sound effects) with warm-ups to help students focus, integrate and connect to the breath.

1. Sitting Spinal Stretches in All Directions/ Twist/ Rock/ Down Dog/ Push-ups

   ![Diagram of exercises]

   Seated stretches  Twist  Rock  Down Dog  Push-ups

2. Rock/ Cat/ Two-legged Cat/ Down Dog/ Plank/ Push-up/ Cobra

   ![Diagram of exercises]

   Rock  Cat  Two-legged Cat  Down Dog  Plank/ Push-up  Cobra

3. Rag Doll/ Waterfall/ Crescent Moon/ Frog/ Down Dog/ Push-ups

   ![Diagram of exercises]

   Rag doll  Waterfall  Crescent Moon  Frog  Down Dog  Push-ups


   ![Diagram of exercises]

   Rock  Half Down Dog  Twisting Dog  Up Dog  Down Dog  Push-ups
Games: Next we play a game in order to keep things fun

**Yogi Benders**
This game gives kids a fun, physical way to take a break, move, laugh and integrate. It takes only a few minutes and can be used anytime to energize, release tension or focus excess energy.

Players spread out in the space or stand behind or next to their desks. The teacher or leader calls out the names of body parts and players make shapes touching only those body parts on the floor. The leader might call out: one foot and one thumb, one heel and one hand, two knees, just your tummy, your shoulders and your feet, etc. Players must find a way to have only those parts called out by the coach touch the floor. You can vary the game by using chairs or large exercise balls for the players to sit or lie on while playing this interesting game of shapes, balance and concentration. You can also try using the names of body parts in a second language for an added challenge.

Guided Meditation/Svasana: Lastly we have students do a guided meditation called Time-In Awareness, which is outlined on the next page and focuses on maintaining body and mind awareness, and then lay in Svasana (resting pose) for a several minutes of silence and rest.
Time-In: Awareness Exercise

Take a moment to put your attention inside yourself and describe the physical sensations in your body, free of any interpretation or judgment. If you start judging yourself, simply note that you are judging yourself and go back to the sensations. Some sensations may be very subtle. That’s fine – no sensation is any more important than any other right now. Even the feeling that nothing is going on is a feeling. Scan your body and pay attention to every part of it, every nook and cranny. Notice which parts dominate your attention, and which don’t seem to feel anything. Each time you become aware of some body sensation, breathe deeply and say to yourself, “Now I am aware that...” Alternately tense and relax your body parts, and describe your experience of them to yourself. Notice where it was easy to attend and where it was more difficult.

Take a few moments to sit and breathe deeply. As you inhale, focus on getting the breath all the way down into your belly. As you exhale, focus on letting go of as many muscle groups as you can so that the air can just fall out. Notice what emotions, sensations or feelings come up. As you notice these, take this as a cue that part of you wants more breath. Breathe more deeply into your tension, your sadness, your boredom, your fluttery feelings. Let your attention rest lightly on them, and simply describe the feel of them to yourself. Stay curious, and don’t try to find explanations or answers. It is as if you could greet each thing that arises in your attention, welcoming it with your breath.

Identify a part of your body that feels tense right now. Play with exaggerating the tension slightly. When you exaggerate it, what movement seems to want to develop? Let the movement happen, not trying to direct it. Simply follow the tension so that it is expressed exactly the way it is. What does this movement become? How have you been restricting yourself from this movement lately?

Identify a lax, collapsed, or mushy part of your body. First, try exaggerating its current quality. Does concentrating on it take you into some kind of body position? How might you characterize that position? For example, if you slump your chest more, do you feel like a hopelessly depressed person? Does this characterization fit how you have been operating in the world in some way? What results, both positive and negative, does this position lead to in your current

Lastly we do Svasana to rest and quiet the mind, which is outline on the following page.
Psychoeducational Component:

Mindfulness Practice—Have students pick one activity they do during the week and practice being mindful and aware of the feelings, sensations, thoughts, emotions, and experience of doing their activity.
CLASS 2-Calm (For Anxiety)

The second class focuses on learning to calm the mind and body, and includes Hissing Snake Breath, forward bends, a game called Back to Mountain, and a meditation called Time In: Special Place.

Breathing Exercise:

Hissing (Snake) Breath
Inhale deeply for 3-5 counts. Then, making an “S” or a hissing sound, breathe out very slowly, making the exhalation last as long as possible. When you have no more air left, close the mouth and inhale again through the nose. Repeat several times, exhaling slowly and steadily for as long as possible. This breath helps children slow down, focus, let go of tensions and return to a state of calm.

Poses: Review Sun Salutations and basic warm-up poses. Then add forward bends.

Forward bend calm the body and help reduce anxiety as they turn student’s attention to the body.
**Forward Bends:**
During the "tha" or passive/moon portion of the class, students will work on the floor doing twists, forward bends, inversions and restoratives. Forward bends open the lower back and legs while stretching the spine. They turn students inward and so help to calm. They also activate and help regulate the endocrine system. Remind students not to force or push during forward bends. Coach them to extend slowly and sensitively, letting gravity and smooth, steady breathing soften and open them.

- **Rock**

- **Rag Doll**

- **Frog**

- **Down Dog**

- **River**
Games:

Back to Mountain
This game lets children explore using finesse, rather than force, to practice correct alignment and posture. It's also great to help kids learn how to ground and stabilize themselves in a relaxed way.

Players stand at attention like soldiers – straight, tensed and rigid with feet together. The coach/teacher moves about the group gently nudging players causing them to fall off balance and change their position, or shift their feet in order to remain stiff.

Then the coach calls out, Be a mountain. Players should assume a mountain pose, with feet slightly apart and body tall and aligned but relaxed. Coach the players to breathe deeply and imagine that their feet are the base of the mountain – wide and strong, firmly planted in the earth. Their eyes can see great distances because they are so tall and majestic. Now the players, when nudged, will remain solidly placed.

When the group can Be a Mountain with success, play some energizing music and move or dance about the space. When the coach turns off the music, he/she yells, Be a Mountain, and the players relax into this position immediately. The coach again gently nudges players, testing that they do not move their feet or fall off balance, but remain grounded and strong. Each time the music is stopped, the coach should nudge several players until the entire group has had a turn to show how strong and balanced they are.

Guided Meditation/Svasana

Time-In: Special Place

Time to go inside. Get comfortable, close your eyes, breathe and rest into yourself. Take a big inhalation and let it out with a sigh or a sound. Good. One more time...AAHHHH. Now, just breathe normally, and settle in, as though you were falling asleep. Let go of thinking and just feel your breath. Let every exhalation take you into deeper and deeper relaxation. Let your body soften, let the world melt away. Release any thoughts or expectations and just BE....

In your heart and imagination, there's a special place where you go to be alone. It may be in a forest hidden among the trees, at the top of a mountain or in a cove on a beach. It could be indoors or out, above ground or below. It may be that cave at the core of the earth that your roots connect you to. You may need to climb a ladder or open a doorway to get there. Only you know where it is. Go there now.
Psychoeducational Component: Have students practice going to their special place in the previous meditation whenever they notice feelings of anxiety throughout the week.

Normalize feelings of anxiety and allow for acceptance, and remind students that deep breathing will calm them when they are anxious.
CLASS 3: Strengthen (For Self-Esteem)

This class focuses on creating and recognizing strength. It begins with balloon breathing, adds standing poses, uses the game Fly Like a Butterfly, and ends with a meditation called Breath and Voice.

Breathing Exercise:

**Balloon Breathing**

Take a breath as you normally do. What do you notice? Is it shallow or deep? Is it tight or fluid? Is it short and fast or long and slow? Most of us use only a small portion of our lung capacity. This robs us of some of the oxygen and energy we need to think and move. Balloon Breath requires abdominal breathing which automatically relaxes, calms and focuses us.

To do *Balloon Breath*, place your hands on your lower belly. When you inhale, breathe all the way down into your belly. Your belly will expand into your hands like a balloon. When you exhale, feel your abdomen getting smaller or deflating like a balloon. Imagine the color of your balloon, and continue balloon breathing with your eyes closed for 5 – 6 rounds. Each time that you breathe in, fill up your whole torso with air, so that even your ribs and chest expand, and then breathe out slowly, letting all the air out.

Poses: (next page)
Standing Poses:
During the "ha" or active/sun portion of the class, practice short standing pose sequences like a dance. Also work on holding balance poses and back bends. A flowing kind of practice expands concentration, focus, grace and stamina. It is designed to be strenuous and intended to deepen and extend students' strength, balance, flexibility, attention and sense of accomplishment. You can always include vocalizing as a way to help students stay focused and breathing as they move.

- Mountain

- Waterfall

- Blown Palm

- Standing Shark
Crescent Moon

Dragon / Twisting Dragon

Triangle

Warrior 2

Warrior 1

Extended Angle
Games:

**Fly Like a Butterfly**
This game is great for activating one’s center of strength and balance and integrating the right and left hemispheres of the brain for clearer thinking!

1. Stand with your feet apart, a little wider than your hips.  
2. Open your arms wide and bend your elbows.  
3. Slowly inhale and bring your right elbow and your left knee to touch in front of you. If touching knee with elbow is too difficult, use your hand. Then exhale slowly and return to standing. Repeat on the other side, inhale and touch left elbow (or hand) to right knee and return to standing. Keep movements smooth. Repeat on both sides 3 times.

4. Chant with movement  
   (optional depending upon the age of your students):  
   - Fly like a butterfly  
   - Sting like a bee  
   - I can balance  
   - Look at me  
   - Open like a flower  
   - Close like a lock  
   - Put your foot down  
   - It’s time to stop!

Guided Meditation/Svasana: (next page)
Psychoeducational Component: This class focused on strength in order to raise self-esteem. Have each student make a list of their strengths (physical, emotional, psychological, etc) and bring it to class next week. Also have each student ask their best friend to make of list of their strengths and show it to them.
CLASS 4- Focus (For ADHD)

This class focuses on getting student’s focused mentally. It begins with Breath and Voice, uses balance poses, uses the game Yogi Benders, and the meditation Inner Mountain.

Breathing Exercise:

**Breath and Voice**

Sit comfortably and allow your breathing to become slow and easy. Release any stress you have in your body. Bring your attention to your throat, tongue, the inside of your mouth, and the back of your neck. If you find any tension in these areas, release it by breathing into them. Allow your breath to open your throat, relax your tongue and soften your hard palate. Imagine that the area of your hard palate is widening across your face and that your jaw is relaxing. Let your vocal chords relax and let your breath pass down deep into your lower back, expanding your waist as you inhale.

Visualize the back of your neck, relaxing and opening as a beautiful blue light enters the back. This is the light of truth, and it helps you to tap into your own truth. It enters your throat to help ease your fears about expressing yourself. Visualize the light becoming more intense as you breathe into your throat. You now have the ability to say what you wish and to trust you will be heard and your feelings acknowledged.

Feel your seat on the floor, and let your spine lengthen. Inhale deeply and sigh out the breath, making a sound: AAH. Everyone breathe in together and then exhale: HAAAH. Feel the sound come from deep inside your belly. On the next breath, sigh out on the sound, OOOHHH (like the “o” in “no”) and then try a third time with the sound, MMMM. Then, on the next exhalation, sigh out all the sounds put together as one, HAAAH—OOOHHH— MMMM. It should sound like the word, **home**, stretched out. Notice how it feels in your body. Does it help you to feel more at home inside yourself? Remember, it doesn’t matter how you sound, it is how the sounds feel in your body.

Poses: (next page)
Balance Poses:
Balance poses are truly empowering for children, even though they are challenging. It is important to practice balance poses regularly so that students can develop a connection to their own core and vertical alignment. In requiring the integration of focus, alignment, strength and finesse, balance poses help extend coordination and attention span.

Tree

Airplane (Warrior 3)

Eagle

Dancer

Half-Moon
Games:

**Yogi Benders**
This game gives kids a fun, physical way to take a break, move, laugh and integrate. It takes only a few minutes and can be used anytime to energize, release tension or focus excess energy.

Players spread out in the space or stand behind or next to their desks. The teacher or leader calls out the names of body parts and players make shapes touching only those body parts on the floor. The leader might call out: one foot and one thumb, one heel and one hand, two knees, just your tummy, your shoulders and your feet, etc. Players must find a way to have only those parts called out by the coach touch the floor. You can vary the game by using chairs or large exercise balls for the players to sit or lie on while playing this interesting game of shapes, balance and concentration. You can also try using the names of body parts in a second language for an added challenge.

**Meditation/Svasana**

**Inner Mountain**
*Find a comfortable sitting position and gently close your eyes. Picture a mountain. Notice everything you can about this mountain; its shape and height, its colors and qualities. Notice how calm, strong, steady, wise it is....*  

Now imagine yourself as the mountain. Let yourself become strong, steady, solid and still. Whatever happens, bad weather or good, friendly hikers or not, you, the mountain, stay the same. Your foundation is rooted deep into the earth and you are unshakable.

Sit like a mountain. Trust in your foundation and the strength that comes from being able to be with whatever comes, knowing that it will pass. Breathe and be. Breathe and be. Let everything come and go. You notice the world change, but you do not change with it. Thoughts and feelings come and go, but you, the mountain, remain... seeing, knowing, being who you are: whole, perfect and magnificent.

It’s time to return your attention to the room. Take a big breath in and let it out with a sigh. Wiggle your fingers and toes, stretch and take another deep, energizing breath. Open your eyes and breathe normally now feeling strong, calm and focused.

**Psychoeducational Component:** This class focuses on focusing. Balancing poses help us focus because our mind has to concentrate on not falling. If you notice yourself becoming distracted, try doing one of the balancing poses, and then try to keep that concentration on whatever task you choose. Remind yourself to smile and not get frustrated if you fall over, as everyone makes mistakes and falls sometimes.
CLASS 5-Cleanse (For Depression)

This class focuses on releasing negative thoughts and emotions, and taking in more positive ones. It begins with the breathing exercise Breathing With The Earth, uses twists, features the Stop the Rock game, and uses the meditation Animal Friend.

Breathing Exercise:

Breathing Exercises

1. Breathing with the Earth
   Inhale for 4 or 5 counts. Imagine breathing in the Earth’s energy into your body; then exhale for 8 or 10 counts, offering your breath down to the Earth. As you inhale, take in good energy, love, support, and healing. As you exhale, let go of fear, pain, sadness and anger. Repeat 10 times.

Poses: (next page)
Twists:
Twists are cleansing and neutralizing. They clear the mind and body by purifying and by creating space. They activate blood flow through all of the organs, and squeeze out toxins. They are an effective way to unwind the back after backbends or forward bends, or to unwind the brain after a period of concentrated thought. It is important to remind kids to drink plenty of water after twisting.

Twisting Dragon

Sititng Twist

Lying Twist

Twisting Dog

Twisting Star
Games:

**Stop the Rock Game**
This balance/centering game requires some fun rhythmic music. All players spread out in a large space and stand with feet hip distance apart, and arms out like wings. When the coach begins the music, players must rock back and forth, shifting weight from one foot to another. When the music is stopped, players must stop rocking and hold whatever position they are in, even if a foot is off the floor, (which is very likely). If a player cannot hold his/her balance, and topples over, he/she should get to a standing position quietly and wait for the music to begin again.

Guided Meditation/Svasana:

**Animal Friend**
*Time to go inside.* Close your eyes, breathe and rest. As though you were falling asleep, let go of thinking and just feel your breath. When you are silent and still, I'll know you are ready to listen. I'll wait for everyone to settle, sigh and melt, releasing any wiggles, movement or tension. With every breath, you are more and more relaxed ...great.

Imagine you are exploring a beautiful forest. You feel safe and happy. The sun is shining, birds are singing and it smells like spring. As you follow a path through the trees, you hear a rustling in the bushes nearby. Then you hear a little giggle. As you turn, you see an animal. Notice what kind of animal – maybe it’s a squirrel or a rabbit, a turtle, dog, raccoon or a mountain lion. It’s watching you and seems curious. Invite it to come closer. It wants to be your friend. You tell it your name, and it tells you its name.

Your new animal friend and you sit together, and talk and cuddle. You know you can trust it to care about you no matter what. You might even want to tell it about something, a secret or a problem that is bothering you. It’s a wise animal who will always help, love and protect you. Do that now, and listen to what it tells you. When you’re finished, say goodbye and know that you can visit your animal friend anytime you wish.

It’s time to return your attention to the room now. So, take a big breath in and let it out with a sigh. Wiggle your fingers and toes, stretch and sit up slowly, feeling your body refreshed and energized. Open your eyes and rub your hands together for 7 counts, and then place them over your eyes, or your heart and belly, sealing in the love, light and energy you just created for yourselves.

Psychoeducational Component: This class focuses on cleansing and removing unwanted thoughts, worries, and emotions. Provide student’s with a pencil and paper and have them write out their fears and worries down, and as they leave the room have them crumple the paper up and throw it in the trash on the way out. Normalize feelings of
sadness allow for acceptance of feelings, and remind students to revisit their animal friend from the meditation and to remind themselves of their strengths.

**CLASS 6-Energize (For Purpose)**

This class is used to create energy in the students. It begins with Breath of Fire, uses back bends, uses the game Energy Balls, and the meditation called Inner Advisor.

**Breathing Exercise:**

2. **Breath of Fire (Energizing Breath)**
   Sit comfortably and put one hand on your belly just below your navel. Inhale softly. When you exhale, your belly pushes in. Quickly inhale softly again, then exhale with force, pushing the belly in. Do this 20 times, building up to 60 over time. You will feel this in your stomach muscles, and you will notice yourself getting warmer. This is your “fire center” and you are stoking it.

   This breath cultivates focus and strength. It is also a cleansing breath, so with each exhalation, imagine that you are letting go of anything that is bothering you or bogging you down.

Poses: (next page)
Back Bends:
Back bends are great energizers and are wonderful for the health and flexibility of the spine, hips, shoulders and organs. They can also be scary and/or bring up emotions which are trapped in the body. While encouraging students to meet the challenges of back bends, be sensitive to their issues and support them in going at their own pace. Be ready to adapt poses and use props so that kids are not struggling, grunting and groaning, but can ease back and maintain their breathing. Let students know that feelings might come up and surprise them. If suddenly they want to shout in anger or cry for no reason, explain that the release of past, stored emotions is one of the benefits of the pose. All they have to do is let the feeling flow through them. Remind them that then they won’t have to carry it around anymore!

Cobra

Lion / Up Dog

Shark

Bridge

Camel / Bow
Games:

Energy Balls

This game is an adaptation of a Chi Gong exercise that is both fun and challenging. Like patting your head and rubbing your tummy simultaneously, it requires complete body-mind concentration, and so is great for engaging focus.

Stand with feet under the hips, with knees slightly bent, and rub the hands together until you create some heat. Hold hands a little apart as though you were holding an imaginary ball of energy. Once you feel it, separate the hands. Bring one hand to shoulder level facing downwards, and the other hand hip level facing up. On the exhalation, lower the upper hand down while raising the lower hand up. Then, turn both hands over at the same time to face the opposite direction that they began with. Repeat the simultaneous raising and lowering of the hands and the flipping of the palms, several times.

Meditation/Svasana:
**Inner Advisor**

_Time to go inside._ Close your eyes, breathe and rest. As though you were falling asleep, let go of thinking and just feel your breath. When you are silent and still, I'll know you are ready to listen... I'll wait for everyone to settle... sigh and melt... releasing any wiggles, movement or tension ...with every breath, you are more and more relaxed ...great.

Imagine you have a guardian angel, fairy godmother or magic mentor to talk to. Someone who knows and loves you better than you do yourself; someone you can always trust, who cares about your feelings and who can help you with anything and everything.

We'll call this wise, loving, helpful friend your **Inner Advisor**. Let them appear to you in whatever form they choose: an animal or a person, a warm glowing light or someone that you know. You may simply feel their presence and not see anything. Accept what comes as long as it feels caring and safe.

Tell them what’s going on with you, and ask them any questions for which you are seeking clarity. Listen to or let in your Inner Advisor’s responses; they may come in words or pictures, or just as a feeling of sudden understanding. Consider what they have told you, and imagine dealing with your problem as they have suggested. How would it change things? Can you act on their advice? If not, why not? Discuss those considerations with your Inner Advisor now, until you feel you have a new perspective on your concern and have learned all you can for now.

When you feel complete, thank your Inner Advisor and say good-bye. Remember that you can meet with them any time that you desire by simply imagining them with you.

It’s time to return your attention to the room now. So, take a big breath in and let it out with a sigh. Wiggle your fingers and toes, stretch and sit up, feeling your body refreshed and energized. Open your eyes and rub your hands together for 7 counts, and then place them over your eyes or heart and belly sealing in the love, light and support you just created for yourselves.

**Psychoeducational Component:** This class focused on energy and release. Have students make a list of accomplishments that they are proud of; and goals and aspirations they would like to work on for the future.
APPENDIX B

EXPERT EVALUATION FORM

NAME:

TITLE:

1. This project will be helpful for this population of students.
   
   Strongly Agree    Agree    Disagree    Strongly Disagree

2. This project is appropriate for this population of students.
   
   Strongly Agree    Agree    Disagree    Strongly Disagree

3. This project is well-structured and clear.
   
   Strongly Agree    Agree    Disagree    Strongly Disagree

4. This project will help students become less obese.
   
   Strongly Agree    Agree    Disagree    Strongly Disagree

5. This project will help students become less anxious.
   
   Strongly Agree    Agree    Disagree    Strongly Disagree

6. This project will help students become less depressed.
   
   Strongly Agree    Agree    Disagree    Strongly Disagree

7. This project will raise students’ self esteem.
   
   Strongly Agree    Agree    Disagree    Strongly Disagree

8. This project will help students cope better with problems.
   
   Strongly Agree    Agree    Disagree    Strongly Disagree

9. This project will help students’ mental well-being
   
   Strongly Agree    Agree    Disagree    Strongly Disagree
10. **This project will help students’ physical well-being**

<table>
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<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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**STRENGTHS:**

**LIMITATIONS:**

**OTHER COMMENTS:**