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THE EFFICACY OF SCHOOL IMPLEMENTED COGNITIVE BEHAVIORAL THERAPY TO REDUCE ADOLESCENT ANXIETY

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THE EFFICACY OF SCHOOL IMPLEMENTED COGNITIVE BEHAVIORAL THERAPY
TO REDUCE ADOLESCENT ANXIETY

by

Madeline Nicole Michelsen

Submitted to the School of Honors Committee

in partial fulfillment

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2018

Dedication

I would like to dedicate this thesis to my mother for her unwavering throughout the years. I would like to thank her for the countless times she has told me to “study hard, get good grades, go to a good college, and get a good job.” Her patience and encouragement this year has been unmatched, and I am thankful for all she has inspired me to accomplish.

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Abstract

Adolescent anxiety is a growing problem which affects millions of children every year. There are a myriad of factors which produce adolescent anxiety such as excessive stress, adverse childhood experiences, and chemical imbalances amongst many other factors. An emerging therapy to treat mental health disorders, such as anxiety, is cognitive behavior therapy (CBT) which teaches participants how to correct maladaptive thought patterns to develop resilience. Cognitive behavior therapy has produced positive results for reducing symptoms of anxiety and other mental health disorders in both adolescents and adults. Due to its unparalleled student access, schools have the unique opportunity to develop school-based CBT to integrate into their mental health programs. In recent years, many school-based CBT programs have been developed and piloted around the world with favorable results. School implemented CBT has the ability to meet the needs of a diverse population of students to decrease adolescent anxiety, improve social learning, and encourage academic success. Through an expanded literature review, the efficacy of school implemented CBT will be explored.

KEY WORDS: cognitive behavior therapy (CBT), adolescent anxiety, FRIENDS Resilience, mental health, schools

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Chapter 1: Introduction

According to the American Psychological Association, “anxiety is an emotion characterized by feelings of tension, worried thoughts and physical changes.” Anxiety is the most common mental illness in the United States, affecting over 40 million adults. However, anxiety is not limited to adults. The Anxiety and Depression Association of America estimates that 1 out of 8 children struggles with anxiety. Despite the alarmingly high rates of adolescent anxiety, 80% of children with a diagnosable anxiety disorder do not seek help (G. Ginsberg, personal communication, 2017).

Typical adolescent worry is a normal part of the childhood experience, but clinical anxiety is often characterized by fear, nervousness, hindered social relationships, school absenteeism, and can greatly affect a student’s academic success (Miller, Short, Garland, & Clark, 2010). While there have been improvements in the health programs of public schools in recent years, many health programs are unable to fully provide treatment for students with increased anxiety. Students with severe anxiety are provided services as a result of Individuals with Disabilities Education Act (IDEA). Unfortunately, many students with anxiety are not identified, therefore accommodations are not formally provided.

While counseling and mental health centers are available for students with anxiety, researchers suggest that school-based treatments and programs can be effective for improving the wellbeing of students. Many schools have nurses, guidance counselors, and health classes, but few schools have a clear plan for helping students with anxiety. Recent studies have analyzed the effectiveness of programs that can operate as both a preventive and intervention for adolescent anxiety (Higgins & O’Sullivan, 2015).

Many studies have tested the use of Cognitive Behavior Therapy (CBT) for children with

anxiety in a clinically applied setting (Miller et al., 2010). Recent studies explored the possibility of implementing CBT in school-based programs. The Cognitive Behavioral Therapy Model is based on the idea that what we think (our cognition), how we feel (emotions), and how we act (behavior), all work together simultaneously (Legerstee, Garnefski, C Verhulst, & Utens, 2011). Negative interpretations and perceptions of situations can cause behavioral patterns that reinforce destructive thinking. By evaluating and identifying distorted thoughts, people with anxious tendencies can develop alternative ways of thinking and lessen psychological distress.

Cognitive Behavior Therapy has been in practice since its development in the mid 1960's by psychologist Beck. The insitial target group consisted of clients who struggled with anxiety and depression (Weinrach, 1988). Over the last few decades CBT has been utilized to treat eating disorders, panic disorders, phobias, and other psychological disorders (Miller et al., 2010). As a result of significant success with adults experiencing clinical anxiety and depression, CBT is now being applied to adolescents in non-conventional settings, such as schools.

In order to adjust to the demands of everyday life, people employ cognitive coping skills to process and respond to stimuli. Cognitive coping is a conscious way of managing the intake of emotionally arousing stimuli (Legerstee et al., 2011). According to the research of Piaget, a child's cognitive development is forming from birth to age 11 (Lefmann & Combs-Orme, 2013). Children are developing schemas, learning how to assimilate information, and modify or accommodate current schemas. Unfortunately, during these stages of development, children are also likely to develop maladaptive coping mechanisms when adjusting to life changes.

Childhood is an important developmental period in which coping develops rapidly (Legerstee et al., 2011). When left untreated, childhood anxiety and maladaptive coping mechanisms can lead to a lifetime of destructive thought patterns. Since the patterns established

in childhood are often good indicators of how adults will respond to negative life events which occur later in life, it is of the utmost importance that positive cognitive coping strategies be taught and developed in early childhood (Legerstee et al., 2011). In the following chapters, relevant literature will be reviewed for the purpose of further exploring the problem of adolescent anxiety and school implemented intervention programs to promote and develop resiliency in students.

Chapter 2: Background

Both globally, and in the United States, anxiety disorders are considered to be the most prevalent psychological disorder in adults, adolescents, and children (Newman, Llera, Erickson, Przeworski, & Castonguay, 2013). Between 2005 and 2008, the Department of Child and Adolescent Psychiatry of the Erasmus Medical Centre in the Netherlands explored the anxiety disorders and diagnoses of students ages 9 to 11. Of the 179 children interviewed, 131 students fit the criteria of having an anxiety diagnosis. Students were tested using the Cognitive Emotion Regulation Questionnaire (adolescent version) to assess the types of anxiety disorders present. Based on the results of the questionnaire, the most prevalent subtype of anxiety disorder was generalized anxiety disorder, which affected over 35% of students tested. General anxiety disorders are characterized by persistent and excessive worry about a number of different things (Newman et al., 2013). Additionally, findings point to generalized anxiety as often identified with co-morbid anxiety subtypes such as social phobia, separation anxiety, panic disorder, agoraphobia, post-traumatic stress disorder, and obsessive-compulsive disorder (Legerstee et al., 2011).

In recent years, clinical anxiety has been referred to as a “chemical imbalance” in the brain. Psychotherapy can be just as, if not more, effective than medication when treating anxiety and depression due to chemical imbalances. Psychologist Moss suggested that anxiety and depression can result from three different sources: ongoing situations, loss issues, and reactivation of negative memories (Criss, 2017). While some anxiety disorders may be purely based on chemical imbalances or cortex damage, it is far more likely that physical symptoms such as chronic pain, inability to participate in normal daily activities, and apathy are the signs of repressed negative emotions.

According to the US National Institute of Mental Health, the prevalence of adult anxiety disorders are 60% higher in women than they are in men, which is similar to the current increased prevalence of depression in women (Donner & Lowry, 2013). In Western civilizations, the lifetime prevalence of anxiety disorders is as high as 18% of the population, with the average onset age being as young as 11 years old. In addition to general anxiety being comorbid with other anxiety subtypes, anxiety is commonly comorbid with depression (Hirschfeld, 2001). Anxiety disorders which occur in childhood are often strong predictors of later and more depressive episodes since anxiety is comorbid with depression. In general, anxiety disorders are far more common in girls than they are in boys even in their adolescence. While no conclusive evidence has identified the exact reason that females are more likely to develop anxiety and emotional disorders, some psychologists believe that women may be more inherently vulnerable to stress (Donner & Lowry, 2013). Donner and Lowry (2013) not only discuss the prevalence due to gender differences, but also how a significant number of emotional disorders start in adolescence.

Recent research sought to find the correlation between social media use and mental health. Social media has been shown to greatly benefit adolescence by enhancing communication skills and developing a sense of connectedness through an online community (O’Keeffe & Clarke-Pearson, 2011). Though there are significant benefits associated with social media, recent studies have found negative psychosocial effects such as poor sleep quality, low self-esteem, and an increase in both anxiety and depression in adolescents (Woods & Scott, 2016). The growing social media industry has given people constant access to a digital community. Studies have found that nearly 24% of U.S. teens reported to be online “almost constantly (Barry, Sidoti, Briggs, Reiter, & Lindsay, 2017, p. 7).” Loneliness, maladaptive

social behaviors, and the fear of missing out, commonly referred to as “FoMO”, are simply a few of the potential implications of social media (Barry et al., 2017).

Many teens use social media as a way to co-ruminate with peers who have similar life experiences. Social media can also lead to hyperactivity and impulsivity as teens seek entertainment and engagement during mundane activities (Barry et al., 2017). Though research is still in progress on the correlations between social media and mental health, evidence shows social media has the potential to damage an adolescents’ ability to form healthy interpersonal relationships, increase anxiety and depression symptoms, lower self-esteem, and cause FoMO (Barry et al., 2017). In addition, social media may cause feelings of exclusion or victimization as cyberbullying becomes more prevalent amongst adolescents (Underwood & Ehrenreich, 2017). Social media is an integral part of many teen’s lives and the importance of developing healthy internet habits cannot be ignored. If not properly addressed, social media can cause maladaptive psychosocial development leading to greater anxiety in adolescents.

Adolescent anxiety disorders can greatly inhibit academic achievements. A longitudinal study conducted in Quebec, Canada, from 1986 to the year 2000, sought to identify the correlation between early elementary anxiety trajectories and high school noncompletion. Two-thousand students, 1,001 boys and 999 girls, were assessed. Each year, parents and educators completed behavioral questionnaires to assess the behavior of the participants. The graduation rate of the participants was also compared. The results of the study showed that students who did not complete high school during the timeframe of the study tended to be classified in the “at risk” range on their initial anxiety assessments their parents and educators completed from kindergarten to sixth grade. Based on the comparative graduation results, this study suggests that early identification and intervention of adolescent anxiety can contribute to higher academic

success rates for students and decrease the rate of high school non-completion (Duchesne, Vitaro, Larose, & Tremblay, 2008).

When discussing the issue of adolescent anxiety, it is important to differentiate between typical adolescent worry and clinical anxiety. Worry is a normal emotion experienced by children and adults alike. Clinical anxiety, defined as an emotion “characterized by feelings of tension, worried thoughts, and physical changes,” encompasses excessive worry (American Psychological Association, 2018). Weems (2000) sought to identify the difference between those who experienced typical worry and excessive worry which is classified as clinical anxiety. To identify the differences, he compared the results of anxiety assessments between children who were clinically referred for anxiety disorders and children in the community who were not. The study found the main areas of worry are very similar between the referred and non-referred children. The study assessed 14 broad areas which categorize worry: health, school, disasters, personal harm, future events, classmates, performance, money, family, war, appearances, little things, and other worries. The results indicated the most common areas of worry were health, school, disasters, family, and personal harm. When compared with the results of the community sample group of no referred children, finding indicated the areas of worry were the same as referred children (Weems, Silverman, & La Greca, 2000). The discussion prompted by this research was to find what specifically separates worry from anxiety. This suggests that while the majority of children may be worried about similar things, children with clinical anxiety experience more frequent and intense worry and worry in multiple areas, perhaps alluding to a definition for excessive worry. Worry may be a universal part of adolescence, but for some students, worry can turn into anxiety if not identified and treated at an early age.

Stress is an expected part of growing up, especially in the formative years of adolescence.

Stress is commonly understood as the response to the everyday demands of life (Garner & Shonkoff, 2012). While stress is a typical physical response and is universally experienced, certain types of stress can have permanent psychological damage. The American Academy of Pediatrics (2018) defines toxic stress as repetitive stress which can disrupt or damage neural connections. Toxic stress can be the result of trauma from periods of prolonged negative experiences (Garner & Shonkoff, 2012). Those who have experienced toxic stress are more susceptible to maladaptive coping mechanisms, substance abuse, an unhealthy lifestyle, poor stress management, physical disease, and/or a mental disorder (Franke, 2014). While toxic stress may be unavoidable for some students, schools do have the opportunity to provide support so students can learn how to develop healthy coping mechanisms and resilience. In addition to responding with support, schools can develop curriculum and programs which teach preventative measures to improve resilience before toxic stress occurs.

Perhaps the biggest obstacle in providing support for students with mental health disorders is the stigma that is commonly attached. The terminology of students who exhibit symptoms of mental health disorders is often the subject of much controversy. For example, students who display disruptive behaviors which are attributed to emotional or behavioral disorders (EBD) are protected under the Individuals with Disabilities Education Act (IDEA). An emotional or behavioral disorder can be defined as “a disability characterized by behavioral or emotional responses in school so different from appropriate age, culture, or ethnic norms that they adversely affect educational performance (Kauffman & Badar, 2013).” For students who are identified as EBD, or occasionally referred to as having an “emotional disturbance,” support and accommodations can be found through Exceptional Student Education services which are protected by the Individuals with Disabilities Education Act. According to IDEA, emotional

disturbances are long term conditions that can adversely affect a child's educational performance. The following characteristics are associated with emotional disturbances:

- (A) An inability to learn that cannot be explained by intellectual, sensory, or health factors.
- (B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
- (C) Inappropriate types of behavior or feelings under normal circumstances.
- (D) A general pervasive mood of unhappiness or depression.
- (E) A tendency to develop physical symptoms or fears associated with personal or school problems (Council for Children with Behavioral Disorders, 2018)

These behavior related accommodations can range from providing "cool off" areas, personalized goals, sensory accommodations, specialized seating arrangements, or accommodations in a self-contained classroom.

Bullock and Gable (2006) determined excessive worry and anxiety is considered to be an emotional behavioral disorder, but the lack of disruptive behavior often leaves children with a diagnosed anxiety disorder overlooked. Extreme cases of anxiety such as agoraphobia and panic disorders often have outward symptoms which not only affect the student's learning but the classroom environment as a whole (Bullock & Gable, 2006). Unfortunately, many students who do not fit into the "extremely anxious" category are not provided accommodations since many of their behaviors are internalized and are not considered disruptive. Anxious behaviors are not always recognizable in the classroom, therefore it is important to consider the implementation of mental health screening for those who may not be considered "disruptive," but do show signs of being unmotivated, passive, apathetic, or show signs of purposeful social isolation.

Despite the increasing prevalence of anxiety disorders, especially in children, many schools do not have a plan on how to address these issues. Psychologist, Dr. Slade found that only 50% of middle schools and high schools in the United States have any health counseling services available through the schools. In addition, only 11% of schools offer mental health counseling, physical examination, and substance abuse counseling onsite (Slade, 2003). Slade asserted that since the primary role of schools is to “remove barriers of student learning and to provide a safe and effective learning environment, schools have an important role to play in helping children with mental health problems gain access to appropriate mental health services (p. 390).” The evidence provided by Slade suggested that mental health education and services are not priorities in schools. Though there are definite limitations that contribute to the lack of services, such as insufficient funding, it is imperative that school systems evaluate the needs of their students in order to implement the appropriate services to best serve their student population.

When considering the implementation of onsite mental health services, it is important to consider what portion of the student population it will affect. Before any program or intervention can be put in place, screening may be the best way to identify students that would benefit most from the integration of mental health services in schools. To address the growing anxiety and depression rates in adolescents, a group of American psychologists proposed that mental health screening should be incorporated in public-school settings (Weist, Rubin, Moore, Adelsheim, & Wrobel, 2007). The goal of these mental health screenings is to identify students who present with signs of emotional or behavioral concerns. Once identified, the school could provide families the option to participate in treatment during school hours. The researchers listed the benefits of mental health screening implementation such as identifying students at risk

of suicide and other mental health disorders. The obstacles and challenges also discussed insufficient funding, inadequate training, and parent cooperation. The researchers' goal was to present schools a detailed plan to implement mental health screening and to help school personnel determine if screening is a plausible addition to their school's mental health program. Mental health screening has the potential to transform the mental health systems of schools (Wesit et al., 2007). With screening, students with elevated anxiety levels can be identified early and referred to appropriate service providers before their anxiety levels have a negative impact on their academic performance.

Public schools are in a unique position which can be used to the benefit of mental health education. According to the National Center for Education Statistics, over 50 million children are currently enrolled in schools, therefore one-fifth of the US population is found in one of the over 98,000 schools in the nation (National Center for Education Statistics, 2017). This gives schools unparalleled access to children and enables schools to address issues such as anxiety, which affect a student's academic, emotional, and behavioral growth (Stephan, Weist, Kataoka, Adelsheim, & Mills, 2007). Students who struggle with mental health disorders, such as anxiety and depression, are overlooked by school counseling services since the symptoms are less likely to cause disruptive behaviors than other emotional behavioral disorders. Access to mental health services in schools can have positive benefits beyond academic achievements, such as decreasing stigmas, treating comorbid disorders, and preventing suicide (Stephan et al, 2007).

A negative stigma is one of the greatest barriers for individuals who seek treatment for mental health disorders. It was reported that only 30% of individuals with a psychiatric disorder seek treatment, which only addresses those who have been identified and diagnosed (Stephan et al., 2007). With the appropriate training and community support, school based mental health

programs have the opportunity to reduce the stigma of mental health disorders for both students and stakeholders. Mental health screening offers the ability to identify students with depression and anxiety, therefore playing a role in the prevention of childhood suicide. Although screening is the first step in a school implemented mental health program, schools must also have a follow up plan for addressing the results of these screenings.

One method of screening has become increasingly popular in recent years. Adverse Childhood Experiences (ACEs) assessments are being integrated into schools (Finkelhor, 2017). While mental health screening assesses symptoms that reveal an underlying mental health disorder, ACEs assess negative childhood experiences which could cause destructive behaviors and could even be the cause of common mental health disorders such as anxiety and depression.

Adverse childhood experiences include, but are not limited to sexual, physical, and psychological abuse, neglect, and parental divorce or incarceration. Although not always immediately correlated, the experiences of these ACEs can lead to disruptive behavior, substance abuse, increased anxiety, and suicidal behavior. Choi, DiNitto, Marti, and Segal (2014) conducted an in-depth assessment to identify the correlation between ACEs and suicide attempts. Data was used from the 2012-2013 U.S. National Epidemiological Survey on Alcohol and Related Conditions to determine the correlation of ACEs with suicide attempts. The study examined how many participants attempted suicide, had a mental disorder, and/or substance use disorder, and the number of ACEs that occurred. As predicted, the study found a significant correlation between ACEs and lifetime suicide attempts. The study found that females had a higher suicide attempt rate and the most common ACE was sexual abuse. Based on the results of this study, the authors argued that early intervention and prevention of ACEs is critical to the mental health and well-being of females having experienced sexual abuse. The results indicate

“helping children who experience adversities do well in K-12 education and pursue higher education is likely to be a powerful antidote to suicidal behavior (Choi, DiNitto, Marti, & Segal, 2017).”

A documentary film released by writer and film director Redford (2015), entitled *Paper Tigers*, explored the role that ACEs play in destructive behaviors, truancy, self-harm, disengagement, and substance abuse. Lincoln Alternative High School in Walla Walla, Washington significantly increase their graduation rate, reduced suspensions, and improved the overall student behavior by implementing a trauma-informed care approach to discipline (Bath, 2008). A trauma informed care approach agrees with the beliefs of Maslow that before students can learn and achieve their highest potential, they must first have their lower level needs met, specifically safety needs (Kee-Smith, 2006). Students who have experienced trauma are often living in survival mode, meaning their immediate obstacles must be addressed before they can achieve their learning potential.

Another important concept explored in *Paper Tigers* is the role of mentorship when building resiliency. According to United States Army researchers, ACEs can lead to an adulthood full of physical and psychosocial maladies. Researchers found, with the help of supportive relationships, childhood traumas can lead to greater resilience. The soldiers that participated in this study attributed their resilience to a specific relationship in their lives (Arincorayan, Applewhite, Garrido, Cashio, & Bryant, 2017). The authors suggested meaningful relationships can help make meaningful differences. Resilience is a cognitive trait that allows students to face their anxiety in a healthy way. Meaningful relationships play a key role in creating resilience in both children and adults.

Meaningful relationships in a mentor-mentee capacity is an integral part of building

resiliency in students. As displayed in *Paper Tigers*, the student's perception of a caring teacher can make a difference. Student behavior and achievement is closely linked to student's perception of the teacher and other staff members of the school (Wentzel, 1998). Although mentorship does not have a direct correlation to anxiety reduction, mentorship and meaningful relationships can lead to resiliency development which promotes healthier stress management and higher achievement for students. Since common side effects of adolescent mental illness are lower academic achievement, disruptive behavior, difficulty concentrating, and restlessness, the development of resilience through student-teacher mentorship opportunities is a feasible option for addressing mental health issues in schools.

Lincoln Alternative High School was able to integrate ACEs screening into their curriculum; every student was acquainted with the concept of ACEs and had the opportunity to participate in anonymous ACEs screening with their class. The intentions of integrating ACEs screening in schools is to reduce stigmas, provide appropriate treatments and resources for students, and to determine potential risks for students with a history of ACEs. Similar to generic mental health screenings, the actions taken as a result of these assessments will cause significant change in schools. Once identified, students with a history of ACEs can either be referred to resources outside the school or referred to in school counseling services or treatment programs.

Although the screening of ACEs can successfully identify students who are at risk for mental health disorders, there is still much debate as to whether ACEs screening should be implemented as a part of mental health support in schools. Sociologist Finkelhor (2017) authored an article to raise concerns and to caution against the universal application of ACEs screening in schools. Finkelhor posed three research questions as follows: (a) What effective interventions can be implemented?, (b) What negative outcomes can occur?, and (c) What are we

screening for? His research suggested ACEs screening may not be the most effective way to prevent childhood maltreatment. While the author is not arguing that ACEs screening is useless, he is arguing that interventions and proper referrals must be in place before ACEs screening can be implemented (Finkelhor, 2017).

In summation, while adverse childhood experiences do not guarantee difficulties in regulating emotions, mental health disorders, or destructive behaviors, the assessment of ACEs allows educators and other stakeholders the opportunity to appropriately respond to student behaviors and assess risks. Once students have been identified, conversations are more appropriately focused on methods which promote resilience and implement healthy coping mechanisms to change the patterns of both destructive thought patterns and behaviors. With the help of school based mental health intervention, students can learn how to develop healthy coping mechanisms which can decrease the likelihood and severity of later mental health related behaviors.

Additional contributing factors of a child's mental health is the home environment and the parental perception of their child's mental health. The most commonly seen childhood health diagnoses are Attention Deficit Hyperactivity Disorder (ADHD), anxiety, Autism Spectrum Disorder, and emotional disturbances (Melchior & van der Waerden, 2016). The mental health characteristics of parents can greatly influence a child's propensity for developing a mental health disorder. Depression and anxiety among parents can develop serious consequences for children if not treated (Gupta & Ford-Jones, 2014). Parents with the potential for mental illness may not be able to identify the early symptoms of a mental health disorder, because they do not recognize their own symptoms, therefore are unable to recognize their illness. Mentally ill parents may also contribute to the development of a mental health disorder by encouraging

unhealthy coping mechanisms. Not only does growing up in a home with mental illness hinder social and emotional development, it can also hinder cognitive development resulting in lower intelligence quotient (IQ) scores and academic progress (Gupta & Ford-Jones, 2014).

While many mental health disorders are genetic or are caused by chemical imbalances, external factors can also largely contribute to mental health disorders. One prominent external factor is poverty. Approximately one in four children in America spend some or the entirety of their childhood in poverty (Evans & Cassells, 2014). Research showed children who spent more time in poverty exhibited earlier and more frequent signs of mental illness. Low-income families are disproportionately affected by mental health challenges which greatly affect their abilities to succeed in school. Since poverty often affects the family as a whole, children are likely to develop a learned helplessness which can be an underlying cause of depression.

Poverty, along with other ACEs, can greatly affect a child's view of themselves. Ayre (2016) indicated that nearly two-thirds of students who identify as being "not well off" said they felt embarrassed because they could not afford all aspects of school (p. 11). Ayre (2016) also suggested that growing up in poverty contributes to "feeling like a failure" and can lead to the lack of optimism about the future. Children growing up in the poorest of households are three times as likely to develop a mental illness than those growing up in the affluent households (Ayre, 2016). Households experiencing severe economic loss are more likely to report higher rates of depression, anxiety, and antisocial behaviors.

While some schools have programs to accommodate students in poverty, for the most part, schools cannot control a student's out of school/home environment. While ACEs, such as sexual abuse, poverty, and parental mental health can greatly affect a student's mental health, school-based programs can teach students how to be resilient. Developing healthy coping

mechanisms and forming positive relationships can increase students' self-efficacy and lead to greater school success. Schools may not be able to intervene in every child's life circumstance, but they can implement school-based programs to promote well-being, which can translate to developing resilience regardless of the challenges they may face.

Chapter 3: Cognitive Behavior Therapy

An increasingly popular method of both prevention and intervention for anxiety is through Cognitive Behavior Therapy. Cognitive Behavior(al) Therapy, is a strand of psychotherapy that is based on the cognitive model. The cognitive model is based on the concept that people's thoughts influence their emotions, and their emotions affect their behavior (Weinrach, 1988). Cognitive Behavioral Therapy "simply proposes that a person's thoughts mediate his or her emotions and behavioral responses to life circumstances and events, which in turn affects both short and long-term consequences for the individual (Joyce-Beaulieu, & Sulkowski, 2015, p. 42)." The goal of CBT is to modify dysfunctional emotions, behaviors, and thoughts. In a series of intervention sessions, participants will learn how to problem solve, find appropriate solutions, and challenge their patterns of dysfunctional thoughts and behaviors (Miller, Short, Garland, & Clark, 2010).

Cognitive Behavioral Therapy is a relatively new strand of psychotherapy in psychology. which is credited to the scholarship and research of Beck in the 1980s (Weinrach, 1988). His methods are based on the belief that maladaptive thought patterns can be controlled and consciously changed to create positive and adaptive thought patterns. Maladaptive thought patterns are considered to be negatively biased, rigid, inaccurate, and often play a role in anxiety and mood disorders (Boden et al., 2012). Some examples of maladaptive thoughts include rumination and worry. Using Cognitive Behavioral Therapy participants are taught how to correct maladaptive thought patterns through logical thought processing which can lead to lasting and beneficial changes to their emotions, thoughts, and behaviors.

A research study sought to assess the role of maladaptive social beliefs in the development of social anxiety disorders (Boden et al., 2012). Forty-seven individuals with a

previously diagnosed social anxiety disorder participated in this research. The self-concepts of participants were measured using the Maladaptive Interpersonal Belief Scale to establish a baseline anxiety score. The intervention was comprised of 16 one-hour weekly sessions in which participants were taught cognitive restructuring skills. Through cognitive restructuring, participants were able to reduce the theoretical causes of anxiety (Boden et al., 2012). At the end of the intervention period, the participants were reassessed, findings indicated maladaptive interpersonal beliefs were significantly reduced after their CBT treatment. The results of this research concluded that maladaptive interpersonal beliefs play a casual role in social anxiety disorders and can be reduced through the implementation of CBT (Boden et al., 2012).

Cognitive Behavioral Therapy can be implemented using various forms. These forms are generally focused on individual or group therapy. Several recent studies have tested unconventional uses of individual CBT in school settings with favorable results. Instead of traditional school-based therapy sessions, researchers in Russia created a correctional program named the “Magic Circle of Power,” which used a form of Mandala Art Therapy to lower anxiety levels in school age children (Kostyunina & Drozdikova-Zaripova, 2016). This research study assessed 79 fifth grade participants using a survey by Philips (1978), which measured eight factors of school anxiety. The survey included factors of childhood anxiety such as relationships, stress, fear of expectations, and fear of knowledge amongst other anxiety inducing situations. The researchers concluded 33% of the students assessed had abnormally high anxiety levels. The selected students then participated in Mandala Art Therapy which allowed students to spend 40 minutes to color and decorate a mandala in whatever manner they liked with little to no interaction with the counselor during the session. The therapy session promoted relaxation which led to increased concentration. The researchers found the Mandala Art Therapy lowered

anxiety levels by over 6% and was an effective method for preventing and treating mild anxiety disorders in children (Kostyunina & Drozdikova-Zaripova, 2016).

Art based Cognitive Behavior Therapy has been tested in the United States as well. Morris, a self-proclaimed eclectic therapist, studied two young adult females (Morris, 2014). One who suffered from Panic Disorders and Agoraphobia (PDA). The second female suffered from Generalized Anxiety Disorder (GAD). Morris conducted seven weekly intervention therapy sessions for both participants. In these sessions, Morris incorporated art therapy into Cognitive Behavior Therapy. The goal of this study was to measure whether or not art therapy, when combined with Cognitive Behavior Therapy, would decrease self-reported symptoms of PDA and GAD. Art therapy included participant drawings of feelings associated with their anxieties during psychoeducation, breathing retraining, cognitive reconstructing, interoceptive exposure, and imaginal exposure. After seven sessions, the participants reexamined their art work which is expressed their anxiety during the previous sessions and reflected on their progress. In both cases, the panic and anxiety lessened, although not to the degree as hoped for. These results suggested integrating general art into CBT could be a viable treatment method for decreasing anxiety (Morris, 2014).

Narrative Therapy is another creative use of individual CBT (Chhabra & Puar, 2016). Psychologists from New Dheli, India sought to test the efficacy of using Narrative Therapy to implement CBT. A nine year male case study participant with Panic Disorder and emerging Agoraphobia was studied in connection to Narrative Therapy. The participant was referred to the school counselor and underwent therapy during school. He was asked to create a narrative story of his life and to identify major conflicts. After a few sessions, the participant was able to challenge his original narrative and could re-author his story based on his life goals. The

participant regained control over his fears. After counseling sessions with his parents, teachers, and later with a few of his friends, the participant returned to the classroom to participate in most typical school activities as a result of decreasing his Agoraphobia using the Narrative Therapy.

Though not as commonly applied in public school settings, transdiagnostic group cognitive behavioral therapy has been successful in reducing a number of anxiety disorders. In this context, the term transdiagnostic refers to a treatment program that is not tailored to one specific type of anxiety (Norton, 2012). Transdiagnostic group therapy applies the same treatment methods to address multiple anxiety disorders such as phobias, post-traumatic stress disorder, and panic disorder. This type of CBT differs from traditional CBT because it focuses on the anxiety disorder as a whole, instead of any specific fear. The center of this treatment method is psychoeducation, by which participants can correct their misconceptions about why they are having anxiety. The transdiagnostic model developed by Norton (2012), breaks the treatment down into a 12 session program. According to the treatment manual, the main components of this treatment include education and group socialization, cognitive restructuring, exposure and response prevention, advance restructuring of core beliefs, and eventually, termination and relapse prevention (Norton, 2012).

Research indicates schools around the world are implementing group-based CBT programs for students (Creed, Waltman, Frankel, & Williston, 2016). Although not many of the programs are specifically designed to target and reduce anxiety, the results of the programs strongly suggest that the cognitive model can be adapted for school based programs (Creed et al., 2016). Two school-based CBT programs have produced successful results in reducing aggressive and disruptive behaviors. *Coping Power* and *Becoming a Man* are multisession correctional programs which have proven to reduce aggression, violent acts, and have

encouraged academic success in males, grades seventh through twelfth (Creed et al., 2016). Other programs such as *Coping Cat* and *ACTION* have found moderate success when addressing the issues of depression and anxiety in school age children (Creed et al., 2016). While these CBT programs have produced favorable results, there is still great question as to the feasibility and sustainability of these programs in public school settings.

In addition to the debate about the efficacy of school implemented CBT, there has also been discussion about whether or not parental involvement in CBT sessions is beneficial. A collective of European psychologists and researchers compiled a literature review to discuss why parental involvement has not enhanced outcomes of CBT for children with anxiety disorders (Breinholst, Esbjørn, Reinholdt-Dunne, & Stallard, 2012). The authors identified some potential reasons that the results of parent involvement were inconsistent. One reason is that parents of anxious children also have anxiety disorders and often model and can reinforce unhealthy anxious behaviors. Anxious children in the research study also perceived their parents as less accepting when compared to the perception of non-anxious children, respectively. Lastly, the authors asserted that it may be necessary for parents to have treatment for their own mental health before participating in CBT with their child and that there is simply not enough information to support the theory that parent involvement in CBT is beneficial (Breinholst, et al. 2012).

Although the verdict on the effectiveness of parental involvement has not been determined, research psychologists from Boston studied ways to increase parental involvement (Mian, Eisenhower, & Carter, 2015). In this research study, the researchers explored a variety of strategies to increase parental involvement in an anxiety prevention program. Mailed flyers, personalized letters, and phone calls were all used in attempt to gain parental support. Despite

their efforts, the researchers found less than one-fifth of parents who were contacted planned on attending and of the one-fifth only one-third of those who committed attended. According to Mian, Eisenhower, and Carter (2015), parental involvement may be beneficial in CBT programs, however the feasibility of parental involvement is yet again questionable.

As previously addressed, the feasibility of school-based CBT programs is still in question. Though not immune to the traditional obstacles faced by CBT programs, one Australian based CBT program has made significant strides in the application of CBT in school settings. In 1988, Barrett, an Australian psychologist launched a CBT program specifically tailored to treat and prevent anxiety and depression and promote resilience and overall wellbeing of school aged children (Friends Resilience, 2017). The program has garnered increased credibility over the past decade and has been endorsed by the World Health Organization as being an effective program in reducing anxiety as a universal and targeted intervention since 2004 (Friends Resilience, 2017).

The acronym of Barrett's (2017) program title stands for Feelings, Remember to Relax, Inner Helpful Thoughts, Explores Solutions and Coping Step Plans, Now Reward Yourself, Do It Every Day, and Smile. Over the course of 8-11 sessions, participants learn how to correct their destructive cognitive patterns in order to manage their anxiety or prevent future anxiety. The program aims to improve student's wellbeing by increasing resilience, self-confidence, self-efficacy, self-esteem, and social emotional skills. Due to the collaborative nature of the program, FRIENDS has been shown to improve peer relationships, and positive attitudes in a school setting. The skills taught using the FRIENDS program are founded on the following principles:

- Our body is our FRIEND and tells us when we are feeling worried by giving us clues so that we can choose to think helpful thoughts and practice thumbs up choices.

- We are FRIENDS to ourselves when we choose positive, helpful thoughts and thumbs up actions such as relaxation and mindfulness strategies
- It is important to learn to be our own FRIEND and reward ourselves when we try our best.
- It is important to think of our FRIENDS and values-based role models/support networks when we are making choices about our thumbs up actions (FRIENDS Resilience, 2017).

The program is broken down into four developmentally appropriate stages: Fun FRIENDS, FRIENDS for Life, My FRIENDS Youth, and Adult Resilience for Life (Friends Resilience, 2017). The first stage of FRIENDS is called Fun FRIENDS (ages 4-7). Barrett (2017), explains this stage in four skills in which students learn resilience through play based activities. The skills that students gain in this program include self-awareness of body clues, relaxation techniques, helping people, and relating to peers. This stage is structured into five sessions lasting 2-2.5 hours. The activities practiced in these group sessions encourage students to smile and make eye contact, develop empathy, speak with confidence, approach groups of peers to make friends, and identify negative thoughts to turn them into positive thoughts (Friends Resilience, 2017).

The next stage of FRIENDS is called FRIENDS for Life (ages 8-11). According to Barrett (2017), students in this age range are facing new challenges in both their home and school life. Without developing the proper coping mechanisms, students may face increased levels of anxiety which could cause problems later on in life. During this five-session course, students will learn to creatively solve problems, develop confidence and self-esteem, and transition smoothly into adolescence (Friends Resilience, 2017).

After FRIENDS for Life, students can participate in the next stage called My FRIENDS Youth, which is appropriate for students ages 12-15. Barrett (2017) suggested the challenges in this stage encompass difficulty maintaining friendships due to an increase in study loads, adolescent transitioning, and peer pressure. When students face these new challenges, the possibility of an increase of stress and anxiety occurs. The skills developed in this stage of the program include building positive relationships with peers, self-esteem, and positive verbal and nonverbal communication skills (Friends Resilience, 2017).

A unique component of the FRIENDS program is its curriculum for people ages 16 and above titled Adult Resilience. Barrett (2017) proposed this stage of the program is ideal for students who are finishing high school and who are about to enter a transitional phase of life, such as the transition from high school to adulthood. Through this program, students will be equipped to choose appropriate role models, set realistic goals, focus on the moment, and develop meaningful non-internet friendships. By acquiring and practicing these skills, students can become the best versions of themselves. The activities for this stage of the program are part of the activity book, *Strong Not Tough: Resilience Throughout Life*. In addition to the values and skills of the FRIENDS program, the Adult Resilience phase also encourages the values and skills of the acronym LIFE which is identified by the first letters of the following phrases: Learning to be mindful, Inner helpful thoughts, Feel like a resilient person, and Enjoy a healthy lifestyle (Friends Resilience, 2017).

Though this stage of the FRIENDS program applies perfectly to students ages 16-18, the skills learned through this program can help adults be successful in any stage of life. In addition to adults participating in this program to develop skills for themselves, the Adult Resilience program also teaches parents how to increase resilience and encourage their children using the

language and methods found in the FRIENDS program (Friends Resilience, 2017). When applied to the family as a whole, the FRIENDS program has the potential to not only cultivate well-being for children, but can also encourage positive interfamilial relationships as each family member seeks to better manage their feelings and learns how to cope with life's transitions (Friends Resilience, 2017).

The FRIENDS program was piloted in over 2,000 schools worldwide including Canada, Australia, Denmark, the United States, and over a dozen other countries, reaching over 8,000,000 students (Murphy, Abel, Hoover, Jelinek, & Faze, 2017). The FRIENDS Program offers trainings for teachers, administrators, health professionals, and anyone else who would like to facilitate the FRIENDS program in their community. "Accredited facilitators must be registered allied health professionals or education professionals (Friends Resilience, 2017)." Facilitation rights are granted for three years with renewal available. The program is designed as a series of ten-week, 70-minute sessions, but can be easily adapted to meet the needs of the school and the students. Unlike traditional individual CBT, FRIENDS is a curriculum-based group therapy approach which includes a series of workbooks for each age appropriate program. Since FRIENDS can serve as both a preventative and treatment program, it can be adapted to either an individual treatment to be facilitated by a health professional, or as an inclusive class/group therapy program facilitated by a teacher.

Irish researchers, Higgins and O'Sullivan (2015) reviewed current literature to determine the effectiveness of the FRIENDS program. In the evaluation of five research studies, the authors found the FRIENDS program does indeed have positive impacts on primary anxiety outcomes. The authors also suggested the need for more research in the areas of cost effectiveness, researcher bias, and whether the program is best facilitated by trained teachers or

mental health professionals (Higgins & O'Sullivan, 2015).

The results of a research study conducted in Iran aligned with the findings of Higgins and O'Sullivan (Moharreri & Yazdi, 2017). Behavioral science researchers Moharreri and Yazdi (2017), developed a clinical trial that tested 40 students ages 9-12, who were identified as having anxiety and or depression according to their results on the Revised Children's Manifest Anxiety and Children's Depression Inventory. These students participated in the FRIENDS for Life (ages 8-11) program for a series of eight sessions. The students were reassessed immediately after the program, and at a three month follow up using the Depression-Anxiety-Stress Scale (DASS). The results of this research study found the program led to decreased levels of anxiety in both the immediate and follow-up evaluation. Moharreri and Yazdi (2017) concluded the FRIENDS for Life program (ages 8-11) was both an effective prevention and intervention treatment for children who suffer from anxiety and depression.

The research of Mostert and Loxton (2008) sought to assess the effectiveness of the FRIENDS program in reducing anxiety symptoms amongst South African children. The prevalence of anxiety is fairly high in South Africa. The children assessed in this study were all from low socioeconomic backgrounds (Mostert & Loxton, 2008). A total of 46, 12-year old children participated in this study. Of the 46 participants, 25 were used in the intervention group and 21 were used in the control group. Each child's anxiety level was assessed before treatment using The Spence Children's Anxiety Scale (SCAS). After participating for ten weeks in the FRIENDS program, the students were reassessed using SCAS. Children were reassessed four times over a sixth month timeframe to measure the long-term effects. The results of the intervention group became more statistically significant over time in comparison with the students in the control group. The findings of this research study suggested the FRIENDS

program is effective for producing long term results in reducing anxiety in school age children (Mostert & Loxton, 2008). Based on follow-up data, the authors also asserted the skills learned in the FRIENDS program help children develop the necessary coping mechanism to deal effectively with anxiety on their own.

English psychologists Rodger and Dunsmuir (2015) conducted a research study to assess the efficacy of FRIENDS in reducing anxiety and promoting positive school adjustment for Irish students aged 12-13. After the students participated in the program, they were immediately reassessed, and then again in four months. The results of this research study found that FRIENDS is effective for both reducing anxiety and for promoting positive school adjustment (Rodgers & Dunsmuir, 2015). Separation anxiety was the subtype of anxiety which was most affected by the program. The paramount conclusion of this study is that “therapeutic interventions, originally designed to be conducted within clinical settings can be equally effective when delivered in educational settings by an appropriately trained and knowledgeable professional (Rodgers & Dunsmuir, 2015).”

While many research studies have assessed the efficacy of FRIENDS for reducing anxiety, a team of English researchers explored the academic effects of a universal implementation of FRIENDS (Skryabina, Taylor, & Stallard, 2016). The researcher based their determination of effectiveness on the student’s end of the year exam scores. The research study found that the program did decrease self-reported anxiety, but the study did not find any correlation to the student’s academic success (Skryabina, et al., 2016).

There are two approaches that can be taken when researching the implementation of FRIENDS. Due to the nature of the program, FRIENDS can be used as both a therapy and intervention program. Many clinical research studies used the program as an intervention

technique by selecting students who have already been diagnosed with an anxiety disorder. The results of these aforementioned research studies have found FRIENDS to be effective in reducing anxiety; some argue that FRIENDS would be most beneficial when implemented as a preventative program (Higgins & O'Sullivan, 2015; Moharreri & Yazdi, 2017; Mostert & Loxton, 2008; Rodgers & Dunsmuir, 2015). Mental health specialist Stallard (2010) argued the FRIENDS program would fit comfortably with other school based mental health programs in the United Kingdom. He argued this program is beneficial for all students, regardless of their level of anxiety, since they learn how to face their worries and how to acknowledge and accept personal differences between their peers in a way that supports other students (Stallard, 2010).

Despite much initial positive reception, some psychologists have doubts about the feasibility and effectiveness of the FRIENDS program. Maggin and Johnson (2014) published a meta-analytical review as an evaluation of the FRIENDS program for preventing anxiety in students. The authors evaluated 17 research studies in areas such as participants and study characteristics, methodology, procedures, and reliability. The review critiqued the methodology of the FRIENDS program and asserted that program length may need to be extended in order to achieve long lasting results (Maggin & Johnson, 2014). The main conclusion of this review was the FRIENDS program, “lacks the rigor to certify it as an evidence-based practice (Maggin & Johnson, 2014, p. 298).”

Three years after the Maggin and Johnson (2014) review, Barrett, Cooper, Stallard, Zeggio, and Gallegos-Guajardo (2017) responded to the review. In the response, the authors' greatest criticisms were the inclusion of low, middle, and high-risk students in a comparison study, the assumption the program is only used as a preventative program, and the absence of studies that fit their research criteria (Barrett et al, 2017). The authors suggested the need for

more research, but researchers need to provide more accurate evaluations and interpretations of the effects of the program which Barrett (2017) authored and founded.

The debate over the efficacy and feasibility of the FRIENDS program is sure to continue, but the criticism does not negate the positive results that have already been witnessed.

FRIENDS has been widely accepted as a viable treatment program for the reduction of adolescent anxiety throughout Australia and New Zealand (Fay, 2016). In 2013, the Ministry of Education in New Zealand piloted My Friends Youth as the universal mental health program for 9th grade students in 50 secondary schools across New Zealand. The program was implemented as part of the school's physical education curriculum. Using data analysis and multiple program participant interviews from 2013-2015, the researcher concluded the program improved resilience, built self-esteem, and reduced anxiety and depression among the participants as intended (Fay, 2016).

In addition, the students found the program to be positive and enjoyable which helps to take away the stigma of mental health treatment (Fay, 2016). By implementing the program to entire classes, students were also able to cultivate healthier social skills with their peers and taught them how to deal with conflict more appropriately along with several other social benefits. Two important foundational lessons that can be gleaned from the FRIENDS program are the value of experiential learning and peer learning (Fay, 2016). The social aspect of FRIENDS is what sets this program apart from other CBT programs and causes it to be effective in school settings. It is apparent FRIENDS teaches students how to cope with life and the value of positive relationships with peers and family members.

The aforementioned research indicated the results of using the FRIENDS program has been favorable worldwide. There are still many aspects of the program that need to be explored

before deciding if it is a feasible option for American public schools. While individual CBT is highly effective, group-based CBT is highly efficient. Group based CBT allows fees to be lower, which greatly increases the accessibility of treatment (Skryabina, et al., 2016) . Another hindrance of CBT that group-based therapy overcomes is the lack of trained professionals. By expanding the amount of clients, a single therapist can treat, less CBT trained therapists are needed to address the myriad of individual anxiety disorders. Another significant benefit of group-based CBT is the social learning aspect of the therapy (Skryabina, et al., 2016). Observing the success and progress of others often inspires and motivates clients to face their own fears. Though traditionally implemented in a therapist and client setting, these principals of psychoeducation and group based social learning can be a valuable tool when addressing anxiety in a school setting. Potential obstacles which could be faced by American school districts include, but are not limited to lack of funding, insufficient staffing, mental health stigmas, time restraints, and parental objections.

Chapter 4: Application

In New Zealand, the FRIENDS program is available to any public school that would like to utilize the program. The United States does not require or promote a single curriculum or program for mental health education like it does for academic standards (Adelman & Taylor, 2010). Despite not having a common framework for mental health education in the United States, individual states and districts are developing programs to address the mental health needs of their students.

One of the greatest hindrances to the creation of a mental health program or plan in schools is the lack of agreement of the definition of mental health (Adelman & Taylor, 2006). Many stakeholders are wary to support a school-wide implemented plan to address mental health because a school-wide plan is often seen with a negative connotation as a correctional program, rather than the school having the opportunity to promote self-efficacy, self-management, and overall well-being for students (Adelman & Taylor, 2006). While many recognize the need to address mental health for students within a school setting, the lack of agreement related to implementation becomes an obstacle. There are an abundance of advocates all competing for their cause and the same dwindling resources to fund each cause. Without a nationally implemented mental health agenda, school districts are left on their own to allocate funds for programming and staffing to meet the mental health needs of their students.

There are certainly advantages for differentiated mental health education between districts. As previously discussed, a correlation exists between an increased number of ACES, poor mental health, and decreased abilities to cope in a healthy manner. Similarly, research studies have found socioeconomic status impacts a child's mental health (Reiss, 2013). Evans (2016) found those belonging to a low socioeconomic group had four times the odds of reporting

poor mental health than those who belonged to a higher socioeconomic group. Similar to the correlation between ACES and resilience, economic stress associated with a low SES is often considered a social causation for mental illness (Arincorayan, Applewhite, Garrido, Cashio, & Bryant, 2017; Hudson, 2005). School districts with high violence rates, low social cohesion, and increased poverty, in addition to typical factors of race and gender, would significantly benefit from a school implemented mental health program. Though students from higher socioeconomic status are certainly not immune to poor mental health, it would be beneficial to districts as a whole if an increased mental health emphasis began in areas where a history of widespread mental health challenges occurred. In urban areas, it is reported that 64% of students are eligible for free and reduced lunch, indicating that these families are near or under the national poverty line (Hudley, 2013). Since poverty has been linked to negative self-perception and poor views of self-efficacy for students, urban areas would benefit from a school-wide mental health program that encourages resilience.

For these reasons, it is understandable why there is currently no single mental health program that is universally endorsed since the needs of students vastly differ from district to district, however mental health education is just as much prevention as it is treatment. Mental health education does more than address mental health disorders, it promotes healthy social and emotional development, and fosters overall well-being (Adelman & Taylor, 2006). From that perspective, mental health education is a relevant topic for every school, not just those with a greater number of at risk students regardless of geography and socioeconomic status.

According to the Collaborative for Academic, Social, and Emotional Learning (CASEL) foundation, all fifty states have integrated Social and Emotional Learning (SEL) goals in their preschool competencies (CASEL, 2018). At the end of 2017, it was reported that eight states

had fully integrated SEL competencies for grades K-12: Illinois, Kansas, Maine, Michigan, Nevada, New Jersey, Rhode Island, and West Virginia. Social and Emotional Learning goals include developing self-awareness, social-awareness, and responsible decision making and behaviors. The assessment of said competencies is still under debate. “Many educators and researchers are also exploring how best to assess these competencies (CASEL, 2018).” The goals of these SEL standards are similar to the goals of FRIENDS, which ultimately seek to teach students how to manage their emotions to promote positive relationships and make healthy and responsible decisions (CASEL, 2018).

One of the most significant factors to consider before implementing a school-based CBT programs such as FRIENDS, is the question of who would facilitate and implement the program. Among school psychologists, school nurses, school guidance counselors, and general education teachers, there are many choices for staff members who could implement these programs (Drake, et al., 2015; Skryabina, et al., 2016; Weeks, et al., 2017). While each category of staff member has an advantage and disadvantage for implementing a CBT program, they have a similar strength. Professionals have the students’ best interest in mind and serve as stakeholders. Each category of staff member has unique access to the students and has the potential to promote change.

The first category of professionals to consider are licensed school psychologists, commonly referred to as an Educational Psychologist (EP). Weeks, Hill, and Owen (2017) examined the effects of a CBT program implemented by EPs. The researchers chose to have an EP conduct the small group CBT due to their knowledge of child development, psychological training, and understanding of the school systems (Weeks, Hill, & Owen, 2017). The researchers focused less on the efficacy of CBT in schools, but rather on the role and importance of an EP to

facilitate the program through small group based approach.

The EP was vital in the process of identifying students with anxiety, however EPs do not always have access to students when compared to the access guidance counselors, nurses, and general education teachers have (Weeks, Hill, & Owen, 2017). Staff members expressed concerns about choosing students based on the typical adult perception of anxiety. An advantage of having EPs facilitate a CBT program is their ability to train staff members such as those listed in the above categories and to properly identify anxiety and other mental health disorders. Programs that utilize small group CBT, facilitated by an EP, would likely need to develop a process of student identification. Small group CBT places a greater responsibility on staff members to accurately identify students with mental health disorders in order to administer effective treatment.

School nurses also have the potential to be effective CBT facilitators for similar reasons as EPs. Due to their child development and general health knowledge, school nurses can make a positive public health impact when dealing with mental health disorders in schools (Drake, Stewart, Muggeo, & Ginsburg, 2015). School nurses have access students, parents, administrators, and outside mental health agencies. Similar to EPs, school nurses may lack the available time needed to implement a CBT program (Haugland et al., 2017). As well, school nurses have a wide range of responsibilities lending to the support of their assigned school. The vast range of responsibilities may hinder a school nurses' potential to facilitate such a specific type of intervention among a large group of students as opposed to a smaller group of students.

An additional option for a CBT facilitator is the school guidance counselors. While the role and job description of school guidance counselors may differ greatly from school to school, their purpose is similar; to support, guide, and counsel students. Promoting healthy mental

health habits is a significant part of encouraging student success (Herzig-Anderson, Colognori, Fox, Stewart, & Warner, 2012). School guidance counselors have access to student files, therefore observable changes may be noted, allowing for accurate student identification. The flexibility in individual schedules allows school counselors to be appropriate candidates for implementing CBT (Herzig-Anderson, et al., 2012).

When considering a school-based CBT program, general education teachers are also viable options for implementation. General education teachers present with both advantages and disadvantages to implementation. General education teachers have the greatest and generally most consistent access to students, especially at an elementary level. Due to their access, general education teachers would be able to anecdotally observe and identify change(s) in students as the program is implemented. Although general education teachers would be the least familiar with CBT, facilitator training is available. Another disadvantage to general education teacher implementation is time availability. Regardless of the implementation method, if CBT is implemented in a classroom setting by a general education teacher, the process would result in the loss of instructional time (Skryabina, et al., 2016). Teachers could apply the program as a small group or individual intervention, or to the whole class as a preventative program. Results of a recent research study found similar manualized CBT programs differed greatly based on the facilitator, yet the correlation between program success and the facilitator has been seldom investigated (Skryabina, Taylor, & Stallard, 2016).

The question of whether CBT is used as a preventative measure or treatment, largely affects the method of implementation. For example, when used in a clinical setting, CBT is traditionally considered a treatment program since it is implemented with patients who have a history of mental health disorders such as anxiety, depression, and/or panic disorder (Cully &

Teten, 2008). Through the use of CBT, participants learn how to change thoughts and behaviors in order to change distressing emotions. The assumption is identifying how situations, thoughts, and actions influence emotions will help correct dysfunctional behavior (Cully & Teten, 2008).

Though most often seen as a treatment, CBT is an effective preventative tool. Another example of an effective use of CBT is seen in the research associated with the FRIENDS program. Employing a class-wide, or school-wide CBT program, can help students cope with feelings, manage emotions, and develop problem solving skills (Skryabina, et al., 2016). The use of CBT as a preventative program has the propensity to target potentially destructive thought patterns which could lessen the likelihood of developing a depressive or anxiety disorder (Rasing, Creemers, Janssens, & Scholte, 2017). Despite CBT being most commonly used to decrease the symptoms of mental health disorders, CBT can develop skills which are useful for increases emotional wellness for both those with a mental illness and those without a mental illness. Cognitive behavior therapy develops cognitive awareness which can help people cope with the demands of everyday life, irrespective of whether there is a diagnosed mental health disorder.

Before determining which of the varied methods of CBT will be implemented, the participants of the program need to be established. Aside from the varied facilitators, there are several approaches to CBT implementation which include different populations of students. There are four main groups of students who should be considered to participate in an CBT program. These groups of students include those who have been identified as having high ACES (defined as adverse childhood experiences), those with an emotional behavioral disorder, those who have been referred by a parent or teacher, or those using a universal intervention with all students in a specified classroom or the entire school population.

The following is a discussion of the potential participants and characteristics which make participants the best candidates for school implemented CBT. Students who have been identified as having a high number of ACES are more likely to develop a mental health disorder. The everyday demands of life are often far greater for students who have experienced ACES such as abuse, poverty, divorce, and other events which can affect a student's well-being (Choi, et al., 2017). Though these students are appropriate candidates for CBT and would benefit from learning how to manage their emotions, the identification process of these students could be an obstacle. A school-wide screening process could be the most effective in order for students to be properly identified (Finkelhor, 2017). If a school-wide screening is not done, students could also be referred for screening on an individual basis by staff members. Once students are identified, they would participate in a small group or individual intervention with the trained facilitator.

Students who have EBD would also benefit from CBT. Though EBD students often have needs that could extend beyond the capabilities of a school-based CBT program, a school-based CBT program could help students manage the thoughts leading to their behaviors. Students who have been diagnosed with EBD have provisions in their Individual Education Plan (IEP). Individual CBT intervention is an appropriate accommodation for students with EBD, providing facilitators have been trained to administer the intervention (Kauffman & Badar, 2013). Students with EBD usually display characteristics that impede the student's ability to succeed in an academic setting. Due to the potential severity of these symptoms, students with EBD may need extra support beyond the limitations of CBT. Since EBD covers a wide variety of emotional disorders, not all students with EBD would benefit from CBT. Anxiety and depression are often the disorders that benefit the most from CBT (Norton, 2012). While CBT has the potential to help students with EBD identify how their thoughts lead to their emotions and behaviors, CBT

also has the potential to help a wider range of students than just those who have been diagnosed with EBD.

Another way to decide which students should participate in a CBT program is based on referrals. Whether a written referral is based on the data results of the screening process or an individual referral is based on observation, students who have been identified as having trouble managing their emotions, or those who have been previously diagnosed as having a mental health disorder could benefit from a CBT program (Weist, et al., 2007). Parents are able to observe the characteristics of students outside the classroom, therefore their recommendation holds significant weight. Many parents have identified excessive worry or destructive behaviors in their children from a young age and may have already had them diagnosed by a professional (Weist, et al., 2007). By providing school-based CBT implemented with an EP or nurse, parents can choose to have their children participate in the school based program. In addition to parent referrals, general education teachers who observed noticeable changes in their students could also recommend students for screening or potential intervention.

Lastly, an option for school-based CBT implementation is for the program to be employed class-wide or school-wide. As previously discussed, CBT has been proven to be beneficial as both a treatment and a preventative plan (Skryabina, et al., 2016). The FRIENDS program has identified three categories of intervention: universal, selected, and targeted. Universal intervention is directed at all students regardless of an at-risk identification or the display of symptoms of a mental health disorder. Selected intervention focuses on those who are not displaying symptoms but who are considered to be at risk. Lastly, targeted interventions focus on those who are already displaying symptoms of a developing mental health disorder (Skryabina, et al., 2016). Each type of intervention has advantages, but universal intervention or

prevention has specific social advantages in the classroom. Through universal intervention or prevention, schools can reach a diverse population of students, reduce stigmas, and encourage peer support as CBT methods are used universally (Skryabina, et al., 2016).

The questions of who should facilitate CBT and who should participate are important things to consider before implementing a school-based CBT program. Another factor that needs to be addressed is the financial requirements of the program. Since CBT programs can range in application, there is no standard cost. Depending on how the CBT is used, the cost could significantly differ from school to school. For a program such as FRIENDS that involves a manualized treatment curriculum, licensing, and training for facilitators, the costs could potentially outweigh the benefit to the school (Higgins & O'Sullivan, 2015). For programs that operate on an individual basis the cost would be significantly less since there would only be one trained professional and less materials used.

Though the cost for a selective or targeted intervention would be less, the program would also reach less students. It is imperative to consider both the needs of a school and the resources available, which include funding. If a universal CBT program, like FRIENDS, were to be implemented school-wide, each teacher would need to attend multiple days of training resulting in licensure, purchase the activity work books and the materials needed accommodate every student (Friends Resilience, 2017). Depending on the size of the school, these costs could quickly add up and may not be considered as a viable option. Districts which are already struggling to allocate resources effectively might have the most difficulty implementing a program of this nature.

Federal funding for expanded school mental health is often limited to treatment services of diagnosable mental health disorders. Programs that are considered to be preventative, are

often supported with grant funding (Cammack, 2013). Mental health decisions and funding decisions are made at the state and district level. Some organizations such as The Duke Endowment were created to assist schools with setting up mental health centers. Generally, it is the responsibility of the district to coordinate funding for their intended programs (Cammack, 2013).

While economic research has supported the importance of education for academic skills, research is now recognizing the economic value of building positive social and emotional behaviors amongst students. Like any program or educational decision, an opportunity cost analysis would be necessary to evaluate the costs versus the benefits before implementation is considered (Cammack, 2013). Funding is a potential challenge in urban areas already lacking resources and struggling to maintain the physical environment of the school. Cognitive behavior therapy is not the most cost-effective plan for an expanded mental health programs due to the specific facilitator and curriculum requirements. The growing evidence of the efficacy of CBT programs such FRIENDS, support its use in schools.

As previously discussed, parental involvement can greatly affect the results of CBT. Though parental involvement in clinical settings has not produced conclusive results of being beneficial. A research study sought to discover the correlation between parental involvement and child success in a CBT program (Pereira, et al., 2016). The sample consisted of 50 Portuguese students ages 8-12 who had been screened and were identified as having an anxiety disorder or phobia. The students participated in an 11-week FRIENDS for Life intervention which involved two sessions that conducted conjointly with the student's parents. After each session, the parents received a handout summarizing the student's progress and with the assigned homework activities which would help the students carry over their learning into real world

application (Pereira, et al., 2016).

The clinical psychologists assigned to the interventions completed the Parental Involvement in Therapy Scale (PITS) to measure the communication levels between the psychologists and parents. Results found the majority of parents attended the parent sessions and communicated well with the psychologists. While many of the parents were present and supportive during the sessions, the parental involvement and support during the student's out-sessions, which are characterized by homework and exposure exercises, were quite low (Pereira et al., 2016).

The researchers asserted there are several reasons for the lack of parental involvement, the first being the lack of understanding. Since these students were screened from the general population of schools, parents may not have taken the anxiety diagnosis seriously. Another common reason is the lack of time and parent busyness. Lastly, the lack of parental involvement could be the result of the parents accommodating their child's avoidance behavior. Parents may have had a difficult time encouraging their children to face the challenging situations that could elicit negative emotions (Pereira, et al., 2016). The results of this study found parental involvement had a positive impact on the efficacy of CBT for students who were diagnosed with anxiety disorders. Since children are more dependent on their parents to complete the out-session therapy activities, the lack of parental involvement could compromise the efficacy of the CBT program (Pereira, et al., 2016).

While psychotherapy like CBT, play therapy, and art therapy have proven to be successful for treating anxious children, many therapists also used pharmacological therapy. Antipsychotic medications include antidepressants and selective serotonin reuptake inhibitors (SSRIs). Since children are rarely allowed to make their own treatment decisions, the parental

perception of treatments is an integral part of the intervention. Research found the parent's perceived benefits of the treatment strongly correlates with the continued use of treatment (Horwitz, 2012). Parents perceived the treatment to be beneficial when their child's functioning was higher and with fewer symptoms. It is imperative that parents have proper understanding of their child's treatment in order to make decisions that will have lasting benefits for their children.

When implementing the FRIENDS program, parental support is vital. A main tenet of the FRIENDS program is the application of learned techniques into everyday activities. The intervention takes place through direct instruction with a facilitator and activities through the FRIENDS activity books. In addition to the work done in session with the facilitator, much of the intervention takes place out of session with the homework and activities assigned. Due to the ages of the students participating in the program, they will need extra support in order to be held accountable with their out-session activities. While the facilitator led intervention is the most effective part of the program, the out-session activities allow students to practice their coping skills when dealing with the everyday demands of life (Higgins & O'Sullivan, 2015). If the intervention is to be effective, parental involvement is needed to monitor student progress, and champion their successes.

Parents can also participate in the FRIENDS Resilience program to either develop their own coping skills or to support the progress of their children in the program. Regardless of the CBT method that is implemented, teachers and parents can integrate CBT principles into their instruction or support (Friends Resilience, 2017). The FRIENDS program has developed curriculum, videos, games, and mobile applications to help engage younger participants. These activities help children identify which thoughts and emotions produce which behavior. Using a combination of psychotherapy, medication, and at home social support, parents can contribute to

the mental well-being of their child. Even if no therapy or intervention takes place, the foundation of CBT is a useful philosophy for parents to teach their children. If children learn from a young age by managing their thoughts, they can replace their destructive emotions and behaviors, they are more likely to become resilient and able to adapt to situations in life.

Chapter 5: Conclusion

Anxiety is a growing issue that affects people regardless of age. The presence of childhood anxiety can greatly hinder student success in both their academics and their ability to positively cope with life circumstances. There are many contributing factors for childhood anxiety including adverse childhood experiences, excessive stress, chemical imbalances, and an abundance of other factors (Criss, 2017; Finkelhor, 2017). With the rise of adolescent technology use, it is imperative adolescents develop healthy internet and social media habits which encourage healthy social and emotional adjustment (Woods & Scott, 2016). Meaningful relationships can play a vital role in helping students implement healthy coping mechanisms as they develop resilience (Arincorayan, et al., 2017).

Due to the unparalleled access to students that school staff members possess, school based implementation offers the ability to implement mental health programs which provide students with meaningful relationships, to teach students healthy coping mechanism, and to encourage resilience. Programs can be implemented as a treatment or as a preventive tool. A variety of strategies can be used to identify students who need additional help managing their emotions and developing resiliency. Generic screenings take place to assess a student's mental health or screening for trauma and adverse childhood experiences can be done in hope of preventing future mental health disorders (Finkelhor, 2017).

Although there is not a generalized treatment for anxiety, CBT has shown promising results in both treating and preventing anxiety in clinical settings. Since students spend upwards of seven hours a day in school, school implemented CBT is a practical option for anxiety intervention (Kilbourne et al., 2018). There are many different forms of CBT and implementation methods are still being developed to meet student diversity. A program that has

been specifically tailored for school implementation is the FRIENDS Resilience Program developed by Dr. Barrett. FRIENDS has already produced effective results in Australia, New Zealand, and England (Friends Resilience, 2017). No widespread studies have been conducted in America, however the methods of FRIENDS could be integrated into public schools. Ideally, FRIENDS should be implemented as school wide, universal intervention. But the lack of existing mental health funding, staffing, and curriculum in public schools makes universal implementation a challenge.

A possible solution is the modification and adaption of FRIENDS for the use of individual districts and schools. FRIENDS can be applied using educational psychologists, nurses, guidance counselors, and general education teachers (Drake, et al., 2015; Skryabina, et al., 2016; Weeks, et al., 2017). The program can also be used for individual, small group, or whole group intervention. The student participant groups can also be modified based on the needs of the student population. The FRIENDS program encourages social learning in addition to developing healthy thought patterns. The implementation of FRIENDS, with the help of parental involvement, can greatly enhance interfamilial relationships as well (Friends Resilience, 2017). Though FRIENDS teaches valuable skills that can be useful for all students such as regulating feelings and correcting destructive thought patterns, the program may be most beneficial for students who are considered at risk due to their life circumstances or environment (Evans & Cassells, 2014).

Regardless of a student's individual background, all students can benefit from a school based mental health program to improve their cognitive coping abilities when adjusting to the demands of everyday life. Adolescence can be a challenging time for many students, and without proper social adjustment, anxiety and other mental health disorders can develop.

Though students may never have complete control over their circumstances, students can develop resiliency through CBT to respond to life circumstances in a healthy way that allows them to thrive despite adversity.

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