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Anxiety Disorders and School-Based Treatments: Assessing School Pyschologists' Knowledge and Perceptions

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Philadelphia College of Osteopathic Medicine

Department of School Psychology

ANXIETY DISORDERS AND SCHOOL-BASED TREATMENTS: ASSESSING SCHOOL
PSYCHOLOGISTS' KNOWLEDGE AND PERCEPTIONS

Kelly A. Myhasuk

Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Psychology

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**PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE
DEPARTMENT OF PSYCHOLOGY**

Dissertation Approval

This is to certify that the thesis presented to us by **Kelly A. Myhasuk** on the **27th** day of **March, 2014**, in partial fulfillment of the requirements for the degree of **Doctor of Psychology**, has been examined and is acceptable in both scholarship and literary quality.

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Acknowledgement and Dedication

I would like to express my deepest gratitude to my dissertation committee, Dr. Diane Smallwood, Dr. Virginia Salzer, and Dr. Michael Blum, for all their guidance and support throughout this dissertation process. I would also like to thank my family and friends for their continued support and encouragement as I completed the doctoral program. Most of all, I thank my husband and best friend, Nick, for his support, love, and patience throughout this process.

This dissertation is dedicated in remembrance of my father, Phillip Stevens, and pop-pop, Albert Poderis, who constantly inspire me.

Abstract

Anxiety disorders are common in children and youth. Despite high prevalence rates, most children with anxiety disorders do not receive treatment. In fact, for the few children who are receiving treatment, schools are the primary source of mental health care. When left untreated, children experience significant disruptions in their academic, social, emotional, and behavioral functioning. Therefore, it is important for those working in schools to recognize and treat children with anxiety disorders.

The present study surveyed school psychologists ($n = 178$) to assess their knowledge about anxiety disorders and about empirically supported school-based treatments. Also, this study sought to investigate school psychologists' knowledge about many of the difficulties faced by children and youth with anxiety disorders. In addition, this study sought to gain an understanding of the referral and identification processes involving children with anxiety disorders in school and the types of services and supports available to students with anxiety disorders.

Results of this study indicated that the majority of school psychologists are at least somewhat to very knowledgeable about most types of anxiety disorders and related educational difficulties, with doctoral level school psychologists being more knowledgeable. However, few school psychologists reported being very knowledgeable about empirically supported school-based treatments for anxiety disorders. Another major finding was that behavior consultation was the most frequently reported approach to address anxiety symptoms. Despite cognitive behavioral (CBT) therapy receiving the greatest support, empirically, as an effective treatment, very few schools offer CBT as a treatment option. Also, few school psychologists reported being very competent in the

delivery of CBT principles and interventions. Directions for future research are offered and implications for practitioners are discussed.

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ANXIETY DISORDER AND SCHOOL-BASED TREATMENT

Chapter 1

Introduction

Anxiety Disorders: Definition, Descriptions, and Prevalence

The experience of anxiety is common and natural. When placed in a difficult or challenging situation, our bodies trigger an emotional and physiological response to face danger. In this instance, an anxious response is quite normal. This response is needed and serves as an evolutionary advantage because it warns us and protects us from danger and threats. When threatened, our anxiety response is quickly activated, triggering the brain to produce the hormone adrenaline. Adrenalin increases not only sweat production, but also heart rate, oxygen to the body, and muscle tension; these responses narrow our focus, which prepares the body to take action. All of this takes place within seconds. Regardless of the choice of action (fight or flight), the body needs the heart pumping quickly to supply muscles with blood; it also needs the lungs to work quickly to supply needed oxygen and increased muscle tension to provide protection to the vital organs; all of these enable the individual to move more quickly. Anxiety is adaptive when it causes a person to take action against a threat (Pliszka, 2011).

In other situations, anxiety can be harmful or maladaptive when a person is in a constant or frequent state of arousal. Whether triggered by thoughts, by real danger or perceived danger, it is not helpful to be persistently anxious. For the people who experience this, the anxiety can become excessive, and although they may realize it is excessive, they have difficulty controlling it (National Institute of Mental Health, n.d.). Difficulty controlling anxious thoughts and behaviors can start to interfere with a person's daily functioning. For example, some may avoid going to work, to school or to

a social event. If an excessively anxious person does choose to expose himself/herself to a feared situation, he or she does so while enduring considerable distress and dread (American Psychiatric Association, 2000). Under these conditions, a person would mostly likely meet the criteria for an anxiety disorder.

Anxiety disorders are common among American adults, affecting approximately 40 million adults, ages 18 years and older (about 18%) in a given year (National Institute of Mental Health, 2009). Unlike the brief and mild anxiety caused by a stressful event, individuals with anxiety disorders display anxious symptoms for a prolonged period of time (six months) and symptoms tend to get worse if left untreated (NIMH, 2009). According to 2002 census data reviewed by the National Institute of Mental Health, the cost associated with treating adults with serious mental health services was conservatively estimated to be over \$300 billion dollars.

Statement of the Problem

Adults are not the only ones suffering from anxiety disorders, however. In fact, anxiety disorders are the most common psychiatric problems affecting children and adolescents, with prevalence ranging between 2 to 27 percent (Sulkowski, Joyce, & Storch, 2012). These statistics are consistent with NIMH reports suggesting a lifetime prevalence of 25.1 percent for ages 13 to 18 years. Unfortunately, not all children in need of mental health service are receiving care. It is estimated that only one in five children in need are receiving mental health services (US Department of Health and Human Services, 2000). It is suggested that 70 to 80 percent of children receiving mental health services are doing so in the educational sector from a guidance counselor or school psychologist (Burns et al., 1995). In other words, for the few children who are receiving

mental health care, the schools are their sole source of care, compared with other sectors such as medical and welfare and juvenile justice services. Therefore, it is clear that many children with anxiety disorders are not receiving mental health services.

Left untreated, high levels of anxiety can have negative effects on academic performance and on social development (Huberty, 2008). Children with anxiety disorders may experience difficulties with concentration, memory, attention, organization of work, and test performance. Huberty (2008) suggests that as children continue to experience difficulties with academic performance, they may experience more anxiety about doing well, which further interferes with their ability to concentrate and perform. Also, anxious symptoms of students were found to impact reading achievement significantly (Ialongo, Edelsohn, Werthamer-Larasson, Crockett, & Kellam, 1994) and were also associated with excessive school absenteeism. Frequent school absences lead to high amounts of missed instruction, which negatively impacts all areas of academic achievement.

In terms of social development, chronically high levels of anxiety can lead to significant social difficulties. Frequently, anxious children avoid age-appropriate situations and social interactions that are necessary for healthy development (Mychailyszyn et al., 2011). As a result, these children have difficulties making and sustaining friendships, initiating social interaction, and participating in social interactions (Huberty, 2008). In addition, excessively anxious children are more likely to have fewer friends, have difficulty participating in classroom activities (i.e., answering questions in class, working in groups, etc.) and avoid social interactions (Ryan & Warner, 2012). These social difficulties have been associated with loneliness, increased likelihood of

psychological disorders such as depression, suicidal ideation, increased risk of substance abuse, and underemployment (Headley & Campbell, 2011; Ryan & Warner, 2012).

Due to high prevalence rates and negative long-term consequences of untreated anxiety symptoms (symptoms worsening over time, depression, social difficulties, and academic impairment, drug/substance abuse, etc.), assessing and treating childhood anxiety disorders are extremely important. Early detection and subsequent treatment are critical for promoting current well-being and future long-term health. As Burns et al., (1995) suggest, schools are becoming the primary access point to meet the emotional and mental health needs of children. Therefore, there is a need for school staff such as teachers, counselors, and school psychologists to recognize, assess, and treat children with anxiety.

However, some have suggested that children with anxiety disorders often go unnoticed by school staff (Layne, Bernstein, & March, 2006). Because of the internalized nature of anxiety, children with anxiety disorders are unlikely to cause overt behavioral disruptions in the classroom. Because these children are not actively acting out in class, they are less likely to be referred for support services, compared with children who are causing daily behavioral disruptions in the classroom (Schoenfeld & Janney, 2008). In other words, children with high levels of anxiety may be suffering in silence.

Among all school staff, school psychologists are in an ideal position to identify, assess, and treat anxious children. Often, they serve as the mental health experts in their buildings. School psychologists are trained to provide services to help children succeed academically, socially, behaviorally and emotionally (National Association of School

Psychologists, 2010). Furthermore, school psychologists recognize that effective learning is influenced by factors outside the classroom, such as a child's physical and mental health (Ysseldyke et al., 2006).

Present times have been described as “anxious times” due to troubling events, such as acts of terrorism and natural disasters. “There has never been a greater need for school psychologists to take leadership in ensuring quality mental health services for children” (Ysseldyke et al., 2006, p. 9). The purpose of this study is to explore the knowledge base of school psychologists regarding anxiety disorders and empirically supported school-based treatments. A secondary purpose is to gain an understanding of the referral and identification process involving children with anxiety disorders within schools and also the available school-based treatments.

Research Questions

1. What level of self-perceived knowledge do school psychologists have about anxiety disorders and educational success?
2. What level of self-perceived knowledge do school psychologists have about empirically supported school-based treatments?
3. To what extent do students with anxiety disorders receive school-based treatments, as reported by school psychologists?
4. Do demographic factors (i.e., size, type, and SES of school district) impact the type of services and supports available to students with anxiety disorders?
5. Do school psychologists' levels of training impact the levels of knowledge about anxiety disorders, empirically supported school-based treatments for anxiety, and the influence of anxiety disorders on learning and educational success?

6. Is there a relationship between school psychologists' years of experience and their knowledge about anxiety disorders, empirically supported school-based treatments, and the influence of anxiety on learning and educational success?

Chapter 2

Review of the Literature

Anxiety disorders are common in children and adolescents. When left untreated, these children experience significant disruptions in their academic, social, and family functioning (Sulkowski, Joyce, & Storch, 2012). In fact, the longer a child suffers with an unidentified anxiety problem, the more adverse the effects that anxiety can have on a child's development; these effects are typically hard to reverse (Ramirez, Feeney-Keller, Flores-Torres, Kratochwill, & Morris, 2006). Although the experience of anxiety is natural and normal, it becomes maladaptive when in excess. Although the extremely anxious individuals may recognize that the anxiety is excessive, they may have difficulty controlling it.

There have been many definitions offered to define anxiety. For example, Huberty (2004) defines anxiety as an apprehension or excessive fear about real or imagined circumstances. Also, the author notes that the central characteristic is worry, which is excessive concern about situations that have uncertain outcomes. Furthermore, anxiety can be characterized as a negative affect that includes feelings of uneasiness, tension, apprehension, and worry that a negative event or situation will occur in the future (Ramirez et al., 2006). Generally, anxiety is associated with physical symptoms such as muscle tension, poor sleep, internal feelings of restlessness, sweating, racing heart, or shortness of breath (Pliszka, 2011).

Anxiety and Development

The experience of anxiety is a normal part of a child's development. For the most part, children are able to cope with it and not let it interfere with daily functioning.

Huberty (2004) has reviewed the developmental course of anxiety and fear in children. At approximately eight months, fear of strangers arises. At this age, an infant shows clear distress around unfamiliar people, even when a parent is close by (Rathus, 2006). Typically, stranger anxiety or fear of strangers suggests the beginning of the cognitive developmental period when children begin to discriminate among people.

Next, separation anxiety occurs between 12-18 months. Toddlers become upset, cry, or have tantrums when their parents leave and try to prevent their parents from leaving. Although upsetting, this is normal toddler behavior, and it indicates a second cognitive developmental milestone; parents are different from other adults and they might not return (Huberty, 2004). Ordinarily, separation anxiety resolves on its own by age two.

In early childhood, fear of imaginary figures emerges; these might be monsters in the closet or under the bed. Children up to about age eight may also fear the dark, certain animals, costumes, and larger children. After age eight, there is a shift in the development of reasoning skills and children's fears become more internalized and abstract. Because of children's increased cognitive ability, they are now able to differentiate between reality and fantasy (Ramirez et al., 2006). For example, children may worry about grades, performance, health, personal harm, peers, and fitting in. Huberty (2004) indicated that once adolescence begins, adolescents worry more about sexuality, religious and moral issues, and how well they compare with others and fit in with their peers. Anxiety disorders can develop when the fear or anxiety is no longer age appropriate, is excessive, and causes significant distress that interferes with social, academic or personal functioning.

Anxiety Disorders

There are several anxiety disorders described in the *Diagnostic and Statistical Manual of Mental Health Disorder, Fifth Edition* (DMS-5). Anxiety disorders tend to share features of excessive fear and anxiety and related behavioral disturbances (American Psychiatric Association, 2013). They tend to differ from one another by the types of objects or situations that are feared and/or avoided, ones that produce elevated levels of anxiety, and the associated cognitive ideation. Several anxiety disorders develop in childhood and tend to persist if not treated (American Psychiatric Association, 2013). This section will address and discuss the following disorders: separation anxiety, selective mutism, generalized anxiety, social anxiety, panic disorder, and phobias. Although differing from earlier editions, the DMS-5 no longer categorizes obsessive-compulsive disorder as an anxiety disorder, and it is included in a separate chapter, viz., “Obsessive-Compulsive and Related Disorders”. However, given its close relationship to anxiety disorders, it is important to include it in this discussion.

Separation Anxiety. Children with separation anxiety disorder experience excessive worry or anxiety when separated from parents or caregivers (Lowe, Unruh, & Greenwood, 2004). It is developmentally appropriate and predictable for children between the ages of 12-15 months. Typically, the crying and clinging to parents when they attempt to leave resolves around age two. However, it is developmentally inappropriate for older children and this may be a sign that a problem is emerging (Huberty, 2012). Although it is common that children show some separation anxiety as they start school, this usually dissipates after a few days and children start to enjoy going to school. If the child continues to show separation anxiety reactions such as crying,

clinging to parents, refusing to come to school, and difficulty separating, it may be a sign of an anxiety disorder (Huberty, 2012).

Children with separation anxiety experience recurrent excessive distress on the separation from the home or major attachment figures (American Psychiatric Association, 2013). When the child is separated from his/her parents, caregivers, or attachment figures, he/she often needs to know their whereabouts and need to stay in touch with them. Also, these children often become preoccupied with fears that either they or their parents/caregivers will be involved in accidents or will become ill (American Psychiatric Association, 2013). Furthermore, children with separation anxiety express fear of traveling alone or becoming lost and never being reunited with their parents. Typically, these children prefer not to be alone and will ask a parent to go into a room with them, follow or shadow parents around, and ask to sleep with them. Children with separation anxiety tend to avoid sleeping at friends' houses or avoid going to school or camp.

According to the DMS-5, a child is given a diagnosis of separation anxiety when he/she displays developmentally inappropriate and excessive anxiety concerning separation from home or from a person to whom the individual is attached, as evidenced by three or more of the following: (1) recurrent excessive distress when separation from home or major attachment figures occurs or is anticipated, (2) persistent and excessive worry about losing, or about possible harm befalling major attachment figures, (3) persistent and excessive worry that an untoward event will lead to separation from a major attachment figure (e.g., getting lost or being kidnapped), (4) persistent reluctance or refusal to go to school or elsewhere because of fear of separation, (5) persistently and

excessively fearful or reluctant to be alone or without major attachment figures at home, (6) persistent reluctance or refusal to go to sleep without being near a major attachment figure or to sleep away from home, (7) repeated nightmares involving the theme of separation, and (8) repeated complaints of physical symptoms (such as headaches, stomach aches, nausea, or vomiting) when separation from the major attachment figures occurs or is anticipated.

In addition, the duration of disturbance is at least four weeks in youth and six months in adults and the disturbance causes clinically significant distress or impairment in social, academic, or other important areas of functioning.

Selective Mutism. Children with selective mutism do not speak in specific situations in which speech is expected, such as in school, despite speaking freely in other settings (Kehle, Bray, & Theodore, 2006). In order to be given a diagnosis of selective mutism, the refusal to speak in social situations must be present for at least one month, and the failure to speak is not due to a lack of knowledge of or comfort with spoken language needed in social settings. Also, the failure to speak cannot be better explained by a Communication Disorder. For example, it would not be appropriate to call an individual a selective mute if the individual refuses to speak due to embarrassment about a severe stutter.

Selective mutism interferes with educational achievement and/or social communication. It is a relatively rare disorder affecting less than 1% of the population. It is more common in girls than in boys. In situations in which the child fails to speak, he/she will gesture, point, or pull to communicate wants and needs. Characteristics associated with selective mutism include excessive shyness, fear of social

embarrassment, social isolation, withdrawal, clinging, compulsive traits, negativism, temper tantrums, or oppositional behavior (American Psychiatric Associations, 2013).

The onset of selective mutism is usually before the age of five when a child first enters school. For the majority of children with selective mutism, school is the context for mutism and therefore it is not surprising that school is the first setting for the child to experience impairment (Hagermoser Sanetti & Luiselli, 2009). Because of this, there is a great need for school-based practitioners to have the knowledge and skills to identify and treat students with selective mutism. Bergamna, Piacentini, & McCracken (2002) reported that the understanding of selective mutism has undergone a considerable shift over the last several years. Previously, it was often suggested that selective mutism was related to a variety of conditions including oppositionality, trauma, family neuroses, and speech and language disorders. These authors suggest that current conceptualizations focus on selective mutism as closely related to, or even a developmental expression of, social phobia. In fact, Black & Uhde (1995) contend that selective mutism is a symptom of excessive social anxiety, specifically a fear of public speaking and can be more appropriately conceptualized as a symptom or subtype of social phobia.

However, Kehle, Bray, & Therdore (2006) report that this might not be entirely true. A study conducted by Yeganeh, Beidel, Turner, Pina, & Silverman (2003) compared children with selective mutism to children with social phobia and found that children with selective mutism tended to score higher on indices of delinquency, suggesting the existence of a broader syndrome. In addition, their study did not uniformly support the notion that children with selective mutism do not speak because they are frozen with fear.

Generalized Anxiety Disorder. The hallmark characteristic of generalized anxiety disorder (GAD) is excessive anxiety and worry, which is present across a variety of situations. People with GAD report feeling worried or anxious more days than not, have difficulty controlling the worry, and report distress due to the worry. Often, they go through the day filled with exaggerated worry and tension even though there is little or nothing to provoke it (National Institute of Mental Health, 2006). Symptoms of GAD include restlessness, being easily fatigued, concentration difficulties, irritability, muscle tension and sleep disturbance. Associated features include trembling, twitching, feeling shaky, muscle ache and soreness, sweating not due to high temperature, nausea, diarrhea, accelerated heart rate, shortness of breath, and an exaggerated startle response (American Psychiatric Association, 2000). In short, people with GAD cannot seem to relax, startle easily, experience a number of somatic symptoms, and have difficulty controlling their worries.

In children and adolescents with GAD, the anxieties and worries are often concerned with quality of their performances or competence at school or in sporting events, even when their performances are not evaluated by others (American Psychiatric Association, 2013). They have excessive concerns about being on time and often worry about the possibility of catastrophic events such as earthquakes or nuclear war. Also, children with GAD tend to be excessively conforming, perfectionistic in their work, and unsure of themselves. To compensate, individuals with GAD will do tasks over again because of disproportionate dissatisfactions with less-than perfect work and seek constant approval and reassurance from others about their performances and worries.

For an individual to be given a diagnosis of GAD, excessive anxiety and worry must have been present about a number of different events or activities for at least six months; the person has found and continues to find it difficult to control the worry, and three more symptoms of restlessness or feeling keyed up or on edge must be present; the individual becomes easily fatigued, has difficulty concentrating or his or her mind goes blank; he or she experiences irritability, muscle tension, and/or sleep disturbance (American Psychiatric Association, 2013). In addition, the worry, anxiety, and physical symptoms cause significant distress or impairments in important areas of functioning (i.e., work, school, social). Differing from adults, children need only one symptom instead of three to meet criteria for this disorder.

The National Institute of Mental Health (2006) reports that this disorder develops gradually and can begin at any point in the life cycle, although the years of highest risk are between childhood and middle age. Numerous individuals with GAD report feeling anxious and nervous their whole lives (American Psychiatric Association, 2013). The American Psychiatric Association (2013) estimated that the prevalence of GAD is 0.9% among adolescents and 2.9% among adults in the United States (American Psychiatric Association, 2013). Also, females are twice as likely as males to experience GAD.

Social Anxiety Disorder (Social Phobia). Social anxiety disorder, also known as social phobia, is characterized by significant or intense fear or anxiety of social situations in which the individual may be evaluated by or scrutinized by others. Social situations can include, but are not limited to, having a conversation, meeting new people, eating and drinking, or performing in front of others. When people with social anxiety disorder are exposed to a social situation, they fear the possibility of being negatively

evaluated by others. In addition, they are excessively concerned that they will appear anxious and be judged as crazy, weird, stupid, or unlikeable. For these individuals, being in social situations will almost always provoke fear and anxiety. As a result, social situations are avoided or endured with intense fear and anxiety.

In children, social anxiety must be present when they are with adults as well as with their peers. Feelings of anxiety and fear manifest themselves in children in the forms of crying, tantrums, freezing, clinging, shrinking or failing to speak in social situations. Ryan & Warner (2012) reported that social anxiety is among the most common of mental disorders in children and adolescents and suggested a prevalence of 6-12%. The researchers also indicated that children with social anxiety have fewer friends, have difficulty participating in classroom activities such as answering questions and working in groups, and avoid age appropriate social interactions such as initiating conversations, joining clubs, or participating in sports.

Developmentally, the median age of onset is usually around 13 years in the United States; 75% of individuals have an age onset between 8 and 15 years (American Psychiatric Association, 2013). Similar to other anxiety disorders, social anxiety disorder is more commonly seen in females.

Specific Phobias. People with specific phobias have a marked fear and anxiety about a specific object or situation. Common phobias include fear of flying, heights, weather, animals, seeing blood, or receiving an injection. When exposed to the feared object or situation, the person will immediately become fearful or anxious. In addition, people with specific phobias will actively avoid feared objects or situations. In other words, they will behave in ways to prevent or minimize exposure to the things they fear.

For example, someone who is afraid of heights will use tunnels instead of bridges while driving. In extreme cases, people may move to a new location to avoid exposure to their feared situation or object. For example, a person may move to an area that is not native to a feared animal or particular weather patterns.

Often, people with specific phobias realize that their fears are out of proportion to the actual danger and more intense than is necessary. However, they will continue to overestimate the danger in their feared situations. The fear, anxiety, and avoidance cause significant distress that interferes with daily functioning.

Sometimes, the specific phobia develops following a traumatic event or observing others going through a traumatic event. For example a person may develop a phobia of dogs after being bitten or attacked by a dog or watching someone else be attacked by a dog. Also, unexpected panic attacks in a situation can lead to phobia of certain situations. A person having an unexpected panic attack on the subway or while driving may have developed a phobia of subways or highways and actively avoid those situations. Many people with specific phobias are unable to recall the specific reason for the onset of the phobia (American Psychiatric Association, 2013).

According to the DSM-5 (American Psychiatric Association, 2013), specific phobias typically develop in childhood, with the majority of cases developing before the age of 10 years. In the United States, the prevalence range varied between 7% - 9%. Specifically for children, the prevalence rate is estimated to be at 5% and the adolescent rate is 16%. Females are two times more likely than males to be affected.

Panic Disorder. Panic disorder is defined as recurrent (more than one), unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes and is accompanied by four or more of the following symptoms: palpitations; pounding heart; accelerated heart rate; sweating; trembling or shaking; sensations of shortness of breath or smothering; feelings of choking, chest pain or discomfort; nausea or abdominal pain; feeling dizzy; unsteady light headed or faint; chill or heat sensations; paresthesias (numbness or tingling sensations); derealization (feeling of unreality) or depersonalization (being detached from oneself); fear of losing control; and fear of dying (American Psychiatric Association, 2013).

An unexpected panic attack is characterized by a panic attack that occurs out of the blue, with no obvious cue or triggers. On the other hand, an expected panic attack is an attack with a known trigger. For an individual to be given the diagnosis of panic disorder, he/she must express persistent concerns or worry about additional panic attacks or their consequences for at least 30 day following a panic attack. For example, he/she might fear “going crazy” or having a major life-threatening illness. In addition, some individuals with panic disorder will significantly change behavior in order to avoid having another panic attack.

In the United States, the prevalence of panic disorder is about 2%-3% in adolescents and adults (American Psychiatric Association, 2013). Although panic disorder can occur in children, it is very rare, with less than 0.4% of this population experiencing the disorder. Common with many other anxiety disorders, females are affected more than males at a ratio of 2:1.

Obsessive-Compulsive Disorder. Obsessive-Compulsive Disorder (OCD) is expressed by the presence of obsessions and compulsions. The DSM-5 (American Psychiatric Association, 2013) defines obsessions as recurrent and persistent thoughts, urges, or images that are experienced as intrusive and unwanted. For example, a person might have persistent thoughts about contamination, might experience recurrent images of violence, or develop repeated urges to perform an act. It is important to note that obsessions are not pleasurable and are involuntary. In most individuals, they are intrusive, unwanted and cause marked distress and anxiety. People with OCD try to ignore or suppress the unwanted obsessions, but often find that it is not enough. As a result, they engage in compulsions.

Compulsions are the repetitive behaviors or mental acts that an individual feels driven to perform in response to an obsession or according to a very rigid set of rules (American Psychiatric Association, 2013). Very common behaviors include hand washing, ordering, and checking. For example, thoughts of contamination are followed by hand washing. Examples of mental acts include counting, praying, or repeating a word silently. The goal of the compulsion is to reduce the distress caused by the obsession or to prevent a feared event. These are not done for pleasure, but many experience relief from anxiety and distress once the compulsion is completed. Often, the compulsions are not grounded in reality, are not connected to the fear, and are excessive.

Although the content of the obsession and compulsion varies among individuals, there are some common themes, including cleaning, symmetry, forbidden or taboo thoughts, and harm. When faced with situations that trigger an obsession, many people with OCD experience disguised or marked anxiety that can include panic attacks. Until

the compulsion is completed, individuals report feeling incomplete or uneasy because things do not feel, look or even sound “just right” (American Psychiatric Association, 2013). More times than not, the obsessions and compulsions are time consuming and cause significant distress and impairment to everyday routines.

Based on reports from the American Psychiatric Association (2013), OCD has a prevalence rate of 1.2% in the United States. It affects females slightly more than males in adulthood, but males are more commonly affected in childhood. The typical age of onset is 19.5 years. However, approximately 25% of all cases start before the age of 14 years. Males have an earlier onset with 25% of cases occurring before the age of 10 years. Although children experience both obsessions and compulsions, compulsions are more easily diagnosed due to the observable behaviors. Also, when compared with adults, children are more likely to have harm obsessions, such as fear of catastrophic events, death, or illness. Without treatment, onset in childhood or adolescence can lead to a lifetime of OCD.

Characteristics and Manifestations of Anxiety in the Classroom

Excessive worry is the central characteristic of anxiety disorders. However, children do not always speak of or voice the fact that they are worried and instead will show behaviors that suggest they are worried. Behaviorally, avoidance is the hallmark of anxious symptoms. According to Friedberg & McClure (2002), children are usually referred for treatment because they are no longer able to avoid the circumstances they fear or their avoidance has come at a great cost. For example, very anxious children may avoid going to school. School refusal is an umbrella term that refers to all attempts to miss school (Wimmer, 2008). Although previously described as school phobia, current

literature supports and recognizes the fact that children have many reasons for not wanting to attend school that are not necessarily the expression of a true phobia (Wimmer, 2004). Therefore, the term school refusal is preferred. Very often, school refusal is emotionally-based and highly comorbid with anxiety disorders. Wimmer (2008) reports the fact that approximately 2%-5% of students miss school because of anxiety. They have anxieties about being separated from loved ones, about what others think, how they will be judged, or from fear of embarrassment. The school refusal may be a response to anxiety about having to give a speech or about taking a test.

It is important to note that school refusal behavior includes truancy; however, it does not truly encompass a “truant” child. Children who are truant typically hide their absences from their parents, do not show emotional distress about attending school, and may be involved in anti-social behavior. With regard to children with school refusal behavior, the opposite is true. Typically, parents know that their child is absent because it often causes significant stress to the parents. The child is distressed about going to school and expresses high rates of physical complaints, such as head and stomach aches (Wimmer, 2004; Wimmer, 2008).

Those anxious children who come to school may display overt behaviors that are consistent in children with anxiety. In a school setting, anxious children may display perfectionism, fear of large assignments, test anxiety, anxiety about time pressure, intolerance of uncertainty, and a frequent need for reassurance (Manassis, 2012). Although this list is not exhaustive, it tends to be the most prominent. Children who worry excessively about the consequences of minor mistakes and set excessively high standards for performance are often described as perfectionists. Perfectionistic children

and adolescents are relatively easy to recognize by parents and teachers because they are more likely to forgo recess to complete assignments, be very much disappointed that they did not receive perfect grades, and engage in compulsive behaviors, such as continually rewriting assignments because the final product is not good enough (Gilman & Ashby, 2006). In agreement with Manassis (2012), perfectionism can be debilitating and maladaptive. Due to the fear of doing their work incorrectly, perfectionistic children will do their work very slowly, erase repeatedly, or avoid doing their work altogether. In addition, Adderholdt-Elliott (as cited in Gilman & Ashby, 2006) describes other behavioral characteristics of perfectionism such as indecisiveness, underachievement, and severe procrastination.

Anxious children may also fear large assignments and have test anxiety. When facing large assignments, these children can become easily overwhelmed. Frequently, they tend to underestimate their own abilities and overestimate the difficulty of the task (Manassis, 2012). In extreme cases, some will completely avoid the task, assuming that it is impossible to manage. Also, worrying about the consequences of poor test performance is common to anxious children. As described by Huberty & Dick (2006), earlier conceptualizations of test anxiety offered an extremely simplistic view of test anxiety, describing it as a failure to retrieve information at the time of the assessment. More recently, this conceptualization has changed to an information-processing approach, suggesting cognitive interference during assessment and general deficits in cognitive processing skills that impair a student's ability to prepare for a test, as well as test performance. Furthermore, two types of cognitive dysfunction are explained: cognitive distortion and cognitive deficiencies. Cognitive distortions involve thoughts

about an event that are misconstrued or misperceived. For example, catastrophizing is a common cognitive distortion in anxious children because they tend to exaggerate highly, the negative consequences and possibilities. For example, failing one test will prevent them from acceptance into college. Cognitive deficiencies defined by Hubery & Dick (2006) are impairments or absence of processing skills which makes children unable to select or act upon an option. Consequently, their minds may go blank and they begin to feel overwhelmed. In addition, children with test and performance anxiety have difficulty organizing their thoughts and engage in negative self-talk such as, "I'm dumb" or "I'm stupid."

Time limitations for work completion may cause distress to children with high levels of anxiety. Often, they worry that they will not have enough time to finish the task to their satisfaction. Also, uncertainty is not very tolerable to anxious children. They crave a sense of predictability and sameness throughout their day. Additionally, when some children are anxious, they need reassurance and will seek it excessively from their teacher by asking the same questions repeatedly. The anxious child may talk very quickly and excessively. The teacher may also observe nail biting or hair twirling. Some anxious students appear restless, fidgety, and even impulsive. In contrast, some anxious students present as quiet, shy, and withdrawn.

In addition to some to the behavioral manifestations of anxiety, there are cognitive and physical manifestations experienced by children with anxiety. Some cognitive symptoms of anxiety include concentration difficulties, overreaction to relatively minor events, memory problems, irritability, rigid thinking, hypervigilance, fear, and difficulties with problem solving and academic performance (Huberty, 2004). It

is not surprising to find anxious children inattentive, distracted, and restless because they are constantly scanning their environments for threats and danger (Friedberg & McClure, 2002).

Many anxious children experience physical symptoms such as trembling, shaking, increased heart rate, excessive perspiration, shortness of breath, dizziness, and chest pain. They may also experience sleep problems, such as difficulty falling and staying asleep, muscle tension, vomiting, nausea, diarrhea, and enuresis (Huberty, 2004; Hubert, 2008). Children with anxiety tend to use more colorful and poetic language to report their anxiety (Friedberg & McClure, 2002). For example, children may report feeling fluttery, jittery, yucky, or jumpy. Reports of feeling weird inside are also common.

Assessment and Identification of Anxiety in Children and Adolescents in Schools

Keeping in line with best practices, assessment of emotional or behavioral disorders should be multidimensional, with information being provided by at least three different sources: parent reports, teacher reports, and direct assessment of the child (McConaughy & Ritter, 2008). Very often, children behave differently in various settings or around different people and therefore perceptions and judgments around the child can vary from person to person. This is not to say that one person is wrong and the other right, but it helps to gather information regarding the child's functioning across all settings. Multidimensional refers to a variety of modalities in which the information is gathered. For example, information can be gathered through structured and/or unstructured interviews, standardized behavior rating scales, and direct student observation.

One of the most common methods for assessing anxiety in children is through interviews, which can range from being unstructured to being highly structured. During an unstructured interview, the assessor determines what questions will be asked, how these will be framed, and determines the need for follow-up questions. An advantage to this type of interviewing is that it allows the assessment to be tailored to the individual needs of the child. However, there are concerns about the inherent unreliability and subjectivity of results and interpretation.

Structured diagnostic interviews consist of a set of questions, which have explicit guidelines on how a child's responses are to be scored (Kamphaus & Frick, 2005). The interview starts with a stem question. If the stem question is answered positively, follow-up questions are asked to determine frequency, intensity, and duration. Examples of the diagnostic interviews for children include the Anxiety Disorder Interview-Child and Parent Versions for the DSM-IV (ADIS-C/P; Silverman & Albano, 1996), the Child and Adolescent Psychiatric Assessment (CAPA; Angold & Costello, 2000), the Children's Interview for Psychiatric Symptoms (ChIPS; Weller et al., 2002), and the Diagnostic Interview for Children and Adolescents (DICA; Reich, 2000).

Kamphaus and Frick (2005) summarized the basic characteristics of each of these diagnostics interviews. The ADIS-C/P is a semi-structured interview designed to assess anxious symptoms in children and provide differential diagnoses for all the DSM-IV anxiety disorders. There are parent and child versions. It is appropriate for children ages 7-17 and takes approximately 60-90 minutes to administer. The CAPA is also a semi-structured interview used to assess all disruptive behaviors, including anxiety disorders.

It can be used with children ages 8-17 and has parent and child versions. This interview also takes about 60-90 minutes to complete.

In contrast, the ChIPS is a highly structured, brief interview taking approximately 30-60 minutes to administer. It can be used for children as young as six years, and until the age of 18. Although brief, it has broad symptoms coverage with simplified language, making it useful for younger populations. Like the CAPA, it assesses all disruptive behaviors outlined in the DMS-IV, but includes an anxiety disorder measure. Parent and child versions are available. Finally, the DICA is a structured interview used to assess many disruptive disorders, including anxiety in children. It, too, can be used for children as young as six years old. However, it is not appropriate for individuals over the age of 18. Similar to the other diagnostic interviews discussed, it has a parent and child version. Administering the DICA takes approximately 1-2 hours.

Diagnostic interviews provide valid and reliable information; however, they are very time consuming and in a school setting they may not be completely feasible. In such cases, the use of standardized behavior rating scales would be beneficial and time saving. Rating scales can be completed by the parents, teachers, and children. There are a number of rating scales that specifically assess levels of anxiety and other scales that assess more global emotional functioning, including anxiety. The Multidimensional Anxiety Scale for Children, Second Edition (MASC 2; March, 2012) is a rating scale that assesses the presence of symptoms related to anxiety disorders in youth aged 8 to 19 years. This also aims to assess a broad range of emotional, physical, cognitive and behavioral symptoms that represent important dimensions of childhood anxiety. There are parent and child self-report versions.

Another commonly used rating scale is the Beck Youth Inventories, Second Edition, for Children and Adolescents (BYI-II; Beck, Beck, & Jolly, 2005). The BYI-II is a series of five inventories that can be used in combination or separately. For anxiety, there is an Anxiety Inventory that can be administered to children ages 7 years -18 years. It assesses specific worries about school performance, the future, negative reactions of others, fears including loss of control, and physiological symptoms associated with anxiety. Second, the Revised Children's Manifest Anxiety Scale, Second Edition (RCMAS-2; Reynolds & Richmond, 1997) is a rating scale completed by the child that assesses the level and nature of his or her anxiety experience. It can be used for children between the ages of 6 and 19.

In addition to anxiety-specific scales, there are broad or more general assessments to assess a child's emotional functioning. A very common rating scale used in schools is the Behavior Assessment System for Children, Second Edition (BASC-2; Reynold & Kamphaus, 2004). The BASC-2 is a comprehensive set of rating scales that includes parent, teacher, and self- reports. It can be used for children as young as 2-years-old through to adulthood (age 21). The BASC-2 not only screens for anxiety problems but also addresses many other behavior and emotional problems, such as depression, peer relations, inattention, and hyperactivity.

Although rating scales provide many advantages, such as being cost effective, being time efficient, and providing normative data to judge the severity of the problem by comparing individual children against a large representative sample of the general population, they do not identify the cause of the child's problem and are not objective, involving people's perceptions that can vary from one rater to the next (McConaughy &

Ritter, 2008). Therefore, direct behavioral observation by the assessor is needed and essential. The child should be observed in settings where the behaviors occur across different days for short amounts of time. Because a child's behavior can vary from day to day across different settings, it is better to do several short observations across different days, compared to one lengthy observation in one day. It also would be helpful, for the sake of comparison, to observe the child in settings where the behavior does not occur. Given that no single assessment tool such as an interview, rating scale, or direct behavioral observation, can fully capture all the components of an individual child and his/her experience of anxiety, a multi method approach is needed with several informants.

Negative Effects of Untreated Anxiety

Early identification and early treatment of children with anxiety disorders are important for improving current functioning and protecting long-term health (Mychailyszyn et al., 2011). When left untreated, the anxiety can worsen over time and have several negative effects. Anxiety disorders are associated with impairments in academic, social, and behavioral functioning (Grover, Ginsburg, & Ialongo, 2007). Academically, children with elevated levels of anxiety tend to perform below their ability levels (Woods, 2006). Woods (2006) indicated that elevated levels of anxiety produce a state of physiological arousal and a narrowing of focus of attention on the perceived threat. As a result, the arousal impairs concentration on nonthreatening stimuli or events, such as academic tasks or teacher lectures. In other words, the child is not attending to teacher instruction because of the elevated anxious arousal and the need to attend to a perceived threat. In addition, high anxiety has been associated with impairments in the recall of previously learned academic material.

Ialongo, Edelsohn, Werthamer-Larsson, Crockett, & Kellam (1994) conducted one of the early longitudinal studies to investigate the significance of self-reported anxious symptoms in first-grade children. The results indicated that first-graders' reports of anxiety were stable over a four month period and were found to have a significant impact on academic functioning. Specifically, elevated levels of anxiety were associated with lower reading achievement. Prior to this study, there was a general belief that reports of anxious symptoms from children younger than age seven were nothing more than transient developmental phenomena (Ialongo et al., 1994). In fact, self-reported anxious symptoms of young children are clinically significant. Grover, Ginsburg, & Ialongo (2007) followed students with high and low levels of anxiety for seven years and found that children who were described as highly anxious in first grade scored higher than non-anxious peers on measures of anxiety and depression seven years later. Also, as eighth graders, these children were still performing lower on measures of academic achievement. These findings lend support to the finding that young children's reports of anxious symptoms are relevant, are stable over time, and, without treatment, do not fade away over time.

However, it is unclear what factors associated with high levels of anxiety may play a role in poorer academic functioning in anxious youth (Hughes, Lourea-Wadell, & Kendall, 2008). As previously noted, children with high anxiety may have difficulties with attention and focus and are easily distracted because they are constantly scanning their environments for potential threats. Also, high levels of anxiety interfere with cognitive functioning, such as recalling information. Furthermore, test anxiety interferes

with their ability to truly show what they know on assessments; this reflects poorly on report cards and scores on standardized assessments.

Hughes, Lourea-Wadell, & Kendall (2008) investigated the association between somatic complaints as predictors of poorer academic performance. It is very common for highly anxious children to have somatic complaints, such as stomach ache, headache, muscle soreness, and feeling shaky or jittery. Often, anxious children with high levels of somatic complaints are associated with poorer school attendance and school refusal. These children may avoid going to school because they do not feel well or if they do attend, they are out of the classroom and frequently visit the school nurse. Also, they might have difficulty paying attention because they do not feel well. Consequently, poor school attendance negatively affects academic performance due to the significant amount of missed instruction. Hughes, Lourea-Wadell, & Kendall (2008) found that children with anxiety disorders reported more somatic complaints than the non-anxious children. Also, a greater frequency of somatic complaints uniquely predicted poorer academic performance beyond that accounted for by the anxious symptoms reported by parent and child. Therefore, somatic complaints could be a significant factor associated with high levels of anxiety that play a role in poorer academic functioning in anxious youth.

In terms of high school graduation, about 12% of all students do not graduate from high school (Kessler, Fister, Saunders, & Stang, 1995). Of these students, a large percentage drop out of school because of early-onset of psychiatric disorders such as anxiety. Kessler, Fister, Saunders, & Stang (1995) conservatively estimated that more than 7.2 million people in the United States prematurely terminate their education because of early-onset of psychiatric disorders. Furthermore, a study conducted by Van

Ameringen, Mancinbui, & Farvolden (2003) found similar results. About half of people with a primary anxiety disorder indicated leaving school prematurely, and 24% of those people indicated that elevated anxiety was the primary reason for their decisions to leave.

These findings have several important implications. First, anxiety disorders account for a large number of school dropouts. Second, an education or lack thereof determines many later life opportunities, such as occupational achievement, financial security, and lifestyle behaviors. Third, there are social consequences to a significant number of the population not receiving an education. For example, an educated citizenry is required to increase the nation's standards of living, participate in civic duties, and reduce the demand for social welfare entitlement (Kessler, Fister, Saunders, & Stang, 1995). Taken altogether, untreated anxiety disorders have long-term negative consequences.

In addition to lower academic performance, high levels of anxiety have been linked with impairments in social functioning (Ginsburg, La Grecam & Silverman, 1998). Such impairments include difficulties establishing and maintaining peer relationships. Peer relationships have a profound influence on a child's social and emotional functioning and are needed for appropriate interpersonal behavior and friendships (Scharfstein, Alfano, Beidel, & Wong, 2011). Children with peer problems or difficulties in establishing and keeping friends are at risk for peer rejection, loneliness, substance abuse, depression, and school dropout (Settipani & Kendall, 2013). In addition, problems with peers may limit the opportunities for and involvement in social activities such as joining clubs or sports team. In other words, friends are needed to provide feelings of support to enhance coping skills and to protect against negative treatment from other

peers in order to aid in healthy social and emotional development (Ginsburg, La Greca & Silverman, 1998).

Children with social anxiety tend to have the greatest difficulty with peer relationships. Socially anxious children were found to perceive their social acceptance and global self-worth to be low and reported a greater number of negative interactions with peers (i.e., having enemies at school and being made fun of or teased by peers) than did low or less socially anxious children (Ginsburg, La Greca & Silverman, 1998).

Empirically Supported School-Based Treatments for Anxiety

Schools are an ideal venue to provide empirically supported treatments to anxious children. Children spend a large amount of time at school, making it an easy child-accessible setting. Because of this, parents need not have scheduling conflicts around school and work schedules, and it eliminates any transportation difficulties or needs. Also, private or community-based treatment can be costly, whereas school-based services are often free of charge or inexpensive. Moreover, mental health services have the potential to become one of the many routine educational services provided (i.e., speech and language therapy, occupational therapy, physical therapy, etc.). There is also some stigma around receiving mental health services. A natural setting such as a school might help alleviate the negative stigma and promote a more positive attitude about youth receiving mental health services.

Schools tend to be the primary setting where children display impairment and significant levels of anxiety (Mychailyszyn et al., 2011; Herzog-Anderson, Colognori, Fox, Stewart, & Warner, 2012). Therefore, schools provide unique opportunities to provide treatment in real life settings, making the potential for generalizability of coping

skills greater. Last and of greatest importance, schools are already the main entry point to mental health services (Burns et al., 1995). Because of these advantages, a considerable amount of attention has been given to empirically-supported, school based treatments.

Evidence-based practice is a common term used to describe services that are based on sound theoretical principles and interventions supported through empirically based studies (Mennuti, Freeman, & Christner, 2006). When working with anxious children, cognitive-behavioral therapy (CBT) and behavioral interventions have received the greatest empirical support for effectiveness (Huberty, 2008). CBT is an amalgamation of a behavioral approach (i.e., psycho-education, relaxation training, exposure tasks, role play, rewards) with cognitive information processing (cognitive restructuring, cognitive distortions, cognitive deficiencies). When working within a CBT model, there is an understanding that emotions and accompanying behaviors are the result of the connection between a given situation, a personal belief system, and thoughts about the event (Mennuti, Freeman, & Christner, 2006).

Almost two decades ago, one of the first randomized clinical trials found that CBT was efficacious for treating children with anxiety disorders (Kendall, 1994). Results indicated that children who participated in the 16-week CBT treatment (Coping Cat) had significant reductions in anxious symptoms and/or no diagnosable anxiety disorder following treatment, compared with the waitlist control group. In addition, the children who received the CBT treatment maintained the treatment gains after a one year follow-up. The intervention used in this study, Coping Cat, is a 16-session cognitive-behavioral intervention used to treat children with anxiety disorder, specifically

generalized anxiety disorder, social phobia, and separation anxiety in children and young adolescents (Kendall & Hedtke, 2006). Its overall goal is to teach children to recognize signs of anxiety and to let these serve as cues to use the coping and anxiety management strategies taught in treatment.

In a larger random clinical trial, very similar results were obtained. After receiving the Coping Cat treatment, children with anxiety disorders were found to benefit from the intervention, compared with the waitlist control group (Kendall et al., 1997). In fact, more than 50% of children no longer met diagnostic criteria for an anxiety disorder post-treatment, and therapeutic gains were maintained after a one year follow-up.

More recently, the effectiveness of a computer-assisted cognitive behavioral therapy program, Camp Cope-A-Lot (CCAL), was examined with anxious youth. CCAL is adapted from the already empirically supported Coping Cat program. Khanna & Kendall (2010) found that children receiving CBT showed marked improvement, compared with those children in the control. However, the children in the computer-assisted group showed the greatest improvement. Eighty-one percent of children in the computer-assisted CBT group no longer met criteria for their anxiety disorders, compared with 70% of children in the individual CBT group. Furthermore, higher levels of child satisfaction were reported from children in the computer-assisted CBT group. In other words, children receiving CCAL enjoyed the program and made better gains.

Herzig-Anderson, Colognori, Fox, Stewart, & Warner (2012) reviewed four school-based treatments for anxiety that have shown promise in controlled studies: Cool Kids, Baltimore Child Anxiety Treatment Study in the School (BCATSS), Cognitive-Behavioral Intervention for Trauma in Schools (CBITS), and Skills for Academic Social

Success (SASS). With the exception of the BCATSS which offers individual and group formats, the remaining interventions are intended to be used with groups and are grounded in CBT theory. Herzig-Anderson et al. (2012) found that each of these previously mentioned interventions had been supported with randomized control trials to demonstrate treatment efficacy and provided positive outcomes to anxious youth.

Another promising CBT intervention is FRIENDS, a family-based group CBT. Shortt, Barrett, & Fox (2001) were the first to conduct a randomized clinical trial evaluating the efficacy of the FRIENDS program. Results indicated that 69% of children who completed the program were diagnosis-free post-treatment, compared with the wait-list control group. Furthermore, after a one year follow-up, 68% of the children who received treatment no longer met criteria of an anxiety disorder.

In addition to the manualized CBT interventions, modular CBT has demonstrated impressive results for supporting and treating youth with anxiety disorders. Modular means that it breaks complex activities into smaller parts that function independently (Friedberg, McClure, & Hillwig Garcia, 2009). Here, the therapist has the flexibility to group together the empirically-supported techniques that have the same therapeutic purpose, which allows for the individual child's needs to be met. Using a modular CBT approach in a school setting, Chiu et al. (2013) found that 95% of children who received the modular CBT demonstrated a positive treatment response by the end of treatment and were free of any anxiety diagnosis. In comparison, at the end of a 3-month waitlist, only 16.7% of children demonstrated a positive treatment response.

Similar results were found in an earlier, but much smaller study. Chorpita, Taylor, Francis, Moffitt, & Austin (2004) evaluated the initial efficacy of a modular

approach to CBT for anxiety disorders in youth. Although only seven children completed the study, all seven children experienced clinically significant improvement, with all principal diagnoses being absent post treatment and also after a six month follow-up. Taking all the information together, CBT as a whole shows the potential for effective school-based treatment for anxious youth. However, one of its most highly scrutinized shortcomings is that treatments rely heavily on mental health clinicians to deliver the intervention, which is costly and resource intensive.

In addition to CBT, consultation, particularly conjoint behavioral consultation, can be used to promote the incorporation of empirically-supported school-based treatments for anxiety disorders (Auster, Feeney-Kettler, & Kratochwill, 2006). Conjoint behavioral consultation includes parents and teachers in the consultation process. In this particular model, a clinician serves as the consultant and uses problem-solving strategies to address the needs of the consultees (parent and teacher) and client (student). In other words, the parent and teacher are joint consultees and the provision of consultation services provided to the school and family are mutually involved (Sheridan & McCurdy, 2005).

Deno (2005) outlines and describes the steps of problem-solving strategies used in consultation. First, in the problem identification stage, the consultant and the child's parents and teachers identify and prioritize their concerns for the child. Second, the problem definition phase, aims to provide an operational definition of the behaviors of concern and to create a treatment goal. The third stage is designing the intervention. In this stage, all parties work collaboratively to design a feasible intervention, which includes a plan for data collection and specific guidelines for implementation. The fourth

stage is the intervention implementation, which includes delivering the intervention, collecting data, and monitoring treatment fidelity. The final step includes treatment evaluation. At this time, the consultant and consultees review the effectiveness of the intervention and decide if treatment goals have been met.

Conjoint behavioral consultation offers some advantages over some of the traditional treatments models. Because parents and teachers are active members in the treatment process, they learn valuable skills that can then be used with other children. As a result, the skills they learn can be generalized to other children in the future, which make these services more cost-effective. Moreover, the mental health needs often are greater than the availability of services. With a consultation approach, the consultees have the ability to reach and deliver services to a greater number of children, compared with that of a sole consultant.

With regard to anxiety disorders, the conjoint behavioral consultation can be very beneficial. Parents and teachers are more than treatment participants. In this model, they receive ongoing training, professional development, and guidance that make them intervention agents (Auster, Feeney-Kettler, & Kratochwill, 2006). Consequently, teachers and parents learn how to recognize symptoms of anxiety and develop skills that can be used with anxious children. This is important because children with anxiety disorders tend to go unnoticed (Layne, Bernstein, & March, 2006; Schoenfeld & Janney, 2008). In addition, some researchers have found conjoint behavioral consultation to be quite effective for treating anxiety disorders. For example, Gortmaker, Warnes, & Sheridan (2004) reported success in treating a boy with selective mutism using a conjoint behavioral consultation service delivery model. Prior to intervention, the young boy

produced zero vocalizations while at school. By the end of the problem solving steps, the boy was able to produce an average of 7.7 vocalizations a day that were generalized to multiple people.

Although various CBT interventions and behavioral consultation have been shown to help children with anxiety, a review of the literature has shown that most interventions that demonstrated effectiveness were delivered by a mental health clinician. Because the cost of hiring mental health professionals may not be feasible for all schools, there is a significant need for effective school-based interventions for anxiety disorders to be delivered by school personnel (Herzig-Anderson et al., 2012). Therefore, school psychologists may be the ideal candidate to implement these interventions.

Training and Practice of School Psychologists

School psychologists assist children and adolescents to succeed academically, socially, behaviorally, and emotionally (National Association of School Psychologist, n.d.). They are highly trained in psychology and education and aim to deliver comprehensive and integrated services. As indicated within the National Association of School Psychologists' (NASP) *Model for Comprehensive and Integrated School Psychological Services* (2010), school psychologists should aid in the development and implementation of interventions and mental health services to foster student development of social and life skills. With their knowledge of biological, cultural, developmental, and social influences on mental health, school psychologists are capable of providing a continuum of mental health services, including individual and group counseling (NASP, 2010). In a recent survey study sampling school psychologists across the United States,

reporting school psychologists dedicate approximately 9% of their time to individual student group counseling and conducting student groups (Castillo, Curtis, & Gellely, 2012).

School psychologists recognize that good mental health is important. As conceptualized by NASP, mental health is not simply the absence of mental illness; it also means having the skills necessary to cope with life's challenges (NASP, n.d.). Here, school psychologists can serve as mental health professionals and prevent or reduce the immediate and long-term consequences of mental health problems experienced by children. In addition, school psychologists can take leadership roles to support systems-level services to address the mental health and welfare of all students and bring increased attention to the need for schools to address these areas to ensure effective academic development (Ysseldyke et al., 2006).

In a recent study that surveyed school psychologists, perceived knowledge, role preference, and training needs regarding the prevention and treatment of internalizing disorders, the majority of school psychologists indicated that prevention of internalizing disorders, including anxiety, is well within the role of a school psychologist (Miller & Jome, 2010). Moreover, depending on the nature of the disorder, school psychologists' opinions about treating disorders differed. There was a strong consensus that school psychologists should prevent and treat children with school refusal behaviors. In addition, half of the sample agreed that school psychologists should aid in the treatment of anxiety disorders.

Taking all the information together, anxiety disorders are common in youth. If left untreated, the disorders worsen over time and are associated with a host of negative outcomes. Therefore, early identification and treatment for anxious youth should be a priority. Recently, schools have become the primary access point for mental health services. Schools are ideal venues for treatment delivery, because they overcome many of the traditional obstacles inherent in community or in private based treatments (i.e., cost, transportation, stigma, etc).

Furthermore, many randomized clinical trial studies have demonstrated the efficacy of CBT to treat anxiety disorders in children and are showing promising results for effectively treating children in schools. Also, behavioral consultation has shown to be effective for treating children with anxiety disorders. However, the one shortcoming is that most rely on a professional mental health clinician for treatment delivery. Therefore, training and accessing school-based personnel for treatment delivery has received much attention. In the school setting, school psychologists are in an ideal position to identify and treat anxious youth. They have the training to support children with mental health needs. In addition, providing school-based treatments to student with mental health needs is within the role and scope of comprehensive services provided by school psychologists.

Hypotheses

1. It is hypothesized that the higher the level of education, the more knowledgeable the school psychologists will be about the criteria and symptoms of anxiety disorder.

2. It is hypothesized that the higher the level of education, the more knowledgeable school psychologists will be about the educational difficulties experienced by children with anxiety disorders.
3. It is hypothesized that the higher level of education, the more knowledgeable will school psychologists be about empirically supported school-based treatments for anxiety.
4. It is hypothesized that higher the level of training, the more competent a school psychology will be with delivery of CBT principles and techniques.
5. It is hypothesized that the higher the level of self-reported competency with CBT principles and techniques, the greater the number of children will be served with school-based treatments for anxiety.
6. It is hypothesized that the smaller the student to school psychologist ratio, the more likely school psychologists will be to provide treatment to children with anxiety disorders.

Chapter 3

Methods

A survey was used in the present study in order to determine the level of self-perceived knowledge that school psychologists have about anxiety disorders and empirically supported school-based treatments. School psychologists completing the survey were also asked to rate their self-perceived knowledge about the social, emotional, behavioral, and academic difficulties experienced by children with anxiety disorders. The surveys were also utilized to elicit information about how children with anxiety disorders are identified and the services that are available in schools, as well as demographic factors (if any) that influence the type of supports and services provided to these students. In addition, the survey explored school-based treatment outcomes and the personnel responsible for providing treatment.

Overview of Research Design

As defined by Creswell (2009), survey research provides a quantitative numerical description of trends, attitudes, or opinions of a population by studying a sample of that population. Its intent and ultimate goal is to make generalizations about a population from a sample of that population. Rea & Parker (2005) have outlined several advantages of sample survey research. First, surveys allow researchers to generalize about an entire population by drawing inferences based on data from a small portion of that population. Second, the cost and time requirements are significantly less, compared with other research designs. Data collection can be done in a relatively short period time, which has some of its own advantages. Unlike long-term studies, the opinions and facts of the participants may change from the beginning to the end of the study. Surveys can provide

a snapshot of that current population without worrying about changing of opinions.

Third, well-structured surveys have the ability to generate standardized data which can easily be quantified and used in computerized statistical analysis programs. Last, surveys can easily be replicated. The same survey can be used or implemented at a different time or with different people.

For this study, survey information was collected through web-based implementation. As such, school psychologists were contacted by e-mail and asked to participate in this survey, which was designed to be completed and submitted online. Web-based surveys have several advantages over the traditional mail-out technique. It allows for faster data collection; data can be collected, downloaded, and processed within days. Also, web-based surveys are cheaper because there is no need for paper supplies and postage. Furthermore, follow-up with potential respondents is more time efficient, using e-mail reminders versus mailing follow-up questionnaires, which can take days or weeks. Finally, web-based surveys are convenient. The respondents can complete the survey in the comfort of their own homes and at each one's own pace.

Prior to seeking approval to utilize the survey for this present study, the survey was presented to the responsible investigator's dissertation committee members. The feedback provided by the dissertation committee members was used to make improvement changes to the survey regarding readability, clarity of wording, and comprehensiveness of topics addressed.

Participants

The participants in this study were school psychologists practicing in a school setting in the mid-Atlantic region of the United States, which included the following

states: New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and West Virginia. The participants were selected from the 2013 member directories from each of the mid-Atlantic state associations of school psychologists or from school districts within the mid-Atlantic region of the United States. School psychologists were chosen as the sample of interest due to their profession. As previously noted, school psychologists are often viewed as the mental health experts in their buildings. Assessing and treating children with anxiety disorders is well within the role and functions of a school psychologist. Therefore, it is beneficial to examine the extent of their knowledge about various anxiety disorders and related educational needs.

Measures

The selected group of school psychologists received an emailed cover letter (appendix A), as well as a link through which to voluntarily participate in the study hosted by SurveyMonkey. The survey included contact information related to their ability to obtain results of the study upon the study's completion. For this study, the contact persons include the responsible investigator, Kelly Myhasuk, and the principal investigator, Diane Smallwood.

The survey (appendix B) consisted of a total of 34 items, divided into three sections: Knowledge Base and Training, Student Information, and Background and Demographics. In the first section, Knowledge Base and Training, the respondents were asked two qualifying questions: The first was, Are you a certified school psychologist? The second was, Do you work either full-time or part-time in a school setting? If the answer was no to either one of those questions, the respondent was disqualified from participating in the survey and was thanked for his or her interest. Following the

qualifying questions, respondents were asked to rate their perceived levels of knowledge about the symptoms and diagnostic criteria for seven anxiety disorders: selective mutism, separation anxiety, generalized anxiety, social anxiety, specific phobia, panic disorder, and obsessive-compulsive disorder. Also, respondents were asked to rate their perceived levels of knowledge about the social, emotional, behavioral, and academic difficulties experienced by children with anxiety disorder and where they primarily learned about the disorders. In addition, the respondents were asked to indicate the frequency with which they encounter students with anxiety disorders, levels of training in cognitive-behavioral therapy, and further, to rate their own competencies in delivery of CBT interventions. With the exception of two items, all other items in this section required the respondents to make a forced single entry. When rating themselves on their levels of knowledge about anxiety disorders and the educational difficulties experienced by children with anxiety disorder, the respondents were required to select a response using a Likert-scale format.

The second section, Student Information, contained items that are related to student information. Here, the respondents were asked to think of some typical students diagnosed with an anxiety disorder with whom they currently work or have worked with in the past. With those particular students in mind, respondents completed survey questions regarding how the diagnosis was made, who made the referral, comorbid conditions, characteristics of anxiety displayed by those children, types of educational programs, current social and academic functioning, related services, empirically-supported school-based treatments, treatment providers, and treatment outcomes. With the exception of the questions regarding the percentage of children with anxiety disorders who are maintained in the general education setting and special education setting, all

remaining questions were forced entry or selected from a list of responses, which allowed for more than one response for these items.

In the last section, Background and Demographics, the respondents were asked questions pertaining to the highest degree they obtained in school psychology, year degree was obtained, years of experience, school psychologist to student ratio, demographics related to their districts of employment, and states of employment. With the exception of the question related to the year degree was obtained, all other questions were in a forced-choice response. Additionally, the survey item regarding grade level employment allowed for multiple responses.

Data Collection

The SurveyMonkey tool was chosen to host the survey. A professional subscription was purchased for a modest fee, which allowed for unlimited questions and responses in the design package. Emails were sent to school psychologists working in the mid-Atlantic region of the United States, with a link to participate in the study. Once the participants clicked on the link, they were taken directly to the survey for completion. The initial goal was to collect between 200 and 500 completed surveys. After an eight week data collection period yielding a minimum of 200 completed surveys, data were downloaded and coded into an Excel spreadsheet. The file was then exported to a Statistical Package for Social Sciences (SPSS) data file.

Data Analysis

In order to address the previously outlined research questions, quantitative analysis of the results was used. Descriptive and inferential statistics were used to analyze the survey responses. Specifically, frequency data were used to determine the

levels of self-perceived knowledge that school psychologists have about anxiety disorders in children, the educational difficulties experienced by these children, and the use of empirically supported school-based treatments. Also, crosstabulation, chi-square, and analysis of variance (ANOVA) tests were used to look for difference between groups.

Chapter 4

Results

In this chapter, results of the survey reflecting school psychologists' self-perceived knowledge about anxiety disorders and empirically supported school-based treatments are presented. Frequency analyses cross tabulation, chi-square, and ANOVA tests were used for statistical analysis of the data.

Within an eight week period, 202 surveys were completed. However, four participants indicated that they were not certified school psychologists and six participants reported that they did not work in a school setting either full or part-time. With those participants disqualified, there were a total of 191 participants eligible to complete the survey in its entirety. However, the final sample consisted of 178 participants who completed the entire survey. The data collected through the survey procedure were analyzed to answer the five major research questions. Basic demographic information about the subject population is summarized in Table 1.

Table 1

Basic Demographic Characteristics of Sample

| | <i>n</i> | % |
|--------------------------|----------|------|
| Education/Highest Degree | | |
| Masters | 45 | 26.5 |
| Educational Specialist | 70 | 41.0 |
| Doctoral | 45 | 26.5 |
| Other | 10 | 5.9 |
| Years of Experience | | |
| 1 to 5 | 54 | 31.8 |
| 6 to 10 | 38 | 22.4 |
| 11 to 15 | 32 | 18.8 |
| 16 to 20 | 26 | 15.3 |
| 21 or more | 20 | 11.8 |
| Primary Assignment | | |
| Preschool | 9 | 5.3 |
| Elementary | 95 | 55.9 |
| Middle/Junior | 27 | 15.9 |
| High School | 38 | 22.4 |
| Post Secondary | 1 | 0.6 |

Ratio of Students per Psychologist

| | | |
|----------------|----|------|
| < 1: 500 | 19 | 11.2 |
| 1: 500 - 700 | 27 | 15.9 |
| 1: 701- 900 | 28 | 16.5 |
| 1: 901 - 1100 | 17 | 10.0 |
| 1: 1101 - 1300 | 22 | 12.9 |
| 1: 1301 - 1500 | 10 | 5.9 |
| 1: 1501 - 1700 | 13 | 7.7 |
| > 1: 1901 | 23 | 13.5 |

Size of District

| | | |
|------------------|-----|------|
| < 1,000 Students | 8 | 4.7 |
| 1,001 to 4,000 | 13 | 7.7 |
| 4,001 to 7,000 | 14 | 8.2 |
| 7,001 to 10,000 | 11 | 6.5 |
| > 10,000 | 124 | 72.9 |

District Type

| | | |
|----------|----|------|
| Rural | 6 | 3.5 |
| Urban | 70 | 41.2 |
| Suburban | 94 | 55.3 |

Average Household Income of Families Residing in District

| | | |
|--------------|----|------|
| Upper | 4 | 2.4 |
| Upper Middle | 25 | 14.7 |
| Middle | 50 | 29.4 |
| Lower Middle | 28 | 16.5 |
| Lower | 63 | 37.0 |

State of Employment

| | | |
|---------------|----|------|
| Delaware | 18 | 10.6 |
| Maryland | 16 | 9.4 |
| New Jersey | 9 | 5.3 |
| New York | 23 | 13.5 |
| Pennsylvania | 56 | 32.9 |
| Virginia | 44 | 25.9 |
| West Virginia | 5 | 2.9 |

Question 1: What level of self-perceived knowledge do school psychologists have about anxiety disorders and educational success?

Question 1 sought to determine, within the sample, the levels of self-perceived knowledge that school psychologists have about the symptoms and diagnostic criteria of seven types of anxiety disorders, and the social, emotional, behavioral, and academic difficulties experienced by children with an anxiety disorder. Survey respondents were

asked to rate themselves on a continuum of little to no knowledge, somewhat knowledgeable, very knowledgeable, and expert level.

The results indicated that the majority of the sample reported that they were somewhat to very knowledgeable about the symptoms and diagnostic criteria of most anxiety disorders. In fact, very few who were surveyed indicated little to no knowledge or viewed themselves as experts. The results for the first part of this research question are presented in Table 2.

Table 2

School Psychologists' Self-Perceived Levels of Knowledge About Symptoms and Diagnostic Criteria of Anxiety Disorders (Percent)

| | Little to No | Somewhat | Very | Expert |
|----------------------------------|-----------------|----------|------|--------|
| Selective Mutism | 7.3 | 61.8 | 29.2 | 1.7 |
| Separation Anxiety | 5.1 | 51.7 | 39.9 | 3.4 |
| Generalized Anxiety | 1.1 | 38.8 | 55.6 | 4.5 |
| Social Anxiety | 1.7 | 39.9 | 54.5 | 3.9 |
| Specific Phobia | 11.2 | 62.4 | 23.6 | 2.8 |
| Panic Disorder | 9.6 | 55.1 | 31.5 | 3.9 |
| Obsessive-Compulsive Disorder | 2.8 | 46.1 | 47.8 | 3.4 |

With regard to the social, emotional, and behavioral difficulties experienced by children with anxiety disorders, more than 50% of the survey respondents indicated that they were very knowledgeable about these difficulties. Similarly, over 50% of the surveyed school psychologists reported being very knowledgeable about the academic difficulties experienced by children with anxiety disorders. Results are summarized in Table 3.

Table 3

School Psychologists' Self-Perceived Levels of Knowledge About Social, Emotional, Behavioral, and Academic Difficulties Related to Anxiety Disorders in Children (Percent)

| | Little to no | Somewhat | Very | Expert |
|------------------------------------|--------------|----------|------|--------|
| Social, Emotional, & Behavioral | 1.1 | 36.5 | 57.3 | 5.1 |
| Academic | 1.1 | 38.2 | 53.9 | 6.7 |

In addition, all of the school psychologists that participated in this study indicated to some degree, that they see problems in social and academic functioning when comparing children with anxiety disorders to their same-aged peers without anxiety disorder symptoms. With regard to social, emotional, and behavioral problems, 23.7% of school psychologists indicated that they sometimes see these problems; 71.7% reported that they often see social problems, and 4.6% indicated that they always see these types of problems. Likewise, 40.5% of school psychologists reported academic problems when

compared with same-aged non-anxious peers; 56.1% indicated they often see academic problems, and 3.5% revealed that they always see academic problems in children with anxiety disorders.

This researcher wanted to examine further, the areas where the surveyed school psychologists most frequently learned about anxiety disorders in children. The survey responses indicated that the majority, almost 40%, of the school psychologists obtained their knowledge about anxiety disorders through university or college training. The second most common source of learned knowledge was workshops or seminars, followed by independent study. The results are presented in Table 4.

Table 4

Where School Psychologists Learned About Anxiety Disorders (Percent)

| University/ College | Workshops/ Seminars | Independent Study | Parents | Other |
|------------------------|------------------------|----------------------|---------|-------|
| 39.3 | 31.5 | 15.7 | 3.4 | 10.1 |

Question 2: What levels of self-perceived knowledge do school psychologists have about empirically supported school-based treatments?

Question 2 sought to determine the levels of self-perceived knowledge that school psychologists have about empirically supported school-based treatments for children with anxiety disorders. Here, survey respondents were asked to rate their levels of knowledge

on a continuum from little to no knowledge, somewhat knowledgeable, very knowledgeable, and expert level. The majority of survey respondents, approximately 60%, indicated that they were somewhat knowledgeable about such treatments. However, very few school psychologists considered themselves experts in this area. The results are summarized in Table 5.

Table 5

School Psychologists' Self-Perceived Level of Knowledge About Empirically Supported School-Based Treatments (Percent)

| Little to no | Somewhat | Very | Expert |
|--------------|----------|------|--------|
| 19.1 | 59.5 | 18.5 | 2.8 |

In addition, this researcher was interested in exploring school psychologists' levels of training with Cognitive Behavioral Therapy (CBT), a well established intervention that has received the greatest empirical support for effectiveness, and their self-reported competencies with the delivery of CBT principles and interventions. According to survey responses, most school psychologists have had at least some exposure to CBT principles. Very few respondents had little to no training in CBT. In addition, more than half of the surveyed respondents indicated that they felt somewhat competent in their delivery of CBT principles and interventions. Results are summarized in Tables 6 & 7.

Table 6

School Psychologists' Level of Training in CBT (Percent)

| Little to no | Some exposure | Multiple workshops/courses | Supervised experience |
|--------------|---------------|----------------------------|-----------------------|
| 5.6 | 58.9 | 19.1 | 16.3 |

Table 7

School Psychologists' Competency in CBT (Percent)

| Not Competent | Somewhat Competent | Competent | Very |
|---------------|--------------------|-----------|------|
| 22.5 | 51.1 | 20.2 | 6.2 |

Question 3: To what extent do students with anxiety disorders receive school-based treatments, as reported by school psychologists?

Question 3 sought to explore and gather information regarding the referral and identification process of students with anxiety disorders in a school setting, available school-based treatments, and outcomes of these treatments. With regard to the referral processes, school psychologists were asked who typically makes the referral; they were given a list of individuals or teams and asked to check all options that apply. The survey responses indicated that parents/guardians most frequently made a referral to the school

psychologist, followed by teachers and the child study team. Results are reported in Table 8.

Table 8

Referral to the School Psychologist (Percent)

| Individual(s) | n | % |
|-------------------------|-----|------|
| Parent/Guardian | 125 | 72.3 |
| Teacher | 116 | 67.1 |
| Child Study Team | 77 | 44.5 |
| School Counselor | 63 | 36.4 |
| Multi-Disciplinary Team | 61 | 35.3 |
| School Nurse | 22 | 12.7 |
| School Social Worker | 19 | 10.9 |
| Universal Screener | 4 | 2.3 |
| Other | 21 | 12.4 |

The school psychologists were asked, if they were in a position to know, about how the diagnosis of an anxiety disorder was made. Approximately 73% ($n = 126$) of the survey respondents indicated that the diagnosis was made by a psychiatrist or psychologist, based on input provided by the parent and by examination of the child, and 18.5% ($n = 32$) reported the diagnosis was made by a psychiatrist or psychologist, based

on input provided by a child study team evaluation and examination of the child. Almost 9% ($n = 15$) of respondents reported an “other” form of diagnosis.

In addition, this researcher was interested in the specific characteristics/behaviors typically seen in children with anxiety disorders that led to a referral to the school psychologist. Based on survey responses, frequent school absences, school refusal, and poor academics were the most frequently seen behaviors leading to a referral. The results are summarized in Table 9.

Table 9

Characteristics of Anxiety That Initiate a Referral (Percent)

| Characteristics | n | % |
|------------------------------------|-----|------|
| School Refusal | 132 | 76.3 |
| Frequent School Absences | 123 | 71.1 |
| Poor Academic Performance | 113 | 65.3 |
| Crying | 93 | 53.8 |
| Avoidant | 91 | 52.6 |
| Refusal to Speak | 84 | 48.6 |
| Somatic Complaints | 84 | 48.6 |
| Poor Rate of Work Completion | 84 | 48.6 |
| Inattentive | 80 | 46.2 |
| Intolerant to Change & Uncertainty | 77 | 44.5 |
| Fearful | 74 | 42.8 |

| | | |
|-------------------------------------|----|------|
| Request to Visit School Nurse | 68 | 39.3 |
| Poor Classroom Participation | 61 | 35.3 |
| Shy, Quiet, Withdrawn | 53 | 30.6 |
| Restless/Fidgety | 51 | 29.5 |
| Few or No Friends | 46 | 26.6 |
| Perfectionistic | 45 | 26.0 |
| Seeks Frequent Reassurance | 39 | 22.5 |
| Other | 10 | 5.8 |
| Fails to Join Clubs or Sports Teams | 5 | 2.9 |

Furthermore, this researcher was interested in the types of related services and treatments provided to children with anxiety disorders in a school setting. Based on survey responses, the majority of students receive some type of counseling support. In fact, in-school individual counseling was the most frequently reported related service, followed by community-based individual counseling. Only 10% of school psychologists indicated that there are no related services provided to students with anxiety disorders.

The results are presented in Table 10.

Table 10

Related Services Provided to Students With Anxiety Disorders (Percent)

| Related Service | n | % |
|--|-----|------|
| In-school Individual Counseling | 120 | 69.4 |
| In-school Group Counseling | 93 | 53.8 |
| In-school Specialized Skill Program (i.e. social skills) | 73 | 42.2 |
| Community-Based Individual Counseling | 111 | 64.2 |
| No Related Services | 19 | 10.9 |

Additionally, school psychologists were asked to provide the typical duration of the counseling services, if known. Over 26% of school psychologist reported that they did not know the duration of counseling services. However, the majority of the responses indicated a range between 3 to 10 months. Specifically, 17% ($n = 26$) reported less than three months; 20% indicated 3 to 6 months ($n = 31$); 23% reported 7 to 10 months, and 13% ($n = 20$) indicated counseling services that were provided longer than 10 months.

This researcher also was interested in exploring the types of empirically supported school-based treatments available in schools for children with anxiety disorders.

Behavioral consultation was the most frequently reported treatment. Manualized CBT programs (i.e., Coping Cat, FRIENDS, Cool Kids, etc.) were the second most frequently reported treatment. In addition, some school psychologist ($n = 21$) reported “other” empirically supported treatments such as resiliency programs, CBT counseling, and the

Superflex curriculum. Few psychologists reported the availability of Modular CBT and none of the school psychologists indicated that computer-based programs, such as Camp Cope-A-Lot, existed at their schools. Results are reported in Table 11.

Table 11

Empirically Supported School-Based Treatments Available to Students With Anxiety
(Percent)

| Treatment | n | % |
|----------------------------|-----|------|
| Manualized CBT Programs | 35 | 20.4 |
| Computer-based CBT Program | 0 | 0 |
| Modular CBT | 15 | 8.7 |
| Behavioral Consultation | 123 | 71.5 |
| None | 37 | 21.5 |
| Other | 21 | 12.2 |

In addition to exploring the types of support and treatments available to students with anxiety disorders in a school setting, this researcher wanted to investigate who was primarily responsible for delivering those treatments as well as knowledge of treatment outcomes. Based on survey responses, the school counselors and school psychologists were most frequently reported as the persons to deliver school-based interventions,

followed by the school social worker. Finally, over 65% of school psychologists indicated that the treatments were effective. Results are summarized in Table 12.

Table 12

Providers and Outcomes of School-Based Treatments (Percent)

| Characteristic | n | % |
|-----------------------------|----|------|
| Provider | | |
| School Psychologist | 41 | 30.6 |
| School Counselor | 45 | 33.6 |
| School Social Worker | 17 | 12.7 |
| Teacher | 6 | 4.5 |
| School Contracted Personnel | 12 | 8.9 |
| Other | 13 | 9.7 |
| Outcome | | |
| Very Effective | 3 | 2.2 |
| Effective | 92 | 68.7 |
| Ineffective | 38 | 28.4 |
| Very Ineffective | 1 | 0.8 |

Question 4: Do demographic factors impact the types of supports and services available to students with anxiety disorders?

Question 4 sought to explore if specific demographic factors of the school district, such as setting, social economic status, and school psychologist to student ratio impact the types of supports and services available to students with anxiety disorders. In this sample, respondents had the option to choose one of three available categories: rural, urban, and suburban. Cross tabulations and chi-square tests were conducted to assess the relationship between school setting and the types of supports and services available to students with anxiety disorders. It is important to note that the rural school setting was not included in this analysis due to the very small representation reported by survey respondents ($n = 6$).

The chi-square analysis $X^2(1, N = 164) = 12.03, p = .001$ indicated that there was a significant relationship between school setting and the frequency of in-school specialized skills program (i.e., social skills program) to treat children with anxiety disorders. Specifically, suburban schools were more likely than urban schools to provide an in-school specialized skills program to students with anxiety disorders. However, there were no significant relationships found between school settings and CBT programs, behavioral consultation, in-school group or individual counseling, and community-based individual or group counseling. Results are summarized in Table 13.

Table 13

Crosstabulation of School Setting and Treatments

| Treatment | Setting (Percent) | | X^2 | p |
|--------------------------|-------------------|----------|-------|------|
| | Urban | Suburban | | |
| Manualized CBT | | | | |
| No | 84.3 | 75.5 | | |
| Yes | 15.7 | 24.5 | | |
| | | | 1.87 | .171 |
| Modular CBT | | | | |
| No | 91.4 | 91.4 | | |
| Yes | 8.6 | 8.5 | | |
| | | | .000 | .989 |
| Behavioral Consultation | | | | |
| No | 30.0 | 28.7 | | |
| Yes | 70.0 | 71.3 | | |
| | | | .032 | .859 |
| IS Individual Counseling | | | | |
| No | 29.0 | 30.9 | | |
| Yes | 71.0 | 69.1 | | |
| | | | .066 | .797 |
| IS Group Counseling | | | | |
| No | 53.6 | 40.0 | | |
| Yes | 46.4 | 59.6 | | |
| | | | 2.80 | .095 |
| IS Specialized Skills | | | | |
| No | 75.5 | 48.9 | | |
| Yes | 24.3 | 51.1** | | |
| | | | 12.03 | .001 |
| CB Individual Counseling | | | | |
| No | 41.4 | 31.9 | | |
| Yes | 58.6 | 68.1 | | |
| | | | 1.58 | .209 |
| CB Group Counseling | | | | |
| No | 82.9 | 79.8 | | |
| Yes | 17.1 | 20.2 | | |
| | | | .247 | .619 |

Note. IS = In-School; CB = Community-Based

** $p < .01$.

Next, crosstabulation and chi-square tests were conducted to examine the relationship between the average household income of the families residing in the district and the types of supports and services available to students with anxiety disorders. Here, respondents had the option to choose one of five categories: Upper socio-economic class, Upper Middle socio-economic class, Middle socio-economic class, Lower Middle socio-economic class, and Lower socio-economic class. Because of the small representation of Upper socio-economic class ($n = 4$) in this sample, Upper socio-economic class was combined with the Upper Middle socio-economic class for these analyses.

The chi-square analysis $X^2(3, N = 170) = 9.53, p = .023$ indicated that there was a significant relationship between average household income of the families residing in the district and the frequency of in-school specialized skills programs (i.e., social skills program) to treat children with anxiety disorders. Specifically, Upper and Upper Middle socio-economic class districts were more likely to provide in-school specialized skills programs to students with anxiety disorders. However, there were no significant relationships found between average household income of the families residing in the district and CBT programs, behavioral consultation, in-school group or individual counseling, and community-based individual or group counseling. Results are summarized in Table 14.

Table 14

Crosstabulation of Income and Treatments

| Treatment | Income (Percent) | | | | X^2 | p |
|------------|------------------|------|------|------|-------|------|
| | U | M | LM | L | | |
| MA CBT | | | | | | |
| No | 72.4 | 78.0 | 78.6 | 85.7 | | |
| Yes | 27.6 | 22.0 | 21.4 | 14.3 | | |
| | | | | | 2.49 | .477 |
| MO CBT | | | | | | |
| No | 89.7 | 88.0 | 100 | 92.1 | | |
| Yes | 10.3 | 12.0 | 0.00 | 7.9 | | |
| | | | | | 3.63 | .304 |
| BC | | | | | | |
| No | 20.7 | 30.0 | 28.6 | 31.7 | | |
| Yes | 79.3 | 70.0 | 71.4 | 68.3 | | |
| | | | | | 1.23 | .745 |
| IS IndCoun | | | | | | |
| No | 27.6 | 26.0 | 29.6 | 33.9 | | |
| Yes | 72.4 | 74.0 | 70.4 | 66.1 | | |
| | | | | | .905 | .824 |
| IS GrpCoun | | | | | | |
| No | 34.5 | 46.0 | 46.4 | 53.2 | | |
| Yes | 65.5 | 54 | 53.6 | 46.8 | | |
| | | | | | 2.81 | .422 |
| IS SSP | | | | | | |
| No | 37.9 | 56.0 | 71.4 | 68.3 | | |
| Yes | 62.1* | 44.0 | 28.6 | 31.7 | | |
| | | | | | 9.53 | .023 |
| CB IndCoun | | | | | | |
| No | 27.6 | 28.0 | 39.3 | 44.4 | | |
| Yes | 72.4 | 72.0 | 60.7 | 55.6 | | |
| | | | | | 4.36 | .225 |
| CB GrpCoun | | | | | | |
| No | 75.9 | 88.0 | 78.6 | 79.3 | | |
| Yes | 24.1 | 12.0 | 21.4 | 20.6 | | |
| | | | | | 2.32 | .509 |

Note. U = Upper & Upper Middle; M = Middle; LM = Lower Middle; L = Lower; MA CBT = Manualized CBT programs; MO CBT = Modular CBT; BC = Behavioral Consultation; IS IndCoun = In-School Individual Counseling; IS GrpCoun = In-School Group Counseling; IS SSP = In-School Specialized Skills Programs; CB IndCoun = Community-Based Individual Counseling; CB GrpCoun = Community-Based Group Counseling

* $p < .05$.

In addition, the school psychologist to student ratio was a variable of interest. This researcher wanted to explore if there was a relationship between the number of children treated for anxiety disorders and the school psychologist to student ratio. For this analysis, two groups of school psychologists were formed: fewer than 1:1500 and more than 1:1500. A one-way ANOVA was conducted to check to see if there were differences between ratio and number of students seen with anxiety disorders. The results of the ANOVA indicated that there were significant differences between school psychologist to student ratio and number of students seen with anxiety disorders, $F(1, 169) = 19.61, p = .000$. In fact, school psychologists with a case load of more than 1500 students saw more children with anxiety disorders ($M = 22.55, SD = 22.76$), compared with school psychologists with a school psychologist to student ratio of fewer than 1500 students ($M = 10.8, SD = 11.52$).

Although size of the district was a demographic factor of interest, an analysis between district size and supports and services available to students with anxiety disorders could not be completed. Within this sample, there was an over-representation of school psychologists reporting district size of over ten thousand students ($n = 124, 72.9\%$).

Question 5: Does school psychologists' levels of training impact the levels of knowledge about anxiety disorders, empirically supported school-based treatments for anxiety disorders, and the influence of anxiety disorders on learning and educational success?

Question 5 sought to investigate possible differences between the school psychologists' levels of training (i.e., Masters, Educational Specialist, or Doctoral

degree) and their knowledge concerning symptoms of and criteria for anxiety disorders. Also, this researcher sought to explore if there are significant differences between the levels of training and their knowledge about empirically supported school-based treatments and the influence of anxiety disorders on learning and educational success. With regard to training, the survey respondents chose one of the three options: Masters, Educational Specialist, and Doctorate. Knowledge of each of the seven anxiety disorders was assessed on a continuum of little to no knowledge, somewhat knowledgeable, very knowledgeable, and expert level. Crosstabulation and chi-square tests were conducted to assess whether or not there is a relationship between highest degree earned and knowledge concerning symptoms of and criteria for anxiety disorders. It is important to note that the Masters and Educational Specialist groups were combined into one group for this analysis. In addition, the little to no knowledge and somewhat knowledgeable categories were combined into one group and the very knowledgeable and expert level categories were combined into one group.

The chi-square analysis indicated significant differences between Masters/Educational Specialist and Doctoral trained school psychologists and knowledge concerning symptoms of and criteria for certain anxiety disorders. Specifically, Doctoral level school psychologists more frequently endorsed being either very knowledgeable or viewed themselves as having an expert level of knowledge about the symptoms and criteria of separation anxiety, generalized anxiety, social anxiety, specific phobia, and panic disorder. There were no significant differences between level of training and selective mutism and obsessive-compulsive disorder. Results are summarized in Table 15.

Table 15

Crosstabulation of Degree and Knowledge of Anxiety Symptoms

| Disorder | Degree (Percent) | | X^2 | p |
|----------------------|------------------|---------------------|-------|------|
| | Masters/EdS | Doctorate | | |
| Selective Mutism | | | | |
| None to Somewhat | 68.7 | 68.9 | | |
| Very to Expert | 31.3 | 31.1 | | |
| | | | .001 | .981 |
| Separation Anxiety | | | | |
| None to Somewhat | 60.9 | 44.4 | | |
| Very to Expert | 39.1 | 55.6 [†] | | |
| | | | 3.54 | .044 |
| Generalized Anxiety | | | | |
| None to Somewhat | 44.3 | 22.2 | | |
| Very to Expert | 55.7 | 77.8 [*] | | |
| | | | 6.71 | .010 |
| Social Anxiety | | | | |
| None to Somewhat | 50.4 | 20.0 | | |
| Very to Expert | 49.6 | 80.0 ^{***} | | |
| | | | 12.31 | .000 |
| Specific Phobia | | | | |
| None to Somewhat | 80.9 | 55.6 | | |
| Very to Expert | 19.1 | 44.4 ^{**} | | |
| | | | 10.71 | .001 |
| Panic Disorder | | | | |
| None to Somewhat | 70.4 | 48.9 | | |
| Very to Expert | 29.6 | 51.1 [*] | | |
| | | | 6.55 | .011 |
| Obsessive-Compulsive | | | | |
| None to Somewhat | 53.0 | 37.8 | | |
| Very to Expert | 47.0 | 62.2 | | |
| | | | 3.02 | .082 |

Note. EdS = Educational Specialist Degree

[†] $p < .05$, one-tail. ^{*} $p < .05$. ^{**} $p < .01$. ^{***} $p < .001$.

This researcher was also interested in exploring the possible relationship between school psychologists' levels of training and their knowledge of empirically supported school-based treatments for children with anxiety disorders. Crosstabulation and chi-square tests were used in this analysis. Again, the Masters and Educational Specialist categories were combined into one group. Likewise, the no to little knowledge and somewhat knowledgeable categories were combined into one group and the very knowledgeable and expert level were combined into one group.

The chi-square analysis $X^2(1, N = 160) = 9.27, p = .002$ indicated that there were significant differences between Masters/Educational Specialist and Doctoral trained school psychologists and knowledge of empirically supported school-based treatments for anxiety disorders. Specifically, doctoral level school psychologists more frequently endorsed being either very knowledgeable or viewed themselves as having an expert level of knowledge about the empirically supported school-based treatments for students with anxiety disorders. Results are displayed in Table 16.

With the same grouping of categories as described previously, crosstabulation and chi-square tests were done to explore significant differences between training and knowledge of the social and emotional difficulties and the academic difficulties experienced by children with anxiety disorders. Chi-square analysis $X^2(1, N = 160) = 10.99, p = .001$ indicated that doctoral level school psychologists more frequently endorsed being very knowledgeable or experts about the social and emotional difficulties experienced by children with anxiety disorder, compared with master or educational specialist level school psychologists.

With regard to knowledge of academic problems experienced by children with anxiety disorders, chi-square analysis $X^2(1, N = 160) = 6.31, p = .012$ indicated that doctoral level school psychologists more frequently reported being experts or very knowledgeable about the academic problems faced by children with anxiety disorders. Results are summarized in Table 16.

Table 16

Crosstabulation of Degree and Knowledge of Empirically Supported School-Based Treatments, Social and Emotional Difficulties, and Academic Difficulties

| Knowledge | Degree (Percent) | | X^2 | p |
|---------------------------------|------------------|-----------|-------|------|
| | Masters/EdS | Doctorate | | |
| Empirical Treatments | | | | |
| None to Somewhat | 84.3 | 62.2 | | |
| Very to Expert | 15.7 | 37.8** | | |
| | | | 9.27 | .002 |
| Social & Emotional Difficulties | | | | |
| None to Somewhat | 46.1 | 17.8 | | |
| Very to Expert | 53.9 | 82.2** | | |
| | | | 10.99 | .001 |
| Academic Difficulties | | | | |
| None to Somewhat | 46.1 | 24.4 | | |
| Very to Expert | 53.9 | 75.6* | | |
| | | | 6.31 | .012 |

Note. EdS = Educational Specialist Degree

* $p < .05$. ** $p < .01$.

Finally, if school psychologists were at least somewhat knowledgeable about empirically supported school-based treatments such as CBT, this researcher was interested in investigating possible differences between levels of training (Master/Educational Specialist or Doctorate) and self-perceived competency in the

delivery of CBT principles and intervention. When assessing levels of CBT competency, survey respondents could choose from one of the four options: not competent, somewhat competent, competent, or very competent. Crosstabulation and chi-square tests were used to look for significant difference between level of training and CBT competency. For this analysis, the not competent and somewhat competent options were combined to form one group. The competent and very competent options were combined to form another group. Chi-square analysis $X^2(1, N = 160) = 10.7, p = .001$ indicated that doctoral level school psychologists more frequently reported being competent to very competent in the delivery of CBT principles and intervention, compared with masters or educational specialist level psychologists. Results are summarized in Table 17.

Table 17

Crosstabulation of Degree and CBT Competency

| Competency | Degree (Percent) | | X^2 | p |
|-----------------------------|------------------|-----------|-------|------|
| | Masters/EdS | Doctorate | | |
| Not to Somewhat Competent | 78.8 | 21.2 | 10.7 | .001 |
| Competent to Very Competent | 52.4 | 47.6** | | |

Note. EdS = Educational Specialist Degree

** $p < .01$.

In addition, this researcher wanted to explore the data for possible differences between school psychologists' competency in CBT and the number of students that are seen with anxiety disorders. Level of competency was assessed in four categories: not competent, somewhat competent, competent, and very competent. A one-way ANOVA was conducted to check if there are differences in level of CBT competency and number

of students seen with anxiety disorders. The results of the ANOVA indicated that there were significant differences between level of CBT competency and number of students seen with anxiety disorders, $F(3, 176) = 4.07, p = .008$. A bonferroni post hoc test revealed that school psychologists that were competent in the delivery of CBT interventions and principles saw more children with anxiety disorders, compared with school psychologists that were not competent in CBT.

Question 6: Is there a relationship between school psychologists' years of experience and their knowledge about anxiety disorders, empirically supported school-based treatments, and the influence of anxiety disorders on learning and educational success?

Question 6 sought to investigate possible differences between the school psychologists' years of experience and their knowledge of symptoms and criteria of anxiety disorders. Also, this researcher sought to explore if there are significant differences between years of experience and their knowledge about empirically supported school-based treatments and the influence of anxiety disorders on learning and educational success. With regards to years of experience, the survey respondents choose one of the five options: 1 to 5, 6 to 10, 11 to 15, 16 to 20, and 21 or more years. Knowledge of each of the seven anxiety disorders was assessed by choosing one of the four options: Little to no knowledge, somewhat knowledgeable, very knowledgeable, and expert level. Crosstabulations and chi-square tests were used for this analysis. During this analysis, the five options for years of experiences were combined to form two groups: 1-10 years of experience and 11 or more years of experience. In addition, the

four options of knowledge about symptoms of anxiety disorders were combined to form two groups: no to somewhat knowledgeable and very knowledgeable to expert.

Chi-square analysis indicated that there were significant differences between years of experience and school psychologists' knowledge of the symptoms and criteria of certain types of anxiety disorders. Specifically, school psychologists with eleven or more years of experiences more frequently rated themselves as being very knowledgeable or having an expert level of knowledge about the symptoms and criteria regarding separation anxiety, specific phobia, and panic disorder. There were no significant difference founds between years of experience and selective mutism, generalized anxiety, social anxiety, and obsessive-compulsive disorder. Results are displayed in Table 18.

Table 18

Crosstabulation of Years of Experience and Knowledge of Anxiety Symptoms

| Disorder | Years of Experience (Percent) | | X^2 | p |
|----------------------|-------------------------------|--------|-------|------|
| | 1 to 10 | 11+ | | |
| Selective Mutism | | | | |
| None to Somewhat | 72.8 | 66.7 | | |
| Very to Expert | 27.2 | 33.3 | | |
| | | | .76 | .383 |
| Separation Anxiety | | | | |
| None to Somewhat | 64.1 | 47.4 | | |
| Very to Expert | 35.9 | 52.6* | | |
| | | | 4.79 | .029 |
| Generalized Anxiety | | | | |
| None to Somewhat | 44.6 | 32.1 | | |
| Very to Expert | 55.4 | 67.9 | | |
| | | | 2.78 | .095 |
| Social Anxiety | | | | |
| None to Somewhat | 47.8 | 34.6 | | |
| Very to Expert | 52.2 | 65.4 | | |
| | | | 3.03 | .082 |
| Specific Phobia | | | | |
| None to Somewhat | 81.5 | 64.1 | | |
| Very to Expert | 18.5 | 35.9** | | |
| | | | 6.58 | .010 |
| Panic Disorder | | | | |
| None to Somewhat | 72.8 | 55.1 | | |
| Very to Expert | 27.2 | 44.9* | | |
| | | | 5.79 | .016 |
| Obsessive-Compulsive | | | | |
| None to Somewhat | 55.4 | 42.3 | | |
| Very to Expert | 44.6 | 57.7 | | |
| | | | 2.91 | .088 |

* $p < .05$. ** $p < .01$.

In addition to the knowledge of symptoms of anxiety, this research sought to explore possible differences between school psychologists' years of experience and knowledge of empirically supported school-based treatments, knowledge of the social

and emotional difficulties experienced by children with anxiety disorders, and knowledge of the academic difficulties common to anxious students. Crosstabulations and chi-squares tests were used to analyze each of these variables with the above previously described groupings.

Chi-square analysis did not reveal any significant difference between years of experience and knowledge of empirically supported school-based treatments, knowledge of social and emotional difficulties, and knowledge of academic difficulties experienced by students with anxiety disorders. Results are summarized in Table 19.

Table 19

Crosstabulation of Years of Experience and Knowledge of Empirically Supported School-Based Treatments, Social and Emotional Difficulties, and Academic Difficulties

| Knowledge | Years of Experience (Percent) | | X^2 | p |
|---------------------------------|-------------------------------|------------|-------|------|
| | 1 to 10 | 11 or more | | |
| Empirical Treatments | | | | |
| None to Somewhat | 79.3 | 79.9 | | |
| Very to Expert | 20.7 | 23.1 | .15 | .703 |
| Social & Emotional Difficulties | | | | |
| None to Somewhat | 40.2 | 34.6 | | |
| Very to Expert | 59.8 | 65.4 | .56 | .453 |
| Academic Difficulties | | | | |
| None to Somewhat | 44.6 | 33.3 | | |
| Very to Expert | 55.4 | 66.7 | 2.23 | .135 |

Chapter 5

Discussion

This chapter includes a summary of the analyses, a discussion of the findings and related hypotheses, conclusion, and limitations. In addition, recommendations for future research are offered and implications for individuals working with children and youth with anxiety disorders are provided.

The purpose of this present study was to examine school psychologists' self-perceived knowledge about anxiety disorders and empirically supported school-based treatments. Also, this study sought to investigate school psychologists' knowledge about many of the difficulties faced by children and youth with anxiety disorders, such as social and emotional difficulties and academic problems. Furthermore, this study sought to gain an understanding of the referral and identification processes involving children with anxiety disorders and the types of services and supports available to students with anxiety disorders.

In this section, the findings reported in the results section related to the stated research hypotheses, are summarized.

Hypothesis 1: It is hypothesized that the higher the level of education, the more knowledgeable school psychologists will be about the criteria and symptoms of anxiety disorders.

Globally speaking, most school psychologists indicated that they were somewhat to very knowledgeable about most of the presented anxiety disorders: selective mutism, separation anxiety, generalized anxiety, social anxiety, specific phobia, panic disorder, and obsessive compulsive disorder. Interestingly, for both generalized anxiety and social

anxiety, more than half of all of the school psychologists that participated in this study indicated that they were very knowledgeable about the symptoms and criteria of these disorders. This is a very positive finding because generalized anxiety and social anxiety are among the most prevalent anxiety disorders in youth (Mychailyszyn et al., 2011).

In terms of training, it was hypothesized that school psychologists with advanced training beyond the specialist level, such as a doctorate, would be more knowledgeable about the symptoms and criteria of anxiety disorders. Findings of this current research study indicated that school psychologists with a doctoral degree were indeed more knowledgeable about most anxiety disorders, compared with school psychologists with a masters or educational specialist degree. Specifically, doctoral level school psychologists were more knowledgeable about separation anxiety, generalized anxiety, social anxiety, specific phobia, and panic disorder. It is important to note that although there were no significant differences between the groups for knowledge of obsessive-compulsive disorder, the data were trending to show that the higher the degree and the greater the training, the more knowledgeable were the psychologists about the disorder. With regard to selective mutism, the majority of school psychologists indicated that they were somewhat knowledgeable about the disorder, and there were no significant differences found between doctoral and specialist level psychologists. This is possibly due to the low prevalence of selective mutism in the general population.

Hypothesis 2: It is hypothesized that the higher the level of education, the more knowledgeable school psychologists will be about the educational difficulties experienced by children with anxiety disorders.

It is not uncommon for children with anxiety disorders to experience educational difficulties. These difficulties can include academic problems, such as poor test performance and class participation, lower reading achievement, and poor attention and memory. Furthermore, social, emotional, and behavioral problems are common in children with anxiety disorders. For example, anxious children tend to have fewer friends and avoid age-appropriate social interactions, which can lead to an increased sense of loneliness and depression. Here, it was hypothesized that doctoral level school psychologists would be more knowledgeable about these difficulties, compared with specialist level psychologists. Results indicated that doctoral level school psychologists were more knowledgeable about the academic and social and emotional difficulties experienced by students with anxiety disorders. In fact, 82.2% of doctoral level school psychologists indicated that they were either very knowledgeable or had an expert level of knowledge about the social and emotional difficulties experienced by children with anxiety disorders. Additionally, 75.5% of doctoral level school psychologists reported being very knowledgeable or considered themselves experts in the area of child anxiety and related academic difficulties.

Hypothesis 3: It is hypothesized that the higher the level of education, the more knowledgeable school psychologists will be about empirically supported school-based treatments for anxiety.

As previously noted, schools are now becoming the primary access point for children with elevated anxiety to receive services and treatment (Burns et al., 1995). Therefore, it is important for school staff, especially school psychologists, to be knowledgeable about treatments that have received support from empirically based studies. Similar to other findings, school psychologists with a doctoral degree were more knowledgeable about empirically supported school-based treatments for students with anxiety problems. In fact, 38% of the doctoral level school psychologists indicated that they were very knowledgeable or expert. However, in general, 60% of all the school psychologists who completed the survey reported that they were at least somewhat knowledgeable about school-based treatments that have shown to be effective when working with anxious youth.

Hypothesis 4: It is hypothesized the higher the level of training, the more competent a school psychologist will be with the delivery of CBT principles and techniques.

CBT has received much attention and support as an effective treatment for children with anxiety disorders. It is important for those working with children with anxiety not only to be knowledgeable about such treatments, but also to be competent in their delivery. Again, it was hypothesized that a school psychologist with advanced training would be more competent in the delivery of such treatments and interventions. Current findings suggest that doctoral level school psychologists perceived themselves as more competent in CBT than specialist level psychologists. In fact, 48% of school

psychologists in this sample with a doctoral degree indicated they were competent or very competent in delivering CBT interventions.

Hypothesis 5: It is hypothesized that the higher the level of self-reported competency with CBT principles and techniques, the greater the number the children served with school-based treatments for anxiety.

Here, school psychologists that reported being competent in CBT did indeed serve more children with anxiety disorders, compared with school psychologists who felt less competent in CBT principles and interventions. Interestingly, there were no significant findings when comparing very competent CBT psychologists to the number of children that were provided treatment for elevated anxiety. This is possibly due to the small number of school psychologists in this sample ($n = 11$) that reported being very competent in CBT. In other words, the sample may have been too small to detect a significant difference.

Hypothesis 6: It is hypothesized that the smaller the school psychologist to student ratio is, the more frequently will school psychologists provide treatment to children with anxiety disorders.

Although this current study looked at specific demographic factors of the district that could possibly influence the type of supports and services available to highly anxious student, school psychologist to student ratio was of interest. It was hypothesized that the smaller the ratio, the more likely a school psychologist would be to provide treatment. Currently, NASP recommends a 1:1000 ratio. This ratio allows for opportunities not only for assessment, but also for implementation of interventions and consultation.

Therefore, with a smaller population, it was thought that the school psychologist would have more time for other activities beyond the traditional test and place model.

However, the current findings did not support this hypothesis. On the contrary, it was noted that the higher the school psychologist to student ratio, the greater the number of children were provided treatment for problems with anxiety. A possible explanation is the greater number of children in need in a larger population. If a school psychologist has a higher case load of children, he or she would be expected to see a higher number of children with anxiety problems.

Summary and Conclusion

Anxiety disorders are common in children and adolescents. When left untreated, these children experience significant disruptions in their academic, social, and family functioning (Sulkowski, Joyce, & Storch, 2012). In the school setting, school psychologists are in an ideal position to identify and treat anxious youth. They have the training to support children with mental health needs. In addition, providing school-based treatments to students with mental health needs is within the role and scope of comprehensive services provided by school psychologists.

In this study, the majority of school psychologists reported that they are at least somewhat to very knowledgeable about most types of anxiety disorders. Likewise, school psychologists are knowledgeable about the social, emotional, and behavioral difficulties as well as the academic difficulties experienced by children with anxiety disorders. When comparing school psychologists' levels of knowledge, those with more advanced graduate training (i.e., doctoral degree) were more knowledgeable about the symptoms of and criteria for anxiety disorders, the difficulties experienced in school by

highly anxious children, and empirically supported school-based treatments. This finding is not surprising when considering the most frequently reported source of learning about anxiety disorders was university or college training. Therefore, school psychologists with advanced university training would be expected to be more knowledgeable about this topic.

Furthermore, this study compared years of experience with levels of self-perceived knowledge of anxiety disorders, related educational difficulties, and knowledge of empirically supported school-based treatments. This study found that school psychologists with 11 or more years of experience were more knowledgeable about separation anxiety, specific phobia, and panic disorder when compared with other school psychologists with fewer than 11 years of experience. However, there were no significant differences between years of experience and knowledge of the remaining four anxiety disorders, knowledge of social and emotional and academic problems related to anxiety disorders, and empirically supported school-based treatments for children with anxiety.

This study also sought to gain an understanding of the referral and identification process of a student with an anxiety disorder. Based on survey responses, parents/guardians most frequently made referrals to the school psychologists; these were followed by teachers. When specifically looking at behaviors or characteristics of an anxious child that lead to a referral, school refusal and frequent school absences were the two most frequently reported behaviors. This is consistent with the reports of Friedberg & McClure (2002); children are usually referred for treatment because they are no longer able to avoid the circumstance they fear or their avoidance has come at a great cost. The

third most commonly reported behavior of an anxious child was poor academic performance. In this sample, all school psychologists reported that they see academic problems when comparing a student with anxiety to the performance of same aged and grade peers who do not display symptoms of anxiety.

Another aim of this study was to explore the school-based supports and services for children with elevated anxiety. In-school individual counseling was the most frequently reported service, followed by community-based individual counseling. More than half of the school psychologists indicated that in-school group counseling is available at their schools, and 40% reported the use of in-school specialization skills programs, such as social skills training. When considering certain demographic factors of the district, those districts in a suburban setting or those having families residing in the district that were upper to upper middle class were more likely to provide in-school specialization programs for children with anxiety disorders. There were no significant relationships found between other demographic factors and services.

With regard to empirically supported school-based treatments, over 70% of school psychologists indicated that behavioral consultation was available at their schools for children with anxiety disorders. Although CBT has received the greatest empirical support for treating children with anxiety disorders, only 28% of school psychologists indicated that it was available at their schools. Nearly 20% reported the use of manualized CBT programs and 8% indicated the use of modular CBT. None of the school psychologists reported the use of computer-based CBT programs such as Camp Cope-A-Lot (Khanna & Kendall, 2010). In other words, few schools offer CBT as a treatment for children with anxiety. However, for the small number of schools offering

empirically supported treatments in a school setting, most school psychologists reported the treatment to be effective.

This finding is surprising, considering that randomized clinical trials have consistently demonstrated the efficacy of CBT for anxious youth (Kendall, 1994; Kendall et al., 1997; Khanna & Kendall, 2010). However, a possible explanation for the reason why CBT is not being used more frequently in schools is the lack of transferability of these programs from a clinical setting to a real life setting, such as school. For over a decade, there has been a noted need to transport laboratory-based treatments to community settings (Owens & Murphy, 2004). Although many randomized clinical control study programs have been shown to make significant improvements for children with anxiety, they are often implemented in a controlled clinical environment with trained staff, making these programs less generalizable to a real-world situation.

Owens & Murphy (2004) discuss many of the challenges faced when transporting evidence-based treatments from laboratories into real life situations, such as school. The authors point out challenges such as building and sustaining a collaborative relationship with the school, managing competing priorities with a teacher's demanding schedule, loss of programming funds, and staffing and location. Nonetheless, these researchers do advocate that schools, indeed, provide an ideal opportunity to further the field of effectiveness research and make evidence-based treatments accessible and available to students and communities.

Another possible explanation for the rare use of CBT in school settings is offered by Khanna & Kendall (2010). These authors noted that one potential barrier is the lack of a CBT-trained workforce. In this context, there might not be enough school

psychologists trained in CBT. In efforts to promote the dissemination of CBT and respond to the lack of a CBT trained professionals, some have supported the use of computer-based and computer-assisted CBT programs (Kendall, Khanna, Edson, Cummings, & Harris, 2011). In fact, these authors offer several potential advantages to these types of programs. For example, computer-based CBT programs are less costly than more traditional treatments; computers are highly available in schools and homes, and they have the potential to improve standardization and program adherence. With schools facing budgets cuts, computer-based CBT programs may be a cost effective intervention for treating children with anxiety disorders. In addition, these programs can help improve treatment fidelity with the benefits of standardized session lessons, materials, and homework assignments. These programs have shown some promising results; however, none of the school psychologists who participated in this study indicated that such a program was available at his or her school.

Finally, it may be the belief of the school or school personnel that delivery of mental health services are not within the scope and sequence of educational services provided to children in a school setting. For example, one survey respondent wrote, “We do not do therapy in a school setting. We are not staffed for it and it is not our role.” Despite NASP’s advocacy for more comprehensive and integrated psychological services, this belief may account for some explanation about the absence of CBT in schools or for any type of therapeutic support for students with anxiety.

Limitations

This study utilized survey data to explore the levels of self-perceived knowledge that school psychologists have about anxiety disorders and empirically supported school-

based treatments. Although the study yielded some interesting findings, it is important to discuss the limitations faced by this study. For example, the survey used in this current study was developed by the responsible investigator. Therefore, the reliability and validity of each item is unknown. Survey items were developed based on information gathered from research articles, book chapters, past dissertations, and the DSM-5. Another limitation is the construct validity of the survey because items were not tested for psychometric properties.

A major limitation of this study is the generalizability of the findings. A true randomized sample of school psychologists was not able to be obtained and a sample of convenience was utilized. Participants were recruited from the mid-Atlantic region of the United States. Based on the participant demographics, there was also an over-representation of school districts with a student population over ten thousand. Therefore, few generalizations can be made about districts with a student population of fewer than ten thousand. Also, approximately 60% of the sample was employed either in Pennsylvania or in Virginia. Again, this greatly limits the generalizability to other school psychologists working in other states. Last, the final sample size, which was fewer than 200, was smaller than expected.

Recommendations for Future Research

This study demonstrated that school psychologists are knowledgeable about anxiety disorders in children and related educational difficulties, but the utility of empirically supported school-based treatments, such as CBT, is lacking. Effectiveness research should continue to explore ways to support and train school staff in the delivery of empirically based treatments. Furthermore, this line of research will promote the

much needed transferability of clinical practices to everyday, real world experiences. In doing so, evidence-based treatments can become more accessible to community settings and potentially reach and treat a greater number of anxious students in need.

As previously noted, this study included only school psychologists in the mid-Atlantic regions of the United States. Based on current findings, school psychologists and school counselors were the most frequently reported persons to provide treatment and intervention to students with anxiety disorders in their schools. It would be beneficial to conduct another survey with a larger sample size that includes both school psychologists and guidance counselors from across the United States to gain an understanding on a much larger scale about what schools are doing to support children and youth with anxiety problems. This research is meaningful because past studies have continually demonstrated not only the high prevalence of anxiety disorders, but also the negative consequences when anxiety disorders are left untreated. Time and time again, research has clearly made a link between mental health and educational success (Owens & Murphy, 2004).

Interestingly, this research study found that behavioral consultation was the most frequently reported evidence-based treatment used with students with elevated anxiety in a school setting. Review of the available research base yielded only one research study that addressed the use of conjoint behavioral consultation to treat a boy with selective mutism. Because a large number of school psychologists in this sample reported its use as an approach for anxiety disorders, it would be beneficial to explore not only the specific types and outcomes of consultation that are used to address anxiety symptoms, but also, who acts as the consultant (i.e., school psychologist or counselor).

Other findings yielded from this current study suggested that parents/guardians were the ones who most frequently made a referral to the school psychologist, and the two most common symptoms associated with the anxiety referral were school refusal and excessive school absences. Avoidance is a common symptom associated with high anxiety levels. Typically, children start to avoid situations that cause significant distress, and they are no longer able to self-manage the excessive anxiety effectively. When a child starts to refuse to come to school, it is both stressful for the child and parents. Because of that stress and concern for their child, they make a referral to the school. However, one could argue that prior to the school refusal behaviors, the child experienced above average levels of anxiety that went unnoticed by the teacher or school personnel. Some researchers (Layne, Bernstein, & March, 2006; Schoenfeld & Janney, 2008) contend that anxious students often go unnoticed due to the internalizing nature of the anxiety disorder. Therefore, it would be beneficial to explore the knowledge base of school teachers regarding symptoms and common behaviors associated with anxiety disorders, because they spend the greatest amount of time with students. Information gathered through these studies could be used to develop early detection programs or universal screening programs so that children with anxiety disorders are not suffering in silence.

Implications for Practitioners

The present study was designed to assess the levels of self-perceived knowledge school psychologists have about anxiety disorders and empirically supported school-based treatments. Given the high prevalence of anxiety disorders in children and youth, adequate knowledge about the symptoms, criteria, and common behaviors associated with anxiety will make it possible to meet the academic and social and emotional needs

of students with anxiety disorders. Based on current findings, most school psychologists are at least somewhat knowledgeable to very knowledgeable about the types of anxiety disorders. In fact, more than half of all survey respondents indicated that they were very knowledgeable about the symptoms of and criteria for two of the most common anxiety disorder affecting children: social anxiety and generalized anxiety. As previously noted, schools tend to be the primary setting where children display impairment and significant levels of anxiety (Mychailyszyn et al., 2011; Herzog-Anderson, Colognori, Fox, Stewart, & Warner, 2012). Therefore, it is essential for school psychologists to be knowledgeable about anxiety disorders in children.

It is equally important for school psychologists to be knowledgeable about some of the difficulties commonly experienced by children with anxiety disorders. These difficulties include academic problems and social, emotional, and behavior problems. The results of this study indicated that 54% of school psychologists reported being very knowledgeable about the academic problems experienced by children with anxiety disorders. Also, 57% of these school psychologists indicated that they were very knowledgeable about the social, emotional, and behavioral difficulties faced by children with anxiety disorders. Based on these results, it can be implied that many school psychologists are knowledgeable about anxiety disorders and the common problems experienced by children with anxiety disorders.

Sadly, less than 20% of the survey respondents indicated that they were very knowledgeable about empirically supported school-based treatments to treat students with anxiety disorders. In other words, school psychologists appear to be knowledgeable about the types of anxiety disorders in children and the related difficulties, but are

unaware or uneducated about how to treat these disorders effectively in the school setting. Almost 60% of the school psychologists who participated in this study indicated that they were somewhat knowledgeable about treatments for anxiety in children who have received empirical support, such as CBT.

CBT has received much attention and support for demonstrating positive results, including significant reductions in the anxiety levels of anxious youth. In the current sample, 65% of school psychologists reported having had no exposure to some exposure to CBT principles and interventions. Approximately 16% of the survey respondents had actual, supervised experience in CBT. Moreover, only 27% of the school psychologists indicated that they were competent or very competent in the delivery of CBT principles and interventions. This lends support to the Khanna & Kendall (2010) claim that empirically supported school-based treatments, such as CBT, are often not being used in settings such as schools due to the lack of CBT trained workforce.

A theme that appeared across the survey results indicated that school psychologists with advanced training (i.e., doctoral degree) were more knowledgeable about the types of anxiety disorders and the related educational difficulties experienced by anxious students, compared with school psychologists practicing at the specialist level (i.e., Masters/EdS degree). Furthermore, doctoral level school psychologists were found to be more competent in the delivery of CBT interventions. When examining school psychologists' years of experience and knowledge of empirically supported school-based treatments and related educational difficulties, no significant differences were found. Therefore, experience alone will not provide the learning or training opportunities needed

to successfully meet the academic, social, and behavioral needs of children with anxiety disorders. School psychologists need explicit instruction and training.

Given the amount of evidence that documents the negative consequences of untreated anxiety disorders, it is essential for school psychologists to be given or to be offered more training in childhood anxiety disorders and empirically supported school-based treatments, such as CBT. The availability and utility of these treatments are lacking. School psychologists should become informed about these programs and advocate for their use in schools.

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Appendix A

Cover Letter

Dear colleague,

I am a school psychologist who is currently working towards a doctorate degree at the Philadelphia College of Osteopathic Medicine. As part of my dissertation, I developed a survey designed to assess school psychologists' knowledge of anxiety disorders and empirically supported school-based treatments. A secondary purpose is to gain an understanding of the referral and identification process of children with anxiety disorders within schools and available school-based treatments.

Your participation in this study would be greatly appreciated and is strictly voluntary. Should you choose to participate, please click on the hyper-link below which will take you directly to the survey hosted by SurveyMonkey.com. By completing the survey, you are consenting for the information to be utilized in the study. Should you have any questions about the survey or study, you may contact me at (215) 808-3315 or kellyst@pcom.edu. You may also contact Dr. Diane Smallwood at (215) 871-6564.

The survey should take about 10-15 minutes to complete. No personal identifying information will be included on the survey. Therefore, your responses will be completely anonymous.

Thank you for your time. I realize that your time is both limited and valuable. Your participation and assistance is greatly appreciated. If you are interested in receiving information about the results of the study once it is completed, you can request this information by contacting me at the phone number or e-mail address listed above.

You can access the survey with the following link:

<https://www.surveymonkey.com/s/H2M72QH>

Best Regards,

Kelly A. Myhasuk, EdS, NCSP

Appendix B

Survey

A. Knowledge Base & Training

1. Are you a certified school psychologist?

Yes

No

2. Do you currently work full-time or part-time in a school setting?

Yes

No

3. For each of the following disorders, rate your knowledge about the symptoms and diagnostic criteria.

| | Little to no knowledge | Somewhat knowledgeable | Very knowledgeable | Expert level |
|-------------------------------|------------------------|------------------------|-----------------------|-----------------------|
| Selective Mutism | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Separation Anxiety | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Generalized Anxiety | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Social Anxiety | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Specific Phobia | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Panic Disorder | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Obsessive-Compulsive Disorder | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

4. How would you rate your knowledge about the social, emotional, and behavioral difficulties experienced by children with anxiety disorders?

| Little or no knowledge | Somewhat knowledgeable | Very knowledgeable | Expert level |
|------------------------|------------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

5. How would you rate your knowledge about the academic difficulties experienced by children with anxiety disorders?

| Little to no knowledge | Somewhat knowledgeable | Very knowledgeable | Expert level |
|------------------------|------------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

6. How would you rate your knowledge about empirically supported school-based treatments for anxiety disorders?

| Little to no knowledge | Somewhat knowledgeable | Very knowledgeable | Expert level |
|------------------------|------------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

7. If you feel at least somewhat knowledgeable about anxiety disorders in children, from what source did you primarily learn about the disorders?

- University or college training
- Workshops or seminars
- Independent study
- Parents of children with the disorder
- Other (please specify)

8. In the last year, approximately how many students did you provide school psychological services to (either directly or indirectly)?

9. Of that number of students, how many of those students came to your attention due to problems with anxiety?

10. Which of the following best describes your level of training with cognitive behavioral therapy (CBT)?

- Little to no training
- Some exposure to CBT principles
- Multiple CBT workshops or courses
- Supervised experience using CBT interventions

11. How competent are you with the delivery of cognitive behavioral therapy (CBT) principles and interventions?

- Not competent
- Somewhat competent
- Competent
- Very Competent

B. Student Information

While answering questions within this section, please think of some typical students diagnosed with an anxiety disorder with whom you currently work or have previously worked.

12. Who typically makes the referral to the school psychologist?

(Please check all that apply)

- Parent/Guardian
- Teacher
- Child Study Team
- Multi-Disciplinary Team
- School Counselor
- School Nurse
- School Social Worker
- Universal Screener
- Other (please specify)

13. How was the diagnosis made? (if known)

- By a psychiatrist or psychologist based on child study team evaluation and examination of the child
- By a psychiatrist or psychologist based on input provided by the parent and examination of the child
- Other (please specify)

14. How often have you seen the following comorbid conditions?

Please check all that apply.

| | Never | Rarely | Sometimes | Often | Always |
|--------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| ADHD | <input type="radio"/> |
| Autism Spectrum Disorder | <input type="radio"/> |
| Bi-Polar Disorder | <input type="radio"/> |
| Conduct Disorder | <input type="radio"/> |
| Depression | <input type="radio"/> |
| Learning Disability | <input type="radio"/> |
| Post Traumatic Stress Disorder | <input type="radio"/> |

15. Which of the following characteristics of anxiety typically initiates a referral to the school psychologist?

Please check all that apply.

- | | | |
|--|---|--|
| <input type="checkbox"/> Crying | <input type="checkbox"/> Inattentive | <input type="checkbox"/> Refusal to speak |
| <input type="checkbox"/> Fearful | <input type="checkbox"/> Restless/fidgety | <input type="checkbox"/> Seeks frequent reassurance |
| <input type="checkbox"/> Frequent school absences | <input type="checkbox"/> Intolerant to change and uncertainty | <input type="checkbox"/> Few or no friends |
| <input type="checkbox"/> Request to visit the school nurse | <input type="checkbox"/> Avoidant | <input type="checkbox"/> Poor classroom participation |
| <input type="checkbox"/> School refusal | <input type="checkbox"/> Poor rate of work completion | <input type="checkbox"/> Fails to join clubs or sports teams |
| <input type="checkbox"/> Somatic complaints | <input type="checkbox"/> Poor academic performance | |
| <input type="checkbox"/> Perfectionistic | <input type="checkbox"/> Shy, quiet, withdrawn | |
| <input type="checkbox"/> Other (please specify) | | |

16. When working with children and youth with anxiety disorders, how often do you see problems with the students' level of social functioning, as compared with other students of the same age and grade?

| | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| Never | Sometimes | Often | Always |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

17. When working with children and youth with anxiety disorders, how often do you see problems with the students' level of academic functioning, as compared with other students of the same age and grade?

| | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| Never | Sometimes | Often | Always |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

18. About what percentage of children with anxiety disorders are maintained in the general education setting in your school(s)?

19. About what percentage of children with anxiety disorders receive special education services in your school(s)?

20. Which of the following related services do children with anxiety disorders typically receive in your school(s)?

(Check all that apply)

- In-school individual counseling
- In-school group counseling
- In-school specialized skill program (i.e. social skills training)
- Community based individual counseling
- Community based group counseling
- No related services

21. What is the typical duration of the counseling services in your school(s)? (if known)

- < 3 months
- 3 to 6 months
- 7 to 10 months
- > 10 months
- Unknown

22. What, if any, empirically supported school-based treatments are available at your school? (Please check all that apply)

- Manualized CBT programs (i.e., Coping Cat; FRIENDS; Cool Kids, etc)
- Computer-based CBT program (i.e., Camp Cope-A-Lot)
- Modular CBT
- Behavioral Consultation
- None
- Other (please specify)

23. If students with anxiety disorders received school-based interventions, who is primarily responsible for providing treatment?

- School psychologist
- School counselor
- School social worker
- Teacher
- School contracted personnel
- Other (please specify)

24. How would you describe the outcome of the treatment?

- Very effective
- Effective
- Ineffective
- Very ineffective

C. Background and Demographics

25. What is your highest degree in school psychology?

- Masters Degree
- Educational Specialist
- Doctorate
- Other (please specify)

26. In what year did you obtain your highest degree?

27. How many years have you been employed as a school psychologist?

- 1 to 5
- 6 to 10
- 11 to 15
- 16 to 20
- 21 or more

28. Which of the following best describes the student to school psychologist ratio at your primary assignment?

- < 1: 500
- 1: 500-700
- 1: 701-900
- 1: 901- 1100
- 1: 1101- 1300
- 1: 1301 - 1500
- 1: 1501 - 1700
- 1: 1701 - 1900
- >1: 1901

29. What is the size of the district in which you are currently employed?

- < 1,000 students
- 1,001 to 4,000
- 4,001 to 7,000
- 7,001 to 10,000
- > 10,001

30. With which grade level(s) do you work?

Please check all that apply.

- Preschool
- Elementary
- Middle school / junior high
- High School
- Post secondary (ie: vocational abilities training for 18 to 21)

31. Which of the following best describes your primary assignment?

- Preschool
- Elementary
- Middle school / junior high
- High School
- Post secondary (ie: vocational abilities training for 18 to 21)

32. Which of the following best describes the setting in which you are employed?

- Rural
- Urban
- Suburban

33. What is the average household income level of the families residing in your district?

- Upper socio-economic class
- Upper middle socio-economic class
- Middle socio-economic class
- Lower Middle socio-economic class
- Lower socio-economic class

34. In what state(s) are you employed?

Please check all the apply.

- Delaware
- Maryland
- New Jersey
- New York
- Pennsylvania
- Virginia
- West Virginia