School Psychologists' Knowledge and Self-perceived Competency in Identifying, Assessing, and Treating Childhood Anxiety Disorders in the School Setting

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SCHOOL PSYCHOLOGISTS’ KNOWLEDGE AND SELF-PERCEIVED
COMPETENCY IN IDENTIFYING, ASSESSING, AND TREATING CHILDHOOD
ANXIETY DISORDERS IN THE SCHOOL SETTING

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Submitted in Partial Fulfillment of the Requirements of the
Degree of Doctor of Psychology
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This is to certify that the thesis presented to us by Jaime Moldovan on the 12th day of April, 2011, 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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Abstract

Anxiety disorders are highly prevalent in the school setting but highly under-recognized, compared with the more outward behavioral disorders. Because of the many negative consequences of anxiety going unnoticed in children, school psychologists should be able to identify, assess, and treat children with anxiety in the school setting. This study utilized survey research to explore whether or not school psychologists felt knowledgeable and competent in identifying, assessing, and treating anxiety disorders in the school setting. Specifically, it explored whether or not there was a relationship between years of experience and levels of degree on knowledge and competence with identifying, assessing, and treating anxiety disorders. Overall results found no main effect for years of practice on knowledge and competence in identifying, assessing, and treating anxiety, and no main effect for knowledge on levels of degree in identifying anxiety. However, there were main effects found for levels of degree on knowledge and competence in assessing and treating anxiety disorders, and with competence in identifying anxiety disorders. Consistently, those with Doctoral degrees felt more knowledgeable and competent in assessing and treating anxiety disorders, and more competent in identifying anxiety disorders than did those with Masters, Masters Plus, and the Educational Specialist degree. School psychologists felt that their knowledge and competence was average, at best, in all areas. Implications for this study show that school psychologists would benefit from seeking further knowledge on anxiety disorders through workshops or through other means. Additionally, graduate training programs in school psychology need to focus on anxiety disorders in children because of their
prevalence rate and because of the potential for negative outcomes. Ideas for future research will also be discussed.
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Chapter One

Introduction

School psychologists utilize clinical acumen and sound decision-making during evaluation and intervention practices and maintain the highest legal and ethical standards in guiding the profession and ensuring high quality services for children (Jacob & Hartshorne, 2007). School psychologists follow the National Association of School Psychologists Principles for Professional Ethics (NASP PPE) set forth by NASP. These principles serve as a guide to ensure the fact that school psychologists are acting in the best interest of the child. This is particularly true for the practicing school psychologist who may be asked to assess or intervene with children who present with a multitude of disabiling conditions. Whether cognitively or emotionally focused, school psychologists are entrusted with the responsibility to assess and treat children accurately.

At times, school psychologists may be faced with children who present with psychopathology such as those children who have internalizing (i.e., anxiety or depression) or externalizing disorders (i.e., ADHD, oppositionally defiant) or who suffer from a DSM-IV-TR disorder. When school psychologists work with children who present with these underlying difficulties, it is expected that they follow the ethical guidelines of declaring their levels of competency at the outset, and seek out consultative services or appropriate supervision if they do not feel competent enough to assess or treat a specific child’s presenting concerns (NASP-PPE, II. A., #1-4). Unfortunately, not all school psychologists feel that they are adequately equipped to work effectively with children who have symptoms of mental health disorders, and many are not seeking the appropriate supervision (Ross & Goh, 1993; Zins, Murphy, & Wess, 1989). In addition, because
school psychologists have traditionally focused most of their efforts on providing direct services to students within special education (Fagan, 1995), they have limited time for appropriate work experiences in other NASP practice domains, which are outlined in School Psychology: A Blueprint for Training and Practice III (Ysseldyke et al., 2006). These domains address school psychologists’ roles in collaboration, in school or district-wide projects, in research and program evaluation, and in crisis response services.

School psychologists are responsible for identifying, assessing, and treating children with various disabilities. Although, children present with multiple handicapping conditions in the school setting, this manuscript focuses on anxiety disorders that impact upon a children’s academic and social development. Children with anxiety are often overlooked because anxiety is an internalizing disorder, which means it is more covert and is more difficult to recognize than are outwardly expressed behavioral disorders (Merrell et al., 2006). Therefore, anxiety in children requires the attention of a knowledgeable and competently-trained school psychologist to identify the symptoms of anxiety adequately, to assess these symptoms, and to treat these symptoms so that further impairment does not occur (Reynolds, 1992). Although the exact rates at which school psychologists assess anxiety varies by the district, survey results of school psychologists employed in school settings revealed that more than any other professionals (inside and outside of school), school psychologists felt it was their responsibility to assess children who had symptoms of anxiety (Miller & Jome, 2008).

In public school districts, special education policies and regulations are governed by the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA, 2004). Children who are identified in a school setting as having symptoms of an anxiety disorder
Anxiety Disorders

may qualify for special education support services through two categories. The category of Emotional Disturbance (ED) requires that the child has had to have demonstrated impairment over an extensive time period and that this impairment must have negatively affected his or her performance in school. This impairment may be in the form either of an incapacity to learn effectively that is not explained by cognition or health, of a lack of ability to have fulfilling relationships with others, of behavioral responses that are not expected in a particular situation, of experiencing symptoms related to depression, or of the presence of physical symptoms when problems are experienced in his or her personal or school life (Code of Federal Regulations, Title 34, Section 300.8(c)(4)). The alternative classification is Other Health Impairment (OHI). In order to meet the criteria for this classification, the child’s symptoms must directly cause a negative impact on his or her educational achievement. Further, there must be a direct need for special education services to correct for the effects of the symptoms in the child’s educational performance (Code of Federal Regulations, Title 34, Section 300.7(c)(9)). Additionally, according to the Office for Civil Rights (OCR), students who do not meet the criteria either for ED or for OHI under IDEIA (2004) may qualify for Section 504 in order to receive accommodations (Brady, 2004; deBettencourt, 2002). However, there was a significant period of time when the implementation of this civil rights law was not being utilized in the schools appropriately (Smith, 2002). In recent years, due to the increase in awareness of the benefit of using Section 504 for students with disabilities, school psychologists and other school personnel have encouraged its further use (deBettencourt, 2002).
School psychologists are the point persons because of their knowledge and training to identify initially and then to assess further anxiety symptoms in children. However, assessment needs to inform treatment, so another important role for school psychologists is to treat symptoms of anxiety effectively in order for children to succeed in school. One of the most empirically supported treatments for anxiety disorders is cognitive behavioral therapy (CBT) (Compton et al., 2004). Using successful approaches to treating anxiety in the schools may help prevent long-term negative outcomes associated with lack of treatment, such as developing an adult anxiety disorder in the future (Spence & Dadds, 1996). Treatment approaches to childhood anxiety can include formal programs (e.g., Coping Cat) or individualized counseling through a CBT approach, consultation with educators, and acknowledging family support systems (Compton et al., 2004; Kendall & Hedtke, 2006a, b).

Given the seriousness of childhood anxiety (see Dobbs, Doctoroff, Fisher, & Arnold, 2006; Schoenfeld, College, & Janney, 2008), it is pertinent that school psychologists be aware of their background knowledge and competency levels in the areas of assessing, diagnosing, and treating symptoms of anxiety in children. This will ultimately heighten awareness levels and ensure that school psychologists are receiving the training needed in order to bridge solid clinical knowledge to strong competency levels. By school psychologists becoming more knowledgeable and competent, more children with anxiety will receive appropriate intervention. As a secondary note, other school personnel will recognize the reasons why it is so important that children with symptoms of anxiety get proper screening and referral for evaluation and intervention.
Chapter Two

Literature Review

School Psychologists’ Knowledge of Anxiety in Children

The term anxiety is thought to be “related to the anticipation of threats to safety or integrity of body or self” (Kirmayer, 2001, p. 23). Children experience fear throughout their development; for example, young children are often frightened of thunderstorms and toddlers often feel distressed when separated from a caregiver. These emotions and reactions are normal parts of development and should not be matters of concern. However, when feelings of worry and fear exceed that which is typical at a particular age and interfere with various aspects of life, it becomes clinically significant and warrants clinical attention (Kazdin & Weisz, Kendall, 2000; 1998; Myers & Winters, 2002).

Characteristics associated with internalizing disorders have been recognized as early as the preschool years, and have been shown to continue into elementary school (McGee, Feehan, & Williams, 1995; Warren, Huston, Egeland, & Sroufe, 1997). Unfortunately, anxiety disorders are difficult to recognize and do not receive as much attention as externalizing or overt behavioral disorders. In the school environment, anxiety is seen as a “secret illness” because of the difficulty in identification due to the inward behavior presentation (Reynolds, 1992). It is for these reasons that internalizing disorders are often overlooked and children continue throughout their school years to receive little to no support in how to handle their emotions. This subsequently results in a negative impact on school experiences (Kendall et al., 1997).
Anxiety in children may be especially problematic when negative behaviors associated with these disorders are affecting school performance. Anxiety is associated with low academic performance because of problems with concentration and lack of homework completion (Dobbs et al., 2006). In fact, a review of the literature revealed that most studies found a link between children in the school setting who experience symptoms of anxiety and those with poor academic outcomes in at least one area (Schoenfeld et al., 2008), and that students diagnosed with a DSM-IV-TR diagnosis of social anxiety were more likely to drop out of school (Van Ameringen, Mancini & Farvolden, 2003). However, the current research base is lacking in studies that address school psychologists and their knowledge of anxiety disorders. A study conducted on members of NASP examined school psychologists’ knowledge of internalizing disorders in general (Miller & Jome, 2008). The results of this study demonstrated that members of NASP felt that it was important for school psychologists to have knowledge of all internalizing disorders. Further, survey results revealed that school psychologists thought that they should have the greatest levels of expertise in assessing and treating school phobia. Almost half of the sample thought that additional training was needed to assess many of the anxiety disorders seen in a school setting (Miller & Jome, 2008). These results are matters of concern and seem to indicate an area that requires further education and training in the field of school psychology.

**School Psychologists’ Collaboration Skills**

A criterion for acceptance into most school psychology programs includes an ability to collaborate and communicate effectively in the home, school, and community settings. Parental involvement is extremely important when a school psychologist is
School psychologists are encouraged to get parents involved and keep parents informed when it comes to their child’s educational planning, including counseling services (NASP-PPE, III, C.). Further, NASP believes this is an important area in which school psychologists should achieve competency during formal training (Ysseldyke et al., 1997, 2006). Given the fact that most children who have an anxiety disorder in the school are described as “shy”, it is pertinent that the school psychologists become their advocates to obtain and provide appropriate services (Coplan, Girardi, Findlay, & Frohlick, 2007; Nelson, Rubin, & Fox, 2005) because children with anxiety disorders are unlikely to advocate for themselves. Furthermore, school psychologists’ skills in consultation and collaboration serve additional, important roles when it comes to providing effective feedback at a parent meeting concerning their anxious child.

School psychologists may earn various degrees in order to practice in a school setting; these include the Masters and specialist degrees, the most common degrees certified school psychologists acquire (Reschly & Wilson, 1997). Approximately three of four certified school psychologists are practicing without a Doctoral degree (Carlson, Demaray, & Hunter-Oehmke, 2006). A Doctoral degree commonly requires a specified curriculum and mental health practice under close supervision during a pre-Doctoral internship year (Gayer, Brown, Gridley, & Treloar, 2003). This degree would allow for licensure as a psychologist (Prus & Mittelmeir, 1995). It is common to think that the higher the degree, the longer period of time in formal education, and the greater length of internship, would lead to practitioners that are more competent and able to work with children of various populations, as well as to provide effective consultation and feedback.
However, survey research has disproved this by demonstrating that a high percentage of mental health professionals do not feel competent or well trained in the ability to communicate findings to others (Curry & Hanson, 2010). The number of years during which a school psychologist has been practicing may also have an effect on competency levels. One study researched the effectiveness of mental health practitioners and their willingness to give feedback, relative to the amount of time since they had earned their degree; they found no correlation (Curry & Hanson, 2010). Further, the study went on to show that overall, mental health professionals not only did not find their internships useful but also did not find that they were related to how they currently practiced.

Cultural Expression of Anxiety

It is important for school psychologists to learn how to identify, assess, and treat anxious children from differing ethnic and cultural groups. Given the fact that statistics show approximately 92% of school psychologists are Caucasian, it is pertinent that these professionals become aware of other cultures (Curtis, Hunley, & Grier, 2002). Another issue that may arise is the overrepresentation of women in the field of school psychology. By 2000, 70% of school psychologists were women (Curtis, Grier, Abshier, Sutton, & Hunley, 2002), and the trends increase by approximately 10% every decade (Reschly, 2000). The overrepresentation of Caucasian women in the field of school psychology makes it especially important that graduate programs focus on how to become culturally aware when working with students of different cultures and genders who present with anxiety. Although it is important for a clinician to be culturally sensitive when working with children who show characteristics of anxiety, it is even more important for the
clinician to be aware of his or her own culture and the ways in which this affects clinician-client interaction (Kirmayer, 2001).

Knowledge and competence in the areas of cultural expression of anxiety may be beneficial for a school psychologist who can then appropriately assess, identify, and diagnose anxiety symptoms. It has been shown that individuals in the United States, including health care providers, are more comfortable in sharing their emotions with others, as compared with individuals in other cultures (Kirmayer, 2001). Several studies have shown no difference between the diagnoses of Panic Disorder (PD) and Obsessive Compulsive Disorder (OCD) in African Americans and Caucasians in the areas of prevalence rates, attempted suicides, comorbidity, and treatment seeking behavior (Horwath, Johnson, & Hornig, 1993; Karno & Golding, 1991). The only difference found was the area of severity and coping strategies (Treadwell, Flannery-Schroeder, & Kendall, 1995; Smith, Friedman, & Nevid, 1999). Hispanics have been shown to report similar levels of anxiety compared with Caucasians (Ginsburg & Silverman, 1996), however, Asian Americans have shown greater levels of anxiety compared with Caucasians (Okazaki, 1997; Sue & Zane, 1985; Lee, Okazaki, & Yoo, 2006; Okazaki, Liu, Longworth, & Minn, 2002).

Neuropsychology and Psychopharmacology and Link to Anxiety

Newer technological advances such as fMRI and PET have demonstrated the anatomy and physiology of the human brain. Various neural pathways are responsible for anxiety, phobias, panic, and obsessions. According to the work of Lichter & Cummings (2002), frontal subcortical circuits in the prefrontal region are implicated in psychopathology, with each circuit responsible for an array of symptoms. Specifically,
the amygdala and the septo-hippocampal system are responsible for anxiety; the hypothalamus and amygdala are responsible for phobias; the periaqueductal gray is responsible for panic, and the cingulate is responsible for obsessions (Gray & McNaughton, 2000; McNaughton & Corr, 2004). Additionally, less activity has been observed in the dorsolateral prefrontal cortex and more activity in the orbital region (Baxter, Clark, Iqbal, & Ackermann, 2001) when in an anxious state. Likewise, prefrontal hypermetabolic activity in the orbital cortex is supported in anxious individuals (Drevets & Raichle, 1995).

Understanding neuropsychological processes are important because school psychologists have traditionally viewed anxiety and its treatment as being behaviorally based. However, recent research has shown neurological impairments and the resultant brain changes that happen with appropriate intervention (Hynd & Reynolds, 2005; Teeter & Semrud-Clikeman, 2007). Recently, there has been a movement towards school neuropsychology to aid in the identification, assessment, and treatment of anxiety disorders (Hale & Fiorello, 2004). School psychologists have reported finding this to be an area of interest in furthering knowledge and competency in educational placement and in promoting effective collaboration (Root, D’Amato, & Reynolds, 2005; D’Amato, 1990; D’Amato, Hammons, Terminie, & Dean, 1992). Unfortunately, graduate training programs in school psychology do not have faculty that are appropriately trained to prepare students in school neuropsychology (Walker, Boling, & Cobb, 1999). This results in practicing school psychologists who do not have adequate background knowledge in the area of school neuropsychology and, therefore, do not utilize these practices in the school setting (Hartlage & Golden, 1990).
Being aware of the neuropsychological constructs that relate to anxiety could be beneficial in understanding the associated psychopharmacological treatments. Even though school psychologists do not prescribe medications in the school setting, they should feel competent with medication management for the treatment of children with anxiety. Medication is a viable treatment option for children experiencing the negative effects of anxiety (Reinblatt & Riddle, 2007). What makes this knowledge even more important is the fact that more than half of the students in special education have been on some form of medication in the past few years (Mattison, 1999). Fluvoxamine, a common selective serotonin reuptake inhibitor (SSRI), has been found to be effective in treating social phobia (Stein, Fyer, Davidson, Pollack, & Wiita, 1999). Further, clonazepam (a benzodiazepine) has also been shown to have beneficial effects on individuals with anxiety disorder (Davidson et al., 1993). A meta-analytic review of pharmacological treatments of social anxiety found phenelzine, clonazepam, gabapentin, brofaromine, and SSRIs, to be the most effective (Blanco et al., 2003). Other studies found similar results when comparing pharmacological treatment effects, in comparison with placebo or no treatment (Gould, Buckminster, Pollack, Otto, & Massachusetts, 2006; Gelernter et al., 1991).

Although school psychologists are not responsible for prescribing medication, knowledge of the various medications and their effects is important to work effectively with children who are prescribed various medications to treat their anxious symptoms. It is also important because it allows for easier communication and collaboration with physicians who can prescribe. This collaboration must be established between a school psychologist, the child’s family and physicians, in order to provide holistic care for the
anxious child (Forness, Kavale, Sweeney, & Crenshaw, 1999). Despite the fact that it is important for school psychologists to have knowledge of how to collaborate effectively about various medications, training programs do a poor job of emphasizing this training (Kratochwill, 1994). A survey conducted of NASP members found that almost three-quarters of respondents had not taken a course focusing on psychopharmacology in their school psychology training, and those who gained this knowledge did so through workshops and other sources of literature (Carlson et al., 2006). Further, this study showed that a majority of the respondents reported a desire for more knowledge about childhood psychopharmacology, and that finding this type of knowledge was extremely important in their job roles (Carlson et al., 2006).

**Identification of Anxiety Disorders in Children**

**Clinical identification of symptoms utilizing the DSM-IV-TR.** School psychologists at any level should feel comfortable with identifying clinical symptoms often associated with anxiety in children; however, the Diagnostic and Statistical Manual for Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR, American Psychiatric Association, 2000) has not always been helpful to school psychologists who have focused on educational classifications to guide treatment (McBurnett, 1996). The identification of children with an anxiety disorder in the school setting is predicated upon IDEA. The IDEA law does not prescribe classifications of need as does the DSM-IV-TR, which follows a behavioral nosology (DSM-IV-TR, APA, 2000). Instead, IDEA requires the symptomatic picture to fall under a classification based not on specific disorders, but based on groupings of symptoms that appear to negatively affect a child’s educational functioning. However, the DSM-IV-TR as a method of identifying features of a specific
anxiety disorder is helpful and meaningful to the school psychologist who can use this information for appropriate individualized intervention. Thus differential diagnosis is crucial for the school setting because the choice of intervention relies upon that child’s symptomatic picture (Hale & Fiorello, 2004).

The following disorders have been shown to affect children in the school setting, making them important to understand: Separation Anxiety Disorder, Generalized Anxiety Disorder, Social Phobia, Specific Phobia, Panic Disorder, Selective Mutism, Obsessive Compulsive Disorder, and Posttraumatic Stress Disorder. Recent research, through a twelve month study, revealed anxiety to be the most prevalent category of disorders (18.1%), with specific phobia and social phobia being the most prevalent type of disorder (Kessler, Chiu, Demler, & Walters, 2005).

Social Phobia in the DSM-IV-TR is marked by worry related to being judged in a social situation. The DSM-IV-TR states that a child must be able to interact appropriately with others, and the fear must occur in situations with adults and peers. The child may or may not recognize their fears as being unwarranted. The response to a social situation may take the form of crying, throwing a tantrum, or avoidance. This disturbance must be present for six or more months, and symptoms may not be due to another disorder, medical diagnosis, or substance use. The fear must significantly affect the child in multiple settings. In the school setting, the presence of this disorder is especially disturbing because of the large emphasis on social interaction both with peers and with adults (Hofmann et al., 1999).

For Specific Phobia, the same criterion is used as for Social Phobia, except that the fear is related to specific items or situations. For example, fears could be related to an
animal, heights, closed spaces, water, needles, costumes, and/or loud noises (APA, 2000). School psychologists considered it quite important to have assessment knowledge, in the school setting, about a specific type of phobia, known as school phobia; however, over half the sample reported not having the background knowledge to do so (Miller & Jome, 2008). School phobia exists when children experience significant disturbances in school, and thus, often try to avoid school (Suveg, Aschenbrand, & Kendall, 2005). Because of the high prevalence rates and the debilitating nature of Social Phobia and Specific Phobia, it is important for school psychologists to have knowledge of and competence in working with children who demonstrate these differential symptoms.

According to the DSM-IV-TR (APA, 2000), Separation Anxiety Disorder is marked by a significant fear when removed from a caregiver. The fear must be in excess of what is expected during the developmental period of the child; symptoms must last four or more weeks; the individual must be younger than 18 years of age, and the symptoms must persist and interfere in multiple settings. Furthermore, three additional criteria must be met for a diagnosis of Separation Anxiety Disorder. Some of these criteria include worrying about separation, concern about a caregiver getting hurt or dying, avoidance of activities that do not allow a caregiver to be in close proximity, nightmares about possible separation, and somatic complaints regarding the thought of separation (APA, 2000).

The DSM-IV-TR defines Generalized Anxiety Disorder as experiencing a feeling of worry for most days within a 6 month period, and in a variety of settings. The rule-out criteria dictate that the worry cannot be related to any other Axis I diagnosis, nor can it be related to a medical diagnosis or substance abuse. Furthermore, three additional
symptoms must be present; these are, specifically: feeling either agitated or irritable, overly exhausted, experiencing somatic symptoms, having difficulty sleeping, and having trouble focusing (APA, 2000). In the school setting, this disorder may manifest itself by the child being overly worried about how he or she performs academically, and by being excessively sensitive to how this performance will affect him or her in the long run (Mychailyszyn, Mendez, & Kendall, 2010). Overall, school psychologists reported working with children who met criteria for Generalized Anxiety Disorder in the school setting, but many felt that they needed additional training in assessment of this disorder (Miller & Jome, 2008).

Panic Disorder in the DSM-IV-TR is characterized by an onset of intense terror that develops suddenly and takes approximately 10 minutes to reach its peak. Symptoms associated with panic disorder include rapid heartbeat, perspiring, difficulty in breathing, choking sensations, queasiness, loss of control, dizziness, tingling limbs, and feeling hot or cold. Panic Disorder may occur with or without agoraphobia. Symptoms associated with agoraphobia include avoiding any situation in which it would be difficult to escape, or situations in which receiving help for symptoms associated with a Panic Attack would be impossible. If these symptoms are present, they may not be due to another Axis I disorder (APA, 2000).

Selective Mutism is a disorder commonly seen in schools. According to the DSM-IV-TR, this disorder is characterized by a child having the ability to communicate but not exhibiting this communication skill in situations in which it is expected. For example, a child may speak appropriately at home but not speak in school. Symptoms must be present for at least a month, but should not be diagnosed if the child has been in
school for only one month. If the child is not speaking due to another Communication Disorder or Pervasive Developmental Disorder, this diagnosis should be ruled out (APA, 2000). The symptoms are commonly seen when a child first enters school; however, because these children are generally quieter in the classroom, for a long period of time, the school related personnel often overlook their behavior as being problematic (Kumpulainen, Rasanen, Raaska, and Samppi, 1998). Because raising awareness among school related personnel would result in preventative measures for these children earlier on in their school careers, it is important for school psychologists to be appropriately prepared to recognize symptoms and communicate their observations to others.

Obsessive Compulsive Disorder is marked either by obsessions or by compulsions (APA, 2000). Similar to Social Phobia, children may not realize that these are inappropriate thoughts or acts. Obsessions are thoughts that are difficult to control but attempts are made by engaging in certain actions (compulsions). The obsessions have no basis in reality and are clearly within a person’s mind and are not imposed. Compulsions are acts or behaviors that are directly caused by an obsession, and are believed to have a direct impact on the obsession (although, this is not the reality). The distress must significantly interfere with an individual’s life by taking up a noteworthy amount of time (lasting at least an hour each day). Similar to other disorders, the obsessions and compulsions must not be related to another disorder, to a medical diagnosis, or to substance intake. Because symptoms cause significant distress in the school environment, it is extremely important to identify and treat these early on (Sturm, 2009). Research has shown several negative school outcomes that make school psychologists especially prominent in being able to work effectively with this population. Specifically,
their obsessions may focus on aggressive or harmful themes and on fear of losing someone close (Geller et al., 2001). Further, other negative outcomes have resulted in poor school attendance or lateness, avoidance of public places, and impairment in concentration that result in poor learning outcomes (Piacentini, Bergman, Keller, & McCracken, 2003).

Last, a diagnosis of Post-Traumatic Stress Disorder is characterized by an individual’s direct or indirect experience of an event that is significant enough to cause serious behavioral and/or emotional side effects (e.g., children’s behavior could seem erratic) (APA, 2000). After the event, children could engage in perseverative play in which the event is acted out, have nightmares surrounding the event, and/or experience significant psychological and physiological distress. Further, children react by trying to avoid contact with people, places, or things that remind them of the traumatic event, or that make them feel the intense fear that was experienced. They may also experience a numbing effect by losing interest in previously enjoyed activities, avoiding emotional contact with close peers and relatives, and avoiding long-term plans. Additionally, there is a disturbance in sleeping patterns (too much or not enough), emotional reactivity (anger), attention, and/or their startle responses (heightened response). Symptoms must last at least one month in order to meet criteria for PTSD (APA, 2000). School impairment could result because of withdrawal from others, resulting in the child shutting down and not achieving academically. A study by Walker, Ramsey, and Gresham (2004) reported that many children in schools often go unnoticed because of the lack of recognition about the disorders among school personnel and lack of appropriate resources.
Assessment of Anxiety in the Schools

A school psychologist can use various strategies to assess anxiety in children. As with any complete assessment, no one measure should warrant a diagnosis. Rather, an examination of multiple sources for recurrent themes should be carefully reviewed before reaching a diagnostic decision. According to NASP, when assessing a student for symptoms of anxiety, it is important to use multiple methods of assessment when drawing conclusions (NASP-PPE, IV, C, #3). The NASP Ethical Guidelines also include numerous statements devoted to respecting the individuality of clients and using appropriate assessment tools (NASP-PPE, III., A., #2, #3; IV., C., #1, b.). Given the fact that almost half of a school psychologist’s time is spent on assessment (Benson & Hughes, 1985; Hutton, Dubes, & Muir, 1992; Stinnett, Havey, & Oehler-Stinnett, 1994), it is important that he or she has the correct tools, knowledge, and competence to administer and interpret these measures accurately.

School psychologists who receive a referral for a child who is described as anxious should begin by conducting a behavioral observation in various settings (e.g., class, lunch, gym). Anxious children are thought to behave in a way that is self-focused, internally distracted, and avoidant of social interaction (Hale & Fiorello, 2004). Further, “nail biting, thumb sucking, compulsions, and hypervigilance are other common behavioral symptoms of anxiety… Not surprisingly, anxious children are inattentive, distractible, and restless” (Friedberg & McClure, 2002, p.219). These children may also report somatic complaints such as headaches and stomach aches during school. These somatic complaints have been shown to be positively correlated with poor academic functioning (Hughes, Lourea-Waddell, & Kendall, 2007). It is hoped that school
psychologists learn to identify these behaviors either through advanced graduate education or during their professional experiences. It is expected that school psychologists would serve as the first line of defense in recognizing these behaviors and in referring these children for formal evaluation.

Other sources of information are also important when making a decision about whether or not a child has symptoms of anxiety; these include cognitive scores, projective measures of social and emotional functioning, and interviews. Some researchers believe that these other methods may not be as effective as observations because they have not been known to be effective with children who exhibit externalizing disorders. Further, they are not as concrete and understandable for teachers and other school personnel in understanding the behavioral implications that are important in the classroom setting (Schoenfeld et al., 2008).

Examining cognitive scores could provide insight into how a child is performing on tasks whose scores may be affected by anxiety. Eysenck and Calvo (1992) state that anxiety and worry affect parts of the brain that are directly related to working memory skills. Working memory tasks require a student to hold information in mind and manipulate it to produce a new presentation (Wechsler, 2003). Children with anxiety struggle with tasks that require psychomotor speed and attention because they are internally distracted. Further, they experience difficulty using automatic processing and rumination is also common (Hale & Fiorello, 2004). For example, subtests on the *Wechsler Intelligence Scale for Children–Fourth Edition* (WISC-IV; Wechsler, 2003) that require attention and concentration include digit span, letter-number sequencing, arithmetic, coding, symbol search, and cancellation. Examining these scores in relation
to the child’s overall functioning could provide an indication about whether or not anxiety may have impacted the results. Additionally, because of the difficulties with working memory, anxious children are likely to have additional difficulties with attention, executive functioning, and memory in general (Hain, Hale, & Kendorski, 2009).

The use of projective drawings in order to examine a child’s social emotional status is also a viable assessment technique. Common drawings include the Kinetic-House-Tree-Person (Burns, 1987) and the Kinetic Family Drawing (Burns & Kaufman, 1970). Although some say that heavy shading is a result of anxious feelings, other researchers have denied the association (Handler & Reyher, 1965; Joiner Jr., Schmidt, & Barnett, 1996). Therefore, although these are widely used tools in assessment, especially for special education placement, caution must be taken in drawing diagnostic conclusions when interpreting projective drawings (Hojnoski et al., 2006). There are researchers who deny their validity and claim this is not a useful approach to assessment (Miller & Nickerson, 2006; 2007).

**Structured interviews.** Another way to assess anxiety is by using structured interviews. These are important because they help to universalize anxious symptoms for various disorders among health care providers, and allow school psychologists to collaborate effectively with professionals who are not working in the schools (McBurnett, 1996). Although diagnostic consistency is never guaranteed across mental health providers, test-retest reliability is generally shown to be stronger when structured interviews are created, using DSM-IV criteria (Saavedra & Silverman, 2002). As with any interview, caution must be taken when administering these to young children who
may lack prerequisite developmental skills to understand, interpret, and answer important diagnostic questions (Valla, Bergeron, & Smolla, 2000).

**Anxiety disorders interview schedule for children.** In clinical settings, a widely used diagnostic tool is known as the Anxiety Disorders Interview Schedule for Children (ADIS-C/P) (Silverman & Albano, 1996). The parent and child interviews follow diagnostic criteria associated with anxiety disorders from the DSM-IV (APA, 1994). Based on responses, a clinical severity rating (CSR) is determined for anxiety and other disorders. The higher the rating (responses range from 0-8), the more severe the disorder and the more surely does impairment exist in everyday functioning.

Research on the ADIS-C/P shows good reliability over time (Silverman, Saavedra, & Pina, 2001). Further, the ADIS-C/P is a useful clinical tool because of the high inter-rater reliability among clinicians (Lyneham, Abbott, & Rapee, 2007). Critics of the ADIS-C/P have identified poor reliability between child and parent reports, and a tendency to value parental input to a greater degree when making diagnostic decisions (Grills & Ollendick, 2003). The AID-C/P is a useful tool in assessing comorbid disorders; these include: dysthymia, major depressive disorder, conduct disorder, oppositional defiant disorder, and ADHD. Further, there are portions directly related to assessing problems with sleeping, elimination, or the possibility of a pervasive developmental disorder.

The research shows the ADIS-C/P is a very effective tool to use because children have been shown to give accurate reports of their symptoms, making it easier to give a differential diagnosis of SAD, Social Phobia, Specific Phobia, and GAD (Silverman, Saavedra, & Pina, 2001). This tool would be useful in the schools because it allows a
school psychologist to have an accurate picture of the symptoms affecting that child, and provide the opportunity for clear communication across mental health professionals.

**Behavioral rating scales.** Another widely used tool for assessing anxiety is behavioral rating scales. School psychologists often include rating scales in their comprehensive evaluations in order to provide a measure of how intense or debilitating others see a child’s behavior to be (Kamphaus, Petoskey, & Rowe, 2000; Power & Ikeda, 1996). These are normally completed by a parent(s), teacher(s), and sometimes the children, dependent upon their developmental levels. Although various raters complete these scales, some researchers believe that a mother is the most accurate informer of a child’s internalizing behaviors (Loeber, Green, & Lahey, 1990; Kendall et al., 1997; Bergeron, Floyd, McCormack, & Farmer, 2008). This is explained by the fact that internalizing behaviors are harder for a teacher to identify in a large classroom setting because symptoms are generally quieter, compared with externalizing behaviors (Kumpulainen et al., 1998). In the school setting, school psychologists are responsible for collecting and analyzing these rating scales in order to draw appropriate conclusions. Many times, however, teacher rating scales may overemphasize scores from children who exhibit externalizing behavior, making the anxious child’s scores lower, and perhaps overlooked (De Los Reyes & Kazdin, 2005).

Historically, childhood anxiety scales were created from adult anxiety scales, and failed to address appropriate developmental factors (Myers & Winters, 2002). However, in the past few decades, various ratings scales have been developed that deal directly with childhood internalizing and externalizing behaviors. With this change comes a need for school psychologists to have adequate knowledge and competence in administering and
analyzing data obtained from these various scales. The following list will begin with broad based measures, which are used to measure a variety of maladaptive symptoms, one of which is anxiety. Then specific rating scales that directly measure anxiety will be outlined and reviewed.

**Behavioral assessment scale for children – second edition.** A popular scale used in schools is known as the Behavioral Assessment Scale for Children – Second Edition (BASC-2; Reynolds & Kamphaus, 2004). This rating scale includes several versions, including a parent, teacher, and a self-report scale. The number of items is dependent upon the age of the child and upon which version is being used; however, the completion time is approximated to be around 20 minutes for the parent and teacher version, and around 30 minutes for the self-report version. For the BASC-2, respondents read short statements and choose the frequency on a 4-point Likert scale ranging from *Never* to *Almost Always*.

The BASC-2 parent and teacher rating scales are used to measure the degree of problem behaviors at home and/or in school for children, ages 2 through 21 years old. The scales included are Aggression, Anxiety, Attention Problems, Atypicality, Conduct Problems, Depression, Hyperactivity, Learning Problems, Somatization, Withdrawal, Activities of Daily Living, Adaptability, Functional Communication, Leadership, Social Skills, and Study Skills (Reynolds & Kamphaus, 2004).

The BASC-2 self-report includes the same 4-point Likert scale (*Never to Almost Always*), as well as, *True or False* items. The self-report scale is relevant for use with children ages 6 through 25 years, if the student seems developmentally and cognitively ready to read and respond to items. The scales included are Alcohol Abuse, Anxiety,
Anxiety Disorders

Attention Problems, Attitude to School, Attitude to Teachers, Atypicality, Depression, Hyperactivity, Locus of Control, School Maladjustment, Sensation Seeking, Sense of Inadequacy, Social Stress, Somatization, Interpersonal Relations, Relations with Parents, Self-Esteem, and Self-Reliance. These scales yield scores only when they are age relevant (e.g., “Alcohol Abuse” yields scores only for students 18-25 years old). The BASC-2 can be computer scored and a print out is available. Scores are represented as T-scores with a percentile rank; significant scores are considered “at-risk,” or “clinically significant” (Reynolds & Kamphaus, 2004).

**Child behavior checklist.** The Child Behavior Checklist (CBCL) comprises 118-items designed to measure behavioral or emotional problems and competencies (Achenbach, 1991). The respondent chooses from three possible ratings ranging from 0 (“not true”) to 2 (“very true/often true”). The CBCL has two versions, one for school aged children (6-18 years of age), and one for preschool and younger children (1.5 to 5 years of age). The specific constructs measured include Aggression, Hyperactivity, Bullying, Conduct problems, Defiance, and Violence. Statistical reports show good reliability and validity (Achenbach, 1991).

**Multidimensional rating scales for children.** The Multidimensional Rating Scales for Children (MASC; March, Parker, Sullivan, Stallings & Conners, 1997) was developed to cover a range of symptoms related to anxiety. The 39-item Likert-type scale could be used for children ages 8 through 19 years. Respondents rate on a scale ranging from 0 (“never true about me”) to 3 (“often true about me”). T-scores are yielded for four main scales, each made up of various subscales. Specifically, these include Physical Symptoms (subscales include Somatic and Tense Symptoms), Harm
Avoidance (Perfectionism, Anxious Coping), Social Anxiety (Humiliation, Performance Fears), and Separation/Panic. An Inconsistency Scale is also included to determine responses that would invalidate the results, and an Anxiety Disorders Scale to determine whether or not further clinical evaluations are recommended. Studies have indicated that these scales are sufficient to identify DSM-IV-TR diagnoses of SP, SAD, and GAD (Myers & Winters, 2002). Research has revealed stronger reliability statistics compared with validity measures; however, both of these are considered sound enough to make this an effective measure of anxiety (Myers & Winters, 2002).

*State-trait anxiety inventory for children.* The rating scale entitled the State-Trait Anxiety Inventory for Children (STAIC) (Spielberger, Edwards, Lushene, Montuori, & Platzek, 1973) is appropriate to use for children ages 8 to 14 years. There are two versions included: “state” and “trait.” The “state” scale is used to measure short-term symptoms associated with particular situations, whereas “trait is used to measure long-term subjective feelings of anxiety. Both of these forms include 20-items that are rated on a 3-point Likert scale assessing intensity and frequency for state anxiety and trait anxiety, respectively. Scores are yielded for both of these scales in order to plan properly for treatment, and are represented as a T-score and percentile rank. T-scores have a mean of 50, and a standard deviation of 10. Use in the school setting could enable school psychologists to uncover whether or not anxiety is directly related to the immediate environment, or to a more generalized environment; it is also useful to differentiate coping styles to aid in treatment (Shankland, França, Genolini, Guelfi, & Ionescu, 2009).

*Revised children’s manifest anxiety scale.* A rating scale commonly used in the school settings and also known as the “What I Think and Feel” scale is the Revised
Children’s Manifest Anxiety Scale (RCMAS) (Reynolds & Richmond, 1978). This 37-item scale measures specific traits related to anxiety for children ages 6 through 19 years. The items yield scores for four scales: Physiological Anxiety, Worry/Oversensitivity, Social Concerns/Concentration, and the Lie Scale to determine whether or not an informant is responding in a socially desirable way (Reynolds & Richmond, 1978). Administration may be conducted on an individual or group basis depending on the age group. Instructions are written on a third grade level; therefore, individual administration with young children is recommended (Reynolds & Richmond, 1994). Although widely used in the school setting, this scale has been outperformed by newer scales (Dierker et al., 2001).

_Fear survey schedule for children – revised._ The Fear Survey Schedule for Children-Revised (FSSC-R; Ollendick, 1983) is a self-report measure given directly to children ages 7 through 16 years. This scale measures how fearful children are in certain situations. There are 80-items in which children choose either “None,” “Some,” or “A Lot,” of fear in specific situations (e.g., elevators). According to Ollendick (1983), statistics for this rating scale showed sound test-retest reliability and internal consistency. The following is a list of the five-factors that are measured using this scale: Fear of Failure and Criticism, Fear of the Unknown, Fear of Injury or Small Animals, Fear of Danger or Death, and Medical Fears.

Some researchers challenged the validity of this scale and sought to “upgrade” the scale by including fears relevant to the time period (Gullone & King, 1992). The newly updated scale was designed to fit reports of fears in the Australian population and was
called the FSSC-II. The validity of the updated scale among the United States population has not been verified.

**Spence children’s anxiety scale.** A rating scale known as the Spence Children’s Anxiety Scale (SCAS; Spence, 1997) was created in order to correct for previous scales’ inconsistencies with the Fourth Edition of the *Diagnostic and Statistical Manual of Mental Disorders* diagnostic criteria for Anxiety disorders (DSM-IV; American Psychiatric Association, 1994). The SCAS utilizes a 45-item Likert-scale specifically designed to measure social desirability and children’s subjective feelings of anxiety. The results are represented as T-scores and include the following scales: Obsessive Compulsive Disorder, Social Phobia, Panic Agoraphobia, Separation Anxiety, Physical Injury Fears, and Generalized Anxiety (Spence, 1997).

**Treating Anxiety**

It is important for school psychologist to have sufficient skills to treat childhood anxiety disorders effectively in the school setting. This is especially evident because of research that shows that untreated childhood anxiety may increase the risk of developing adult anxiety disorders later in life (Spence & Dadds, 1996). Identifying and treating anxiety early on could prevent long-term negative consequences associated with childhood anxiety. It is important to select research based programs such as the cognitive behavioral programs that provide adequate background research that proves its effectiveness (NASP-PPE, C., #4).

One of the most widely used and empirically supported modalities for treating childhood anxiety is CBT (Compton et al., 2004). Research on CBT reveals that it is very effective in treating anxiety disorders when compared to no treatment (Bernstein,
There is also evidence that the effects of using CBT with children is long lasting, and may be used as a long-term treatment option (Barrett, Duffy, Rapee, & Dadds, 2001). An important component of CBT is to build effective coping and problem solving abilities and to eliminate dysfunctional thoughts (Kendall, 1993). CBT treatments focus on five main areas including a psychoeducational portion, identification and control of somatic symptoms, cognitive restructuring, exposure to feared stimuli, and preventative measures to control for relapse (Albano & Kendall, 2002).

Some common techniques used in CBT treatments include systematic desensitization and relaxation training. The goal of systematic desensitization is to decrease the link between anxious feelings and certain stimuli by pairing an anxiety provoking situation with a calming response (Wolpe, 1958). This treatment has been shown to be effective for treating anxiety in testing situations (Zemore, 1975), in reducing symptoms associated with separation anxiety and school refusal (Ballard & Yule, 1981), and in treating medical phobias (Sanders & Jones, 1990).

Relaxation training is also commonly used for children who present with anxiety. Jacobson (1938) introduced the concept of progressive muscle relaxation, during which muscle groups are isolated, tensed, and then released. Deep breathing is another technique that can be taught to an anxious child. Relaxation scripts are useful when they are on the child’s developmental level (Friedberg & McClure, 2002). Koeppen (1974), created a relaxation script for children of various ages that uses fun language and developmentally appropriate exercises.
The following is a review of some of the most widely used manual-based programs to treat children with anxiety disorders. Many of these manual-based programs follow the cognitive behavioral therapy orientation when treating anxiety. Several of these have been found to be extremely effective in treating children with anxiety as compared with those anxious children who did not receive the treatment. Further, when properly implemented, these protocols were found to be as effective in the school environment, compared with their use in private practice (Schoenfeld et al., 2008).

**Queensland early intervention and prevention of anxiety project.** The Queensland program uses cognitive behavioral strategies in a school setting to treat children ages 7 to 14 years old that experience symptoms related to anxiety (Dadds et al., 1999; Dadds, Spence, Holland, Barrett, & Laurens, 1997). The main focus of this program is to prevent symptoms associated with anxiety by introducing children to effective coping strategies, while simultaneously confronting fears. The program makes use of effective cognitive behavioral strategies of focusing on decreasing negative thoughts, feelings, and behaviors, while simultaneously dealing with persistent fears through exposure exercises. Parental participation is strongly encouraged and is included in a few sessions throughout this project. Children who were not diagnosed with an anxiety disorder but were at-risk showed long term benefits after participating in this program (Dadds et al., 1997).

**Coping cat project.** *Coping Cat* is a well researched treatment manual/workbook used to treat children 7 through 13 years of age with Generalized Anxiety Disorder, Social Phobia, and Separation Anxiety Disorder (Kendall & Heddte, 2006a, b). It is recommended that a therapist use a flexible approach that matches a child’s
developmental level in order to maximize results (Albano & Kendall, 2002). The manual outlines 16 sessions lasting 1-hour each, with half being devoted to psychoeducation and the rest devoted to practicing exposure tasks. Skills are taught utilizing the acronym F.E.A.R. to help children remember the various steps to take when they are anxious. The F.E.A.R. plan stands for, “Feeling frightened, Expecting bad things to happen, Attitudes and actions that can help, and Results and Rewards” (Kendall & Hedtke, 2006a).

Specifically, the child is taught to identify somatic feelings associated with anxiety, and to use calming techniques when faced with those feelings (e.g., deep breathing, progressive muscle relaxation). Next, the child is encouraged to abandon negative thinking and, instead, to adopt effective coping responses (“I can do this”). The child then learns to brainstorm possible responses or choices and to think, critically, which would be the most beneficial. If the child is able to control his or her fears and worries, the child is rewarded. The therapist or a parent may be beneficial in this step by coming up with possible rewards that may motivate the child to continue using the F.E.A.R. plan when feeling anxious (Kendall, Gosch, Furr, & Sood, 2008). The exposure tasks are used to practice facing fears while using their new skills to navigate the situation effectively. The efficacy of the *Coping Cat* has been proven in studies that showed decreased levels of anxiety in children who received treatment (Kendall, 1994; Kendall et al., 1997).

**FRIENDS.** FRIENDS is a manual-based program that utilizes CBT methods to treat anxiety in a school setting (Barrett, 2004). Several studies have investigated the efficacy of using this protocol for the treatment of groups of children with anxiety. FRIENDS is a program that could be used with an entire classroom, within a smaller
group format, or individually with students (Barrett, 2004). Studies have found that using FRIENDS to treat anxiety in the schools has improved behavioral functioning and academic achievement, and has maintained these effects over a long period of time, when compared with having no treatment (Dadds et al., 1997, 1999; Barrett, Webster, & Turner, 2000; Schoenfeld & Mathur, 2009). A similar study that utilized the FRIENDS manual, with an added parental component, showed greater effects when the parents were involved in the treatment (Bernstein et al., 2005).

**Statement of the Problem**

Anxiety disorders are one of the most prevalent problems that children experience in the school setting (Albano, Chorpita, & Barlow, 2003; Chavira, Stein, Bailey, & Stein, 2004). The school environment is supposed to provide a safe place for a child to learn and grow. However, schools can be difficult environments for these children to adapt to because of heightened anxiety levels that negatively impact their daily functions. For example, they may have symptoms associated with social anxiety, making it harder for them to interact socially with peers, as well as adults. This, in turn, makes it difficult to develop socially, and affects their ability to work in the classroom environment. Children in the school settings who present with anxiety disorders have been shown to be more socially withdrawn and described as “shyer.” Further, research has shown that these children are also rated as less popular amongst their peers (Coplan, Girardi, Findlay, & Frohlick, 2007; Nelson, Rubin, & Fox, 2005).

Although the limited research on this topic shows that children with anxiety disorders suffer considerably, relative to their non-anxious peers, in a highly stressful school environment, these children are often overlooked or ignored (Mychailyszyn,
Mendez, & Kendall, 2010). This may be explained by the inward and quiet turmoil associated with internalizing disorders, compared with the outward behavioral interruptions associated with externalizing disorders (Kumpulainen et al., 1998). Because of outward interruptions associated with such diagnoses as Attention Deficit Hyperactivity Disorder (ADHD), teachers generally use any and all excess resources to manage these children, and the anxious child goes unnoticed (Beidel, Turner, & Morris, 1999). This results in under-identifying and under-treating anxious children when their behaviors significantly affect their daily school functioning. Research by Lane, Pierson, and Robertson (2004) showed that children who exhibited externalizing behavior in the school setting were referred to special education personnel more frequently than children who exhibited internalizing behavior (i.e. anxiety).

This is a downward cycle that negatively affects children who have anxiety disorders. If teachers are not able to identify and report children with anxiety disorders to school psychologists, the latter will not be able to assess and treat these children effectively. Further, if school psychologists do not have this knowledge and are unable to collaborate effectively with teachers, there is a vicious cycle that continues to affect the child negatively. Studies that have been completed on internalizing disorders indicated that many mental health professionals feel that it is very important that they have proper knowledge and competency in treating these children; however, despite these reports, over half felt that further training was necessary and warranted to feel competent (Miller & Jome, 2008).

Children who show symptoms of anxiety in the school setting but are not diagnosed by a physician will receive a special education classification of ED (IDEIA,
Anxiety Disorders 33

2004). Given the fact that this category encompasses a large variety of children, including children who exhibit outward behavior presentations (ADHD), it is not surprising that the literature that does exist focuses primarily on the latter group (Schoenfeld et al., 2008). This results in a limited research base for employees in a school, and in this case, for school psychologists. Without this knowledge, it is easy to allow children with anxiety go through school without the help they need to succeed. This presents long term problems in adulthood associated with poor employment rates, and increased risk of suicide and substance use (Barlow, 2002; Last, Hansen, & Franco, 1997).

Given the fact that most school psychologists are employed in the public or private school setting (Curtis et al., 2002), they may be lacking the knowledge to collaborate effectively with physicians regarding medication and a medical diagnosis of anxiety according to the DSM-V-TR (APA, 2000). School psychologists may not be trained to recognize clinical symptoms related to anxiety in the school setting, and this may contribute to their being overlooked. Further, the lack of collaboration between physicians and school psychologists makes providing appropriate care more difficult.

It is important for school psychologists to have the skills to collaborate effectively with professionals inside the school as well. As previously discussed, those children who present with anxiety usually internalize their feelings and they are not known for advocating for their needs. School psychologists need to act as advocates for these children, and effectively communicate with other school personnel. Having effective collaboration skills will make it easier to communicate the needs and services that are appropriate for each child. Unfortunately, research up until now has shown that various
mental health practitioners do not feel competent in communicating findings at educational meetings (Curry & Hanson, 2010).

Therefore it is important for school psychologists to have the knowledge and competence in identifying, assessing, and treating children with anxiety in the school setting. Not having this knowledge will result in having school psychologists who do not recognize early warning signs for various symptoms related to anxiety, resulting in a lower rate of diagnosis. As several studies that have been outlined indicate, there are many long-term negative outcomes associated with childhood anxiety (Barlow, 2002; Last, Hansen, & Franco, 1997; Spence & Dadds, 1996).

**Purpose of the Study**

Given what is known about anxiety in children, it is pertinent that mental health professionals know how to assess and treat these children. School psychologists are responsible for working with anxious children in the school setting; therefore, it is imperative that they are knowledgeable and competent in providing services. The study sought to measure how much knowledge and competency school psychologists have regarding anxiety disorders in children.

School psychologists were surveyed to assess how much knowledge they possessed in identifying, assessing, and treating children with anxiety disorders in the school setting. Further, a review of their graduate school training and knowledge of background information on anxiety was included in the survey. The survey also measured how competent school psychologists felt in working with children with anxiety disorders, and with providing information to related service professionals and parents.
The sample was an adequate representation of school psychologists operating in the field, and the ways in which they work with children who have anxiety. It is important to keep in mind that from that 70%, the targeted sample will be employed in a school setting. According to findings, about 84.3% of school psychologists are employed in a public or private school setting (Curtis et al., 2002).

The research literature lacks surveys related to the topic of school psychologists and anxiety disorders; therefore, this should contribute important information to mental health care professionals. It is hoped that this survey will also have an impact on how school psychologists view anxiety disorders, and will contribute to an increase in their awareness in the school settings. It is hoped that this will also lead to school psychologists seeking out knowledge on their own in order to fill this competency gap. It will also contribute further research in the study of internalizing disorders in the school, a topic that is too often overlooked. Further, this study should help directors of school psychology programs plan their curriculum appropriately to include knowledge directly related to identifying, assessing, and treating anxiety disorders in the school setting.

**Research Questions and Hypotheses**

There is a relationship between the degree held by a school psychologist (Masters, Masters Plus, Educational Specialist, Doctoral) and the number of years a school psychologist has been practicing (< 2 years, 3 to 5 years, 6 to 10 years, 11 to 15 years, 16 to 20 years, and 21 or more years), and the amount of knowledge and competence with which they identify anxiety disorders, based on the DSM-IV criteria. It is hypothesized that the higher the level of education and the higher the number of years in practice, the
more knowledgeable and competent school psychologists are with identifying anxiety disorders based on the DSM-IV criteria (measured as an average response above 4).

There is a relationship between the degree held by a school psychologist (Masters, Masters Plus, Educational Specialist, Doctoral) and the number of years a school psychologist has been practicing (< 2 years, 3 to 5 years, 6 to 10 years, 11 to 15 years, 16 to 20 years, and 21 or more years), and the amount of knowledge and competence with assessing anxiety disorders using various instruments. It is hypothesized that the higher the level of education and the higher the number of years in practice, the more knowledgeable and competent school psychologists are with assessing anxiety disorders, using various instruments (measured as an average response above 4).

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Chapter Three

Method

Participants

Participants were school psychologists who wished to participate and who fully completed the study survey. The initial sample consisted of 319 surveys; however, only 236 (approximately 74%) were included in the final sample because of not meeting the inclusion criteria. Of the 236 participants, 15.7% \((n = 37)\) were males, and 84.3% \((n = 199)\) were females. Further, participants rated themselves as the following ethnicities: 1.7% \((n = 4)\) African American; 2.1% \((n = 5)\) Asian American; 1.7% \((n = 4)\) Biracial or Multiracial; 90.7% \((n = 214)\) Caucasian; 2.1% \((n = 5)\) Hispanic/Latino and 1.7% \((n = 4)\) reported “Other.” This sample is primarily consistent with past surveys of school psychologists, in which approximately 70% of the participants were women, and of varying ethnicities with the largest group being Caucasian (Curtis, Grier, Abshier, Sutton, & Hunley, 2002; Curtis, Hunley, & Grier, 2002).
Anxiety Disorders

Table 1

*Gender and Ethnicity*

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<tr>
<th>Characteristic</th>
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<tr>
<td>Other</td>
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</table>

The final sample consisted of 22.9% of school psychologists between the ages of 22 and 29 years old \((n = 54)\); 32.2% \((n = 76)\) between 30 and 39 years old; 18.2% \((n = 43)\) between 40 and 49 years old; 18.2% \((n = 43)\) between 50 and 59 years old, and 8.5% \((n = 20)\) that were over 60 years old. When asked whether or not they were part of NASP, 74.2% \((n = 175)\) participants said “Yes,” and 25.8% \((n = 61)\) said “No.”
Table 2

*Age and the National Association of School Psychologists (NASP) Membership*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 – 29</td>
<td>54</td>
<td>22.9</td>
</tr>
<tr>
<td>30 – 39</td>
<td>76</td>
<td>32.2</td>
</tr>
<tr>
<td>40 – 49</td>
<td>43</td>
<td>18.2</td>
</tr>
<tr>
<td>50 – 59</td>
<td>43</td>
<td>18.2</td>
</tr>
<tr>
<td>60 +</td>
<td>20</td>
<td>8.5</td>
</tr>
<tr>
<td><strong>National Association of School Psychologists Membership</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>175</td>
<td>74.2</td>
</tr>
<tr>
<td>No</td>
<td>61</td>
<td>25.8</td>
</tr>
</tbody>
</table>

The participants were practicing in various states and included 4.7% (*n* = 11) from Connecticut (CT), 0.8% (*n* = 2) from Delaware (DE); 1.7% (*n* = 4) from Idaho (ID); 0.4% (*n* = 1) from Illinois (IL); 8.5% (*n* = 20) from Iowa (IA); 5.5% (*n* = 13) from Maryland (MD); 8.9% (*n* = 21) from Massachusetts (MA); 0.3% from Minnesota (MN); 3.4% (*n* = 8) from Nebraska (NE); 0.4% (*n* = 1) from Nevada (NV); 0.4% (*n* = 1) from New Hampshire (NH); 16.5% (*n* = 39) from New Jersey (NJ); 2.5% (*n* = 6) from New York (NY); 11% (*n* = 26) from North Carolina (NC); 11.4% (*n* = 27) from Ohio (OH); 12.7% (*n* = 30) from Pennsylvania (PA); 1.3% (*n* = 3) from Utah (UT); 0.8% (*n* = 2) from
Vermont (VT); 0.4% ($n = 1$) from Virginia (VA); 0.4% ($n = 1$) from Washington (WA), and 6.8% ($n = 16$) from West Virginia (WV).
### Table 3

**State of Practice**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>$n$</th>
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<td><strong>State</strong></td>
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</tr>
<tr>
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<td>11</td>
<td>4.7</td>
</tr>
<tr>
<td>Delaware</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Idaho</td>
<td>4</td>
<td>1.7</td>
</tr>
<tr>
<td>Illinois</td>
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<td>0.4</td>
</tr>
<tr>
<td>Iowa</td>
<td>20</td>
<td>8.5</td>
</tr>
<tr>
<td>Maryland</td>
<td>13</td>
<td>5.5</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>21</td>
<td>8.9</td>
</tr>
<tr>
<td>Minnesota</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td>Nebraska</td>
<td>8</td>
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<tr>
<td>Nevada</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>New Jersey</td>
<td>39</td>
<td>16.5</td>
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<tr>
<td>New York</td>
<td>6</td>
<td>2.5</td>
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<tr>
<td>North Carolina</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>Ohio</td>
<td>27</td>
<td>11.4</td>
</tr>
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</table>

(continued)
State of Practice (continued)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>30</td>
<td>12.7</td>
</tr>
<tr>
<td>Utah</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td>Vermont</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Virginia</td>
<td>1</td>
<td>0.4</td>
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<td>Washington</td>
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<td>0.4</td>
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<tr>
<td>West Virginia</td>
<td>16</td>
<td>6.8</td>
</tr>
</tbody>
</table>

Measures

The survey entitled, “The Survey of Knowledge and Competency in Child Anxiety,” was created to better understand the self-perceived knowledge and competence levels with identifying, assessing, and treating anxiety disorders among school psychologists. In order to ensure that the survey was appropriate for answering the hypotheses, the dissertation committee consisting of two faculty members at the Philadelphia College of Osteopathic Medicine (PCOM) and a third member who works as a full time school psychologist, read the survey to ensure face validity. The following sections were included in the survey: SECTION A – Knowledge of Identifying Anxiety Disorders, SECTION B – Competence in Identifying Anxiety Disorders, SECTION C – Knowledge of the Assessment of Anxiety Disorders in the schools, SECTION D – Competence in the Assessment of Anxiety Disorders in the schools, SECTION E –
Knowledge of Treatment of Anxiety Disorders in the schools, SECTION F – Competence in the Treatment of Anxiety Disorders in the schools, and SECTION G - Demographic and Background Information. Sections A through F have responses measured on a Likert-scale ranging from 1 through 7, with 1 being the least confident and 7 the most confident, and with 4 being a moderate amount (See Appendix C for the survey).

Section A asked questions related to participants’ training in graduate school on anxiety disorders in general; on neuropsychological constructs related to anxiety; on whether or not additional knowledge was sought out; on how important they felt it was to seek out further knowledge on collaboration skills, neuropsychology and anxiety disorders; on how strongly they felt that anxiety was overlooked in the schools, and how much of an effect they felt anxiety had on a child’s social and academic performance. Additionally, participants were asked to rate their levels of knowledge on the various DSM-IV-TR anxiety disorders.

Section B dealt with how competent and prepared school psychologists felt in working with children who had anxiety disorders, including students from different cultural groups. Participants were also asked how comfortable they felt with seeking out supervision, collaboration, and feedback skills. Other questions dealt with how important they felt it was to have parents involved in the school treatment of their child; how comfortable they felt with consulting with a physician regarding a medical diagnosis of anxiety, and how comfortable they felt with giving a student with anxiety an educational classification of Emotional Disturbance (ED), or Other Health Impaired (OHI) to qualify them for special education services. Further, participants were asked to rate their levels
of competence in using the diagnostic criteria for each of the DSM-IV-TR anxiety disorders.

Section C had questions related to knowledge gained during training with assessing anxiety disorders by using behavioral observations, cognitive performance, neuropsychological tests, projective measures, and whether or not participants felt it was beneficial to have training in the assessment of anxiety disorders. Additionally, participants were asked to rate their levels of knowledge in using structured interviews and rating scales to diagnose anxiety disorders.

Section D had questions related to perceived competency levels with assessing children for an anxiety disorder using behavioral observations, cognitive performance, neuropsychological measures, and how comfortable they are with using neuropsychological measures and projective measures. Additionally, participants were asked to rate their levels of comfort in using structured interviews and rating scales to diagnose anxiety disorders.

Section E specifically asked about training and whether or not it included treating anxiety disorders effectively, and also about medication treatment. Participants were asked to rate how strongly they felt about school psychology training programs including the treatment of anxiety disorders. Additionally, participants were asked to rate their levels of knowledge in using several treatment programs for children with anxiety.

Section F asked about confidence and competence in treating children with anxiety disorders, and how much they sought out knowledge on this topic after graduating. Participants were also asked how much they felt that it was their responsibility to treat children with anxiety disorders. They were asked to rate how
important they felt it was to have knowledge of the empirically based treatment programs, and how comfortable they felt in using them. Also, questions on medication and collaborating with a physician were included. Additionally, participants were asked to rate their levels of comfort in using several treatment programs for children with anxiety.

Section G had several questions related to gender, age, and ethnicity, whether or not they are a NASP member, highest degree held, number of years they have been a school psychologist, what they spent a majority of their time doing in schools, their state of employment, the number of referrals they receive in a year for children who present with anxiety, whether or not they use behavioral goals in I.E.P.s for anxious children, if they felt their internship prepared them to work with children who present with anxiety, and if they have been involved in creating 504 plans for children with anxiety.

**Procedures**

After the survey was drafted, it was sent through the Institutional Review Board (IRB) at the Philadelphia College of Osteopathic Medicine (PCOM) for approval. Once approved, the survey was created, using a paid subscription to Survey Monkey© (http://www.surveymonkey.com/). After the creation of the survey, an e-mail was sent to presidents of each state association in school psychology. The e-mails sent to state associations where a contact was found, inquired whether or not the invitation to participate and the survey could be distributed to their individual members. The procedures for individual states were followed, depending on the approval criteria. Some states approved the survey to be sent in an individual e-mail to each member, and some opted to place the survey on a ListServ for their individual state associations. States that
either requested further information or agreed to distribute to their members included CA, CT, ID, IL, IA, KS, KY, MA, MN, NE, NV, NJ, NC, OH, UT, VT, WA, WV.

Additionally, the survey was sent out to e-mail addresses of school psychologists from various states. Many states did not respond to whether or not they actually disseminated the study; therefore, if respondents from individual states did complete the survey, it was assumed that only those states that responded sent out the survey to their members.

Additionally, an invitation letter was sent along with the survey link in an e-mail to certified school psychologists (See Appendix B). This letter stated the purpose of the study which was to explore school psychologists’ levels of knowledge and competency in identifying, assessing, and treating anxiety in children. It also stated that all data was to be kept anonymous and consent was assumed if the survey was completed. Additionally, no personal identifiers were used and survey data was not linked to any particular participant. It also stated the length of time the survey would take: approximately 10-15 minutes to complete. For the first 100 participants that completed the survey in its entirety, a donation of $1.00 was made to the NASP Children’s Fund. Participants were also informed that they could opt out of taking the survey by closing the web browser. They were told to send an e-mail to the study investigator or the dissertation chair if they wanted the final results. Contact information for the principal investigator, as well as the dissertation chair was provided if participants had any questions. After three weeks from the initial date of distribution, the survey results were collected and analyzed for dissertation data.
Analyses

To provide answers to the specific research questions, descriptive and inferential statistics were calculated using SPSS. Specifically, frequency data were calculated for the demographic information collected. This study utilized three 4 x 6 factorial analyses of variance (ANOVA), to determine main effects and interaction effects between variables. The independent variables were years of practice and degree held, compared with the dependent variables of total knowledge and competence with identifying, assessing, and treating anxiety disorders in the school setting. The .05 significance level (\( \alpha = .05 \)) was used for all analyses.

To form the total variable for knowledge and competence in identifying, assessing, and treating anxiety in children, the questions within each survey domain were summed together by adding the Likert ratings across the questions. Answers to sections A through F were summed to create a total Knowledge and a total Competence score. Specifically, Section A had 20 questions measured on a scale from 1-7; therefore, the minimum score was a 20, and the maximum was a 140. Section B had 18 questions, with a minimum score of 18, and a maximum of 126. Section C had 15 questions with a minimum of 15 and a maximum of 105. Section D had 17 questions, with a minimum score of 17, and a maximum of 119. Section E had six questions, with a minimum score of six, and a maximum of 42. Last, Section F had 11 questions, creating a total minimum score of 11, and a maximum of 77.
Chapter Four

Results

Descriptive Statistics

In the sample on highest degree achieved, 2.5% \( (n = 6) \) had a Masters degree; 33.9% \( (n = 80) \) had a Masters Plus degree; 44.1% \( (n = 104) \) had an Educational Specialist degree, and 19.5% \( (n = 46) \) had a Doctoral degree. Further, the sample revealed that the number of participants with fewer than two years of experience represented 14.4% \( (n = 34) \) of the sample, with 24.2% \( (n = 57) \) who had three to five years experience; 22.9% \( (n = 54) \) had between six and 10 years experience; 11.4% \( (n = 27) \) had between 11 and 15 years of experience; 9.7% \( (n = 23) \) had between 16 and 20 years experience, and 17.4% \( (n = 41) \) had over 21 years of experience.
Table 4

*Level of Degree and Years of Practice*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>$n$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of degree</td>
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<td></td>
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<tr>
<td>Masters level</td>
<td>6</td>
<td>2.5</td>
</tr>
<tr>
<td>Masters Plus</td>
<td>80</td>
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</tr>
<tr>
<td>Educational Specialist</td>
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<td>44.1</td>
</tr>
<tr>
<td>Doctorate</td>
<td>46</td>
<td>19.5</td>
</tr>
<tr>
<td>Number of years of practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 2</td>
<td>34</td>
<td>14.4</td>
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<tr>
<td>3 -5</td>
<td>57</td>
<td>24.2</td>
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<tr>
<td>6-10</td>
<td>54</td>
<td>22.9</td>
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<td>27</td>
<td>11.4</td>
</tr>
<tr>
<td>16-20</td>
<td>23</td>
<td>9.7</td>
</tr>
<tr>
<td>21 +</td>
<td>41</td>
<td>17.4</td>
</tr>
</tbody>
</table>
Raters were asked to rate a “one” or “two” for the activity to which they dedicated the majority of their time in a school, followed by their next most time consuming activity, respectively. The rating of “one” was ranked by 58.1% \( (n = 137) \) of the participants for assessment and report writing; 23.3\% \( (n = 55) \) ranked time spent in collaboration with others; 8.9\% \( (n = 21) \) ranked counseling; 0.4\% \( (n = 1) \) ranked school/district-wide projects; 0\% \( (n = 0) \) ranked research/program evaluation; 7.6\% \( (n = 18) \) ranked I.E.P. meetings, and 1.7\% \( (n = 4) \) ranked crisis response services. The rating of “two” was ranked by 19.1\% \( (n = 45) \) of the participants for assessment and report writing; 36\% \( (n = 85) \) ranked collaboration with others; 13.6\% \( (n = 32) \) ranked counseling; 5.1\% \( (n = 12) \) ranked school/district-wide projects; 1.3\% \( (n = 3) \) ranked research/program evaluation; 19.9\% \( (n = 47) \) ranked I.E.P. meetings, and 5.1\% \( (n = 12) \) ranked crisis response services.
Table 5

*School Psychologists’ Activities within the School*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Time 1</th>
<th>Time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment/report writing</td>
<td>137 (58.1)</td>
<td>45 (19.1)</td>
</tr>
<tr>
<td>Collaboration</td>
<td>55 (23.3)</td>
<td>85 (36)</td>
</tr>
<tr>
<td>Counseling</td>
<td>21 (8.9)</td>
<td>32 (13.6)</td>
</tr>
<tr>
<td>School district projects</td>
<td>1 (0.4)</td>
<td>12 (5.1)</td>
</tr>
<tr>
<td>Research program/evaluation</td>
<td>0 (0)</td>
<td>3 (1.3)</td>
</tr>
<tr>
<td>Individualized education plan meetings</td>
<td>18 (7.6)</td>
<td>47 (19.9)</td>
</tr>
<tr>
<td>Crisis response</td>
<td>4 (1.7)</td>
<td>12 (5.1)</td>
</tr>
</tbody>
</table>
Participants were asked how many referrals they receive in a year for children who present with symptoms of anxiety. The majority, 111 participants, reported receiving fewer than five referrals a year (47%); 77 (32.6%) reported receiving five to 10; 34 (14.4%) reported between 11 and 20; 9 (3.8%) reported between 21 and 30; two (0.8%) reported over 30 referrals. Finally, three (1.3%) reported working in the field for less than a year. Another question asked about eligibility for special education based on the child’s anxiety interfering with his or her education; specifically, whether or not specific behavioral goals be placed on the child’s I.E.P. A majority of the participants (193, 82.6%) said “Yes”, but 41 (17.4%) said “No.” The next question asked whether or not their internship prepared them to work with students who present with anxiety, and 80 (33.9%) said “Yes.” A total of 156 (66.1%) reported “No”, representing a majority of the sample. Participants were also asked whether or not they were involved in creating 504 or service plans, and 203 (86%) said “Yes” and 33 (14%) said “No”.
Table 6

*Number of Referrals for Anxiety, I.E.P. Goals, Internship Preparation, and 504 Plans*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
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<td>Number of Referrals</td>
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<td></td>
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<tr>
<td>Less than 5</td>
<td>111</td>
<td>47</td>
</tr>
<tr>
<td>5 - 10</td>
<td>77</td>
<td>32.6</td>
</tr>
<tr>
<td>11 - 20</td>
<td>34</td>
<td>14.4</td>
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<tr>
<td>21 - 30</td>
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<td>More than 30</td>
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<td>0.8</td>
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<td>Worked less than a year</td>
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<td>1.3</td>
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<td>Measurable I.E.P. goals</td>
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<td>82.6</td>
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<td>17.4</td>
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<td>Internship prepared to work with anxiety</td>
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<td>80</td>
<td>33.9</td>
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<td>No</td>
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<td>66.1</td>
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<td>504 Service plan implementation</td>
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<td>Yes</td>
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<td>86</td>
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<td>No</td>
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</table>
Inferential Statistics

Table 7

Means and Standard Deviations for Level of Degree

<table>
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<tr>
<th>Level of Degree</th>
<th>Masters (n = 6)</th>
<th>Masters Plus (n = 80)</th>
<th>Educational Specialist (n = 104)</th>
<th>Doctorate (n = 46)</th>
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<td>SD 18.28</td>
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<tr>
<td>Cl</td>
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<td>SD 27.17</td>
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<td></td>
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<td>CA</td>
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<td>SD 24.64</td>
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<td>CT</td>
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<td></td>
<td>SD 11.21</td>
<td>SD 8.93</td>
<td>SD 9.88</td>
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</table>

### Table 8

**Means and Standard Deviations for Years of Practice**

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<th>&lt; 2 ((n = 34))</th>
<th>3-5 ((n = 57))</th>
<th>6-10 ((n = 54))</th>
<th>11-15 ((n = 27))</th>
<th>16-20 ((n = 23))</th>
<th>21+ ((n = 41))</th>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>(M)</td>
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<td>97.96</td>
<td>100.93</td>
<td>99.57</td>
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<td>(SD)</td>
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<td>18.39</td>
<td>14.82</td>
<td>16.82</td>
<td>18.52</td>
<td>17.39</td>
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</tr>
<tr>
<td>(M)</td>
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<td>(SD)</td>
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<td>19.72</td>
<td>15.09</td>
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<td></td>
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<td>(M)</td>
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<td>47.91</td>
<td>47.27</td>
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<td>(SD)</td>
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<td>14.72</td>
<td>13.46</td>
<td>11.20</td>
<td>15.91</td>
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</tr>
<tr>
<td>(M)</td>
<td>52.47</td>
<td>58.88</td>
<td>57.96</td>
<td>60.07</td>
<td>59.70</td>
<td>60.15</td>
</tr>
<tr>
<td>(SD)</td>
<td>14.02</td>
<td>16.50</td>
<td>15.56</td>
<td>15.08</td>
<td>10.29</td>
<td>18.67</td>
</tr>
<tr>
<td><strong>KT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(M)</td>
<td>16.79</td>
<td>17.05</td>
<td>15.63</td>
<td>16.26</td>
<td>16.30</td>
<td>16.24</td>
</tr>
<tr>
<td>(SD)</td>
<td>4.82</td>
<td>5.50</td>
<td>4.67</td>
<td>4.82</td>
<td>4.60</td>
<td>6.99</td>
</tr>
<tr>
<td><strong>CT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(M)</td>
<td>41.47</td>
<td>42.51</td>
<td>42.72</td>
<td>45.70</td>
<td>44.43</td>
<td>44.93</td>
</tr>
<tr>
<td>(SD)</td>
<td>10.07</td>
<td>10.69</td>
<td>9.05</td>
<td>9.47</td>
<td>9.51</td>
<td>11.05</td>
</tr>
</tbody>
</table>

*Note. M = Mean, SD = Standard Deviation. n = number in each group. KI – knowledge in identifying, CI – competence in identifying, KA – knowledge in assessing, CA – competence in assessing, KT – knowledge of treatment, CT – competence in treatment.*
**Highest degree/years of practice on knowledge in identifying anxiety.** The results of the 4x6 ANOVA revealed no interaction effect between years of practice and highest degree on knowledge in identifying anxiety, $F(12, 236) = 1.22, p = .268$. There was no main effect for years of practice and knowledge in identifying anxiety, $F(5, 236) = .612, p = .691$. Further, there was also no main effect for highest degree and knowledge in identifying anxiety, $F(3, 236) = 1.43, p = .235$.

Table 9

*Between-subjects ANOVA using Knowledge of Identifying Anxiety as the Dependent Variable*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>eta²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of practice</td>
<td>5</td>
<td>842.839</td>
<td>168.568</td>
<td>.612</td>
<td>.691</td>
<td>.014</td>
</tr>
<tr>
<td>Highest degree</td>
<td>3</td>
<td>1181.147</td>
<td>393.716</td>
<td>1.430</td>
<td>.235</td>
<td>.020</td>
</tr>
<tr>
<td>Years of practice x degree</td>
<td>12</td>
<td>4044.230</td>
<td>337.019</td>
<td>1.224</td>
<td>.268</td>
<td>.064</td>
</tr>
<tr>
<td>Error</td>
<td>215</td>
<td>59183.653</td>
<td>275.273</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>236</td>
<td>2271740.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Significance set at the $p < .05$ level.

**Highest degree/years of practice on competence in identifying anxiety.** The results of the 4x6 ANOVA revealed no interaction effect between years of practice and highest degree on competence in identifying anxiety, $F(12, 236) = 1.392, p = .171$. Although there was no main effect for years of practice and competence in identifying anxiety, $F(5, 236) = .654, p = .659$, there was a main effect for highest degree and competence in identifying anxiety, $F(3, 236) = 2.789, p = .042, \eta^2 = .037$, with 4% of the variance accounted for. Power was adequate (.667).
Bonferroni post-hoc analyses were conducted to further analyze the level of degree with competence level in identifying anxiety. There was a significant difference between the Masters level and the Doctoral level, the Masters Plus and Doctoral level, and the Educational Specialist and Doctoral level on total competence in identifying anxiety. An analysis of group means revealed that school psychologists with a Doctoral degree reported the greatest competence in identifying anxiety, followed by the Masters Plus, Educational Specialist, and then the Masters degree. Please see Table 7.

Table 10

Between-subjects ANOVA using Competence in Identifying as the Dependent Variable

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>eta²</th>
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</thead>
<tbody>
<tr>
<td>Years of practice</td>
<td>5</td>
<td>1085.386</td>
<td>217.077</td>
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<td>.659</td>
<td>.015</td>
</tr>
<tr>
<td>Highest degree</td>
<td>3</td>
<td>2777.062</td>
<td>925.687</td>
<td>2.789</td>
<td>.042</td>
<td>.037</td>
</tr>
<tr>
<td>Years of prac x degree</td>
<td>12</td>
<td>5543.239</td>
<td>461.937</td>
<td>1.392</td>
<td>.171</td>
<td>.072</td>
</tr>
<tr>
<td>Error</td>
<td>215</td>
<td>71352.423</td>
<td>331.872</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>236</td>
<td>1781777.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Significance set at the p < .05 level.*

**Highest degree/years of practice on knowledge in assessing anxiety.** The results of the 4x6 ANOVA revealed that there was no interaction effect found between years of practice and highest degree on knowledge in assessing anxiety, $F(12, 236) = .594, p = .846$. There was no main effect for years of practice and knowledge in assessing anxiety, $F(5, 236) = .307, p = .908$. Further, there was a main effect for highest degree and knowledge in assessing anxiety, $F(3, 236) = 7.466, p < .001, \eta^2 = .094$, with 9% of the variance accounted for. The observed power was strong (.985).
Bonferroni post-hoc analyses were conducted to further analyze the degree level with knowledge in assessing. There was a significant difference between the Masters Plus and Doctoral level, and the Educational Specialist and Doctoral level on total competence in identifying anxiety. There was no significant difference between the Masters level and Doctoral level. An analysis of group means revealed that school psychologists with a Doctoral degree reported the greatest knowledge in assessing, followed by Masters degree, Masters Plus, and then Educational Specialist. Please see Table 7.

Table 11

Between-subjects ANOVA using Knowledge in Assessing as the Dependent Variable

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>eta²</th>
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</thead>
<tbody>
<tr>
<td>Years of practice</td>
<td>5</td>
<td>290.973</td>
<td>58.195</td>
<td>.307</td>
<td>.908</td>
<td>.007</td>
</tr>
<tr>
<td>Highest degree</td>
<td>3</td>
<td>4247.628</td>
<td>1415.876</td>
<td>7.466</td>
<td>.000</td>
<td>.094</td>
</tr>
<tr>
<td>Years of prac x degree</td>
<td>12</td>
<td>1352.470</td>
<td>112.706</td>
<td>.594</td>
<td>.846</td>
<td>.032</td>
</tr>
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<td>Error</td>
<td>215</td>
<td>40771.291</td>
<td>189.634</td>
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<tr>
<td>Total</td>
<td>236</td>
<td>546023.000</td>
<td></td>
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</tbody>
</table>

Note: Significance set at the $p < .05$ level.

Highest degree/years of practice on competence in assessing anxiety. The results of the 4 x 6 ANOVA revealed that there was no interaction effect found between years of practice and highest degree on competence in assessing anxiety, $F(12, 236) = .499$, $p = .914$. There was no main effect for years of practice and competence in assessing anxiety, $F(5, 236) = .332$, $p = .893$. Further, there was a main effect for highest
degree and competence in assessing anxiety, $F(3, 236) = 4.193, p = .007, \eta^2 = .055$, with 5% of the variance accounted for. The observed power was adequate (.852).

Bonferroni post-hoc analyses were conducted to further analyze the degree level with competence in assessing. There was a significant difference between the Masters Plus and Doctoral level, and the Educational Specialist and Doctoral level on total competence in identifying anxiety. There was no significant difference between the Masters level and Doctoral level. An analysis of group means revealed that school psychologists with a Doctoral degree reported the greatest competence in assessment, followed by Masters degree, Masters Plus, and then Educational Specialist. Please see Table 7.

Table 12

*Between-subjects ANOVA using Competence in Assessing as the Dependent Variable*

<table>
<thead>
<tr>
<th>Source</th>
<th>$df$</th>
<th>$SS$</th>
<th>$MS$</th>
<th>$F$</th>
<th>$p$</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of practice</td>
<td>5</td>
<td>391.990</td>
<td>78.398</td>
<td>.332</td>
<td>.893</td>
<td>.008</td>
</tr>
<tr>
<td>Highest degree</td>
<td>3</td>
<td>2973.250</td>
<td>991.083</td>
<td>4.193</td>
<td>.007</td>
<td>.055</td>
</tr>
<tr>
<td>Years of prac x degree</td>
<td>12</td>
<td>1415.007</td>
<td>117.917</td>
<td>.499</td>
<td>.914</td>
<td>.027</td>
</tr>
<tr>
<td>Error</td>
<td>215</td>
<td>50824.641</td>
<td>236.394</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td>236</td>
<td>857111.000</td>
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</tbody>
</table>

*Note:* Significance set at the $p < .05$ level.

**Highest degree/years of practice on knowledge in treating anxiety.** The results of the 4 x 6 ANOVA revealed that there was no interaction effect found between years of practice and highest degree on knowledge in treating anxiety, $F(12, 236) = 1.196, p = .287$. There was no main effect for years of practice and knowledge in treating anxiety,
$F(5, 236) = 1.126, p = .348$. Further, there was a main effect for highest degree and knowledge in treating anxiety, $F(3, 236) = 6.510, p < .001, \eta^2 = .093$, with 9% of the variance accounted for. The observed power was strong (.969).

Bonferroni post-hoc analyses were conducted to further analyze the degree level with knowledge in treating. There was a significant difference between the Masters Plus and Doctoral level, and the Educational Specialist and Doctoral level on total competence in identifying anxiety. There was no significant difference between the Masters level and Doctoral level. Analysis of group means revealed that school psychologists with a Doctoral degree reported the greatest knowledge in treating, followed by the Educational Specialist, the Masters degree, and then the Masters Plus. Please see Table 7.

Table 13

*Between-subjects ANOVA using Knowledge of Treating as the Dependent Variable*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>eta²</th>
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</thead>
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<tr>
<td>Years of practice</td>
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<td>147.852</td>
<td>29.570</td>
<td>1.126</td>
<td>.348</td>
<td>.026</td>
</tr>
<tr>
<td>Highest degree</td>
<td>3</td>
<td>513.057</td>
<td>171.019</td>
<td>6.510</td>
<td>.000</td>
<td>.083</td>
</tr>
<tr>
<td>Years of prac x degree</td>
<td>12</td>
<td>377.149</td>
<td>31.429</td>
<td>1.196</td>
<td>.287</td>
<td>.063</td>
</tr>
<tr>
<td>Error</td>
<td>215</td>
<td>5647.698</td>
<td>26.268</td>
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</tr>
<tr>
<td>Total</td>
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<td>70061.000</td>
<td></td>
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<td></td>
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</tbody>
</table>

*Note:* Significance set at the $p < .05$ level.

**Highest degree/years of practice on competence in treating anxiety.** The results of the 4 x 6 ANOVA revealed that there was no interaction effect found between years of practice and highest degree on competence in treating anxiety, $F(12, 236) =$
1.005, $p = .445$. There was no main effect for years of practice and competence in treating anxiety, $F(5, 236) = .675, p = .643$. Further, there was a main effect for highest degree and competence in treating anxiety, $F(3, 236) = 5.784, p = .001, \eta^2 = .075$, with 7% of the variance accounted for. The observed power was strong (.948). Although the number of years of practice was not significant on any variables, please refer to Table 8 for Means and Standard Deviations.

Bonferroni post-hoc analyses were conducted to further analyze the degree level with competence in treating. There was a significant difference between the Masters Plus and Doctoral level, and the Educational Specialist and Doctoral level on total competence in identifying anxiety. The difference between the Masters level and Doctoral level on competence in treating was approaching significance. An examination of group means revealed that the school psychologists holding a Doctoral degree reported the greatest competence in treating, followed by the Masters Plus, Educational Specialist, and then the Masters degree. Please see Table 7.

Table 14

*Between-subjects ANOVA using Competence of Treating as the Dependent Variable*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>$\eta^2$</th>
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</thead>
<tbody>
<tr>
<td>Years of practice</td>
<td>5</td>
<td>313.180</td>
<td>62.636</td>
<td>.675</td>
<td>.643</td>
<td>.015</td>
</tr>
<tr>
<td>Highest degree</td>
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<td>1611.076</td>
<td>537.025</td>
<td>5.784</td>
<td>.001</td>
<td>.075</td>
</tr>
<tr>
<td>Years of prac x degree</td>
<td>12</td>
<td>1120.074</td>
<td>93.340</td>
<td>1.005</td>
<td>.445</td>
<td>.053</td>
</tr>
<tr>
<td>Error</td>
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<td>92.843</td>
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</tr>
<tr>
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</table>

*Note: Significance set at the $p < .05$ level.*
Chapter Five

Discussion

Overview

As stated previously, given the negative consequences of anxious children going unnoticed in the school setting, it is pertinent that school psychologists know how to identify, assess and treat these children (Barlow, 2002; Last, Hansen, & Franco, 1997; Spence & Dadds, 1996). This study aimed to measure how much knowledge and competency school psychologists have relative to identifying, assessing, and treating anxiety disorders in children. This was accomplished by surveying school psychologists on their self-perceived measures of knowledge and competence in identifying, assessing, and treating children with anxiety disorders in the school setting. Further, a review of their graduate school training and knowledge of background information on anxiety was included in the survey. The survey also measured how competent school psychologists felt in working with children with anxiety disorders, and with providing information to related service professionals and parents.

Descriptive Interpretations

In the current sample, consistent with past research, approximately 70% of all school psychologists are part of NASP (Fagan, 1994). Interestingly, the age groups that were included showed that a majority were from the 30-39 year old age group, followed by the 22-29 year olds. The older age groups in the sample were under-represented in this study. This may signify that the more seasoned school psychologists felt less obligation in answering this survey, perhaps because of increasing life demands as they age (for example, caring for children or grandchildren). Related to this finding, a majority of participants have been practicing in the three to five, and six to ten year
range; followed by a similar level of those practicing fewer than two and more than 21 years. Finally, there was a drop in response for those practicing between 11 and 15, and 16 and 20 years. The assumption here may be that those with between three and ten years experience may not have started a family or even been married yet, and have more time to answer the survey; whereas, life demands may increase with getting married and having children and grandchildren after having practiced 11 to 20 years in the field. Those who have three to ten years of experience may have completed the survey for a graduate student’s dissertation requirement because they have greater empathy, having been out in the field for only a few years, and remembering the demands of graduate school. Additionally, those who are just out of school, with fewer than two years experience, may still be adjusting to the demands of the job, leaving less time and energy to complete a survey. They also may not have found a job in the field of school psychology because of the job market, making them less likely to be eligible for the survey. Those with more than 21 years of experience may be those individuals who have grown children that can care for themselves, freeing up some time to take the survey. Or they may be so used to the requirement of the job that they do it effectively and efficiently, leaving additional time to answer the survey.

An examination of the degree type held by most school psychologists revealed the fact that most held an Educational Specialist degree. More than half the sample included school psychologists who did not have a Doctoral degree. These results seem somewhat consistent with past research (Reschly & Wilson, 1997). Also similar to the results found in this study, other research has found that approximately three of four certified school psychologists are currently practicing without a Doctoral degree (Carlson, Demaray, &
Anxiety Disorders

Hunter-Oehmke, 2006). Those with a Doctoral degree had a significant effect for competence in identifying, assessing, and treating and for knowledge in assessing and treating. An exact analysis showed that those who held a Doctoral degree reported higher levels of knowledge and competence overall. This seems to make sense, given the fact that a Doctoral degree requires additional curriculum in mental health practice and a pre-Doctoral internship year (Gayer, Brown, Gridley, & Treloar, 2003). It may also suggest that those with a Doctoral degree felt obligated to report higher levels of knowledge and competence, given the fact that they had invested so much more time and money than those who achieved other degree levels. Some other implications for these findings suggest that perhaps graduate programs at the Masters and Educational Specialist level need to do a better job of preparing students to identify, assess, and treat children who have anxiety disorders in the school setting. Specifically, professors need to recognize anxiety as an important area of study, and to advocate inclusion of identification, assessment, and treatment of anxiety within the curriculum.

Many professionals criticize the field of school psychology because of the overemphasis on assessment and special education services (Fagan, 1995). Consistent with previous findings, almost half of a school psychologist’s time was involved in assessment and report writing (Benson & Hughes, 1985; Hutton, Dubes, & Muir, 1992; Stinnett, Havey, & Oehler-Stinnett, 1994). Previous surveys utilizing school psychologists have shown that they believed more experience should be gained in the assessment of internalizing disorders (Miller & Jome, 2008). Because the results showed that most school psychologists reported assessment as their primary role, this may reveal
that most school psychologists are working with a greater number of students who show outward behavioral problems.

Surprisingly, the next most common practice was consultation, an area that was rated as being commonly overlooked within the NASP practice domains (Fagan, 1995; Ysseldyke et al., 2006). Given the fact that past survey research has shown that a high percentage of mental health professionals do not feel competent in the ability to communicate with others (Curry & Hanson, 2010), there remains the question of whether or not school psychologists are providing the most effective consultation possible in the school setting. However, NASP believes that school psychologists should be provided with the appropriate training in order to be competent in consultation with parents and teachers (NASP-PPE, III., C.; Ysseldyke et al., 1997, 2006). Perhaps these results show that school psychologists are obtaining formal training or are seeking out knowledge in how to consult appropriately with others.

School psychologists primarily rated themselves as having very few referrals for anxiety disorders, with a majority reporting fewer than five referrals a year. This is somewhat consistent with a past survey conducted on school psychologists’ knowledge of internalizing disorders, showing that a majority of respondents saw fewer than 10 referrals a year for children with generalized anxiety disorder, and even fewer respondents saw children with obsessive compulsive disorder and post-traumatic stress disorder (Miller & Jome, 2008). This finding is important to note because according to Merrell et al. (2006), anxiety disorders are more difficult to notice than are more overt behavioral problems. This makes increasing the awareness of the symptoms of anxiety even more important in the practice of school psychology.
Further, with the recent increase in the use of 504 plans to qualify students for special services (deBettencourt, 2002), it is no surprise that a majority of school psychologists reported using this method of qualification. However, it is interesting that even though overall school psychologists did not feel well prepared to work with students who present with an anxiety disorder, most rated themselves as having used 504 plans to qualify children with anxiety for extra support. Perhaps this signifies that school psychologists want to present themselves as following the law and abiding by the guidelines, even though they really have not had this experience.

In terms of internship training, a majority of school psychologists rated themselves as having an internship that did not prepare them to work with students who presented with an anxiety disorder; this is consistent with previous findings (Curry & Hanson, 2010). This has important implications for graduate programs because these programs set the requirements for completion of the degree. Perhaps graduate programs should emphasize the formal training for identifying, assessing, and treating anxiety disorders during the internship year, and require the completion of at least one case study.

**Implications**

The intent of this study was to examine the background knowledge and competence of school psychologists in identifying, assessing, and treating anxiety in the school setting. There were differences between identifying, assessing, and treating across both knowledge and competence.

The first hypothesis stated there will be a relationship between the degree held by a school psychologist (Masters, Masters Plus, Educational Specialist, Doctoral) and the number of years a school psychologist has been practicing (< 2 years, 3 to 5 years, 6 to 10
years, 11 to 15 years, 16 to 20 years, and 21 or more years), and the amount of knowledge and competence with identifying anxiety disorders, based on the DSM-IV criteria. It was hypothesized that the higher the level of education and the higher the number of years a school psychologist has been practicing, the more knowledgeable and more competent school psychologists would be with identifying anxiety disorders, based on the DSM-IV criteria (measured as an average response above 4).

The results of this study showed that when comparing years of practice and the level of degree relative to knowledge of identifying, there was no relationship. School psychologists were asked to rate their levels of knowledge on the various DSM-IV-TR categories, based on how much information they believed they had received either in graduate school, or had sought out after graduate school. This means that the level of academic degree does not matter nor does it matter how many years they have been practicing, relative to their knowledge with identifying various disorders related to the DSM-IV-TR categories of anxiety. However, when years of practice and academic degrees were compared with competence in identifying, the number of years they had practiced did not make a difference, but their degree levels did have a significant effect. Specifically, an examination of group means revealed that those with a Doctoral degree rated themselves as most competent in identification of children with anxiety disorders, followed by those with an Educational Specialist, Masters Plus, and then Masters degree.

Currently, school psychologists use the DSM-IV-TR classifications in the school setting less frequently than it is used in other clinical settings due to several limitations. These involve the fact that the DSM-IV-TR categories for children are not specific enough to school related problems, and the exclusion of criteria that specifically relates to
school functioning (Wodrich, Pfeiffer, & Landau, 2008). There is also poor overlap between categories in the manual and the definitions of educational classifications within the school setting. Because of this, in-services in the field of school psychology have seldom emphasized using the manual during trainings. Additionally, externalizing disorders have been researched and included in the updated manuals more frequently than internalizing disorders (McBurnett, 1996).

School psychologists who completed the survey in this current study reported at least average, if not, above average competence in identifying anxiety according to their achieved levels of degree (measured by an average score on this section of the survey above four on a seven point Likert scale). Specifically, those who hold a Doctoral degree seek out the greatest amount knowledge, perhaps because they have a love of knowledge driving them to complete the higher degree in the first place. Although school psychologists are becoming more highly aware and more competent in how to identify symptoms of anxiety in the school setting, there is still room for improvement.

The second hypothesis stated there will be a relationship between the degree held by a school psychologist (Masters, Masters Plus, Educational Specialist, Doctoral) and the number of years a school psychologist has been practicing (< 2 years; 3 to 5 years; 6 to 10 years; 11 to 15 years; 16 to 20 years, and 21 or more years), and the amount of knowledge and competence with assessing anxiety disorders, using various instruments (observations, cognitive, rating scales, etc.). It was hypothesized that the individuals who graduated with the highest degree and who have been practicing for the longest amount of time would be more knowledgeable and competent in assessing anxiety disorders,
using various instruments (measured as an average response above four on a seven point scale).

The results showed that only the level of degree made a difference, with those who held a Doctoral degree rating themselves as the most knowledgeable and competent, followed by those with a Masters Plus and then the Educational Specialist degree. Included under the assessment sections were the knowledge and competence school psychologists had in the area of school neuropsychology. According to Hale and Fiorello (2004), there has been a recent increase in interest in this area. Given the fact that previously this was an area that was often overlooked, it makes sense that years of experience would not have an effect on their knowledge and competence. However, given that the level of degree did make a difference on their knowledge and competence levels in this study, it is surprising that previous research has shown that graduate programs do not have appropriately trained faculty and that most school psychologists are practicing without appropriate training (Walker, Boling, & Cobb, 1999; Hartlage & Golden, 1990). Because graduates of Doctoral programs felt the most highly prepared in assessing anxiety, perhaps these graduate programs are emphasizing school neuropsychology more fully than other degree levels, or are hiring specialized faculty in this area.

Additionally, past surveys showed that school psychologists believed that they should have knowledge on assessing school phobia, generalized anxiety disorder, post-traumatic stress disorder, and obsessive compulsive disorder; however, school psychologists rated themselves as needing further knowledge in these areas (Miller & Jome, 2008). Additionally, Miller and Jome (2008) found that school psychologists
believed that they were somewhat confident in assessing internalizing disorders. The current survey showed that although school psychologists with a Doctoral degree believed that they were the most knowledgeable and competent, their average knowledge and competence in assessing anxiety fell generally below the average level (measured by an average score on this Section of the survey below four on a seven point Likert scale). This signifies that school psychologists need to acquire more knowledge in the assessment of internalizing disorders (including the anxiety disorders), on a whole (Miller & Jome, 2008).

The third and last hypothesis stated there will be a relationship between the degree held by a school psychologist (Masters, Masters Plus, Educational Specialist, Doctoral) and the number of years a school psychologist has been practicing (< 2 years; 3 to 5 years; 6 to 10 years; 11 to 15 years; 16 to 20 years, and 21 or more years), and the amount of knowledge and competence with treating anxiety disorders, using various approaches. It was hypothesized that the individuals who graduated with the highest degree and who have been practicing for the longest amount of time would be more knowledgeable and competent in treating anxiety disorders, using various approaches (measured as an average response above four).

The results of these analyses revealed that years of practice had no effect on their knowledge and competence levels in treating. This again signifies the shortcomings of trainings and in-services for school psychologists in the field. It seems that continuing education credits should require at least one course on anxiety disorders, given their high prevalence (Albano, Chorpita, & Barlow, 2003; Chavira, Stein, Bailey, & Stein, 2004). Further, it seems that years of practice did not make a difference in the knowledge and
competence level; therefore, the field of school psychology needs to recognize the
important long-term benefits of this modality, and to include it during in-service training
(Barrett, Duffy, Rapee, & Dadds, 2001).

On the other hand, level of degree did make a significant difference on knowledge
and competence. When examining the knowledge levels, participants who held a
Doctoral degree rated themselves higher in assessing anxiety, followed by those who held
an Educational Specialist and then a Masters Plus degree. When examining the
competency levels, participants who held a Doctoral degree rated themselves higher in
assessing anxiety, followed by those who held a Masters Plus and then an Educational
Specialist degree. Because CBT is highly popular and is empirically supported for
treating childhood anxiety (Bernstein, Layne, Egan, & Tennison, 2005; Borkovec &
Costello, 1993; Compton et al., 2004; Ollendick & King, 1998), measuring the
knowledge and competence level is important. However, the level of knowledge was
rated to be approximately a two on a seven point scale for those who did not hold a
Doctoral degree, and approximately a three for those who did. The level of competence
was slightly higher, but still below average for those who did not hold a Doctoral degree
(approximately an average score of three on this section on a seven point Likert scale),
and approximately a four for those who did. These results indicate that school
psychologist training programs need to do a upgrade their methods of emphasizing
effective treatments for anxiety, especially for those who do not obtain a Doctoral degree.
Further, professors of training programs need to obtain more knowledge and competence
in treating those who have anxiety disorders in order to teach these skills effectively to
school psychologists in training.
An interesting finding overall was that relationships were found only with levels of education, but not with years of experience on identifying, assessing, and treating anxiety disorders. This could mean that the field of school psychology needs to do increase the possibilities of providing continuing education courses to school psychologists working in the field. This will increase the knowledge and competency of school psychologists as their careers progress. Further, although collaboration was rated as the second most frequently engaged in activity, increased interaction with colleagues and related service professionals will increase the awareness of anxiety disorders even more. This can be established by placing a greater emphasis on professional development time, and increased interaction time during the school day.

It could also be a reflection upon individuals in the field of school psychology who do not obtain a Doctoral degree, and are not seeking out further knowledge after their training in graduate schools are complete. Perhaps there could be greater incentives for individuals who do continually seek out further information related to their fields. Because school psychologists who do hold higher degrees rate their knowledge and competence higher, graduate programs may want to consider making their entrance requirements stricter to ensure they have the highest quality students and future professionals to represent the field.

Teaching methods and enhancements in the field of school psychology have resulted in more adequately trained school psychologists as they leave their programs; these graduates are able to compensate for years of experience that are held by more tenured school psychologists in the field. This represents a step in the right direction for newly graduated school psychologists but still leaves the field with seasoned school
psychologists who may feel stuck in their ways and are not willing to accept the new laws and the new regulations that are passed as the field of education changes. This is of course a generalization, and may raise awareness for those school psychologists who have been practicing for a long time but may not have thought to seek out knowledge in the area of anxiety disorders. These professionals may lead the way to advocate for children who have anxiety disorders.

The information provided in this study is beneficial for all individuals interested in or involved in the field of school psychology who could make a difference on the future findings if this study were to be replicated. Individuals interested in seeking out a career in school psychology need to realize the benefits of helping children who experience the effects of the internalizing disorders, therefore expanding their visions rather than focusing solely on the more noticeable outward behavioral disorders (Kumpulainen et al., 1998; Mychailyszyn, Mendez, & Kendall, 2010). Further, advocacy efforts could be put forth in graduate programs to advocate for more information on identifying, assessing, and treating the inward behavioral disorders, particularly anxiety. Graduate programs also need to advocate for changes in their curriculum in order to focus on identifying, assessing, and treating children with anxiety disorders. Additionally, those already practicing need to take this study into account in their every day practices; by continuing on the path they currently follow, children with anxiety disorders will continue to experience the negative long-term consequences associated with these youngsters going unnoticed (Barlow, 2002; Last, Hansen, & Franco, 1997; Spence & Dadds, 1996).
Limitations

As with any study, this proposed survey research has several limitations. Survey research has questionable reliability and validity. This is especially true because the principal investigator created the survey and did not utilize a previously standardized measure to examine the knowledge and competence among school psychologists. Generalization will be difficult, given the fact that a true random sampling of all school psychologists was not possible. Also, these respondents are the school psychologists who are choosing to take the time to respond to questions.

In terms of the significance of findings, it is important to note that with knowledge and competence in assessing, there were significantly different findings at the Doctoral, Masters Plus, and Educational Specialist level. Upon analysis of the numbers of participants, the Masters level yielded only six participants, limiting the chance to find significance. This is also true for many of the demographic questions; having a very narrow range of choices may have limited the findings. For example, ages were split into blocks of about nine years; if these categories were broader, perhaps there would be more significant findings. The same is true for years of practice that spanned about four years, and also the number of anxiety referrals received in a year, again with a range of about five points.

Other demographic information found may also limit the generalizability of the study. Specifically, a majority of the sample were Caucasian women, consistent with past research (Curtis, Grier, Abshier, Sutton, & Hunley, 2002; Curtis, Hunley, & Grier, 2002). This signifies a downfall in the field of school psychology, indicating that graduate programs should attempt to recruit more males and more ethnic minorities.
Most respondents were from PA and NJ which may limit generalization to other parts of the United States. However, it is important to point out that several states not as close geographically did obtain a sufficient sample size (i.e., NC).

The survey design may also limit further findings from being revealed. Specifically, the various sections included questions that were related to multiple topics in the areas of identifying, assessing, and treating anxiety in the school setting, thus collapsing the specific questions that may have been rated as higher or lower. For example, if a question related to consultation yielded a higher average score on the Likert scale compared with a question on identifying cultural differences, the mean would look average, but these two questions appear unrelated. Another example is rating how much a school psychologist uses certain assessment techniques for anxiety. For example, previous research has shown that school psychologists believed that self-reports and interviews were much more relevant to assessing anxiety than were standardized tests of intelligence (Miller & Jome, 2008). Perhaps this resulted in more knowledge and competence with the self-report measures, and lower knowledge and competence with cognitive measures. This may be a limitation of the overall design of the survey.

Responder bias may also be present because the survey subjectively measured self-perceptions of their knowledge and competence levels. This method of measuring actual knowledge and competence is not as valid as using more concrete measures, such as direct observation. Respondents may also want to present themselves in a better light, by responding to the questions in a way that they think the investigator wants them to answer, given what they think the survey is intended to measure. Additionally, respondents were forced to answer all the questions on the survey in order to make their
surveys appropriate for use during the analysis stage; this may have made some respondents guess on certain items about which they were not sure.

Because a donation was made in response to the surveys, respondents may have answered it quickly in order to reap the benefits. This survey was completed only one time by participants, and their answers may have been affected by their particular moods that day. Another limitation is that after the survey was approved and placed online, no additional changes could be made. Therefore, flexibility in the statistical design was limited to questions on the original survey submitted to IRB.

**Future Directions**

It is hoped that this study will raise the awareness level of many school psychologists and school psychology training programs. This study provides pertinent information for school psychologists regarding knowledge and current competence with anxiety disorders in the schools. It is essential for the field to continue exploring further areas related to anxiety disorders to provide the best outcomes for these children.

School psychology training programs may want to focus their research on graduates of their programs who are practicing in their states, and those practicing in other states. Measuring the outcomes of school psychology training programs is extremely important to ensure that individuals are graduating with knowledge related to identifying, assessing, and treating anxiety disorders before they begin working. Further, observing the state of their practices and their competence levels may give an idea of how various states acknowledge further training in post-graduate school. Also, studies may want to examine the number of courses that addressed anxiety disorders and if that
number affected the knowledge levels across all conditions (identifying, assessing, and treating).

Future research may want to measure school psychologists’ primary role in the schools, and how that relates to the competence level in identifying, assessing, and treating anxiety disorders. Also, the number of referrals could be examined to determine whether or not those receiving the highest number of referrals would feel more or less competent than those receiving fewer referrals for anxious children.
References


Code of Federal Regulations, Title 34, Section 300.8(c)(4) *et seq.*

Code of Federal Regulations, Title 34, Section § 300.7(c)(9) (hereinafter C.F.R.).


Anxiety Disorders


APPENDIX A

INVITATION TO PARTICIPATE
Appendix A

Invitation to Participate

Subject: School Psychologist’s Knowledge and Competence of Anxiety Disorders

Dear fellow school psychologist,

You are being asked to participate in a research study exploring the self-perceived knowledge and competency level of school psychologists in identifying, assessing, and treating anxiety disorders in the school setting. This survey will be used for Doctoral dissertation purposes at the Philadelphia College of Osteopathic Medicine (PCOM) by Jaime Moldovan. You will be asked to rate your knowledge and competence levels on various questions related to identifying, assessing, and treating anxiety disorders in the school setting; as well as, answer several demographic questions. This survey will take approximately 10-15 minutes.

There are minimal risks associated with this study concerning asking respondents for their self-perceived competency levels. There are no direct benefits to you; however, for the first 100 participants to fully complete the survey, a $1 donation will be made to the NASP Children’s Fund. Your participation is completely voluntary, and consent will be assumed if the questions have been answered. You may withdraw at any time with no penalty by closing out of the SurveyMonkey website; however, no money will be donated for incomplete surveys and the data will not be counted.

In order to complete the survey, please click on the link. https://www.surveymonkey.com/s/YH298P2

The results of the survey will be kept completely confidential. The data will be kept anonymous by having no personal identifiers used. The results will be analyzed and could be made available if you are interested. This survey has been approved by the Institutional Review Board (IRB) at PCOM. Specific questions may be addressed to Theresa Fullerton, Research Compliance Specialist, at teresaf@pcom.edu or by calling 215-871-6782.

Thank you in advance for your participation. Should you have any questions, or if you would like the results, please contact Jaime Moldovan at PCOM at Jaimemo@pcom.edu. You may also contact the dissertation chair for this study, Lisa Hain, Psy.D. at Lisahai@pcom.edu or 215-871-6618.

Sincerely,

Jaime Moldovan
(631) 327-0321
JaimeMo@pcom.edu
Lisa Hain, Psy.D., Dissertation Chair
(215) 871-6618
LisaHai@pcom.edu
APPENDIX B

SURVEY OF KNOWLEDGE AND COMPETENCY WITH CHILD ANXIETY
Appendix C

Survey

Anxiety Disorders in the School Setting
A school psychologist’s knowledge and competence in identifying, assessing, and treating.

Preliminary Questions:

Are you currently employed in a school as a school psychologist? Yes No

If your answer was No to the above question, have you worked in a school as a school psychologist in the past three years? Yes No

If you are not currently employed in a school as a school psychologist and have not been employed in a school as a school psychologist at some point in the past three years, thank you for your time, but you are not eligible to participate.

SECTION A – Knowledge of Identifying Anxiety Disorders
These questions will be answered on a scale from 1 to 7, with 1 being the least and 7 being the most. Please mark 4 for a moderate amount.

How strongly do you feel about the statement that training programs in school psychology should emphasize the identification of anxiety disorders? 1 – 2 – 3 – 4 – 5 – 6 – 7

During your school psychology training, how much emphasis was placed on learning the DSM-IV-TR categories of anxiety disorders? 1 – 2 – 3 – 4 – 5 – 6 – 7

After your training, how much did you seek out further knowledge related to the DSM-IV-TR categories of anxiety disorders? 1 – 2 – 3 – 4 – 5 – 6 – 7

How important do you feel it is to have knowledge on the DSM-IV-TR diagnostic criteria for anxiety disorders in the schools? 1 – 2 – 3 – 4 – 5 – 6 – 7

Please mark your knowledge of the diagnostic criteria of each of the following anxiety disorders according to the DSM-IV-TR:

Separation Anxiety Disorder (SAD) 1 – 2 – 3 – 4 – 5 – 6 – 7
Generalized Anxiety Disorder (GAD) 1 – 2 – 3 – 4 – 5 – 6 – 7
Social Phobia (SP) 1 – 2 – 3 – 4 – 5 – 6 – 7
Specific Phobia 1 – 2 – 3 – 4 – 5 – 6 – 7
Panic Disorder 1 – 2 – 3 – 4 – 5 – 6 – 7
Selective Mutism 1 – 2 – 3 – 4 – 5 – 6 – 7
Obsessive Compulsive Disorder (OCD) 1 – 2 – 3 – 4 – 5 – 6 – 7
Posttraumatic Stress Disorder (PTSD) 1 – 2 – 3 – 4 – 5 – 6 – 7

How important do you feel it is to have skills related to effectively collaborating with school personnel about students who show symptoms of anxiety disorders? 1 – 2 – 3 – 4 – 5 – 6 – 7

How important do you feel it is to know about the neuropsychology
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How much did you feel your graduate training emphasized neuropsychological constructs related to anxiety?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How strongly do you feel that children with externalizing problems are referred more often than children with internalizing disorders?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How strongly do you feel that anxiety disorders are often overlooked or ignored in the school setting?  
1 – 2 – 3 – 4 – 5 – 6 – 7

What is the extent of the effect you feel anxiety has on a child’s academic classroom performance?  
1 – 2 – 3 – 4 – 5 – 6 – 7

What is the extent of the effect you feel anxiety has on a child’s social performance with peers and teachers?  
1 – 2 – 3 – 4 – 5 – 6 – 7

What is the extent of the effect you feel anxiety has on a child’s feelings of somatic symptoms (headaches, stomachaches)  
1 – 2 – 3 – 4 – 5 – 6 – 7

SECTION B – Competence in Identifying Anxiety Disorders

These questions will be answered on a scale from 1 to 7, with 1 being the least and 7 being the most. Please mark 4 for a moderate amount.

How prepared did you feel to work with children with an anxiety disorder in the school setting after graduation?  
1 – 2 – 3 – 4 – 5 – 6 – 7

In your practice, do you feel competent in working with students who have symptoms of an anxiety disorder?  
1 – 2 – 3 – 4 – 5 – 6 – 7

In your practice, how competent do you feel about cultural differences in the presentation of an anxiety disorder?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How comfortable are you with seeking out supervision when working with students who present with anxiety symptoms?  
1 – 2 – 3 – 4 – 5 – 6 – 7

Please mark your level of competence in using the diagnostic criteria of each of the following anxiety disorders according to the DSM-IV-TR:

Separation Anxiety Disorder (SAD)  
1 – 2 – 3 – 4 – 5 – 6 – 7

Generalized Anxiety Disorder (GAD)  
1 – 2 – 3 – 4 – 5 – 6 – 7

Social Phobia (SP)  
1 – 2 – 3 – 4 – 5 – 6 – 7

Specific Phobia  
1 – 2 – 3 – 4 – 5 – 6 – 7

Panic Disorder  
1 – 2 – 3 – 4 – 5 – 6 – 7

Selective Mutism  
1 – 2 – 3 – 4 – 5 – 6 – 7

Obsessive Compulsive Disorder (OCD)  
1 – 2 – 3 – 4 – 5 – 6 – 7

Posttraumatic Stress Disorder (PTSD)  
1 – 2 – 3 – 4 – 5 – 6 – 7

How comfortable do you feel about collaborating with a teacher on a child who presents with symptoms of anxiety?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How comfortable do you feel about giving feedback for a child who presents with an anxiety disorder to parents?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How important do you feel it is to have parents involved in the school

How comfortable are you with giving a child with anxiety a classification of Emotional Disturbance (ED)? 1 – 2 – 3 – 4 – 5 – 6 – 7

How comfortable are you with giving a child with a clinically diagnosed anxiety disorder an Other Health Impaired diagnosis (OHI)? 1 – 2 – 3 – 4 – 5 – 6 – 7

How comfortable do you feel about consulting with a physician regarding a medical diagnosis of anxiety? 1 – 2 – 3 – 4 – 5 – 6 – 7

SECTION C – Knowledge of the Assessment of Anxiety Disorders in the schools

Knowledge refers to either instruction gained during graduate training or internship, or during independent study.

How much knowledge do you feel you gained during your graduate school psychology training pertaining to assessing anxiety disorders using behavioral observations? 1 – 2 – 3 – 4 – 5 – 6 – 7

How much knowledge do you feel you have in identifying symptoms of anxiety based on cognitive performance on an intelligence test? 1 – 2 – 3 – 4 – 5 – 6 – 7

How much knowledge do you feel you have with identifying symptoms of anxiety based on a neuropsychological test? 1 – 2 – 3 – 4 – 5 – 6 – 7

How much knowledge do you feel you have with using neuropsychological measures during a comprehensive assessment for a child who has or is suspected of having anxiety? 1 – 2 – 3 – 4 – 5 – 6 – 7

How much knowledge do you feel you have with identifying symptoms of anxiety based on projective measures? 1 – 2 – 3 – 4 – 5 – 6 – 7

How much knowledge do you feel you have with using projective measures during a comprehensive assessment for a child who has or is suspected of having anxiety? 1 – 2 – 3 – 4 – 5 – 6 – 7

Please rate your level of knowledge in using one of the following structured interviews and/or rating scales (please use 1 if you have never learned the measure).

Anxiety Disorders Interview Schedule for Children (ADIS-C/P) 1 – 2 – 3 – 4 – 5 – 6 – 7
Child Behavior Checklist (CBCL) 1 – 2 – 3 – 4 – 5 – 6 – 7
State-Trait Anxiety Inventory for Children (STAIC) 1 – 2 – 3 – 4 – 5 – 6 – 7
Revised Children’s Manifest Anxiety Scale (RCMAS) 1 – 2 – 3 – 4 – 5 – 6 – 7
Fear Survey Schedule for Children-Revised (FSSC-R) 1 – 2 – 3 – 4 – 5 – 6 – 7
Spence Children’s Anxiety Scale (SCAS) 1 – 2 – 3 – 4 – 5 – 6 – 7

How strongly do you feel about the statement that training programs in school psychology should emphasize the assessment of anxiety disorders? 1 – 2 – 3 – 4 – 5 – 6 – 7
SECTION D – Competence in the Assessment of Anxiety Disorders in the schools

How competent do you feel with assessing children for an anxiety disorder?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How important do you feel a behavioral observation would be for a child who was reported to have symptoms of anxiety?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How confident do you feel about observing symptoms of an anxiety disorder?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How confident are you in identifying symptoms of anxiety based on cognitive performance on an intelligence test?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How confident are you with identifying symptoms of anxiety based on a neuropsychological test?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How confident are you in identifying symptoms of anxiety based on cognitive performance on an intelligence test?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How confident are you in identifying symptoms of anxiety based on a neuropsychological test?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How comfortable are you with using neuropsychological measures during a comprehensive assessment for a child who has or is suspected of having anxiety?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How confident are you with identifying symptoms of anxiety based on projective measures?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How comfortable are you with administering projective measures during a comprehensive assessment for a child who has or is suspected of having anxiety?  
1 – 2 – 3 – 4 – 5 – 6 – 7

When anxiety is suspected, please rate your level of comfort in using one of the following structured interviews and/or rating scales (please use 1 if you have never used the measure).

Anxiety Disorders Interview Schedule for Children (ADIS-C/P)  
1 – 2 – 3 – 4 – 5 – 6 – 7

Behavioral Assessment Scale for Children – Second Edition (BASC-2)  
1 – 2 – 3 – 4 – 5 – 6 – 7

Child Behavior Checklist (CBCL)  
1 – 2 – 3 – 4 – 5 – 6 – 7

Multidimensional Rating Scales for Children (MASC)  
1 – 2 – 3 – 4 – 5 – 6 – 7

State-Trait Anxiety Inventory for Children (STAIC)  
1 – 2 – 3 – 4 – 5 – 6 – 7

Revised Children’s Manifest Anxiety Scale (RCMAS)  
1 – 2 – 3 – 4 – 5 – 6 – 7

Fear Survey Schedule for Children-Revised (FSSC-R)  
1 – 2 – 3 – 4 – 5 – 6 – 7

Spence Children’s Anxiety Scale (SCAS)  
1 – 2 – 3 – 4 – 5 – 6 – 7

How important do you feel it is to have knowledge of how to assess for anxiety in the schools?  
1 – 2 – 3 – 4 – 5 – 6 – 7

SECTION E – Knowledge of Treatment of Anxiety Disorders in the schools

Knowledge refers to either instruction gained during graduate training or internship, or during independent study.

How much do you feel your training in school psychology included effectively treating anxiety disorders?  
1 – 2 – 3 – 4 – 5 – 6 – 7

Please select how much knowledge you have with using the following programs (please use 1 if you have never learned or heard of the intervention):

Queensland Early Intervention and Prevention of Anxiety Project  
1 – 2 – 3 – 4 – 5 – 6 – 7

Coping Cat  
1 – 2 – 3 – 4 – 5 – 6 – 7

FRIENDS  
1 – 2 – 3 – 4 – 5 – 6 – 7
How much do you feel your training in school psychology included medication treatment for anxiety disorders?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How strongly do you feel about the statement that training programs in school psychology should emphasize the treatment of anxiety disorders?  
1 – 2 – 3 – 4 – 5 – 6 – 7

SECTION F – Competence in the Treatment of Anxiety Disorders in the schools

How confident do you feel in your ability to treat children who have symptoms of anxiety?  
1 – 2 – 3 – 4 – 5 – 6 – 7

After your training, how much did you seek out further knowledge related to treatment of children with anxiety?  
1 – 2 – 3 – 4 – 5 – 6 – 7

Using the scale, how much do you feel it is your responsibility in the setting you work in to work with children who have symptoms of an anxiety disorder?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How important do you feel it is to use programs that are empirically supported to treat anxiety?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How comfortable are you with using empirically based programs for treating anxiety?  
1 – 2 – 3 – 4 – 5 – 6 – 7

Please select your comfort level with using the following programs:
Queensland Early Intervention and Prevention of Anxiety Project  
1 – 2 – 3 – 4 – 5 – 6 – 7
Coping Cat  
1 – 2 – 3 – 4 – 5 – 6 – 7
FRIENDS  
1 – 2 – 3 – 4 – 5 – 6 – 7

Overall, how familiar are you with various medications related to the treatment of anxiety?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How comfortable would you feel about consulting with a physician about medications for treatment of an anxiety disorder?  
1 – 2 – 3 – 4 – 5 – 6 – 7

How important do you feel it is to have knowledge on the various medications available for treatment of anxiety disorders?  
1 – 2 – 3 – 4 – 5 – 6 – 7

SECTION G - Demographic and Background Information

What is your gender?  
Male  Female

What is your age?  
22-29 years  
30-39 years  
40-49 years  
50-59 years  
60+ years

Are you currently a member of the National Association of School Psychologists (NASP)?  
Yes  No

Please select your ethnicity.  
African American  Asian American
Anxiety Disorders

Please mark your highest educational degree.
- Masters Degree
- Masters Plus
- Educational Specialist
- Doctorate

Please mark the number of years you have practiced as a school psychologist.
- < 2 years
- 3 to 5 years
- 6 to 10 years
- 11 to 15 years
- 16 to 20 years
- 21 or more years

What do you find yourself spending most of your time doing at work? (Rank top two choices with 1-2 with 1 being the most time-please select the one that most closely applies).
- Assessments/report writing
- Collaboration with others
- Counseling
- School/District-wide projects
- Research/Program Evaluation
- I.E.P. meetings
- Crisis response services

In what state are you employed?

Approximately, how many referrals a year do you get for students who present with symptoms of anxiety?
- < 5 students
- 5-10
- 11-20
- 21-30
- > 30
- I have worked < 1 yr

If a child is found to be eligible for special education because of anxiety interfering with their education, are specific measurable behavioral goals being placed in the child’s IEP (i.e. counseling)?
- Yes
- No

Do you feel your internship prepared you to work with students with anxiety disorders?
- Yes
- No

In your experience, have you been involved in creating or implementing a 504 plan (also known as a service plan that does not require an IEP).
- Yes
- No