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K-2 Teacher Perception of Anxiety

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K-2 Teacher Perception of Anxiety

Abstract

Research has indicated that anxiety adversely affects learning. Schools charged with student learning and achievement need to address anxiety. However, determining the efficacy of anxiety prevention programs or strategies may be problematic. School leaders that wish to address anxiety with students will have difficulty in finding an anxiety prevention program or strategies that are evidence-based. This places a burden on school leaders' decisions regarding the allocation of additional resources to implement such services. The purpose of the current study is to examine the perceptions of K-2 school teachers' perceptions on school anxiety in the children they serve. Information obtained from teachers' perspectives may be used to help with future prevention efforts in schools. The study used a qualitative methodology, specifically, phenomenology. Subjects included K-2 school teachers. Interviews were transcribed and coded, using manual coding. The emergent themes were used as a way to recognize and categorize student anxiety at the K-2 level. The findings revealed that signs of anxiety in primary students include tears, withdrawn, acting out, and body language. Causes of anxiety at the primary level include fear of the unknown, home life, Common Core, and technology. Furthermore, the findings verified the theoretical framework of this study – the ACT theory. The ACT theory posits that anxiety causes lack of concentration and brain fatigue. The findings in this study revealed that anxious students could not think clearly, focus, or finish work. Additionally, possible viable strategies or programs used by teachers were identified that decrease anxiety in students.

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Dedication

I did not do this dissertation alone. There are many to acknowledge and thank. First and foremost, it is Divine Intervention that brought me through this journey. The personal and professional support I received from others also led me to my success.

Thank you to my best friend and husband, Steve – you are and always have been the wind beneath my wings. My beloved children, Raychel and Steve have been my inspiration to excel as I strive to be the best role model I can for them. They, too, I know will follow in my footsteps and be life-long learners.

Thank you to my committee chair, Dr. Linda Doty, and my committee member, Dr. Leela George, for their guidance, feedback, and encouragement. My advisor, Dr. C. Michael Robinson predicted and helped me achieve both tenure and my doctorate degree in 2017 – I am forever grateful for your encouragement and help along the way. Additionally, I am thankful for my team of fellow doctoral students – Chris Bolt, Tanya Eastman, and Melissa Moore – better known as team GEARS. Our entire cohort, the extraordinary 18, also gets a shout out for being a great group of people. I hope we get to cross paths again.

I also need to thank my co-worker, mentor, and friend, Dr. Mark Charette. His expertise, advice, and support helped me through this process. It has been my good fortune to cross paths with you both professionally and personally.

Biographical Sketch

Beth Kramer is currently the Principal of Walberta Park School in the Westhill School District. Prior to this, she was an administrator in the Syracuse City School District. Mrs. Kramer attended LeMoyne College from 1984 to 1988 and graduated with a degree in English Education. She attended Syracuse University from 1989 to 1990 and graduated with a Masters degree in Special Education. She also earned her C.A.S. degree in administration at Syracuse University in 1996. Mrs. Kramer enrolled in the St. John Fisher College doctoral program in Executive Leadership in 2015. She pursued research in a qualitative study examining the perspective of K-2 teachers regarding student anxiety under the direction of Dr. Linda Doty and Dr. Leela George and received her Ed.D. Degree in 2017.

Abstract

Research has indicated that anxiety adversely affects learning. Schools charged with student learning and achievement need to address anxiety. However, determining the efficacy of anxiety prevention programs or strategies may be problematic. School leaders that wish to address anxiety with students will have difficulty in finding an anxiety prevention program or strategies that are evidence-based. This places a burden on school leaders' decisions regarding the allocation of additional resources to implement such services.

The purpose of the current study is to examine the perceptions of K-2 school teachers' perceptions on school anxiety in the children they serve. Information obtained from teachers' perspectives may be used to help with future prevention efforts in schools.

The study used a qualitative methodology, specifically, phenomenology. Subjects included K-2 school teachers. Interviews were transcribed and coded, using manual coding. The emergent themes were used as a way to recognize and categorize student anxiety at the K-2 level. The findings revealed that signs of anxiety in primary students include tears, withdrawn, acting out, and body language. Causes of anxiety at the primary level include fear of the unknown, home life, Common Core, and technology. Furthermore, the findings verified the theoretical framework of this study – the ACT theory. The ACT theory posits that anxiety causes lack of concentration and brain fatigue. The findings in this study revealed that anxious students could not think clearly,

focus, or finish work. Additionally, possible viable strategies or programs used by teachers were identified that decrease anxiety in students.

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Chapter 1: Introduction

Over 20% of school-age children have an anxiety disorder (National Institute of Mental Health, 2015). Eighty percent of children with an anxiety disorder do not get treatment for the disorder (Child Mind Institute Incorporated, 2015). The reasons for not obtaining treatment for anxiety in children are varied. Some of the reasons that children do not receive treatment for anxiety include finances, humiliation, time, or long wait-lists (Herzig-Anderson, Colognori, Fox, Stewart, & Warner, 2012; Lowry-Webster, Barrett, & Dadds, 2001). Anxiety disorders in children often lead to low attendance rates and poor school performance (Mojtabai, Stuart, Hwang, Eaton, Sampson, & Kessler, 2015). Four out of five children do not receive the help they need to overcome anxiety (Child Mind Institute Incorporated, 2015). Anxiety negatively affects their performance in school, and so schools are compelled to find ways to alleviate anxiety.

In order to address anxiety within a school setting, anxiety has to be accurately detected. Addressing anxiety at its earliest stages in childhood has the most significant impact on prevention (Hains, Jandrisevits, Theiler, & Anders, 2001; Shoemaker, Tully, Niedam, & Peterson, 2015). In the primary years, students are learning fundamental concepts that are the foundation for all future learning. Students at the primary level are learning to read so that they can read to learn in their elementary years and beyond (Medford & McGeown, 2016). Not only does early intervention on anxiety impact the onset of a diagnosis of anxiety, it also addresses potential learning problems (McIntosh, Ty, & Miller, 2014). Therefore, it is important to recognize the signs of anxiety in its

infancy so that they can be addressed immediately and not lead to a learning problem or diagnosis.

The median age of diagnosis for childhood anxiety is 11 years old (Kessler, et al., 2005). Anxiety, for the purposes of this paper, is any type of anxiety such as: (a) diagnosed, (b) undiagnosed, (c) trait, or (d) state anxiety. Diagnosed anxiety is diagnosed by a medical professional as classified in the *Diagnostic and Statistical Manual of Mental Disorders*. Undiagnosed anxiety is showing signs of being anxious or worried but not having a medical diagnosis. Trait anxiety is an ongoing personality trait. State anxiety is circumstances that induce momentary anxiety or worry (Derakshan & Eysenck, 2009; Derakshan & Eysenck, 2010; Morales, 2012). Regardless of the type of anxiety, anxiety causes the brain to worry, which may create unfavorable conditions for learning (Baddeley, 2012). Anxiety is not typically diagnosed until the preteen years; therefore, undiagnosed anxiety is more prevalent than diagnosed anxiety at the primary level. This study will focus on anxious behaviors of students in the primary school setting. The primary level is defined as students who are enrolled in kindergarten, first grade or second grade (K-2).

To prevent state or trait anxiety from reaching clinical levels, interventions need to take place at the first signs of anxious behaviors (Altman, Sommer, & McGoey, 2009). Signs of anxiety can manifest as early as primary school or younger (Mohapatra, Agarwal, & Sitholey, 2013). If interventions for anxiety or stress can be used on students at the primary level, clinical levels of anxiety can be prevented. The idiom from Benjamin Franklin, “an ounce of prevention is worth a pound of cure,” (Bartlett & Kaplan, 2002) applies to the principle of anxiety prevention.

Problem Statement

When anxiety is present learning is potentially impacted. Within the primary K-2 school setting there are many anxiety triggers for students, such as technology, subject-area apprehensions, and social pressures (Cassady, 2010). Developmentally, children at the primary level have some level of worry, fear, and shyness. Therefore, it is difficult to distinguish between normal levels and clinical levels of anxiety (Mohapatra et al., 2013). Anxiety specifically affects the brain's efficiency as well as effectiveness and inhibits the brain's ability to focus (Ng & Lee, 2015). Furthermore, anxiety negatively affects attention, working memory, and aptitude (Derakshan & Eysenck, 2010). Attention, working memory, and aptitude are key elements in the learning process.

Anxiety is difficult to detect in students as it is an internalizing behavior. Internalizing behaviors are nondisruptive behaviors that students exhibit, such as avoidance, sweating, and stomachaches (McIntosh et al., 2014). However, because teachers spend a great deal of time with students at the primary level, their perceptions will be invaluable in helping to assess their students. While teachers do not have the credentials to diagnose or clinically treat anxiety in students, their perceptions will be of great value in identifying anxious behaviors that may help to prevent or alleviate student anxiety. However, a clinician's expertise is needed to determine if a student's anxious behavior rises to the level of a clinical diagnosis (Mohapatra et al., 2013). Anxiety progresses; therefore, it is important to address anxiety when it first appears instead of waiting until anxiety reaches a diagnosable status (Kashani & Orvaschel, 1990). Since teachers or school personnel spend a significant amount of time with students, they notice anxious behaviors in students.

Schools and teachers can play a pivotal role in the prevention of diagnosed anxiety (McIntosh et al., 2014). Students show signs of anxiety as early as primary school or younger. If signs of anxiety can be identified, strategies can be put in place by teachers and/or schools to help students deal with anxiety so anxiety does not reach the level of becoming a diagnosed, debilitating, mental health issue (Mohapatra et al., 2013). Dealing with anxiety when anxiety is first noticed is less difficult than dealing with anxiety at the clinical level.

Theoretical Rationale

It is important to understand how anxiety negatively affects the learning process. Attentional control theory (ACT) provides a theoretical framework for a study of anxiety and the impact on student learning. ACT theorizes that anxiety adversely affects academic performance by extracting attention away from task (Eysenck, Derakshan, Santos, & Calvo 2007). ACT is a newly evolved theory; therefore, it is important to thoroughly explain the theory that it evolved from, the processing efficiency theory (PET) (Eysenck & Calvo, 1992). The researchers of PET postulated that anxiety adversely affects working memory. Working memory is defined as “a brain system that provides temporary storage and manipulation of the information necessary for such complex cognitive tasks as language comprehension, learning, and reasoning” (Baddeley, 1992, p. 281). Working memory is a strong indicator of cognitive achievement (Leather & Henry, 1994). Therefore, PET theorists posit that anxiety indirectly affects student achievement (Eysenck & Calvo, 1992). Figure 1.1 represents the relationship among anxiety, working memory, and academic performance (Mackinnon, Warsi, & Dwyer

1995). Anxiety and worry inhibit the brain's ability to take in information and therefore negatively impact learning.

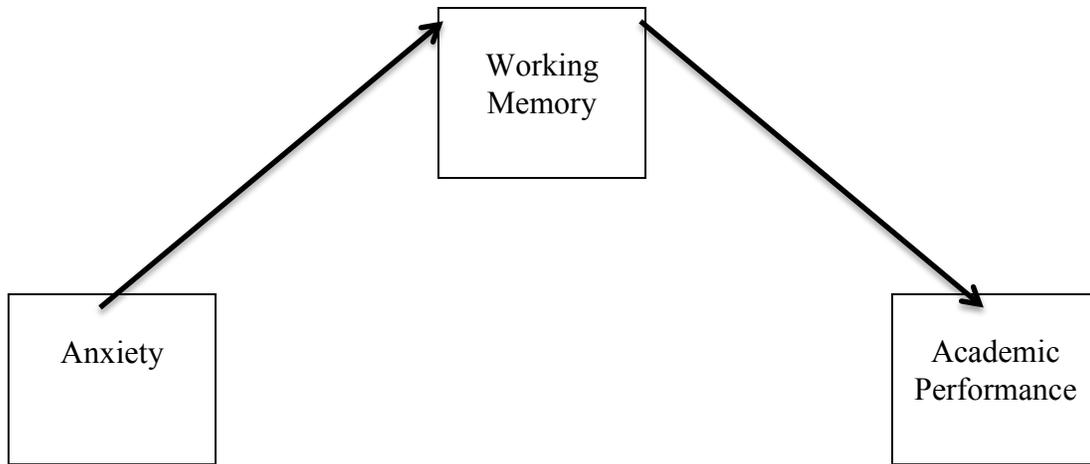


Figure 1.1. Relationship amongst anxiety, working memory, and academic performance.

PET evolved from a 1984 theory from Humphreys and Revelle and a 1988 theory from Sarason (Hadwin, Brogan, & Stevenson, 2005). Humphreys and Revelle (1984) theorized that efficiency in the cognitive domain is based upon three personality traits: introversion/extroversion, motivation, and anxiety. Sarason (1988) established the cognitive interference theory that postulated that anxiety negatively affects cognitive function and, ultimately, test performance. These theories were embedded in Eysenck and Calvo's (1992) theory on anxiety inhibiting working memory which negatively affects cognitive performance. The brain is preoccupied with worry; therefore, it is not able to concentrate on learning.

PET theory revealed that anxiety affects working memory in two ways. First, it diminishes processing skills and, secondly, it fatigues memory by using excess effort to concentrate (Eysenck & Calvo, 1992). Working memory consists of three sections: (a)

central executive, (b) phonological loop, and (c) visuospatial sketchpad (Baddeley, 2012). The central executive section manages operations on two different tasks, retrieves stored information, filters out distractions while focusing, and holds and synthesizes information into long-term memory (Baddeley, 2010). The phonological loop keeps and reviews verbal information (Baddeley, 2004). The visuospatial sketchpad retains images, visual information, and spatial coordinates (Zimmer, 2008). The central executive system oversees the phonological loop and visuospatial components and controls attention and focus needed for tasks (Dovis, Van der Oord, Wiers, & Prins, 2013). The phonological loop retains and calculates audio information, where the visuospatial does the same for visual and spatial information (Owens, Stevenson, Norgate, & Hadwin, 2008). Figure 1.2 shows a visual representation of the components of working memory.

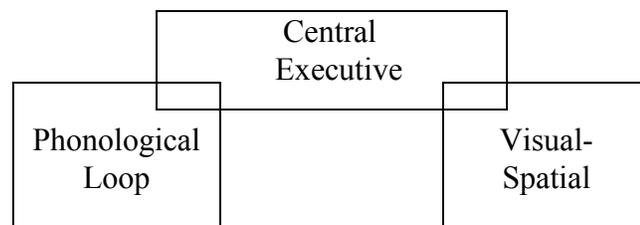


Figure 1.2. Visual representation of Working Memory Components.

Esylenck and Calvo (1992) explained how anxiety reduced the working memory's effectiveness as well as efficiency. More recently, Derakshan and Esyneck (2009) described PET by further defining the role of the central executive function. The central executive part of the brain fatigues by using energy to filter out distractions to maintain focus. This theory of fatigue progressed into a newer theory, ACT. ACT postulates that the central executive part of the brain uses valuable energy by switching

between task and worry (Derakshan & Eysenck, 2009). The brain becomes fatigued by using energy to block out anxiety; therefore, it is not operating at optimal levels for learning to take place.

Anxiety in primary school-age children is problematic because it inhibits learning. PET supports the idea that anxiety negatively impacts achievement. PET explains how anxiety taxes working memory and compromises its ability to be efficient and effective. ACT further defines the reason for the fatigued working memory by switching attention back and forth from worry to task.

Statement of Purpose

Anxious behaviors interfere with children's ability to learn (Mohapatra et al., 2013). Often teachers are not prepared to respond effectively and consistently to the signs of anxiety. At the primary level, it is difficult to decipher if their anxiety is developmental or not (Muris, Merckelbach, Mayer, & Meesters, 1998). This study examines primary teachers' perceptions of student anxiety. This study also seeks to identify strategies teachers currently use to prevent or alleviate student anxiety. Schools may use this information to provide justification for training and staff development. Furthermore, they may use the information to justify K-2 school-wide anxiety prevention programs and/or social and emotional skill-building programs.

Research Questions

This study will examine K-2 teachers' perceptions of students' anxious or worrisome behaviors in the classroom setting. Additionally, teachers will be asked if they use any strategies to try to alleviate or prevent these behaviors. The following questions will focus the research:

1. What are teachers' perceptions of stress and learning among their students?
2. What are teachers doing to help students with anxiety and stress?

Potential Significance of the Study

The significance of this study is its potential impact on students, teachers, and schools. By identifying K-2 student anxious behaviors we can examine the strategies that teachers implement to alleviate anxiety. Identifying anxious behaviors when they first appear at a young age can prevent anxiety from reaching clinical levels. Early detection of anxiety will also help students learn (Mohapatra et al., 2013). By understanding the K-2 teachers' perceptions of student anxiety or worry insights may be gained as to what schools can do to help identify and alleviate anxiety and promote learning.

This proposed study will provide the following: (a) information about teachers' perceptions of student anxiety, (b) teachers perceived effectiveness in dealing with anxiety within the classroom, (c) teachers' perceptions of their schools' anxiety prevention efforts or alleviation among students within the school, and (d) information about strategies or programs that will help students alleviate anxiety.

Chapter Summary

Research shows that anxiety negatively affects the learning process. The Individuals with Disabilities Education Act (IDEA) mandated that school systems provide mental health services to students if their mental health issues impede them educationally. It further stated that educational achievement is a school system's primary focus, not mental health (Fazel, Hoagwood, Stephan, & Ford, 2014). Detecting and preventing or alleviating anxiety at its beginning stages will not only help students' mental health, but it will also help learning (Mohapatra et al., 2013). By understanding

the K-2 teachers' perceptions of student anxiety or worry insights may be reached as to what schools can do to help identify and alleviate anxiety and promote learning.

The subsequent information provides a brief summary of the remaining chapters of the dissertation. Chapter 2 is a review of the literature of relevant research. With anxiety being identified as a problem for schools because it interferes with learning it is important for schools to be aware of programs that can prevent or alleviate anxiety at the K-2 level. The research design methodology, participants, and data collection and analysis procedures are detailed in Chapter 3. Chapter 4 describes the results and includes a comprehensive report and discussion of the findings. Chapter 5 concludes with a summary of the research process and describes the significance and implications of the findings. Discussion of limitations of the study and recommendations for future research and actions are also presented in Chapter 5.

Chapter 2: Review of the Literature

Introduction and Purpose

Research indicates that excessive anxiety in the school setting detracts from student learning (Maggin & Johnson, 2014; Rozenman, Amir, & Weersing, 2014). Students may be naturally anxious by nature or become anxious due to environmental circumstances. Regardless of the root cause, anxiety negatively affects students' ability to learn (Barrett & Heubeck, 2000; Mychailyszyn, Beidas, Benjamin, Edmunds, Podell, Cohen, & Kendall, 2011). Anxiety in children if left untreated can manifest into a mental illness such as diagnosed anxiety or depression (Lowry-Webster et al., 2001). For the purposes of this chapter, anxiety refers to worry, stress, state anxiety, trait anxiety, and emotional regulation difficulties. Emotional regulation is the ability to control one's emotions and remain stable. Emotional regulation difficulties predispose anxiety (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Jones & Suveg, 2015; von der Embse, Barterian, & Segool, 2013). Any anxiety, worry, or emotional distress can potentially diminish the learning process.

This chapter provides a review of the literature on school-wide prevention programs for stress, worry, and anxiety at the K-2 level. It is organized around three key topics. First, the chapter provides a definition and possible causes of childhood anxiety and why it is important to address anxiety at this level. Second, it examines the professional training teachers receive in identifying and working with students who have

stress or anxiety. Last, it examines school-wide interventions and strategies that alleviate anxiety and promote social and emotional well-being in students.

Description of Topic

Anxiety is the most prevalent mental health issue in children (Altman et al., 2009; Maggin & Johnson, 2014; Morris & March, 2004). “Anxiety is an emotional disorder involving the experience of fear and danger that is either irrational and/or disproportionate to the perceived threat and has a negative impact on one or more areas of children’s normal functioning and/or psychosocial development” (Bender, Pons, Harris, Esbjørn, & Reinholdt-Dunne, 2015, p. 2). Anxiety is the predominant behavior associated with mental health issues in children.

Causes of Childhood Anxiety

Several variables can lead to the onset of childhood anxiety. One variable is genetics. If relatives in the family have anxiety, the chance of a child having anxiety is higher (Hettema, Neale, & Kendler, 2001; Schreier, Wittchen, Holfer, & Lieb, 2008; Steinhausen, Foldager, Perto, & Munk-Jorgensen, 2009). One parent having anxiety doubles the risk for a child to have anxiety; if both parents have anxiety, the chances of a child having anxiety are five times greater (Li, Sundquist, & Sundquist, 2008). Heredity factors increase the probability of a child developing anxiety.

Another variable for child anxiety is parenting style. Parents establish the emotional foundation of a child’s temperament (Wood, McLeod, Sigman, Hwang, & Chu, 2003). Overprotective parenting styles cause children to have anxiety (Beesdo, Pine, Lieb, & Wittchen, 2010; Rubin, Coplan, & Bowker, 2009). It is theorized that overprotective parenting thwarts a child’s development of being in control; feeling no

control can lead to anxiety (Beesdo et al., 2010; Chorpita & Barlow, 1998; Rapee, 1997). A 2003 review of empirical literature by Wood et al. (2003) suggested that child anxiety is brought on by “parental acceptance, control, and modeling of anxious behaviors” (p. 1). Parenting style can increase the probability of anxiety in children.

Sleep-related problems have also been associated with anxiety in children (Chase & Pincus, 2011; Weiner, Elkins, Pincus, & Comer, 2015). Chase and Pincus (2011) conducted a study of 175 children aged 6 to 18 and found that 90 % of children with anxiety had at least one sleep-related problem. It was unclear, in this study, whether sleep problems caused anxiety or anxiety caused sleep problems. The study showed a correlation between sleep-related problems and anxiety but not causation. Children who have anxiety may not be able to sleep due to worrisome thoughts, or children who are not able to get proper sleep may not be able to function well, which can cause anxiety. Whether anxiety is caused by hereditary, environmental, or sleep-related problems, a relationship exists between early intervention and anxiety prevention (Washington, 2009).

The Importance of Addressing Anxiety

Research shows that anxiety can negatively impact learning. The demands of a school setting can be cause for anxiety in some children. Schools necessitate students to experience potentially stressful situations such as socialization and acquiring new concepts (Cassady, 2010). If students are anxious, their brains focus on the anxiety instead of learning (Ng & Lee, 2015).

Several key researchers have documented the adverse effects of anxiety relative to learning. Rozenman et al. (2014) describe anxiety as incapacitating, taxing, and the most

widespread mental health issue in youth. Van Ameringen et al. (2003) explain the negative impact of anxiety on school-age children in Canada by noting that children with untreated anxiety often do not succeed academically, have social problems, and end up dropping out of school. Their study suggested a correlation between anxiety and early school departure. Another study by Riglin, Petrides, Frederickson, and Rice (2014) supported the notion that anxiety in students is associated with students dropping out of school before graduating. The role of anxiety in schools is harmful in terms of the aforementioned outcomes of negative school achievement.

Anxiety affects working memory and working memory is directly related to learning and, ultimately, achievement (Hadwin et al., 2005). It reduces the working memory's efficiency to process skills and it fatigues memory by using extra exertion to concentrate (Eysenck & Calvo, 1992). Anxiety reduces the working memory's proficiency (Eysenck & Calvo, 1992). The brain is unable to maintain focus while being distracted with anxiety (Derakshan & Eysenck, 2009). Anxiety diverts the brain, making focus and concentration less proficient.

Hoffman, Dukes, and Wittchen (2008) conducted a meta-analysis focused on the impact of anxiety on the economy and the overall quality of life of those who suffer. The researchers concluded that there is a correlation between anxiety and lack of success in the work force. Two other economic impacts of anxiety included costs of medical interventions and time or lack of productivity at work. Anxiety appears to negatively affect school performance as well as job performance. Therefore, if anxiety can be prevented, it is increasingly probable that a person can enjoy a better standard of living.

Description of Problem Statement

Addressing anxiety at its earliest stages in childhood has the greatest implications for successful outcomes (Hains et al., 2001; Tully, Niedam, & Peterson, 2015). Anxiety impacts learning (Derakshan & Eysenck, 2009), so there is an urgency to address it so learning can take place. Thus, anxiety can potentially disrupt the fundamental learning blocks for future education.

Teacher Training on Student Stress/Anxiety

Given the potentially deleterious role of anxiety on student achievement and quality of life, logic suggests that teachers should be educated on how to identify signs of anxiety or stress in their students. If teachers notice signs of anxiety in its infancy, they can potentially address the anxious behaviors before the behaviors rise to clinical levels (Altman et al., 2009; Costello, Egger, & Angold, 2005). Another reason why teachers should address anxiety is that they are held accountable for student academic success. Research shows that students cannot learn or academically perform optimally while they are too stressed or anxious (Eysenck & Calvo, 1992; Hadwin et al., 2005; Owens et al., 2008). Therefore, in order to help students learn and achieve academically, teachers are required to play a vital role in addressing student stress and anxiety.

Research regarding teacher training in identifying and working with student stress and anxiety is inconclusive. Ball et al. (2016) conducted a quantitative content analysis procedure of teaching standards in the United States. The sample for this study contained teaching standards from 48 states. The school mental health competency framework by Weston, Anderson-Butcher, and Burke (2008) measured teacher competency in regards to their education on school mental health within the teaching standards. Although the

study concluded that states do include teacher education in student mental health concerns, only 20% of teacher education materials discussed how to identify the signs of emergent mental health issues such as anxiety (Ball et al., 2016). Also, note that teacher standards addressed anxiety in a broad sense under the venue of mental health. Mental health should be considered a broad concept with anxiety or stress as one of the many categories within the term of “mental health.”

While the Ball et al. (2016) study found that state teaching standards contain expectations of teacher competency with regard to student mental health, other studies found that teachers do not believe they are adequately trained to identify and address mental health issues such as stress and anxiety within their classrooms. For example, Rothi, Leavey, and Best (2008) conducted a qualitative study by interviewing 19 teachers. One of the themes that emerged in the study was that teachers did not believe they have proper training or expertise to detect or deal with students with mental health issues such as anxiety. Another study completed by Graham, Phelps, Maddison, and Fitzgerald (2010) found similar results. This qualitative study involved 508 teachers, and almost 64% of teachers in the study noted the following: (a) teachers need training on how to recognize mental illness in students, (b) teachers need more professional development about student mental illness, (c) teachers do not feel confident that their pre-service education adequately prepares them to handle mental health issues with students (Graham et al., 2010). While mental health issues with students are addressed in teacher state standards, it appears that teachers are not confident in the amount of training they have in identifying and managing student mental health problems such as anxiety.

School Interventions for Anxiety

In reviewing the literature on school intervention programs for anxiety, it is important to keep in mind that recent legislation in New York State requires school student achievement scores to be factored into principal evaluations. If students do not achieve at the targeted level, the principal may receive an unfavorable rating. (NYSED.gov, 2012). A principal's role is paramount to creating a high achieving learning environment (Leithwood et al., 2010). Anxiety may adversely affect learning and achievement; therefore, principals need to address anxiety not only for the well-being of students but also for a favorable performance score. If anxiety negatively affects student learning and performance, it can also affect principals' job performance scores. Discovering the most effective, evidence-based anxiety prevention program is problematic. School-wide anxiety prevention program research is inconclusive. The burden of selecting a viable, researched-based anxiety intervention program usually falls upon administrative leaders.

Response to Intervention Model for Anxiety

The Response to Intervention (RtI) regulation provides a general framework when considering intervention programs. This model mandates that all schools have supports in place for students academically, behaviorally, and medically (*Response to Intervention*, 2010). The goal of RtI is to address learning issues when they first surface instead of waiting until the student is failing and/or falling far behind. The RtI guidance suggests a multi-tiered approach to providing interventions. The fundamentals of the RtI model are (a) universal screening, (b) research-based instructional delivery within general education, (c) consistent checking of progress, and (d) use of supplemental or target

instruction as needed and indicated by assessment. RtI models typically contain three tiers that provide increasingly intensive support at each level. Level one is more of a preventative measure and is administered to all students. The majority, up to 80-90%, of students should respond positively to this first level of interventions. Students who do not respond to these interventions receive a higher level of support at the second level of the RtI framework. Approximately 5-15% of the students need the more select, intensive, small group support at the second level. The third level of the framework is for students who did not show progress with the first and second level of interventions. This level of intervention is the most intensive and is typically individualized. About 1-5% of students need this third level of support.

Kearney and Graczyk (2014) suggest that schools adopt an anxiety-focused RtI framework to promote and address emotional well-being. While there are tiered levels of support for academics and behavior, Sulkowski, Joyce, and Storch (2012) established a three-tier intervention model for anxiety (Figure 2.1). Tier I includes the whole population of students and incorporates positive behavior supports and social and emotional learning. Tier II is comprised of small groups such as social skills groups, support groups, or cognitive behavior therapy groups. Tier III is individualized interventions.

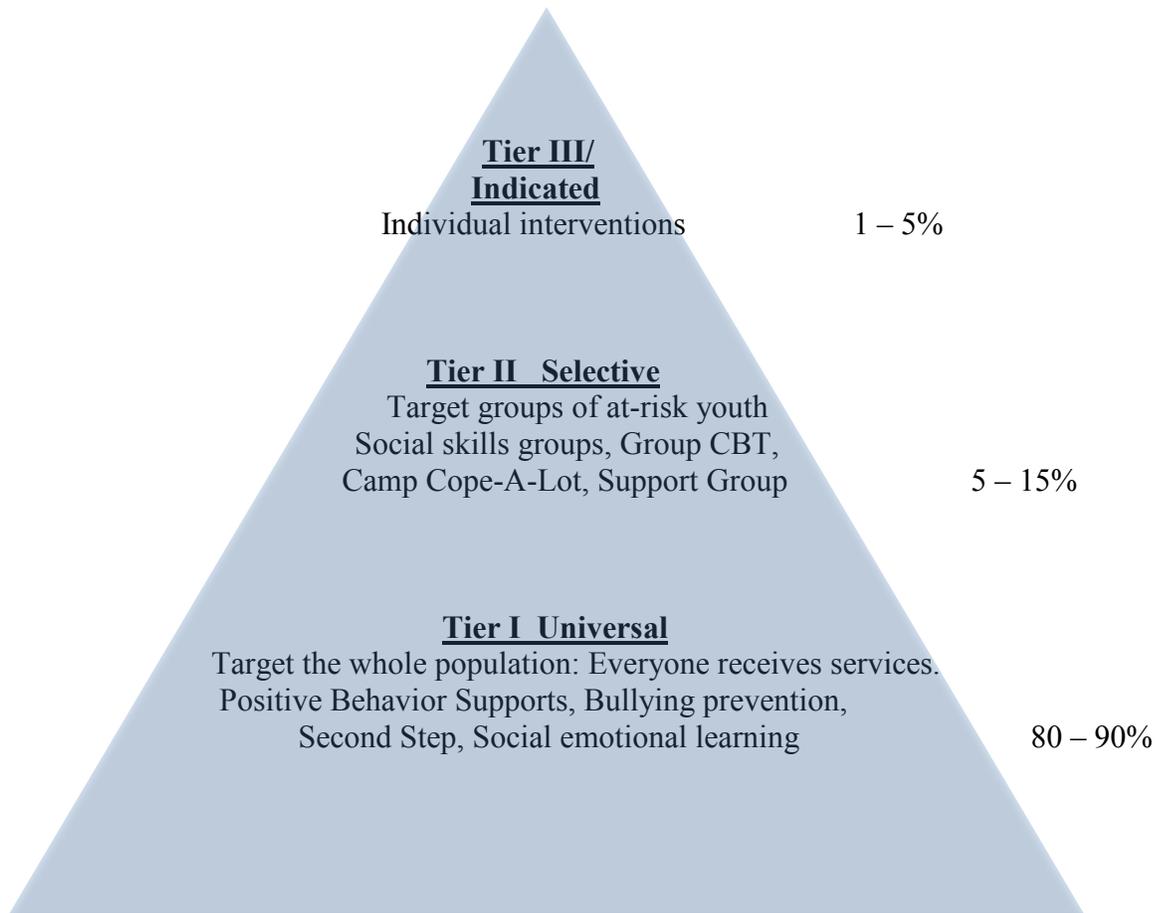


Figure 2.1. A three-tiered RtI framework for addressing childhood anxiety. (Approximate percentages of students served at each level are adjacent.)

The RtI framework assumes that Tier I instruction will appropriately support 80-90% of students. If more than 10-20% of the students are not responding to the Tier I instruction, then it is assumed that the core Tier I instruction is not effective and that other possibly more intensive supports should be administered (i.e., Tier II). According to the RtI model, universal anxiety prevention programs appear to align most closely with a Tier I level of intervention while anxiety reduction programs are best viewed as a more

targeted set of Tier II interventions. This chapter will now review literature regarding universal Tier I school-wide programs that prevent anxiety.

Universal School-Wide Anxiety Intervention Programs

FRIENDS program. A review of the literature found mixed results in terms of the effectiveness of universal school-wide anxiety prevention programs, thus making it difficult for school leaders to determine the best and most effective program. The literature regarding which program is most effective is inconclusive. For example, one anxiety prevention program cited often in the literature is the FRIENDS program.

FRIENDS stands for:

F for what am I Feeling?

R for learning to Relax

I for Inner thoughts

E for Explore plans of action

N for Nice work

D for Don't forget to practice

S for Stay cool and calm! (Lowry-Webster et al., 2001, p. 42)

This program first helps students identify and recognize feelings of stress and anxiety. Then it involves changing thought processes and guided practice with a teacher. The FRIENDS program trains available school staff currently employed within the school; therefore, this program shows great promise for sustainability (Lowry-Webster et al., 2001). Relaxation techniques are then taught. A parent training component is an integral part of the program as well.

The literature shows various results in terms of the effectiveness of the FRIENDS program. A study by Lowry-Webster et al. (2001) showed that the FRIENDS program was effective with a posttest effect size of .62 in terms of anxiety reduction in school children. A systematic review of the literature by Neil and Christensen (2009) also determined FRIENDS to be an effective program. The World Health Organization (2004) even listed the program as evidence-based in terms of anxiety prevention or reduction. The World Health Organization stated that the FRIENDS program was the only evidence-based school-wide program for anxiety (WHO, 2004).

Further research, however, contradicts these findings. A meta-analytic study by Maggin and Johnson (2014) determined that the FRIENDS program did not have a significant effect on the reduction of student anxiety. Maggin and Johnson (2014) conducted a meta-analysis study on the effectiveness of the FRIENDS program. They specifically looked at FRIENDS programs practiced in school settings and looked to prove if the program is evidence-based as claimed. Maggin and Johnson's (2014) meta-analysis included 17 studies that met the following criteria: (a) use of FRIENDS program or an approved variation of the program created by Barrett, (b) students were in grades kindergarten to 12, (c) the setting took place in the school or classroom, (d) standardized measurements were used in pre- and post-testing of anxiety, and (e) experimental or quasi-experimental design and a control group was used. Effect size of this study was determined by posttest results of standardized anxiety measurement tests of students in the treatment and control groups. The effect sizes were determined for low-risk anxiety students and for high-risk anxiety students.

Unlike the systematic review by Neil and Christensen (2009), Maggin and Johnson's (2014) meta-analysis concluded that the FRIENDS program had only a slight effect on students with low anxiety and no effect on students with high anxiety. Therefore, the FRIENDS program would not be considered evidence-based, according to this study. They also noted that empirical studies support the fact that change in anxiety levels was easier to detect with diagnosed anxiety that receives a specific intervention rather than a preventative program that is meant to alleviate and reduce anxiety. Although they state that the FRIENDS program does not have enough evidence to be considered evidence-based, they did give suggestions for the following elements to be included in future studies and school anxiety prevention: (a) anxiety screenings and individualized interventions, (b) preventative programs (such as FRIENDS) as part of a multitiered intervention structure, (c) support program throughout the whole year rather than a limited time, and (d) train teachers rather than support personnel to implement program.

Lowry-Webster et al. (2001) did a quantitative study on the effectiveness of the FRIENDS program as a universal school program for anxiety prevention. Out of the 531 participants, 392 children participated in the treatment group and 139 children were assigned to the control group. The treatment group had 78.3% of children who showed no risk of anxiety before or after the intervention. However, 14.8% of the treatment group showed a risk for anxiety at the pretest, but not at the posttest. Out of the children who showed at-risk anxiety symptoms, 75.3% of these at-risk children did not show up as at-risk during the posttest. More than half (54.8%) of the control group who were at-risk continued to be at-risk. Children who participated in the FRIENDS intervention

demonstrated lower rates of anxiety when comparing the pretests and posttests that measured anxiety levels. Children who were at-risk for anxiety as demonstrated in the pretest showed an even greater change on the posttest for anxiety; they were no longer in the risk category for anxiety.

Miller, Laye-Gindhu, Liu, March, Thordarson, and Garland (2011) conducted a study that compared the effectiveness of the FRIENDS program to an attentional control group that received entertaining stories read to them. Participants included 253 students across seven elementary schools and they were randomly assigned to either a FRIENDS intervention or a story group. The FRIENDS intervention group had 141 participants and the attention control group had 112 participants. Both groups met for 1 hour a week for 9 weeks. One group received the FRIENDS training curriculum and the other group participated in a read-aloud adventure story.

Both groups in this study were tested for anxiety before and after the 9-week intervention of FRIENDS or story time; then they received follow-up testing a year later. Both the FRIENDS group and the story group showed about the same amount of anxiety reduction after 9 weeks. There was little difference of anxiety decrease in both groups. Moreover, the follow-up testing a year later did not show a substantial decrease in anxiety in either group. A control group that did not receive any intervention could have strengthened this study (Miller et al., 2011). While the study showed there was not a great difference between the group that received the FRIENDS intervention and the group that received an adventurous story, it did not indicate the difference between children who received no intervention at all.

Review of other school-wide anxiety programs. Neil and Christensen (2009) conducted a systematic review that included studies of universal school-based intervention programs for anxiety. Studies included in the review met the following criteria: (a) participants were either 5 to 12 years old or 13 to 19 years old, (b) the interventions were aimed at preventing or reducing anxiety, (c) school-based programs, (d) anxiety symptoms were measured, (e) randomized control trial, and (f) the studies were written in English and peer-reviewed. Two researchers reviewed and coded studies to determine the inclusion of relevant studies. Twenty-seven studies met the aforementioned criteria.

Out of the 27 studies, 16 were universal school-wide programs (Tier I), eight were targeted interventions (Tier II), and three were individual interventions (Tier III). School mental health professionals (guidance counselors, social workers, or school psychologists), graduate students, or classroom teachers administered the programs. Almost 88% of teacher-led programs showed significant reductions in anxiety while programs led by mental health professionals or graduate students showed 75% anxiety reduction (Neil & Christensen, 2009).

Teachers administering the preventative programs in this study seemed to have a better effect on student anxiety reduction. Programming at the classroom level by a teacher was more sustainable than programming led by mental health professionals or graduate students. Teachers are already in place at the classroom level. Although psychologists or school social workers have expertise in mental health, teachers are more readily available. The average ratio of school psychologists to students is 1:2,000 (Weir, 2012) while the National Association of School Psychologists recommended ratio is

1:1,000 (DeNisco, 2015). The average ratio of school social worker to students is 1:400 while the recommended ratio is 1:250 (National School Social Work Association of America, n.d.). Schools do not have an abundance of mental health professionals; therefore, it is important to take into account who would be available and qualified within the school setting to administer these programs (Lowry-Webster et al., 2001). Teachers having the most consistent contact with students would be able to maintain a program.

Only universal school-based programs for anxiety with large effect sizes are examined within the systematic review by Neil and Christensen (2009). A large effect size was considered to be over .50. Within the Neil and Christensen review the stress management intervention study by Hains and Ellmann (1994) showed the most promising results with a posttest effect size of 1.37. This program evolved from 1988 stress inoculation training by Meichembaum and Deffenbacher. The stress management intervention program for schools had three components: (a) conceptualization phase, (b) skill acquisition phase, and (c) skill application phase. A psychologist and psychology doctoral student administered the program.

The first phase of the program, the conceptualization phase, concentrated on helping students identify their own stress and the negative thoughts and feelings associated with their stress. The second phase of the program, the skill acquisition phase, focused on participants challenging their negative, anxious thoughts, then learning how to problem solve, and, finally, learning anxiety reduction methods via relaxation techniques. The last phase involved guided practice of the skills. Participants had the opportunity to discuss with a trainer the process they would pick to alleviate stress and reflect upon procedures they used (Hains & Ellman, 1994).

The State-Trait Anxiety Inventory (STAI) (Spielberger, 1983) measured anxiety before and after the administration of the stress management program. The Adolescent Perceived Events Scale (APES) (Compas, Davos, Forsythe, & Wagner, 1987) measured stress levels of the participants before and after the administration of the program. Both of these scales are self-assessment scales. The results of these scales showed that the stress management program reduced students' anxiety and stress as compared to the control group. It is important to note that for the follow-up testing both groups had the training. The control group was trained after the original study. The follow-up study also indicates improvement in students' anxiety and stress levels as indicated in Figure 2.2 (Hains & Ellman, 1994).

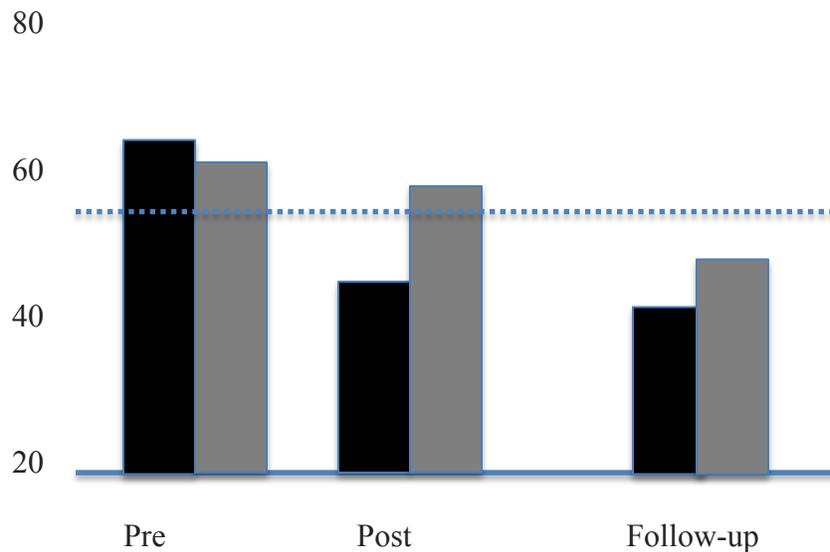


Figure 2.2. Mean scores for the high emotional arousal youths in the training group and the wait-list group for trait anxiety. Adapted from “Stress Inoculation Training as a Preventative Intervention for High School Youths.” by A.A. Hains and S.W. Ellmann, 1994 *Journal of Cognitive Psychotherapy*, 8, p. 229. Copyright 1994 by Hains, Ellmann.

The anxiety management training and stress inoculation training comparison studies, both by Hains (1992), showed the second and third most significant posttest effect size of 1.27 and 1.13, according to the meta-analysis by Neil and Christensen (2009). Anxiety management training that had the effect size of 1.27 taught participants to recognize anxiety and employ relaxation techniques such as visualizing relaxing scenes, muscle relaxation, and deep breathing. Participants used these various coping strategies when encountered with a stressful situation.

Within this same study, a comparison method of stress inoculation training was also examined. This study received a large post effect size of 1.13. The main components of this intervention included learning how to recognize signs of stress and promote positive thoughts while having the opportunity to perform and use these skills with the guidance of the trainer (Hains, 1992).

Kraag, Zeegers, Kok, Hosman, and Abu-Saad Huijter (2006) conducted a meta-analysis of anxiety prevention programs for school-aged children. The stress management programs included (a) relaxation training, (b) social problem solving, (c) social adjustment and emotional self-control, and (d) a combination of all three interventions. They selected studies that were random controlled trials or quasi-experimental. Other criteria for this meta-analysis included articles that were peer-reviewed, used a control group, and were conducted between 2003 and 2006. Only 19 articles met the selection criteria. They measured effectiveness of the selected programs by comparing differences in mean change between control and treatment groups.

Results of Kraag et al.'s (2006) meta-analysis showed an overall mean change between treatment and control groups of 1.51 with a confidence interval of 95%. This

meta-analysis includes intervention programs and attributes of studies. The variables that were measured in the control and treatment groups included: (a) stress symptoms, (b) social behavior, (c) coping skills, and (d) self-efficacy. Stress symptoms and coping skills were found to have the biggest overall positive change. Stress symptoms measured an overall .87 standard mean change with the treatment group scoring less than the control group. Coping skills measured an overall 3.49 standard mean change with the treatment group scoring higher than the control group. Results of this meta-analysis indicate great promise for school anxiety reduction programs.

Within the Kraag et al. (2006) meta-analysis classroom teachers implemented nine out of the 19 programs. Within these nine programs, five teachers had additional outside supports from researchers, graduate students, or undergraduate assistants. Teachers are readily available and know their students, so they should implement the preventative program. Relying on additional staff or resources thwarts sustainability of a program due to the unpredictability of outside agencies and school funding (Herzig-Anderson et al., 2012).

Greenberg, Domitrovich, and Bumbarger (2001) also examined literature on prevention and target programs. They selected prevention programs that had random selection or quasi-experimental evaluations and produced positive results. However, their review included school prevention programs for anxiety, drugs, delinquency, and suicide. For the purpose of this chapter, only the effects of the anxiety prevention programs will be discussed and analyzed. Two programs in this review met the criteria of being universal anxiety prevention, randomly selected or quasi-experimental, and showing decreased anxiety symptoms.

Both these universal programs are social and emotional/cognitive and behavioral training programs. The Interpersonal Cognitive Problem-Solving Program (ICPS) has the classroom teacher administer the program and consists of 30 one-hour sessions (Shure & Spivack, 1982). The Promoting Alternative Thinking Strategies (PATHS) also has the classroom teacher as the program provider. However, the PATHS program has a parent component. Parents participate in the program via family activities and homework assignments (Greenberg, Kusche, Cook, & Quamma, 1995).

Another review, a meta-analysis by Teubert and Piquart (2011), indicated positive results for universal school-wide anxiety reduction programs. They included school programs that directly and indirectly addressed anxiety. For example, the FRIENDS program specifically targets anxiety, whereas a social and emotional skill-building program targets several mental health issues. The universal K-3 programs in the Teubert and Piquart (2011) study included the FRIENDS program, Relaxation Techniques, Positive Thinking Program, Faustlos Program, Taming Worry Dragons, and Jogging. They analyzed 65 random control studies. The results of the meta-analysis concluded that universal programs lowered anxiety and worry considerably. Additionally, single-purpose programs for anxiety had a larger effect size on anxiety reduction than multipurpose programs.

Mindful-based interventions. A newer school-based, anxiety reduction program that is gaining momentum in schools and the literature is mindfulness-based interventions (MBI). “Mindfulness can be defined as the psychological capacity to stay willfully present with one’s experiences with a nonjudgmental or accepting attitude, engendering a warm and friendly openness and curiosity” (Zenner, Herrleben-Kurz, & Walach, 2014,

p. 2). MBIs can decrease anxiety and stress, increase contentment, attention sustainment, and cognitive performance (Chiesa & Serretti, 2009; Jha, Krompinger, & Baime, 2007; Sibinga, Kerrigan, Stewart, Johnson, Magyari, & Ellen, 2011; Zenner et al., 2014).

Zenner et al. (2014) did a systematic review and meta-analysis of the existing research on MBIs within school settings.

Reports included in their review were studies that met the following criteria: (a) mindfulness interventions were administered, (b) MBIs were applied in a school setting, (c) included students in grades 1-12, and (d) quantitative methods were used to measure psychological functions such as stress and emotional problems. The effect size of MBI was based on the following elements: (a) self-assessment of stress, (b) self-assessment of resilience, (c) self-assessment of emotional difficulties, and (d) academic performance.

While 207 studies were extracted from the literature, only 24 studies met the aforementioned criteria to be included in the meta-analysis (Zenner et al., 2014).

The number of students that received MBIs was 1,348, and 876 students were used as the control group. Specialized trainers implemented the MBI in 63% of the studies, and classroom teachers implemented the interventions in 29% of the studies, and both trainer and teacher implemented interventions in 8% of the studies. Mindful interventions and percentage of use in studies are indicated in Table 2.1 (Zenner et al., 2014).

Table 2.1

Mindful-Based Intervention

Intervention	Percent of Studies that used Intervention
Breath Awareness	100%
Working with Thoughts & Emotions	88%
Psycho-education	83%
Awareness of Senses & Practices of Daily Life	83%
Group Discussion	75%
Body Scan	58%
Home Practice	50%
Kindness Practices	46%
Body-Practices like Yoga	25%
Other Mindful Movements	21%

Programs such as MindfulSchools or Learning to BREATHE were used for 62% of the studies; the remaining 32% of the studies was a combination of mindful practices. Results of the meta-analysis showed a medium effect size of .4 when using Hedges' *g* to analyze the pre- and post-measurements of cognitive performance, emotional problems, stress, and resilience. Additionally, the study showed a strong effect size of .80 in the improvement of cognitive performance and a medium effect size of .39 in the reduction of stress. Unlike other universal school anxiety reduction programs, cognitive performance was measured instead of just anxiety or stress reduction.

Butzer, Bury, Telles, and Khalsa (2014) conducted an appraisal of the literature on mindfulness (including yoga and meditation) intervention in schools and its effects on students' social and emotional learning. This study was not a literature review but was intended to give a report about the available literature around this newer school-based intervention. Due to the newness of this school-based intervention, most of the empirical studies were not strong as many did not have control groups, use randomized selection or

focus on ideal frequency and intensity as well as long-term effects. Regardless of these drawbacks, mindful-based interventions showed positive effects on various student outcomes such as anxiety reduction.

For example, a systematic review by Serwacki and Cook-Cottone (2012) cited in this review found that yoga interventions in schools had favorable effects on students' emotional regulation, attention sustainment, academic performance, and anxiety reduction. Other studies within Butzer, Ebert, Telles, and Khalsa's (2014) examination of the literature included two qualitative studies by Case-Smith, Shupe Sines, and Klatt (2010) and Conboy, Noggle, Frey, Kudesia, and Khalsa (2013). These qualitative studies found that yoga within a school setting increased students' abilities to concentrate and stay focused. Additionally, the studies found that students' stress and anxiety levels decreased. Butzer et al. (2015) found that yoga in the school settings was related to cortisol reduction. Jensen, Stevens, and Kenny (2012) stated that yoga in schools led to better breathing habits in students, and Bothe, Grignon and Olness (2014) found improvements in healthy heart rate rhythms for students engaged in a school yoga program. However, a study by Hagins, Haden, and Daly (2013) found no differences in blood pressure or heart rate between the control group and yoga intervention group.

Not all the studies in Butzer et al.'s (2014) review found positive effects on student anxiety. Haden, Daly, and Hagins (2014) and Hagins et al. (2013) studies within the review found no considerable difference between results of the control group and results of the yoga intervention group. Additionally, there were some studies that showed a negative effect associated with mindful-based interventions. Haden et al. (2014) found an increase in negative effects and White (2012) found that stress levels increased for

students receiving mindful-based interventions. Furthermore, Ehud, An, and Avshalom (2010) and Steiner, Sidhu, Pop, Frenette, and Perrin (2013) discovered in their studies that teacher-perceived student stress levels showed a reduction after students received mindful-based interventions, whereas the students' own ratings in regards to stress levels showed no decrease. While the majority of research on mindful-based interventions in schools is positive, there are a few studies that negate these claims. However, at this point in time, there is more literature on the positive effects of mindful-based interventions in schools than there is literature about negative or no effects.

Initial research shows that mindful-based interventions, such as yoga, can have positive effects on students. Figure 2.3 shows Butzer et al.'s (2014) hypothesis about the positive effects of yoga in the school setting. Various studies demonstrate that yoga improves academic performance (Beauchemin, Hutchins, & Patterson, 2008; Benson et al., 2000; Kauts & Sharma, 2009) and social and emotional competence such as the ability to reduce or prevent anxiety and stress (Melnyk et al., 2013; Oberle & Schonert-Reichl, 2013; Sahdra et al., 2011). Mindful-based interventions in schools are relatively new and research around it is just beginning. Therefore, it is recommended that future research incorporates strong methodological practices to further ascertain if mindful-based interventions in schools have positive effects on students such as anxiety reduction and prevention and better academic achievement.

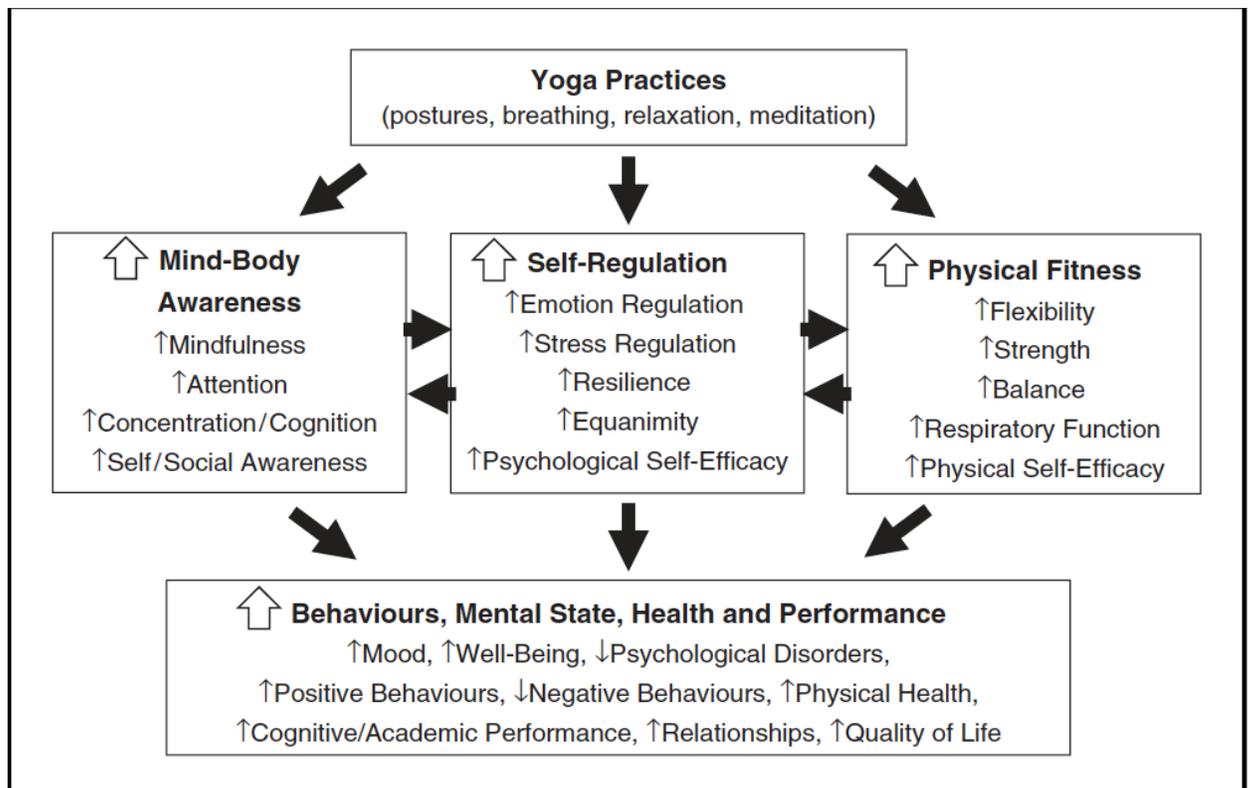


Figure 2.3. Hypothesized associations between yoga practice, self-regulation, mind-body awareness, physical fitness, performance, health, mental state and behaviours. From “Implementing Yoga within the School Curriculum: A Scientific Rationale for Improving Social-Emotional Learning and Positive Student Outcomes.” by B. Butzer, D. Bury, S. Telles, and S. B. S. Khalsa, 2014, *Journal of Children’s Services*, 11, p. 8. Copyright 2014 by Butzer, Bury, Telles, Khalsa. Reprinted with permission.

Computer-based programs. Cognitive behavior therapy (CBT) has been a long-standing, evidence-based treatment for anxiety (Kendall, Khanna, Edson, Cummings, & Harris, 2011; Khanna & Kendall, 2008; Vigerland, Thulin, Ljótsson, Svirsky, Öst, Lindfors, & Serlachius, 2013). Cognitive behavior therapy is a type of psychotherapy in which therapists work with patients to change unhealthy thought patterns in order to diminish destructive behaviors (Rutter, Bishop, Pine, Scott, Stevenson, Taylor, & Thapar,

2011). Unfortunately, approximately 80% of children with anxiety do not receive treatment due to financial issues, time restraints, stigmatization, or availability of services (Herzig-Anderson et al., 2012; Khanna & Kendall, 2008). Although CBT is an effective intervention for anxiety, it is not frequently utilized.

Recent studies have postulated that CBT combined with computer technology addresses the barriers involved with CBT alone (Vigerland et al., 2013). Computer technology use with CBT includes Internet access, downloadable software, CD-ROMs, or smartphone applications (Pennant et al., 2015). CBT incorporated with computer technology is cost efficient, standardized, readily available in the school setting due to access of computers, and has easy data access (Kendall et al., 2011). Computer-based CBT (CCBT) programs can also influence a large number of participants without the stigma of going to a therapist (Donovan & March, 2014). CCBT addresses these obstacles by being adaptable and adjustable in terms of time, access, and money (Donovan & March, 2014; Hirai & Clum, 2006). The attributes of CCBT for anxiety reduction can be enticing for schools to consider.

Currently, there is little research on the use of CCBT programs on anxiety prevention within the school setting. The research looks promising as to the effectiveness of CCBT programs via empirical research and schools have plenty of computers available, so it would make sense for schools to consider implementing CCBT programs that reduce or prevent anxiety (Khanna & Kendall, 2008). Several studies examined the use of CCBT for child anxiety. Very few studies took place within a school setting and these studies looked at CCBT as a Tier II or Tier III anxiety reduction intervention, not a Tier I preventative intervention. However, because CCBT showed promising results as

Tier II and Tier III interventions, it can also be considered for a Tier I preventative intervention due to the availability of computer access within school settings. The average number of students per computer is three within the public school setting in the United States (Zheng, Arada, Niiya, & Warschauer, 2014). Students have access to computers within their school settings.

Pennant et al. (2015) did a systematic review and meta-analysis on the effectiveness of CCBT programs. They searched the literature for empirical studies that were randomly controlled trials, included children from 5 to 11 years old or young people from 12 to 25 years old, and were either universal and preventative or for high-risk anxious participants and target interventions. Additionally, therapies included in this study were any type of therapies that used the computer for Internet access, downloadable software, CD-ROMs, or smartphone applications for at least half the time during the intervention.

Twenty-seven studies met the aforementioned criteria. The results of this meta-analysis showed that CCBT studies had a considerable effect on the reduction of anxiety symptoms in high-risk students, showing a standard mean deviation of $-.77$, with a 95% confidence interval. The general population participants in this study showed a small effect size of $-.15$, with a 95% confidence interval. The general population was not necessarily at risk for anxiety, so it stands to reason that the effect size would be small. Computer programs such as Camp Cope-A-Lot, BRAVE, MoodGym, Think, Feel, Do, or attention bias modifications and cognitive bias modifications were analyzed in this study (Pennant et al., 2015). CCBT therapies appeared to have better results with the anxiety reduction interventions at the Tier II and III levels than the Tier I preventative

interventions as results from targeted, homogeneous populations would manifest more than results from a universal heterogeneous group.

Chapter Summary

An alarmingly large number of children experience anxiety, which can adversely affect learning. School leaders have made various attempts to address anxiety because of its potential negative impact on learning. One reason for this is that their job performance score is incumbent upon student achievement. *Prevention is the best medicine* when it comes to worry and anxiety. If anxiety can be prevented in its infancy, there is a good chance that it will not reach clinical levels (Donovan & March, 2014; Hirai & Clum, 2006). Anxiety can be brought on by genetics, environment or a combination of both (Wei & Kendall, 2014). Research about evidence-based programs that prevent anxiety is inconclusive. Studies and key researchers seem to contradict each other.

Key elements of universal school anxiety prevention programs across the literature include training those who implement the intervention, some form of cognitive-based therapy and recognition of feeling and emotions, relaxation, and parent participation. The FRIENDS program, which contains these key elements, is cited frequently in the literature, but empirical studies have found mixed results as to its effectiveness. MBIs are gaining popularity as anxiety prevention programs in school settings, although the evidence for their effectiveness is scarce at this point as it represents a relatively new concept in the school setting. However, initial research shows MBI as having great promise in reducing anxiety in children. Another anxiety prevention approach for children that can be easily implemented in the school setting is CCBT

programming. While there is research about the effectiveness of CCBT, more research is needed about its effects on prevention of anxiety in a school K-2 setting.

As mentioned in the original problem statement, the inconsistencies inherent in the current literature review appear to support the assertion that present studies do not provide consistent evidence that universal school-wide prevention programs are either evidence-based or effective. This makes it difficult for school leaders to render appropriate decisions with regard to the implementation of such programs given the current state of research. Moreover, teachers are left confused about best practices in regard to addressing anxious students.

Given the conflicting nature of the aforementioned research, it would appear necessary to clarify teachers' understanding of their students' anxiety. This information could then prove helpful in further assisting school leaders in their decision-making relative to effective intervention programs.

Chapter 3: Research Design Methodology

General Perspective

Anxiety negatively affects the learning process for students (Maggin & Johnson, 2014; Rozenman et al., 2014; Van Ameringen, Mancini, & Farvolden, 2003). Since schools are responsible for student learning, it is imperative that school personnel identify and alleviate anxiety in students. Addressing anxiety at its earliest stages in childhood significantly impacts prevention (Hains et al., 2001; Shoemaker et al., 2015). This study utilized in-depth interviews with K-2 school teachers about their perceptions of their students' anxiety. The results of this study may be used to increase awareness of anxious behaviors in students at the primary level and may offer possible solutions or preventions based on the perceptions of teachers.

Qualitative methodology was used to study teachers' perceptions of student anxiety or worry. Glesne (1999) posits that qualitative research lends itself to analyzing and comprehending a phenomenon. To grasp the phenomenon of student anxiety as perceived by teachers, face-to-face communication took place. One-on-one interviews foster profuse verbal depictions that precisely express the phenomenon (Polkinghorne, 1989). The following research questions were addressed in order to guide the development of the interview protocols (Saldana, 2015, p. 52) of teachers' perceptions of student anxiety:

1. What are teachers' perceptions of stress and learning among their students?
2. What are teachers doing to help students with anxiety and stress?

Research Context

The study was conducted in the Onondaga-Cortland-Madison (OCM) BOCES region. There are 23 school districts within the OCM BOCES. The districts within this group vary in terms of socioeconomic status, size, and population. For the purpose of this study, these schools are comprised of rural, suburban, and urban schools.

Sampling of the subjects took place in advance of the study (Flick, 2014). Sampling for this study was a combination of purposeful, homogeneous, and criterion. Flick (2014) defines purposeful sampling as when the researcher selects samples based upon professional judgment. In this study, the researcher selected teachers from more than one type of school district (rural, urban, suburban) in order to rule out characteristics of a particular type of district. In order to acquire the collective understandings of teachers' perspectives of student anxiety or worry, purposeful sample is needed (Creswell, 2013). Homogeneous sampling was used in order for the phenomenon to be understood within the context of a category (Glesne, 1999). An even number of teachers in the following categories was the structure for sampling: (a) urban school teachers, (b) suburban school teachers, and (c) rural school teachers. Sampling was further categorized by professional experience in terms of years: (a) 1-5 years, (b) 6-10 years, and (c) 11 years or more. Criterion sampling was also used as it entails using certain experiences of participants who have identified the phenomenon (Creswell, 2013). Criterion sampling selects cases that meet some criterion. "This strategy is typically applied when considering quality assurance issues. In essence, you choose cases that are information-rich and that might reveal a major system weakness that could be improved"

(Nastasi, Moore, & Varjas, 2004, p. 2). For this study, the criterion were the teachers' experiences and perceptions of students' anxiety or worry.

While research states anywhere from six to 50 samples are needed for a qualitative study (Bernard, 2000; Bertaux, 1981; Creswell, 1998; Kuzel, 1992; Morse, 1994), most researchers agree that if the samples are purposeful and homogeneous, six to 12 samples should be appropriate (Guest, Bunce, & Johnson, 2006). The idea is to obtain "saturation" (Saldana, 2016, p. 248). Once no new information, aspects, or attributes are extracted from interviews, saturation is achieved (Strauss & Corbin, 1998). The subjects were interviewed in their work place during the weekday, outside of school hours as to not interrupt the regular school day. A convenient, distraction-free room was prearranged and procured for interviews to take place within the school setting. Bottled water was provided to the participants.

Research Participants

The study focused on K-2 school teachers within the OCM BOCES region. The Onondaga-Cortland-Madison (OCM) BOCES elementary principals' e-mail LISTSERV provided access to all principals within these counties. An e-mail (Appendix A) containing an announcement about the study with a request for teachers to participate was mailed to all elementary principals within the OCM BOCES region. Principals were asked to identify K-2 teachers in their building with at least one year of teaching experience who would be interested in participating in the study. Teachers in the study needed to have adequate experience in order to identify student-anxious behaviors. Therefore, a minimum of 1-year teaching experience was needed. Once potential subjects were identified, an introductory letter (Appendix B) was sent to introduce and

explain the study and procedures. A consent form (Appendix C) and a demographic collection sheet (Appendix D) were attached to the invitation. Once signed consent forms and demographic information sheets were returned, subjects were asked to commit to an interview time. All materials such as the letter to principals, participants, and the demographic data sheet are included in the appendices.

Instruments used in Data Collection

Data in the study was collected via demographic questionnaire, interviews (Appendix E- the interview protocol), notes from interviews, and analytic memos. This is a qualitative study with a transcendental phenomenological approach and the primary method of data collection used in the study was the interview. “Transcendental phenomenology is a scientific study of the appearance of things, of phenomena just as we see them and as they appear to us in consciousness” (Moustakas, 1994, p. 48). The interviews were one-on-one and semi-structured with open-ended questions. All questions were similar in order to ensure uniformity in the process of eliciting responses (Patton, 2002). In order to ensure a quality interview, the following advice from Elton Mayo (1933), a psychologist who founded the refined technique of interviewing that continues to be well regarded today in terms of qualitative interview methods (Brinkmann & Kvale 2015), was adhered to throughout the interview process:

1. Give your whole attention to the person interviewed, and make it evident that you are doing so.
2. Listen – don’t talk
3. Never argue; never give advice
4. Listen to:

- (a) what he wants to say
 - (b) what he does not want to say
 - (c) what he cannot say without help
5. As you listen, plot out tentatively and for subsequent correction the pattern (personal) that is being set before you. To test this, from time to time summarize what has been said and present for comment (e.g., “Is this what you are telling me?”). Always do this with the greatest caution, that is, clarify in ways that do not add or distort.
 6. Remember that everything said must be considered a personal confidence and not divulged to anyone (Mayo, 1933, p. 65).

Ensuring quality interviews is essential, as interviews are the foundation of the entire study. If interviews are not high quality, then the remainder of the study such as the analysis and findings will be poor also (Brinkmann & Kvale, 2015).

The following are indicators of a quality interview:

- The extent of spontaneous, rich, specific, and relevant answers from the interviewee
- The shortest interviewer’s questions and longest subjects’ answers possible
- The degree to which the interviewer follows up and clarifies the meanings of the relevant aspects of the answers
- To a large extent, the interview being interpreted throughout the interview subject’s answers over the course of the interview
- The interview being “self-reported,” a self-reliant story that hardly requires additional explanations (Brinkmann & Kvale, 2015, p. 192).

A digital audio recorder recorded all interactions, but short notes were also taken to comment on or question the verbal data the subject might have been revealing. While notetaking during an interview can capture significant body language and emotion that an audio recorder may not be able to detect, it was important to not be excessive in notetaking as to not disrupt the course of the discussion (Kvale, 2007). The goal was to make participants feel as comfortable as possible in order for them to speak freely and openly about their experiences and perspectives (Smith, Flowers, & Larkin, 2009).

Prior to conducting interviews, subjects were asked to complete a short demographic sheet (Appendix D). The questions within the survey requested subjects to answer questions regarding gender, years of professional experience, grade level taught, undergraduate and graduate school information and training. The information on this survey may or may not correlate with participants' perceptions. The survey ensured that the sample of participants was representative of the entire population of the study (Flick, 2014).

Furthermore, the digital recordings were translated into text and coded. While there are some who argue that coding data somehow takes away its meaning or artistry, if the right type of coding method is used in a study, then the enduring phenomena will emerge (Saldana, 2015). In summary, initial coding, descriptive coding and in vivo were used to analyze the data in this study. First the data was initially coded via highlighting emerged themes within the transcripts. Then descriptive coding was used to organize emerging themes by extracting phrases that captured the essence of teachers' perspectives. Finally, in vivo coding was used as a third cycle to solidify the phenomenology (Saldana, 2013).

Procedures for Data Collection and Analysis

Elementary principals within central New York State school districts were contacted to help select the pool of possible eligible candidates and ensure that district guidelines were adhered to in terms of academic research. Prior to meeting for face-to-face interviews with participants, e-mails were exchanged regarding information about confidentiality and what to expect. Interview consent forms and demographic data collection forms were sent and returned prior to setting up the interview. Additionally, the teacher participants were made aware that the interview would be digitally recorded and later transcribed. Participating teachers were interviewed at their schools after school hours and in a private location. The interview process ranged from 25 to 60 minutes.

Throughout the entire qualitative research process, analytic memos about the participants and research process were kept. Analytic memos are notes that researchers write to themselves about information in the research (Saldana, 2015). They help to convey clarity, if needed, on the research process (Brown, Steven, Troiano & Scheider, 2002; Bruce, 2007). Analytic memos were a necessary safeguard to track the researcher's thought process during the research phase of the study.

Once an independent transcriber transcribed the audio recordings, transcripts were studied in-depth while referring to field notes and listening to the recordings. Common and significant themes in regards to the phenomenon of student anxiety or worry were highlighted on the transcripts. This process is known as horizontalization (Moustakas, 1994). Once common themes emerged, a specific coding process took place.

Manual coding was used in this study to code the transcribed text. Saldana (2016) suggests that the neophyte researcher should manually code. Basit (2003) recommends

that smaller projects be manually coded. Therefore, the interviews in this study were manually coded. The data was analyzed to establish a phenomenon via interpreting, organizing, and categorizing into codes. Manual coding involves reading and rereading the transcripts and then using note cards and scissors to cut and paste information that fits together to form themes (Basit, 2003). The length of the study and neophyte status of the researcher lent this study to manual coding.

The next step of the process was the qualitative data analysis. This involved the analysis and categorization of the data (Flick, 2014). The phenomenological study identified the themes that emerged. Themes were categorized according to teachers' conjectured causes of stress/anxiety in K-2 students and what they have found ameliorates stress within the classroom. Emerged categories and themes were analyzed and organized to reveal phenomenas.

Chapter Summary

This chapter explained the methodology for a transcendental phenomenological study that examined K-2 teachers' perspectives of student anxiety and worry. Participants were K-2 teachers from the OCM BOCES area. Once interviews were conducted and transcribed, the data went through a thorough analyzation process. First, common themes were noted and then grouped together to form a descriptive text that captured the essence of teachers' perceptions in regards to student anxiety and worry. The more an understanding of student anxiety is available, the more prevention or help can be provided.

Teachers who spend five days a week with students, have an understanding of student anxious behaviors. Moreover, teachers may have strategies that work to alleviate

or prevent anxiety. The working strategies teachers identified that emerged as a phenomenon from this study, can benefit other students. Schools and teachers can use these strategies to help their students.

Chapter 4: Findings

Introduction and Perspective

The purpose of this qualitative study was to understand teachers' perspective regarding student anxiety. Chapter 3 described the transcendental qualitative phenomenology methodology used for the study. Twelve K-2 teachers were interviewed about their perspectives on student anxiety. The interviews were audiotaped and transcribed. Numbers 1 to 12 were used to identify each participant. Participant demographics are listed in *Table 4.1*. Demographic information such as grade level, experience, type of district, and college preparation about student anxiety were included to compare teachers' demographics and examine their relative perspectives. Quotations from participants are identified by assigned participant number.

Chapter 4 reports information and themes that emerged from twelve K-2 teachers' perspectives. This chapter discloses K-2 teachers' perspective on: (a) portrait of an anxious student, (b) causes of anxiety, (c) anxiety's effect on learning, and (d) anxiety reduction strategies. From these four categories, 13 themes emerged. Throughout the paper, categories are in bold letters and themes are italicized. *Table 4.2* summarizes the categories and corresponding themes.

Table 4.1

Demographic Data on Participants

Teacher	Grade Level	Years of Experience	Type of District	College Preparation on Anxiety
Participant 1	K-2	2	Urban	Some
Participant 2	2	24	Suburban	None
Participant 3	K	2	Suburban	Some
Participant 4	2	2	Urban	None
Participant 5	1	19	Suburban	None
Participant 6	K	25	Suburban	None
Participant 7	K	9	Suburban	None
Participant 8	K	14	Urban	Yes
Participant 9	K	18	Suburban	None
Participant 10	K	13	Suburban	None
Participant 11	1	2	Suburban	Some
Participant 12	K-2	37	Suburban	None

Table 4.2

Summary of Categories and Themes of Teacher Perceptions

Category	Themes
Portrait of an Anxious Student	Tears Withdrawn Acting Out Body Language
Causes of Anxiety	Fear of the Unknown Home Life Common Core Technology
Anxiety's Effect on Learning	Inability to Think Clearly Inability to Focus Inability to Finish Work
Anxiety Reduction Strategies	Classroom Strategies Outside Resources

Research Questions

The study aspired to answer the following research questions:

1. What are teachers' perceptions of stress and learning among students?

2. What are teachers doing to help students with anxiety and stress?

Interview protocol questions (Appendix E) were developed to help answer the research questions.

Findings and Analysis

Various themes and subthemes emerged from the data collected during the interview process. Three cycles of coding were used to develop these themes and subthemes. First the data was initially coded via highlighting emerged themes within the transcripts. Then descriptive coding was used to organize emerging themes by extracting phrases that captured the essence of teachers' perspectives. Finally, in vivo coding was used as a third cycle to solidify the phenomenology (Saldana, 2013).

Portrait of an anxious student. Four themes emerged from the data as teachers commented on anxious students. All 12 participants responded that anxiety can be portrayed in many different ways and it depends on the child. The four themes that teachers' noted that described anxious students were: (a) tears, (b) withdrawal, (c) acting out, or (d) body language.

Tears. Ten out of the 12 participants said that an anxious child cries. Throughout the participant transcripts, the terms "tears" or "cry" occurred 47 times and emerged as a major theme in the data. Participant 10, a Kindergarten teacher said:

An anxious child could be in tears. They come in the morning crying for some reason or during the day, they may just break down and cry for no apparent reason. I think they feel anxious but don't know how to verbalize or deal with it – so they get confused or scared and just cry. Feeling anxious is an awkward

feeling and kids this age probably don't know how to process their feelings so they end up crying to signal that something doesn't feel good or right.

Participant 7, another kindergarten teacher, said:

Tears would definitely be a huge signal for me that they're [students] anxious about something. They might not even know what they are anxious about – it could be anything. They just know that they feel yucky and don't like feeling that way. No one likes to feel anxious – but imagine how it must be for a small child.

Participant 5, a first grade teacher said, "I think at this age, it's hard for kids to verbalize it. They don't really know that they're anxious, so they might just...sometimes they might cry, or they might look sad."

Withdrawn. Teachers described children with anxiety as being shy or quiet.

Terms such as and equivalent to, "shy," "quiet," or "withdrawn" occurred 39 times in the participant transcripts. Participant 2, a second grade teacher, said that she often sees students with anxiety "close down and become very quiet. It is beyond being shy. I see shy as being afraid to speak up, but still participating. An anxious student is beyond this – they won't respond to anyone." Equally, Participant 11, a first grade teacher said anxious students, "come into themselves; they're a lot more quiet. Some students are quiet by nature, but an anxious student is purposely avoiding any kind of socialization or interaction because they cannot cope." Participant 9, a kindergarten teacher stated, "I have a lot of kids over the years that I'd consider anxious, who don't answer, don't speak up. When you call on them, they shut down even though you are fairly certain they know the information. But they get scared in front of people to say it."

Acting out. Some children tend to act out when they are anxious, according to the participants. Six out of the 12 participants said that anxious students become angry or act out. Participant 5 stated that students, “have behavioral problems because of their anxiety. They’re a little more vocal about it and start perseverating on different things. She further stated that students with anxiety may “behave in inappropriate ways such as shouting out...or they might argue about things.” Participant 10 stated anxious students can “act out behaviorally because they don’t know what to do, so their behaviors will sometimes be negative because they’re trying to avoid the situation. Participant 2, noted, “I have one little one who is very high-strung when he’s anxious and nervous, it was just the whole struggling to control the body a little bit. He needs a little bit more redirection, a little bit more refocus and attention from me.”

Body language. Signs of anxiety can be detected in students via their body language. Five teachers described student anxiety as being apparent in students’ facial expressions, body movements, or body reactions. Participant 9 mentions that nail biting, shirt chewing, a lot of movement, or “...it’s the look on their [students] face, that concerned, nervous look” are signals to her that a student is anxious. Participant 12 stated, “An anxious student has, in my experience, has a more rigid body. Their body language is very stiff...often you will see a change in their facial expression that will let you know that this is stressing them out and causing anxiety that they can’t function on task.” Participant 7 said, “It [anxiety] could be shown in a physical way, you know like hard to breathe or sweating...they [students] have very stressed out features, bugged eyes, or are tense.”

According to the data, teachers perceive an anxious student in the following ways: (a) tears, (b) withdrawn, (c) acting out, or (d) body language. One teacher stressed the importance of reading the signs of anxiety in primary level students because primary students do not know how to verbalize their feelings. These themes emerged as teachers described what an anxious student looks like to them. The next section will describe teachers' perceptions of why students are anxious.

Causes of anxiety. Four themes emerged from the teachers' perception data about why students are anxious. These themes include: (a) fear of the unknown, (b) home life, (c) Common Core, and (d) technology.

Fear of the unknown. Teachers believe that anything out of a student's routine can cause anxiety because the student does not know what to expect. For example, four teachers mentioned that a change in dismissal procedures can cause student anxiety. If students usually take the bus and are informed that they will be picked up instead, that can cause some students with anxiety to become anxious about the change in routine. Participant 10 mentioned that a new activity after school made students anxious about dismissal procedures. She stated:

Some kids are very anxious like when we did art class after school, and it was their first time to do this, which means they are not going on the bus every day like normal, but they are going down to a different location at the end of school. They can worry about that all day long. From the minute they come in the morning with a note saying they are going to art class until they are down there doing the activity. So some kids are really anxious about anything different that's not their normal structure of the day.

Participant 8 stated:

I've seen kids get anxious when they're normally a buser and today they're a walker. They keep verifying with me constantly throughout the day that they are a walker today. Anxious kids always want verification. Sometimes they might say, 'How many hours or how many things do we have to do before we go home?' I know of one student in particular who's exhibited quite a bit of anxiety recently. That's what she'll say. She'll say, 'How many things do we have to do before it's time to go home?' It's not a direct, 'Oh, I'm scared. I'm anxious.' It's usually, 'Okay, well when are we going home?' or, 'What's next?' It's usually in anticipation for what may come.

Changes to the daily schedule can cause anxiety for students. Five teachers mentioned that last minute schedule changes caused students to exhibit anxious behaviors. Participant 1 stated that, "my students become anxious when there is a schedule change. Even though we've gone over it, that still causes them to be anxious. We go over exactly what to expect and even role play the situation, but students still appear anxious and perseverate on the change." Equally, Participant 10 stated that, "something that's new makes them [students] anxious. That's why structure in kindergarten is so critical because it just keeps them knowing what's next. When you throw something new in there it can really make them anxious." Participant 4, a second grade teacher, described a situation when one of her anxious students had art class cancelled:

The student teared up when I announced to the class that art was cancelled for today. She began biting her nails and asked why art class was cancelled. She

continually checked in with me to verify that art class was cancelled. She did not participate in class discussions and became very withdrawn. I tried to explain to her and the class that we will play outside today, instead of going to art. The rest of the class was excited to go play outside, but she sulked all day about art class being cancelled. I think if she could choose between art and playing outside, that she would rather play outside but the idea of a change in her routine really rocked her world.

Home life. Five teachers believed that students' home life was a reason for their anxiety. From their perspective, what a student is exposed to at home directly affects their anxiety level. Participant 6 believes children from divorced families are often anxious. She stated:

For instance the child who, as it's approaching dismissal time is saying, 'Is it a mom day or a dad day?', because there's joint custody. That's a big anxiety now, compared to I've been teaching more than 20 years, so I would say that is more of an anxiety now than when I started teaching. Sometimes it's about that, or it could be about what bus they are taking today? 'Am I going to grandma's house or the babysitter's house?' So a lot of times, 'where am I going', based on the busy schedules and lives of the families. Where days gone by the child always knew they were going home. Now they don't know, are they going to babysitter, are they going to grandma's, are they going to afterschool care program? So, that is anxiety for them, a lot... students also show signs of stress when there is friction on the homefront or parents are not on the same page for parenting strategies, so they're getting mixed messages from both parents about what's

acceptable and what's not acceptablethey get mixed messages about what's important.

Participant 10 believes that anxious parents produce anxious children. She stated:

There are a lot of anxious mom and dads, and I think that rubs off on the kids.

When I have parents that are needy – like always emailing, calling me, or writing notes – I notice that their children are hesitant and nervous – stressed. Sometimes things come up about home. Coming in and not feeling confident or the, 'I can't do it, I don't want to do it.' That whole not feeling secure and confident in their abilities. I think that because some parents are so anxious that their child will get hurt or not be perfect at something that they do everything for their child and don't give the child a chance to try things on their own and build up self-confidence. These are the children that I often see shut down when they are expected to try something new. They shut down because they are afraid of not doing it perfectly – they put so much pressure on themselves because they are so used to feeling their anxious parents' pressure.

Participant 4 thinks that family's overly busy schedules lead to anxious students.

Most families have both parents working. After school, students go to a sitter's house – they might not get picked up until after 5:00. In the evening the students are involved in sports and activities during the week. Therefore, family dinners are rushed or on the run. They are lucky if they get home by 8:00 at night and then it's time for bed. Or, kids stay up too late and don't get enough sleep and that stresses them out. Always being on the run and being rushed makes for anxious students. They need time to rest. They need time to play. It's okay to

not be in every activity and have down time. Kids today don't have enough down time. It's a fast-paced stressful world for them.

Equally, Participant 8 believes that stress in the family leads to stress in the child. She said:

I think families are stressed. I see it here. I can't tell you how many times kids move. A student that I have currently, she's been staying with grandma for weeks because they're between places. She does not know what is going on. They're supposedly moving, but suddenly it's been three weeks and they're still at grandma's and they haven't moved yet. 'Oh well, it's because my mom is cleaning the place' or something like that. 'Oh well, my mom says she's got to get a couple more checks.' I see that more. Again, I think it's because the families are stressed. Things are not consistent for kids, not predictable.

Common Core. Seven teachers mentioned the Common Core as a reason for student anxiety. They believe that students are expected to complete milestones that are either too difficult or too intense.

Participant 2 said:

The kids that experienced stress and anxiety, let's say even, let's go back 10 years, we're not dealing with the level and the stress of anxiety that we're dealing with now. As of now, 10 years later, I think there's just so much pressure on them. The whole pushing down of the..I don't want to say the Common Core because I don't think the Common Core is such a bad thing, but I just think that developmentally, we've gotten a little bit away from kids developmentally and I think that's causing them a lot of stress and anxiety.

Participant 9 further explains the effects of the Common Core. She stated:

We ask kids to do too much in a day. We need to make it so there is more play at a younger age, make it fun. Not that I don't think we do that, but I think we've been trying to do that over the years, and make sure that play is built into everything. But then there are all the standards that we're asking them to meet at this point. I think I remember starting in second grade, and what we did in second grade felt a lot like what I do in kindergarten now, even easier, actually, just a lot of crafts and fun for the joy of it. By the time I left second grade 5 years ago, I was stressed out about how I was stressing out the kids, then feeling like I was hearing from the third grade teachers that we weren't doing enough with them to prepare them for the state test. Now I do get concerned mostly about just how much we're expecting them to focus on and get done in one day.

Equally, Participant 3, a kindergarten teacher, stated:

The Common Core stresses me out as a teacher trying to cover it all – I am sure my stress trickles down to the students. Student stress has definitely increased due to the demands we put upon them. What the state expects from 5 year-old children is overwhelming. Developmentally, students are just not capable of reaching these high expectations. It is like expecting a 3-month old baby to walk. They don't have the capability or muscle tone to walk yet, so don't even try. Wait until they get older and start standing on their own and then help them walk. That is what we are doing to our children – we are expecting things that they are just not developmentally ready for. Some kids in kindergarten don't yet have the fine motor skills to write – it is painful to watch them struggle. Don't get me wrong, I

still have high expectations for my kids, but I think we should take into account where students are developmentally; they are 5.

Technology. Five teachers believed that technology has caused more anxiety with students. They believe that students are accustomed to the fast pace of technology and they have difficulty with the slower pace of the classroom in real time. Furthermore, teachers believe that because students are often exposed to technology when they are upset, that they do not know how to self-soothe themselves. Participants 2, 3, 6, 9, and 10, all kindergarten teachers spoke about the role of technology in regards to student anxiety. For example, Participant 10 stated:

I think our world has changed. I also think that the technology in our world today has affected how parents parent and how kids learn coping mechanisms. So here's an example, if a toddler is having a meltdown, years ago before cell phones and before tablets and all of that, the parent magazines tell you to distract them. So let's go for a walk, let's go outside, let's draw a picture, let's color, and let's get a snack – whatever. Now I see it so much where just put on a video, and hand your phone to a crying child, and their temper tantrum will stop because they've got something to distract them, but they have not learned how to self-regulate and come down from a tantrum, let's say, without that.

Participant 2 believed technology leads to more student anxiety. She said:

I think they're [students] being pushed to learn in a way that for some isn't ever going to be the way that they learn and they're having to conform to what this all looks like and I think that's still increasing anxiety and stress a lot. I think the pressure is media; I think social media plays a huge role. And kids today, I mean,

10 years ago, kids were just starting to get into the social media piece and the iPads and all the technology and stuff. Now they're completely immersed in it and I think, I know it causes anxiety and stress sometimes, and I think it causes them a lot of anxiety and stress because everything that's there about their worlds are so instant. Their worlds are so instant. So when you're up there teaching and you're trying to teach a lesson, they just want it now. You can't get it fast enough because it's like, 'Honey, I don't have a fast-forward button.' This is real life. We need to slow down and be patient and things like that, and so I think sometimes the anxiousness is about it's not coming quick enough for them, maybe.

Participant 6 noted:

I think they're [students] exposed to a lot more. They're not just watching Andy of Mayberry on TV. Even if their parents don't let them watch a violent show, there are all kinds of violent and sexual commercials on the TV or Internet out there slapping them in the face constantly. So when you have a 5-year old girl who's acting like a Victoria's Secret model and that was on a commercial, that wasn't because she was exposed to a whole entire show. I think that's why there's inappropriate messages in which is not a realized anxiety, but a subliminal anxiety that they have. They're sitting in a classroom and what they hear in school and what necessarily happens at home does not always match up.

Anxiety's effect on learning. Three themes emerged from the data in terms of anxiety's effect on learning. Ten teachers believed that anxiety negatively affects learning. They noted that students' ability to think is hindered; they cannot focus, or

finish their work. These perceptions correlate with Derakshan and Eysenck's theory, ACT (2009). ACT postulates that the central executive part of the brain uses valuable energy by switching between task and worry. The brain becomes fatigued by using energy to block out anxiety; therefore, it is not operating at optimal levels for learning to take place (Derakshan & Eysenck, 2009). Participants in this study noted that anxious students were not able to: (a) think clearly, (b) focus, or (c) finish tasks.

Inability to think clearly. Three teachers said that anxiety makes the brain “freeze” (Participants 4, 10, & 11). Participant 11 said in terms of anxiety on learning, “Her brain freezes. I can see her wheels spinning and really trying to think of what to do or what to say to answer the question or problem. As more time elapses and she still cannot think of the answer, she clams up and cannot do anything.”

Participant 4 also stated that she saw students:

...kind of freeze up or check out completely, and not do their best. They would totally lose interest in doing anything even when it is something below their skill level. Anxiety, I think causes students to forget how to do simple tasks that they are more than capable of doing if anxiety was not blocking their abilities. When a student is anxious, they cannot learn or show what they know. Their minds are cluttered with anxiety and as a result, the student cannot function.

Equally, Participant 10 said:

Anxiety on academic performance is negative. If they [students with anxiety] are anxious about their academic performance, nine times out of ten, their brain freezes and they can't think. They definitely know that information and the answer, but they cannot retrieve any of it because they are just so hyped up and

nervous. Then they get more anxious because they cannot think of an answer and that makes them more anxious and then their brain just freezes. Their ability to think is gone.

Inability to focus. Participant 8 describes students with anxiety that cannot focus because they are preoccupied with their anxious thoughts. She said:

They're [students with anxiety] not right here so it's very difficult to keep them on task, keep their memory, they're forgetting things. When I think of a couple of kids, they're forgetting things and are distracted. It is really tough to keep them focused on what we're doing here more than anything else.

Participant 1 noted that anxiety causes students to:

...take them off task and they cannot move forward. Because they are unable to focus, my ability to teach them is diminished. At this young age, students are learning so many foundational skills. If I can't get them to focus and pay attention to learn these skills, then they will constantly be behind. And I am sure that being behind or not understanding will lead to more anxiety. That is why it is so important to help students at this age overcome anxiety.

She spoke of how students with anxiety can be misinterpreted as not paying attention.

She said:

At first I thought this student was just not paying attention. He was looking all around and at others around him. My attempts to refocus and redirect him were futile. Once I understood that he was anxious, I concentrated on the source of his anxiety and reducing his anxiety so that he could pay attention and focus.

Inability to finish work. Four teachers noted that because students are so focused on doing a perfect job and getting the right answer, they are unable to efficiently work at a pace that keeps up with the rest of the class. Participant 5 described one of her students with anxiety's work pace.

She does everything the right way. She is really careful about everything. She rarely finishes things. I worry about that because she just is so worried about everything being perfect – like a perfectionist. This causes her to hyper-focus and not finish in-class assignments. It is difficult to ascertain her true abilities because she is unable to complete assignments due to her perseveration on doing everything perfectly.

Participant 3 also stated that anxious students use more time to complete tasks:

I have one student who constantly erases and starts over again if her letters are not perfectly formed. Letters are not supposed to be perfectly formed in kindergarten! I tried giving her extra time to complete tasks but that only fed into her perseveration of trying to be perfect. I need her to learn how to be okay with what she naturally writes – not this perfect, precise copy. I think the more time I gave to her, the more she perseverated on perfection. So now I give her warnings of how much time left so she can budget her time and just hopefully concentrate on finishing, instead of perfection.

Equally, Participant 7 noted anxious students' inability to finish work. She said:

My kindergarteners who have anxiety over writing aren't going to show their best, because they're not wanting to show anything if they can't do it right. So I think they're less likely to show their best when they have anxiety. And if they

cannot produce their best possible writing, anxiety takes over and they just sit there. Sometimes they sit there and cry or sit there and do nothing until I can help them get started. Once they get started they focus on drawing every line in every letter perfectly. It may take them a long time just to write their name. What little writing they are able to produce is beautiful – it looks like an adult wrote it. But they might have only gotten as far as writing their name when the rest of the class finished the assignment in the time allotted.

Anxiety reduction strategies. Teachers utilized strategies in and out of the classroom to help students with anxiety. Five teachers used specific strategies within the classroom to prevent or alleviate anxiety. All of the teachers consulted and used resources outside the classroom to help them deal with student anxiety. Nine of the teachers said that their undergraduate or graduate studies did not prepare them adequately to work with students with anxiety.

Classroom strategies. Most teachers said that they talk to their anxious students and try to figure out the source of their anxiety. They also implement preventative measures to help students from becoming anxious in the first place. Participant 10 stated:

The first thing I do when I approach them [anxious students] is say, ‘What’s up?’ Tell me what’s going on. Because some of them will be like, ‘so and so took my crayon.’ It’s not an anxious happening, but some of them might be, ‘My grandma’s in the hospital.’ The fact that the kid took the crayon is the straw that broke the camel’s back that got them upset in the first place, so I usually go right to that. Tell me what’s going on? How can I help you fix this? That’s my number one strategy is to address it, and let them know I’m there for them if they

need it. I'm lucky enough to have a TA [teaching assistant] in my room, so she's really good at, 'Can you take my little friend here for a walk because something is upsetting her, and I can't figure it out, but maybe on a walk.' Nine times out of ten she'll be able to draw it out of them because they're out of view of their classmates so they're not afraid to cry or tell what's going on. I think that's the biggest strategy is just to let the kid know that you're there for them if they need you, and sometimes it will be immediate. You might notice it in the beginning of the day, and they'll come to you at quiet time after the day has progressed. So I think it's just letting the kid know you are there.

Participant 10's other strategies include reducing or preventing stress. She said, "I give them strategies to help reduce anxiety. I tell them what helps me is I take a deep breath and smell the cake and blow out the candles. I think it's all of those tricks that we have to calm our bodies – like yoga moves in the morning or movement breaks throughout the day."

Participant 11 implements a variety of stress reducing strategies in her classroom. She stated:

We have lots of tools in place because I have a special education teacher with me half the day to really teach everybody how to calm themselves. Not only kids who really need it hour by hour, but for all the kids, too. So we have a lot of just fidgets to calm down. I put these little curtains over the lights to make it kind of more of a calming atmosphere. There is a little section in the room if students just need a space where they can read and/or calm themselves down. There are visuals and a sand timer in this spot. We teach them techniques like counting to

ten, taking deep breaths, putting your hands on your lap. There are pictures of these techniques so students will be reminded of what they can do to help themselves. And then when the sand timer goes off, they know they should be ready to return to the rest of the class. Kids who are really stressed have used this spot and it's nice to see them kind of deflate and take time and be able to regain control and go back to a less stressful situation.

Participant 12 concentrated on preventative strategies for anxiety reduction such as having a consistent routine so students know what to expect, reading social stories about dealing with anxiety, and having students role play what to do when anxious. She said:

I've used social stories. I built a lot of it into lessons. We might read a book about a student who was fearful of something, maybe fearful of the thunder. And then we would talk about it, "Okay, what makes us fearful?" I've also used Skill Streaming and did it with the whole class where we role-played what made us nervous, and I would work closely with the social worker. We had students practice what to do when they were feeling anxious – such as positive thinking, taking a deep breath, or counting.

Outside resources. Besides strategies used in the classrooms, all 12 participants spoke of outside resources they went to for help or support. These resources included administration, other teachers, special education teachers, social workers, school nurse, counselors, psychologists, parents, and/or the school's child study team. Participant 9 mentioned that she consults with her building's child study team which includes a special education teacher, the school nurse, the school psychologist, the social worker and administration. She stated, "I've had a lot of support [through the child study team] with

students that I felt strongly were anxious students. A few of them have gone to child study. I feel like I've had other teachers' support in what to do, and how to help them, and conversations about how to work with them the best way so that they can be successful, so that the student could be successful." Participant 5, on the other hand, starts with her administrator or colleagues to get advice about how to deal with an anxious student. She said, I first seek out my administrator when I suspect a student has anxiety. She sees things at a more global level and probably has dealt with plenty of situations regarding anxious students." If Participant 5 knows she has another colleague also dealing with an anxious student, she will seek ideas from that teacher. She stated, "last year, my friend next door had an extremely anxious student that she was dealing with. This year, she was my go-to person for advice and information on dealing with my anxious student."

Participant 2 relies on her school social worker for support with her students who are anxious. She said:

We have an amazing social worker. So I think when we have situations like this where it's an extreme case of anxiety that can't be handled in the classroom, as a resource, we can go to our social worker now and she is completely invaluable.

The teacher can do as much as she can, but without having an extra resource there as a safety net where kids can go and talk to someone and feel that they can have someone to share this with. She does all kinds of social groups for children whose parents have died, children whose parents are divorced. She brings in kids that need to be together for social skills because they're not in a home situation that's very friendly. She does all that foundation type of building with the kids.

When I was dealing with this one situation where a parent has died, I mean, I was at her door, ‘Okay, I said this, is this the right thing?’ Because there’s no manual on how to deal with these kids with anxiety and stress.

Summary of Results

This chapter summarized K-2 teachers’ perspectives regarding student anxiety. Themes emerged from the data in relation to: (a) what an anxious student looks like, (b) what students are anxious about, (c) anxiety’s effect on learning, and (d) anxiety reduction strategies. These topics sought to answer the following research questions:

1. What are teachers’ perceptions of stress and learning among students?
2. What are teachers doing to help students with anxiety and stress?

Three themes for Question 1 regarding teachers’ perception of stress among students were: (a) an anxious student can be identified via tears, acting out, being withdrawn, and/or body language, (b) anxiety can be caused by fear of the unknown, home life, Common Core, and/or technology (c) learning is negatively affected by anxiety as anxious students are unable to think clearly, focus, or finish their work. Teachers were readily able to identify what an anxious student looks like to them. However, the reasons why students would be anxious, varied. Two teachers mentioned separation anxiety but, said this happens only in the beginning of the school year in kindergarten students – it was not an on-going issue throughout the year. While all teachers felt that anxiety negatively affected learning and performance, three teachers noted that anxiety can cause students to work diligently and carefully. Participant 6 mentioned that she has an anxious student due to his home situation that excels in learning and performance because that is when he feels good about himself.

The findings for Question 2 indicate that teachers implement in-class strategies as well as consult resources outside the classroom. In classroom strategies included talking to anxious students, distracting students from the anxiety, breathing exercises, or movement breaks. Teachers believed that just letting an anxious student know they understand and are there for them was a significant step in alleviating anxiety. Ten teachers mentioned contacting the school social worker as a resource to help anxious students. Some of the teachers in this study looked to administration as well as other colleagues for help and advice in dealing with student anxiety. Others read books or consulted websites for additional information regarding student anxiety.

Chapter 5 analyzes the information in the interviews; it discusses the study and includes interpretations of the data and findings. Moreover, it compares findings of the study with findings in the literature. Limitations of the study are discussed as well as recommendations for further research.

Chapter 5: Discussion

Introduction

One out of five school-age students suffer from anxiety (National Institute of Mental Health, 2015). Researchers posit that anxiety causes poor academic performance and cognitive functioning (Baddeley, 2012; Derakshan & Eysenck, 2010). Further, many of these children do not ultimately obtain treatment for a myriad of reasons (Child Mind Institute Incorporated, 2015). Given that feelings of anxiety can impede success in a student's academic sphere, schools are beginning to take on a more significant role in recognizing, accommodating, and helping to treat the disorder. As a result of increasing anxiety in schools, researchers and educators are beginning to understand the implications as well as the importance of anxiety's role in cognitive, socio-emotional, and academic domains.

The ultimate goal of this data collection was to acquire more information about the ways K-2 educators understand student anxiety, along with each teacher's specific interactions and experiences with the disorder. While at the primary level, all children have some level of worry, it is difficult to distinguish between normal levels and clinical levels of anxiety (Mohapatra et al., 2013). Teachers spend a great deal of time with students at the primary level; therefore their perceptions are invaluable in terms of detecting and dealing with student anxiety. If a student were to be diagnosed with anxiety by a clinician, the clinician would want to take into account the teacher's perceptions. In this same vein, the collection of data compiled the varied ways these

individuals' resources and strategies helped to create and maintain a safe and engaging classroom for anxious students. The goals of this study were met. Themes emerged from teachers' perceptions that can potentially help detect and deal with student anxiety.

The findings in Chapter 4 align with research that shows anxiety can negatively impact student learning and academic performance (Baddeley, 2012; Derakshan & Eysenck, 2010). Additionally, the findings in Chapter 4 align with literature that posits childhood anxiety can be caused by genetics (Li et al., 2008) or parenting style (Beesdo et. al, 2010). Sleep problems were also cited as a possible cause of anxiety in children (Chase & Pincus, 2011), and this research partially supported that finding, as two participants alluded to overly busy schedules outside of school for students. The findings in Chapter 4 also aligned with the literature that posited teachers believe they are not properly trained to detect or deal with students with anxiety (Rothi et al., 2008). Eight out of the 12 participants said they had no training in identifying or working with anxious students. The findings in Chapter 4 partially aligned with literature relative to universal programming for anxiety. None of the participants used universal programs or computer-based programs as suggested in the literature. However, several participants did use some mindful-based practices in their classrooms as cited in the literature to alleviate student anxiety.

Implications of Findings

Research indicates that anxiety deleteriously affects cognitive and academic functioning (Baddeley, 2012; Derakshan & Eysenck, 2009). Teachers, who have the responsibility of teaching students and maximizing learning, need to be able to identify anxiety and then alleviate it so learning can take place. The current study examined

teachers' perspectives of stress and learning among their students as well as their strategies for alleviating student stress so learning could take place. Several themes emerged from participants that coincided with information discussed in the literature. These themes have implications for school leaders, teachers, and teacher education programs.

Causes of childhood anxiety. Participants in this study perceived fear of the unknown, home life, the Common Core, and technology as triggers for anxiety in K-2 students. The literature cited genetics (Hettema et al., 2001; Schreir et al., 2008; Steinhausen et al., 2009), parenting style (Wood et al., 2003), or sleep deprivation (Chase & Pincus, 2011; Weiner et al., 2015) as possible causes for childhood anxiety. Five participants in the study indicated either nature (genetics) or nurture (parenting style) as factors in student anxiety.

The onset of anxiety in children can occur for various reasons. A child may have a personality that is presupposed to being anxious. Environmental situations such as parental bonding in early years, parental overprotectiveness, or modeling after an anxious parent can lead a child to be anxious (Altman et al., 2009; Wei & Kendall, 2014). Genetic or environmental situations can manifest anxiety in children by either predisposing a child to anxiety via hereditary factors or exposing a child to an environment that induces anxiety. If a child is constantly exposed to a parent or family member's anxiety, they may learn to be anxious in the future as well.

Participants discussed the parental influence as a significant factor in creating student anxiety. Similar to previous research, 42% of the participants described environmental factors in the home or parents as the reason for student anxiety. For

example, the most common terms used to describe teachers' perceptions of causes of anxiety were home, family, parents, and parenting. This is consistent with literature that indicates heredity factors increase the probability of a child developing anxiety (Hettema, Neale, & Kendler, 2001; Li et al., 2008; Schreir et al., 2008; Steinhausen et al., 2009). The data in this study further aligns with the literature that indicates parenting style can increase the probability of anxiety in children (Beesdo et. al, 2010; Chorpita & Barlow, 1998; Rapee, 1997; Rubin et al., 2009; Wood et al., 2003). While the participants did not explicitly differentiate between genetic factors or environmental factors, they did acknowledge the role of parents in the factoring of student anxiety.

Similar to the research in literature, this study did find that sleep deprivation could be a cause for student anxiety. Sleep-related problems in children have been associated with anxiety (Chase & Pincus, 2011; Wener, Elkins, Pincus, & Comer, 2015). Participants did not mention sleep deprivation explicitly, but used phrases such as "overly busy schedules," "not enough sleep" or "always on the run" to describe how students do not get enough rest.

The data in the study and the research differed in terms of other factors that contribute to student anxiety. While both this study and research indicated that parents or sleep deprivation could cause student anxiety, the data from this study additionally indicated that fear of the unknown, the Common Core, and technology can also lead to anxiety in students. Further research is needed to ascertain if more teachers agree that these factors encourage student anxiety.

Anxiety's effect on learning. The findings of this study contribute to a burgeoning body of research that anxiety negatively affects the learning process (Barrett

& Heubeck, 2000; Mohapatra et al., 2013; Mychailyszyn et al., 2011). As aforementioned in Chapter 1, the ACT theory was applied as a theoretical framework to explain how anxiety distracts the mind and prevents learning. ACT theorizes that anxiety adversely affects academic performance by extracting attention away from the task (Eysenck et al., 2007). More specifically, anxiety affects the working memory part of the brain, which is used for cognitive and academic functioning (Baddeley, 1992). While anxiety diminishes the working memory's function, it further fatigues the brain by exerting extra effort to attempt to stay focused (Eysenck & Calvo, 1992). The brain uses its energy supply by switching between task and worry (Derakshan & Eysenck, 2009). Using energy to block out anxiety fatigues the brain; therefore it is not operating at optimal levels and learning is hindered.

Similar to the ACT theory, data showed that teachers viewed anxious students as unable to think clearly, focus, or finish work. Participants described anxious students learning behaviors in the following ways: (a) brain freezes, (b) preoccupied, or (c) hindered. Teachers conveyed that anxiety prevented students from learning or performing academically.

Implications for executive leadership. Educational leaders need to address student anxiety for several reasons. First, anxiety impedes learning so educational leaders are compelled to find ways to alleviate anxiety. Secondly, if anxiety is not dealt with in its beginning stages, it can manifest into a debilitating clinical diagnosis further down the road. Signs of anxiety can be noticed as early as primary school. While a clinical diagnosis does not happen until later in childhood or into adulthood, signs and patterns of anxiety begin in early childhood. Recognizing and dealing with anxiety in its

initial beginning stages can help prevent it from manifesting itself into a clinical diagnosis (Altman et al., 2009). Therefore, it is important that educational leaders address anxiety at the beginning stages in education.

The importance of addressing anxiety at the primary level has been established in the literature. However, the literature remains inconclusive in regards to a school-wide research based anxiety reduction program. School leaders would need an anxiety reduction program that is research based in order to help students and justify resources allocated for such programming. Perhaps this is why none of the 12 teachers in this study spoke of a school-wide program that was being implemented.

Instead, the participants in the study used individual classroom strategies to alleviate student anxiety or consulted with school personnel, such as the school social worker or school psychologist. The findings in this study contribute to existing research on effective anxiety reducing strategies at the K-2 level. Since there are no agreed upon research-based programs within the literature, perhaps school leaders should look at specific strategies that teachers find effective for anxious students and work to establish these strategies within a school-wide or district-wide basis. For example, both the literature and the study cited breathing exercises as a viable strategy in reducing student anxiety. Perhaps schools can teach breathing techniques to students during morning announcements. Many schools use video announcements. School leaders can use existing school personnel such as an occupational therapist, speech therapist, school nurse, social worker, school psychologist, or guidance counselor who would have an expertise in breathing techniques. They can train staff and students in breathing

techniques and these techniques can be practiced daily via morning announcements and in classrooms throughout the day as needed.

Implications for K-2 teachers. The findings in this study have several implications for teachers. Since anxiety impedes learning, teachers need to be able to identify the signs of anxiety. For example, the most significant indicator of student anxiety, according to this study was tears. Anxious students usually cry. While novice teachers may realize that a crying student is obviously upset, they may not necessarily know that crying is a significant indicator of anxiety. Teachers should look at the cause of the crying and investigate if the student is harboring anxious feelings.

If teachers notice that students are anxious, they will be able to ascertain a learning difficulty. Both the literature and this study determined that learning does not take place when anxiety is present. Teachers will need to alleviate anxiety before they can teach students. Teacher professional development in the areas of identifying student anxiety and alleviating student anxiety is essential, especially at the K-2 level where critical, foundational and fundamental concepts are being taught. Moreover, students cannot always articulate their feelings.

Implications for teacher and leadership development programs. Detecting and alleviating student anxiety needs to be included in university, college, and training programs for teachers and administrators. Courses in the areas of childhood developmental maturation and healthy development of childhood mental health should be included to ensure that teachers are prepared to identify the signs of anxiety. The sooner anxiety can be identified and dealt with, the better chances are that it will not manifest and rise to a potentially debilitating clinical level. Furthermore, teachers should be

trained in anxiety alleviating strategies. Anxiety alleviating strategies are not only part of a healthy lifestyle, but they also will help to nurture a more effective learning process in students. Student anxiety is too impeding to the educational process to ignore. School leaders need to be made aware of viable effective programs and strategies that can be administered school-wide. Additional courses regarding the detection and alleviation of student anxiety need to be a requirement for all teachers and administrators so that students can be successful in education and life.

Limitations

With qualitative research, specifically using the interview process, there is always a chance that the researcher may misinterpret the participants' experiences (Nunkoosing, 2005). The researcher kept a journal of each interview experience and digitally recorded responses to mitigate the possibility of any inaccurate assumptions. Furthermore, member checking took place and the digital recordings were listened to and transcriptions were read over ten times to attempt to precisely capture the essence of each participant's actual lived experiences and perceptions.

Furthermore, the researcher's professional work includes daily interactions with primary teachers and students. Potential exists that the researcher may not have an unbiased or objective view as a researcher who does not typically associate with students and teachers at the primary level. Again, member checking was utilized as a means of ensuring confidence in the findings. However, there is the possibility that researcher's professional role could have subjectified the analysis.

Recommendations

Recommendations addressed in this section include (a) further research, (b) professional training, and (c) practice of preventative methods. These recommendations evolve from the findings of this study, the existing research, and the possible working practices that could help students avoid or overcome anxiety.

Further research. As described in Chapter 2, the research regarding effective school-wide anxiety programs is inconclusive. While the research is conclusive - that anxiety negatively impacts learning - the remedies for school-wide anxiety reduction programs are inconclusive. School leaders, who are charged with raising student achievement, would want to consider anxiety reduction programs, considering all the research on anxiety's negative impact on learning. However, a school leader would not be able to find a universal school-wide anxiety prevention program that is evidence based. Resources such as time, money, and training should not be allocated toward a program that is not based on significant research or results. Therefore, further research is needed to ascertain evidence-based programs.

The participants in this study mentioned several anxiety-reducing strategies for students. The findings showed that teachers employed effective anxiety reduction strategies such as: (a) engaging students in conversation about the anxiety, (b) distracting the student, (c) taking a deep breath, (d) doing yoga moves or having movement breaks, or (e) providing a sensory friendly space where children can calm themselves. However, more studies are needed to confirm these teacher strategies as an effective means to reduce student anxiety.

The anxiety-reducing strategies that participants used in this study are consistent with findings in the literature regarding mindfulness interventions in schools. For example, the study by Zenner et al. (2014) found that classroom strategies such as breath awareness and yoga moves improved students' cognitive performance and reduced stress. However, because mindfully based interventions within the classroom are recent phenomena, there are not as many empirical studies.

Professional training for teachers and leaders. Both the literature and the findings in this study indicated that teachers do not feel they are adequately trained to identify and address student anxiety within their classroom. There appears to be a disconnect in the literature regarding teacher training in regard to mental health issues such as anxiety. While mental health issues with students are addressed in teacher state standards, it appears that teachers are not confident in the amount of training they have in identifying and managing student anxiety. Eight out of the 12 participants in the study indicated that they received no college preparation in regard to student anxiety. Three out of the 12 participants said that they received some college preparation in regard to student anxiety. Only one participant indicated that she received adequate college preparation relative to student anxiety. This one participant happened to be a certified special education teacher.

Since student anxiety impacts learning, teachers should be educated on how to identify anxiety and help students manage anxiety. School leaders should have knowledge of effective school-wide anxiety reducing programs or strategies. If anxiety is addressed when it first appears, it would help students manage their anxiety before it

becomes debilitating or reaches a clinical level (Altman et al., 2009; Costello et al., 2005). It is important to deal with anxiety in its beginning stages so it does not progress.

Conclusion

This dissertation contains five chapters: (a) Introduction, (b) Review of the Literature, (c) Methodology, (d) Findings, and (e) Discussion. The introduction explained the increasing problem of student anxiety and its impact on learning and academic performance. Furthermore, it explained the need to address anxiety in its infancy in order to avoid more intense, clinical levels. Research indicates that addressing anxiety at its earliest stages in childhood has the most significant impact on prevention (Hains et al., 2001; Shoemaker et al., 2015). Moreover, the importance of addressing anxiety in its beginning stages is twofold. First, there is the need to keep anxiety from escalating. Second, beginning stages of anxiety occur in young children and it prevents them from learning fundamental skills, such as learning to read and write, which they will need throughout their academic careers. Therefore, it is important for schools to address anxiety as early as the K-2 level so that it will not manifest or impede students from learning foundational skills.

Eysenck et al.'s (2007) ACT theory provided the theoretical framework to explain anxiety's adverse effects on learning and academic achievement. ACT theorizes that the brain becomes preoccupied with anxiety and significantly diminishes its effectiveness and efficiency. Furthermore, the brain fatigues itself by struggling between the stimuli causing feelings of anxiety and the current task. Fatigue also significantly diminishes the ways in which the brain completes tasks in a quick and productive manner. Therefore,

learning and academic achievement are compromised. Chapter 1 established that K-2 students cannot optimally learn while in an anxious state.

Chapter 2 provided the reader with research regarding: (a) possible causes of childhood anxiety, (b) professional training teachers receive in identifying and working with students who have anxiety, and (c) a literature review on school-wide interventions and strategies that alleviate anxiety.

Chapter 3 identified the mode of methodology for collecting and analyzing the data in this study. This qualitative study employed a transcendental phenomenological approach to capture the phenomena of teachers' perceptions regarding student anxiety. The one-on-one interviews with teachers sought to answer the following research questions:

1. What are teachers' perceptions of stress and learning among their students?
2. What are teachers doing to help students with anxiety and stress?

Participants in the study were purposely selected from the OCM BOCES region. After IRB approval, the process of selecting participants consisted of the researcher contacting all elementary principals on the OCM BOCES email LISTSERV to identify K-2 teachers with at least one year of teaching experience who would be interested in participating in a study regarding student anxiety. The researcher contacted the identified teachers to set up semi-structured, one-on-one, in-depth interviews that were digitally recorded and then transcribed. Interview sessions lasted between 20 and 45 minutes. Twelve teachers participated in this study. Member checking and research memos were employed throughout the data collection and analysis to ensure trustworthiness of the process and data.

Chapter 4 employed a significant amount of quotes from participants to relay the exact phenomena and essence of participants' perspectives. The participants shared their outlooks and viewpoints on student anxiety, and from their experiences, they stated their strategies that most effectively helped alleviate the anxiety. The same interview protocol and demographic information sheet was presented to each participant. The findings revealed, from teachers' perspective that anxious students do not learn or academically perform well. Phrases such as "shut-down," "brain freezes" or "clams-up" were used to describe anxiety's effects on learning and academic performance.

One category that manifested itself from the data was the portrait of an anxious student. While all participants noted that anxiety can look different in every student, four themes emerged from this category: (a) tears, (b) withdrawn, (c) acting out, and (d) body language. Another category, causes of anxiety, had four themes: (a) fear of the unknown, (b) home life, (c) Common Core, and (d) technology. The third theme, anxiety's effect on learning, identified strongly with this dissertation's theoretical framework, ACT. ACT theorizes that the ability to learn is diminished when anxiety is present because the brain is distracted by the anxiety and fatigues by switching from worry to task (Eysenck et al., 2007). Participants noted that anxiety caused students to be unable to: (a) think clearly, (b) focus, and (c) finish work. Teachers provided anxiety-reduction strategies in the classroom or consulted with resources such as the school psychologist or school social worker in order to most effectively help students with anxiety.

Chapter 5 summarized and analyzed the findings. The findings revealed that anxiety in students at the K-2 level could look very different, depending upon the student. Participants perceived the following indicators as signs of anxiety in students:

(a) tears, (b) withdrawn, (c) acting out, and (d) body language. Fear of the unknown, home life, Common Core, and technology were reasons that teachers believed attributed to students' anxiety. The data further showed that teachers believed that anxiety negatively affects student learning and academic performance. Participants stated that students could not think clearly, focus, or finish their work. The findings support previous research that suggests anxiety negatively affects learning. The findings also revealed, from the participants' experiences, ways in which teachers can help manage student anxiety by

- Talking with student,
- Distracting student,
- Breathing exercises,
- Social stories,
- Yoga moves or movement breaks,
- Contacting resources such as school social worker.

In conclusion, this study coincided with previous existing literature about student anxiety and learning. Learning does not take place while students are anxious. Since schools number one goal is to teach students, they must make sure to alleviate student anxiety so students can learn. The results of this study can help teachers better identify anxious students at the K-2 level and provide them with possible strategies to help alleviate anxiety. Furthermore, the literature review in this dissertation, along with the results of the study, can help school leaders adopt best practices when it comes to student anxiety measures.

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Appendix A

E-mail Invitation to K-2 Public School Principals in central New York

Subject: Research Interview Invitation for Teachers

To: Principals of K-2 teachers

From: Beth Kramer, St. John Fisher College (SJFC) doctoral student

Hello, my name is Beth Kramer and I am looking to recruit K-2 teachers to participate in a study I am conducting for my dissertation at St. John Fisher College. I am looking to gain a better understanding of K-2 teachers' perspectives about anxiety or worry that they notice in their students. The Institutional Review Board at St. John Fisher College has reviewed and approved this study.

Can you please give me the names and school email addresses of K-2 teachers in your building so that I may contact them directly? The study involves participating in a one-on-one 60-minute interview with me. I will come to your school to conduct interviews and do it at a convenient time, outside of school hours. Identities of the teachers, students, district, and all information will be confidential. Once I receive willing participants, I will need to secure a letter from your district that grants me permission to conduct this study with their teachers.

I plan to complete my dissertation in the summer of 2017. Should you be interested in a copy of the report, I would be happy to provide it to you. I appreciate your assistance in completion of this dissertation.

Sincerely,

Beth Kramer

Appendix B

E-mail Invitation to K-2 Public School Teachers in central New York

Subject: Research Interview Invitation

To: Teachers of K-2 teachers

From: Beth Kramer, St. John Fisher College (SJFC) doctoral student

Hello, thank you for your interest in my study. My name is Beth Kramer and I am looking to gain a better understanding of K-2 teachers' perspectives about anxiety or worry that they notice in their students. The Institutional Review Board at St. John Fisher College has reviewed and approved this study.

In order to begin the process, you need to sign consent to participate and respond to a brief demographic questionnaire. Once I have this information from you, I will contact you to arrange a one-on-one 60-minute interview with me. I will come to your school to conduct interviews and do it at a convenient time, outside of school hours. To complete the consent form and demographic questionnaire, please open the link below:

[Teacher questionnaire](#)

Identities of the teachers, students, and district will be confidential. I plan to complete my dissertation in the summer of 2017. Should you be interested in a copy of the report, I would be happy to provide it to you. I appreciate your participation and assistance in completion of this dissertation.

Sincerely,

Beth Kramer

Appendix C

St. John Fisher College INFORMED CONSENT FORM

Title of Study: Perceptions of K-2 Teachers on Student Anxiety or Worry

Name of Researcher: Beth Kramer

Faculty Supervisor: Dr. Linda Doty Phone for further information: 315.529.1670

Purpose of Study: The purpose of this research project is to learn the perceptions of K-2 teachers in terms of student anxiety and worry. The demographic survey will take approximately five minutes to complete and the one-on-one interview will be about 60 minutes. It will take place at your place of work (your school) and I will be conducting the interview.

Place of Study: Participants school/place of work **Length of participation:** 60 Minutes

Risks and benefits: The study involves your participation in a 60-minute interview about your perceptions and perspectives about student anxiety and worry in school. As a participant in this study, it is possible that you may feel uncomfortable with the interview process, especially when you may not be sure how to answer a question. Additionally, there is a time obligation that you are committing to at least one meeting of approximately 60 minutes. The study should be helpful to schools, school personnel, and families who are concerned about child anxiety. If anxiety symptoms can be identified early on, professionals can implement strategies to alleviate it and help students cope so they will be better learners and resilient students.

Method for protecting confidentiality/privacy: All identifying information will remain private and not available to anyone except the researcher. All audio and text files for the study will be secured under lock and key during the research phase and for five years after the study.

Your Rights: As a research participant, you have the right to:

1. Have the purpose of the study, and the expected risks and benefits fully explained to you before you choose to participate.
2. Withdraw from participation at anytime without penalty
3. Refuse to answer a particular question without penalty.
4. Be informed of appropriate alternative procedures or courses of treatment, if any that might be advantageous to you.
5. Be informed of the results of the study.

Signatures: Please sign and date the following.

I have read the above, received a copy of this form, and I agree to participate in the above-named study.

Print name (Participant)

Signature

Date

Print name (Investigator)

Signature

Date

If you have any further questions regarding this study, please contact the researcher listed above. If you experience emotional or physical discomfort due to participation in this study, please contact the Syracuse Community Service Hotline at 315-251-0600 or contact your health provider.

The Institutional Review Board (IRB) of St. John Fisher College has reviewed this project. For any concerns regarding this study, you can contact Jill Rathbun by phone at 585.385.8012 or by email at: irb@sjfc.edu.

Appendix D

Demographic Data on K-2 Teachers

Please mark your responses below and respond in text when appropriate.

Gender: Male _____ Female _____ Prefer not to disclose _____

1. How many years have you been teaching?
2. How many students do you currently have in your class?
3. What NYS teaching certificates do you hold?
4. What did you major in college?

5. What did you major in graduate school?

6. How well did your education prepare you to identify and work with students with anxiety or worry?

Appendix E

Interview Protocol

Hello. Thanks for agreeing to help me with my research project. This interview should take about an hour long or less. Do you mind if I record our interview, as I am not a great note taker. Okay, let's begin!

1. Tell me your definition of anxiety/stress:

Tell me what an anxious student looks like

How do they behave?.....

What do you see that leads you to believe that student is anxious?.....

What (if anything) does the student report that leads you to believe he or she is anxious?

2. Approximately how many students have you taught that you would identify as anxious or stressed?

3. Tell me about the impact (positive or negative) of student anxiety on:

-Academic Performance?

-Social interactions with peers?

-Social interactions with adults?

-Overall general behavior (i.e., compliance with school rules, attention to task, school attendance)

4. In your experience, describe your building/district's handling of student anxiety. What would you like to see done differently, if anything?

5. Describe your own strategies for handling anxious student in your class

6. Has student anxiety become better, worse, or remained the same since you started teaching?

Why do you think that is?

7. Describe your comfort level in accessing information regarding anxiety and strategies to reduce it.

8. Do you feel comfortable with your own personal/professional strategies to help students with anxiety?