

American Elementary Teachers' Knowledge of Anxiety

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### **Introduction**

Mental health is as a state of positive well-being in which people can deal with the usual stress of life, have fulfilling relationships and engage in productive activities (World Health Organization, 2013). The American Psychiatric Association defines mental illness as a condition “involving changes in emotion, thinking or behavior” that is associated with “distress and/or problems functioning in social, work or family activities” (American Psychiatric Association, 2018). Mental health disorders make up one-third of the diseases experienced by adolescents throughout the world (Kutcher, Wei, McLuckie, & Bullock, 2013). In the United states, 13% to 20% of children experience a mental illness within a given year (Perou et al., 2013).

Anxiety is the most common mental health disorder among children in the United States (Kessler et al., 2007). In a U.S.-representative study of adolescents with mental health conditions, 31.9% met criteria for an anxiety disorder (Merikangas et al., 2010, p. 983). Anxiety disorder is characterized by worry, difficulty with uncertainty and an overactive response to perceived dangers (Martinelli, Cohen, Kimball, & Miller, 2018). Anxiety is an internalizing disorder and may therefore be invisible as most of the individual's emotions and perceptions are kept inside his or her mind (Wolfe & Mash, 2006). Accordingly, anxiety disorders are often overlooked and go untreated for years (Wang et al., 2005).

If left untreated, childhood anxiety is associated with depression (Beesdo et al., 2007), substance abuse (Essau, Lewinsohn, Lim, Ho, & Rohde, 2018), the development of disruptive behaviors (Bubier & Drabick, 2009) and reduced academic performance (Grover, Ginsburg, & Ialango, 2007). Furthermore, children who have anxiety are at a higher risk of continuing to

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experience anxiety in adulthood (Bittner et al., 2007). However, once detected, anxiety is highly treatable (Martinelli, Cohen, Kimball, & Miller, 2018) through treatments such as cognitive behavioral therapy (Saavedra, Silverman, & Morgan-Lopez, 2010). Anxiety disorders most likely appear during elementary years (Merikangas et al., 2010). Separation anxiety and phobia are more likely to appear in childhood, while social phobia and panic disorder are more likely to appear during adolescence (Costello, Egger, & Angold, 2005).

Children spend a large percentage of their time in school, and as such schools have become the 'de facto' provider of mental health for children and adolescents (Weist, Lever, Bradshaw, & Sarno, 2014). In the United States, approximately 80% of children who receive mental health services receive them in school (Rones & Hoagwood, 2000). Schools can play an essential part in promoting positive mental health and providing mental health care for students (Kutcher, Wei, McLuckie, & Bullock, 2013) through tier 1, tier 2 and tier 3 interventions (Macklem, 2011; Askell-Williams & Cefai, 2016).

In the United States, teachers play a variety of roles regarding mental health of students. These include identification, observation, referral, accommodation and education. Teachers are considered well-placed to identify issues concerning students' social and emotional well-being (Graham, Phelps, Maddison, & Fitzgerald, 2011) due to their ability to observe students over extended periods of time. Teachers are seen as "referrers" of students to medical and psychiatric services (Rothi, Leavey, & Best, 2008) as well as "informants" on their students' mental health needs (Roeser & Midgley, 1997, p. 129). Teachers may be required to provide accommodations and interventions to students with Individual Education Plans or 504 plans (Gibson, Stephan, Brandt, & Lever, 2014), or they may informally accommodate students who do not have such

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plans. Further, teachers may be called upon to teach tier 1 and tier 2 mental health interventions (Franklin, et al., 2017). Given the role that teachers play in the mental health needs of their students, there is a need to pay attention to the knowledge and views of teachers in relation to children's mental health needs (Graham, Phelps, Maddison, & Fitzgerald, 2011; Gibson, Stephan, Brandt, & Lever, 2014).

Mental health knowledge, sometimes perceived as an entity of mental health literacy, is associated with improved mental health outcomes and increase used of health services (Wei, McGrath, Hayden, & Kutche, 2015). Given this positive relationship, this study focuses on teacher knowledge of students' mental health assuming that teachers' increased mental health knowledge is associated with improved student mental health outcomes and increased student utilization of mental health services.

Gaining insight into the knowledge that teachers have regarding anxiety "is vital to understand which anxious children are likely to be referred for assessment and treatment, and also in identifying which children are likely to be overlooked" (Headley & Campbell, 2013, p. 51). Anxiety is most common mental health disorder among children (Kessler et al., 2007) and symptoms of anxiety begin during elementary years (Merikangas et al., 2010). The focus on elementary teachers' knowledge of anxiety is especially warranted given the lack of such research (Headley & Campbell, 2013).

### **Research Questions**

The following research question guides this study: "What do American elementary teachers know about anxiety disorders in relation to their students?" The following supportive questions are identified and addressed through the research instruments of this study:

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- How do American elementary teachers define anxiety?
- What behaviors do American elementary teachers think are associated with anxious students?

## Literature Review

### Overview

Mental health is a common issue facing both adults and children. In the United States, children often face mental health disorders that impact not only their normal functioning, but also their academic achievement. Teachers are responsible for their students' academic achievement. Furthermore, teachers spend their working hours watching and teaching children, giving them a unique role in perceiving and responding to children's mental health needs. Among children, anxiety is the most prevalent mental health disorder. Reviewing the literature surrounding teachers' knowledge of mental health allows an understanding of what teachers know, and what they need to learn, about mental health and anxiety.

### Children's Mental Health

Mental health concerns are common among children in the United States and around the world (World Health Organization, 2004; Child Mind Institute, 2018). The majority of children's mental health needs are unmet due to a variety of factors (Kataoka, Zhang, & Wells, 2002; Satcher, Friel, & Bell, 2007). Signs of mental health disorders begin in early childhood (Robinson et al., 2017; Child Mind Institute, 2016; Gilliam, 2005; Spencer, 2013). Mental health is defined as a state of positive well-being in which people deal with the usual stress of life, have fulfilling relationships and engage in productive activities (World Health Organization, 2013;

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American Psychiatric Association, 2018). Mental illnesses conditions are classified into mood disorders, anxiety disorders, behavior disorders, substance abuse disorders and eating disorders (Merikangas et al., 2010). Anxiety is the most common mental health condition among children (Kessler et al., 2007) and it is treatable through medication and behavioral therapy/ intervention (Martinelli, Cohen, Kimball, & Miller, 2018; Saavedra, Silverman, & Morgan-Lopez, 2010). The coming paragraphs will elaborate on these facts.

Though the term mental health can be ambiguous to define (Askell-Williams & Cefai, 2016), this paper defines mental health as a state of positive well-being in which people can deal with the usual stress of life, can have fulfilling relationships and engage in productive activities. This definition of mental health is a combination of the definitions provided by the World Health Organization and the American Medical Association and the American Psychiatric Association (World Health Organization, 2013; American Psychiatric Association, 2018). On the other hand, the American Psychiatric Association (2018) defines mental illness as a health condition “involving changes in emotion, thinking or behavior” that are associated with “distress and/or problems functioning in social, work or family activities”.

Mental illnesses include mood disorders (major depressive disorder, dysthymic disorder, bipolar I or II); anxiety disorders (panic disorder, agoraphobia, social phobia, specific phobia, generalized anxiety disorder, posttraumatic stress disorder, separation anxiety disorder); behavior disorders (attention-deficit/ hyperactivity disorder, oppositional defiant disorder, conduct disorder); substance use disorders (alcohol abuse/ dependence, drug abuse/ dependence), and eating disorders (anorexia nervosa, bulimia nervosa and binge eating disorder) (Merikangas, et al., 2010). Signs of mental health disorders include headaches, fatigue, loss of appetite, crying,

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sadness, grief, anxiety, fear, being on guard, insomnia, nightmares, irritability, anger and confusion (World Health Organization, 2017).

Estimates indicate that 20% of children have mental health concerns (World Health Organization, 2004). In the United States, approximately 17.1 million children, or 20%, have or had a diagnosable psychiatric disorder (Child Mind Institute, 2018). This is more than the number of children with cancer, diabetes and AIDS combined (Child Mind Institute, 2018). A review of data of 1,973 children with mental health conditions showed that of 80% had a mental health need which was unmet (Kataoka, Zhang, & Wells, 2002). Stigmatization, poor material circumstances and lack of access are barriers to successful treatment of mental disorders (Satcher, Friel, & Bell, 2007).

Signs of mental health disorders begin early (Robinson et al., 2017). Fifty percent of mental health disorders begin before age 14 (Child Mind Institute, 2016, p. 2). Problems with mental health may start as early as prekindergarten (Gilliam, 2005). A study of Connecticut children found that over 70% of middle school students diagnosed with a mental health problem exhibited warning signs by second grade and 25% exhibited warning signs in kindergarten (Spencer, 2013). Factors which impact mental health in children include parental mental health, parental substance abuse, parental loss and physical or psychological trauma in childhood (National Research Council of Medicine, 2009). Mental health conditions may be transitory or long-term; mild or severe (Australian Disability Clearinghouse, 2018).

### **Anxiety**

Anxiety is the most common mental health disorder among children, both in the United States and around the world (Kessler et al., 2007). In a U.S.-representative study of adolescents

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with mental health conditions, 31.9% met criteria for an anxiety disorder (Merikangas et al., 2010, p. 983). Anxiety is a disorder characterized by worry, difficulty with uncertainty and an overactive response to perceived dangers (Martinelli, Cohen, Kimball, & Miller, 2018). Various types of anxiety include separation anxiety, social anxiety, selective mutism, generalized anxiety, specific phobias and panic disorder.

While the average age of onset for anxiety disorders is 11, signs of anxiety can begin as early as age two through increased behavioral inhibition (Martinelli, Cohen, Kimball, & Miller, 2018). In (Merikangas et al., 2010, p. 983) anxiety disorders appeared earlier than any other mental disorder, as early as age 4. Childhood anxiety is associated with earlier onset depression (Beesdo et al., 2007), a two-fold increase in substance abuse later in life (Essau, Lewinsohn, Lim, Ho, & Rohde, 2018) and the development of other disruptive behaviors (Bubier & Drabick, 2009).

Anxiety disorders are often overlooked and go untreated for years (Wang et al., 2005). As such, it is important for professionals to know how to interpret and understand symptoms of anxiety in children. Some children who have anxiety have internalizing symptoms. They avoid and become afraid of situations and their behaviors are misinterpreted and minimized as “shyness” (Martinelli, Cohen, Kimball, & Miller, 2018). Other anxious children externalize. They react to fearful situations through tantrums and violent explosions, which are then misinterpreted as anger or opposition.

Anxiety is highly treatable (Martinelli, Cohen, Kimball, & Miller, 2018). One effective treatment for anxiety is cognitive behavioral therapy, or CBT, (Saavedra, Silverman, & Morgan-Lopez, 2010). CBT helps children to address their fears in a safe environment, allowing

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them to gain a sense of control. Another effective treatment for anxiety is antidepressant medication in the form of serotonin reuptake inhibitors (Martinelli, Cohen, Kimball, & Miller, 2018). A 2008 clinical trial of treatments for youth with anxiety disorders published in the *New England Journal of Medicine* showed that after 12 weeks, CBT was 66% effective while anti-depressants were 55% effective in treating anxiety. However, a combination of CBT and antidepressants was the most effective treatment for anxiety, showing 81% effectiveness after 12 weeks (Walkup et al., 2008). Both school-based interventions (Neil & Christensen, 2009) and community-based interventions (Christensen, Pallister, Smale, Hickie, & Callear, 2010) have been offered and found to be effective in preventing anxiety in young children.

### **Mental Health and Academic Achievement**

Mental disorders may negatively impact student academic performance in a variety of ways. Students with mental disorders may have an inability to screen out environmental stimuli, an inability to concentrate, a difficulty handling time pressures, a difficulty handling multiple tasks, a difficulty interacting with others, a difficulty handling negative feedback and a difficulty responding to change (Boston University, 2018). Students with psychiatric disorders may also miss school, have short-term memory loss, misinterpret communication, be easily overwhelmed by information, have a difficulty following instructions, display rigid thinking patterns and isolate themselves (Australian Disability Clearinghouse, 2018). Various studies have illustrated the connection between mental disorders and future academic performance (Murphy, et al., 2015; Fernandez-Castillo & Gutierrez-Rojas, 2009; Grover, Ginsburg, & Ialango, 2007; Graziano, Reavis, Keane, & Calkins, 2007), as well as the link between mental disorders and suspension or expulsion from school (Peate, 2017; Gilliam, 2005; Stanley, Canham, & Cureton, 2006).

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Several studies have determined a link between children's mental health and their future academic performance. Some of these studies took place internationally. Murphy et. al. (2015) conducted a longitudinal study of 37,397 first and third grade students in Chile who were receiving mental health screening. Their results indicated that mental health was a significant predictor of future academic performance. Furthermore, the study found that those students whose mental health improved between first and third grade made better academic progress than those whose mental health did not improve. Fernandez-Castillo & Gutierrez-Rojas (2009) conducted a random sample of 28 students ages 12-16 in Spain and found a significant inverse association between depression and academic performance.

The link between mental health and academic performance has also been found in U.S.-based studies. A study of kindergarten students found that student emotional regulation was positively associated with early literacy and math achievement scores, as well as teacher reports of academic success and productivity (Graziano, Reavis, Keane, & Calkins, 2007). A study of fifth grade students found that the students who were nominated for mental health services reported lower academic efficacy, lower self-esteem and fewer positive emotions related to school (Roeser & Midgley, 1997).

Mental health and behavioral problems are also associated with the suspension and expulsion of students. A 2017 British study found that nearly half of expelled students had a mental health problem (Peate, 2017). In the United States, an average 5,117 children are expelled from prekindergarten each year due to behavioral problems (Gilliam, 2005, p. 3). The likelihood of expulsion decreased significantly when the classroom had access to a behavioral consultant or mental health professional (Gilliam, 2005, p. 7). In addition, a study of suspended middle school

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students found as association between their suspension and their emotional and behavioral problems (Stanley, Canham, & Cureton, 2006).

### **Academic Achievement and Anxiety**

As anxiety is a subcategory of mental health, anxiety is also associated with negative academic outcomes. A longitudinal study conducted in the United States examined the relationship of anxious symptoms of students in first grade with the same students' eighth grade academic, social and psychological functioning (Grover, Ginsburg, & Ialango, 2007). The study found that children who were identified as anxious in first grade were, seven years later, three times more likely bottom one-third of reading achievement and two times more likely to be in the bottom one-third of mathematics achievement (p. 415). Furthermore, the students who identified as anxious in first grade were more likely to be rated as low in social acceptance in the eighth grade and more likely to identify as anxious in the eighth grade. (p. 416).

### **Mental Health Services in U.S. Schools**

American schools provide support for children's mental health in the United States. Rones & Hoagwood (2000) stated that approximately 80% of children who receive mental health services receive them in school. Schools are an ideal point for delivering services related to children's mental health (Pullmann, Bruns, Daly, & Sander, 2013) because they offer access to children over long periods of time as well staff who help the children (Greenberg, 2010). Traditionally, counselors, school psychologists and school social workers are the staff responsible for mental health and social services in schools (Demissie & Brener, 2017). School-based mental health programs can provide universal preventative mental health services,

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identify students with or who are at risk for mental health issues, refer students for assessments, refer students for interventions and monitor and manage students' mental health needs (Taras, 2004).

Mental health programs in schools can be offered at three levels. Tier 1 mental-health interventions are preventative classroom-based programs targeting all students (Macklem, 2011). These programs are designed to reduce students' externalizing symptoms by focusing on emotion regulation. Well-researched tier-1 preventative programs include, but are not limited to, social and emotional learning (SEL), Incredible Years (IY), Dina Dinosaur, Promoting Alternative Thinking Strategies (PATHS), Positive Action and FRIENDS. Tier 2 programs are offered to small groups of children who are exhibiting behavior problems and/ or who exhibit higher a risk of developing disorders than their peers (Macklem, 2011). Tier 3 provides treatment for identified students who require a referral to a specialist (Askill-Williams & Cefai, 2016).

It is important for mental health programs to be evidence-based. An evidence-based program is one that "has been evaluated by experts in the field, other than the creators of the program, outcomes are attributable to the program itself, and has been declared evidence-based by a federal agency or respected group or registry" (Macklem, 2011, p. 21). For a program to be referred to as 'evidence based' it must have an EST label, which stands for empirically supported treatment. Such a label is issued by the Division of Clinical Psychology of the American Psychological Association (Macklem, 2011, p. 20). Of all programs, cognitive behavioral therapy has the most research support for school-age children (Macklem, 2011, p. 33).

## **Teachers' Role in Students' Mental Health and Anxiety**

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Teachers play a critical role in the mental health of children. Positive teacher-child relationships may decrease behavioral problems by teaching children to regulate their emotions and behaviors (Rittblatt, Hokoda, & Charles, 2017). Parent and teacher recognition of mental health problems is a predictor of a child seeking professional help (Ford, Hamilton, Meltzer, & Goodman, 2008). Parents of children with mental health problems often seek help from teachers (Oh, Mathers, Hiscock, Wake, & Joradana, 2015). Teachers are good at determining which of their students could benefit from mental health needs (Roeser & Midgley, 1997, p. 129) and are seen as front line identifiers and referrers of their students to medical and psychiatric services (Rothi, Leavey, & Best, 2008).

Once teachers are aware of their students' needs, they may better accommodate them in the classroom (Australian Disability Clearinghouse, 2018). Accommodations include providing a list of assignments for students, reducing the number of reading texts required, providing orientation to unfamiliar situations, providing verbal instead of written feedback, providing recorded lectures and providing alternative assessment methods (Australian Disability Clearinghouse, 2018).

Certain school initiatives rely on teachers to deliver tier 1 mental health programming in their classrooms (Askill-Williams & Cefai, 2016). Teachers can be effective in providing tier 1 and tier 2 mental health interventions to students (Franklin, et al., 2017). Tier 1 interventions target all students and may be delivered in the classroom. Tier 2 interventions target specific students with greater needs, and may be delivered in or out of the classroom. A review of the effectiveness of 24 teacher-delivered psychosocial interventions found that teachers are effective in delivering tier 1 interventions because these interventions take place in the classroom and

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utilize the teaching skills that teachers already have, especially when the teachers were supervised and utilized a structured mental health curriculum (Franklin et al., 2017).

Finally, studies have found that teachers are in favor of providing mental health services in schools. A survey of 119 elementary school teachers found that they had favorable attitudes regarding the appropriateness of providing mental health services in schools (Walter, Gouze, & Lim, 2006). Another 2011 survey of 292 early childhood and elementary teachers from five school districts in the United States found that surveyed teachers believed that schools should be involved in addressing the mental health needs of students and that it was their role to implement behavioral interventions in the classroom (Reinke, Stormont, Herman, Puri, & Goel, 2011). A survey of Australian and Maltese teachers found that they had a positive attitude toward mental health promotion (Askell-Williams & Cefai, 2016).

## Teachers' Proficiency in Identifying Student Anxiety

Three studies have attempted to assess teachers' ability to identify students with anxiety through symptom identification (see Table 1). Two of the three studies found that teachers were able to identify approximately 50% of students with anxiety (Gelley 2014; Cunningham & Shannon 2014). While these studies did not measure teachers' knowledge of mental health/anxiety directly, they important to review due to the link between knowledge of mental health and identification (Headley & Campbell, 2013).

First, Trudgen & Lawn (2011) studied Australian teachers' recognition and report of anxiety through a qualitative method. To better understand teachers' knowledge of anxiety,

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teachers were asked “What informs your knowledge of mental illness?” and “What are the behaviors of a student that indicate to you that the student has anxiety or depression?” (p. 130). One of the themes reported was that teachers gained their knowledge of anxiety and depression from informal sources, such as through media or family members. Further, while all teachers could identify at least 2 symptoms of anxiety or depression, they indicated having a difficult time seeing these symptoms in their own students.

Second, Gelley (2014) measured the accuracy of middle school teachers, mental health staff and school nurses in identifying students who had elevated levels of self-reported anxiety or depression. The study indicated mixed results. Approximately 58% of teachers were able to correctly identify anxious students and 32% were able to identify depressed students. However, interestingly, school-based mental health staff and nurses were less accurate at identifying students with heightened anxiety and depression. This indicates that though teachers could only identify half of students with anxiety and depression, their identification was more accurate than that conducted by other members of the school staff. Finally, Cunningham & Shannon (2014) added to existing literature by assessing teacher ability to recognize anxiety and depression among their fourth and fifth grade students. The findings of their study agreed with that of (Gelley 2014). Teachers were able to identify 50% of students with elevated depressed symptoms and 41% of students with anxiety.

## Teachers' Knowledge of Mental Health and Anxiety

### **Importance.**

Given the role that teachers play in the mental health needs of their students (Rittblatt, Hokoda, & Charles, 2011; Askill-Williams & Cefai, 2016) and teachers' ability to identify at

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least half of their anxious students (Gelley 2014; Cunningham & Shannon 2014), there is a need to pay attention to the knowledge of teachers in relation to children's mental health needs (Graham, Phelps, Maddison, & Fitzgerald, 2011; Gibson, Stephan, Brandt, & Lever, 2014). It is assumed that increased knowledge will help teachers to not only provide high-quality mental health teaching to their students, but also to identify and refer their students who need mental health services (Askill-Williams & Lawson 2013). Alternatively, a lack of knowledge surrounding mental health may impede teachers from assisting children in managing mental health disorders and in preventing negative outcomes (Frauenholtz, Mendenhall, & Moon, 2017).

### **Common Themes.**

Five studies assessed teachers' knowledge of mental health (see Table 2). These studies have attempted to answer what it is that teachers know (Aguinis, 2009) about "mental disorders and their treatments" (Wei, McGrath, Hayden, & Kutche, 2015, p. 2). Two studies utilized objective measures of knowledge (Walter, Gouze, & Lim 2006; Stormont, Reinke, & Herman 2011) and three utilized subjective measures of teachers' opinions of their own knowledge (Reinke, Stormont, Herman, Puri, & Goel 2011; Headley & Campbell 2013; Askill-Williams & Cefai 2016). Among all five studies, only one study set out to measure teachers' knowledge of anxiety (Headley & Campbell 2013).

First, Walter, Gouze, & Lim (2006) conducted a study of 119 inner-city elementary school teachers. Their study tested teachers with 27 true/false questions about common child psychiatric and mental health issues, with items about attention-deficit/hyperactivity disorder, anxiety disorder and post-traumatic stress disorder. A tabulation of their results found that teachers exhibited a limited amount of mental health knowledge, scoring an average of 65% of

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the answers correctly. Furthermore, through a second 13-item measure of self-efficacy, the study found that teachers did not feel confident about their ability to manage mental health problems in their classroom, scoring an average of 1.82 on a 3-point scale.

Second, Reinke, Stormont, Herman, Puri, & Goel (2011) asked teachers questions to determine their self-perception about their own knowledge and skills required to meet the mental health needs of children. Their results indicated that only 34% of teachers felt that they had the knowledge and skills necessary to meet the mental health needs of their students. Third, Stormont, Reinke, & Herman (2011) assessed 239 general education teachers' knowledge of evidence-based practices and mental health resources through a Mental Health Needs and Practices in School Survey. The survey found that 82-92% of teachers had not heard of evidence-based mental health programs. Furthermore, the teachers had little understanding of the types of mental health services provided by their schools. For example, 57% of teachers were not sure whether their schools provided behavioral assessments.

Fourth, Headley & Campbell (2013) examined primary teachers' knowledge of anxiety and anxiety symptoms in children. To collect data, they utilized a four-part questionnaire with 315 teachers in Australia. The questionnaire asked about teachers' knowledge of anxiety, teachers' identification of anxious students and teachers' identification of typical and atypical signs of anxiety in children. Their results indicated that teachers were able to recognize anxiety-specific indicators in children. Finally, Askell-Williams & Cefai (2016) assessed teachers' self-perceived knowledge as part of a larger study on Australia and Maltese teachers perspectives about mental health promotion. Their results indicated that one-quarter to one-half of teachers did not strongly agree to being knowledgeable about mental health.

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**Measures.**

Wei, McGrath, Hayden, & Kutche (2015) conducted a scoping review of studies measuring mental health knowledge and noted sixty-nine different measures of mental health knowledge. Some measures were based on the recognition of disorders through descriptions of symptoms. Other measures evaluated knowledge through fact-based true/false tests. Of all of the measures, only the Anxiety Literacy Questionnaire was deemed to be a valid measure of knowledge of anxiety (Gulliver, 2012). Other measures of knowledge of anxiety not included in the review by Wei et. al (2015) include the Teachers’ Anxiety Identification and Referral Questionnaire (Headley & Campbell, 2013) and the Parental Attitudes, Beliefs, and Understanding of Anxiety measure (Wolk et al., 2016).

Table 1

*Studies of Teacher Identification of Anxious Students*

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Study	Purpose	Participants	Design/ Analysis	Outcomes
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Trudgen & Lawn (2011)	To determine how teachers recognize anxiety and how they act on their concerns.	20 teachers from four secondary colleges in Australia	Qualitative: In-depth interviews.	Teachers' recognition of anxiety and depression not based on formal knowledge or years of experience.
Gelley (2014)	To identify the accuracy of teacher identification of early adolescents who self-reported high anxiety or depression.	233 middle school students, 19 teachers, 6 school-based mental health professional	Quantitative: Survey	Teachers correctly identified 58.33% of anxious students and 32.14% depress students. Teacher identification was more accurate than identification by other school-based mental health staff.
Cunningham & Shannon (2014)	To identify the accuracy of elementary teachers in identifying fourth and fifth grade students with depression and/or anxiety.	238 fourth and fifth grade students and 26 classroom teachers	Quantitative: Survey	Teachers identified 50% of students with depression and 40.7% of students with anxiety.

Table 2

## American Elementary Teachers' Knowledge of Anxiety

*Studies of Teachers' Knowledge of Mental Health*

Study	Purpose	Participants	Design/ Analysis	Outcomes
Walter, Gouze, & Lim (2006)	To survey teachers' beliefs about mental health service needs in inner city elementary schools.	119 elementary teachers in inner-city schools	Quantitative: Survey	Most teachers had little education and limited knowledge in mental health.
Reinke, Stormont, Herman, Puri, & Goel (2011)	Examine teachers' perceptions of current mental health needs, knowledge, skills, training experiences, training needs, roles and barriers.	292 early childhood and elementary teachers.	Quantitative: Survey	Teachers reported a lack of experience and training for supporting children's mental health needs.
Headley & Campbell (2013)	Examine primary school teachers' knowledge of anxiety and excessive anxiety symptoms in children.	315 primary teachers	Qualitative: Questionnaire	Teachers had an understanding of what anxiety was in general.
Askeff-Williams & Cefai (2016)	To determine teacher perspectives about their capabilities for mental health promotion.	1029 Australian and Maltese teachers	Quantitative: Survey	Many teachers reported concerns about knowledge of mental health.
Stormont, Reinke, & Herman (2011)	To determine teachers' knowledge of effective mental health interventions, as well as school-based mental health resources.	239 general education teachers	Quantitative: Survey	Teachers were not aware of effective school-based mental health interventions.

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Four of the studies analyzing teacher knowledge of mental health utilized a quantitative design and collected data through surveys. First, Walter, Gouze, & Lim (2006) utilized a self-made survey instrument through which they assessed the teachers' knowledge of mental health. This instrument included 27 true/false questions about common child psychiatric and mental health issues, including items about attention-deficit/hyperactivity disorder, anxiety disorder and post-traumatic stress disorder. Second, Reinke, Stormont, Herman, Puri, & Goel (2011) measured teachers self-reported knowledge by utilizing a 5-point Likert scale, ranging from strongly agree to strongly disagree. Third, Askill-Williams & Cefai (2016) utilized five questions to measure teachers' self-percieved knowledge of mental health. These questions began with the stem "I know how..." (p. 66). Fourth, Stormont, Reinke, & Herman (2011) utilized the Mental Health Needs and Practices in School Survey. Only one study (Headley & Campbell 2013) collected data utilizing a qualitative design in which they utilized open-ended questions on teachers' definitions of anxiety and indications of excessive anxiety in children.

### **Weaknesses.**

Some weaknesses were present the reviewed literature. Askill-Williams & Cefai (2016) collected data at two different time points while a mental health program was occurring, thus skewing the results through the impact of the mental health program on teachers' knowledge and views. Reinke, Stormont, Herman, Puri, & Goel (2011) had a low response rate of 50%, possibly removing results from unsupportive educators. Finally, the responses in Walter, Gouze, & Lim (2006) were only from schools that were willing to participate in a mental health program, thus eliminating responses from teachers in unwilling schools.

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### **Research Gap.**

Understanding the knowledge of educators on mental health is essential. One research gap has been identified: American elementary teachers' knowledge of childhood anxiety. No present study of American teachers focuses on measuring their knowledge relating to anxiety. In fact, among international studies, there is only one study focused on teachers' knowledge of anxiety (Headley & Campbell, 2013). This gap in research is notable because anxiety the most common mental health disorder among children (Kessler et al., 2007), it is highly treatable once identified (Martinelli, Cohen, Kimball, & Miller, 2018) and its symptoms begin during elementary years (Merikangas et al., 2010).

### **Proposed Research**

#### **Problem**

The problem underlying this research is the lack of teacher knowledge of what childhood anxiety is and what it looks like. This lack of knowledge impedes teachers from recognizing and referring their students to mental health services.

#### **Objective**

The objective of the proposed research is to determine elementary teachers' knowledge of anxiety disorders among their students. Specifically, to find out how teachers define anxiety and what they think are the anxious behaviors exhibited by children.

#### **Ethics**

Ethics approvals will be obtained from the ethics committees of the University of Illinois at Urbana Champaign, as well as the Miami-Dade School District.

## **Methodology**

This research will explore teachers' shared experience of teaching students who experience anxiety disorders. A phenomenological methodology has been chosen as it results in an understanding of a common essence of the individuals' experience (Creswell & Creswell, 2018). In this specific research, the 'individuals' are teachers and the 'essence' is their experience of anxiety within their students. Once again, this study is not focused on how teachers experience being anxious themselves, but how they experience the anxiety of their students. Other research that has utilized a phenomenological methodology to understand perceptions of anxiety includes (Malik, 2015; Labbé, 2008).

## **Method**

The method utilized by this study will be an interview to solicit demographic and knowledge of anxiety information. The demographic information to be collected includes age, gender, total years of experience, total years of experience at the present site, college degrees and previous mental health training. To collect information about knowledge of anxiety, two questions will be asked. The first question is "What is anxiety?" and comes from (Headley & Campbell, 2013) and the second question is "What are the behaviors of students that indicate to you that a student has anxiety?" and comes from (Trudgen & Lawn, 2011). Trudgen & Lawn (2011) utilized an unnamed questionnaire to study the threshold of Australian teachers' recognition and report of anxiety. Headley & Campbell (2013) utilized The Teachers' Anxiety Identification and Referral Questionnaire (TAIRQ) to assess Australian teachers' knowledge of anxiety.

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### **Participants**

Targeted participants in this study are 30 elementary teachers in a Miami-Dade public school. This specific school has been selected due to ease of access by the researcher. However, the recent Stoneman Douglas High School shooting resulted in increased funding for mental health services in Florida schools. Miami-Dade School District specifically announced in August 2018 that an additional \$6.2 million will be allocated to create a mental health department. The department will hire mental health coordinators and establish a youth mental health first aid training for teachers (Diaz, 2018). As such, a survey targeting teachers in a Miami-Dade school is both convenient and timely.

Both genders will be approached. According to demographic information released by Miami-Dade, teachers are 52.9% Hispanic, 24.3% Black and 20.0% White (Miami-Dade County Public Schools, 2018). Furthermore, these teachers teach a student population that is 71.5% eligible for free/reduced lunch. Miami-Dade has not released data regarding the gender distribution of their teachers, however current national trends indicate that approximately 76% of public school teachers are female (National Center for Education Statistics, 2018). This study will verify these findings.

### **Sampling**

After the research is approved, all of the 30 teachers in the specific Miami-Dade school will be invited to complete the interview. The response rate of this study has yet to be determined, given that the study has not been provided.

### **Conclusion**

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Writing this research proposal has been a long and rewarding process. I have learned a variety of lessons, both about the writing and research process, and about mental health in school systems. First, this paper taught me about the process of choosing what to research. In the beginning, it seemed impossible to pin-point exactly what it was that I wanted to research. Even after I chose mental health as my area of interest, my paper continued to change from a focus on socio-emotional skills, to knowledge and views of mental health. to simply knowledge of anxiety. The process of choosing and re-focusing my research was based on two questions. First, what type of research question will be realistic for me to answer, given my current location and access to research subjects. Second, what type of research question has yet to be answered.

I also learned about the importance of asking only one or two research questions. At first, I had four research questions: “1- What is teachers’ awareness, if any, of their students’ mental health? What is their knowledge, if any, of their students’ mental health? 3- What challenges, if any, do they face relating to their students’ mental health? 4- What strategies, if any, do they utilize regarding their students’ mental health?” My professor, Dr. Adeoye O. Adeyemo, suggested that I had over-extended my research focus. He was correct. Through personal reading and writing, I found that the more variables in my research, the more literature I have to review and the more terms I have to define. At the end, I focused only on teachers’ knowledge of anxiety through two questions: “How do American elementary teachers define anxiety?” and “How do American elementary teachers identify students who have anxiety?”

Writing this paper also taught me about the importance of details. I am not a detail oriented individual. However, I realize now that I must take the extra time to review every single detail within my papers. This ranges from mistakes in spelling to mistakes in APA formatting.

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For example, I utilized an embedded citation program that was unreadable by my professor. In addition, I incorrectly formatted the in-text citation of multiple sources in my sentences.

Forgetting the details can have long-term consequences, and I'm glad that this paper allowed me to learn this lesson early on.

Writing this paper also taught me about my area of research, which is teachers' knowledge of mental health. I learned about the different types of mental health disorders. I learned that anxiety disorder is the most common mental health disorder experienced by both adults and children. Further, I learned that teachers believe in the importance of providing mental health services to students, yet very few teachers are properly trained to identify mental health disorders. It may be that the low priority given to mental health in public school systems is hindering teachers from learning about mental health and also hindering school mental health departments from hiring enough staff to service the mental health needs of students.

Looking to the future, I look forward to researching about different aspects of childhood mental health. Perhaps I may be able to read more about mental health programming in classrooms, school initiatives to increase teachers' mental health and universal mental health screening. I also hope that, someday, I find a means by which my work can be meaningful in allowing for positive change for others.

In the end, I am thankful to my professor, Dr. Adeoye O. Adeyemo, who challenged me and my classmates to produce in a short period of time. I am also thankful to my partner who was patient as I spent valuable time away from her and with my paper. Finally, I am thankful to my mother, who not only encouraged me to pursue my EdD, but whose personal experience obtaining two PhD's has always been an inspiration. I recognize my privilege as an individual

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who comes from a long-line of well-education individuals. Therefore, at the end of this process, I can reflect not only upon the multiple lessons that I have learned, but also on the easy access to knowledge that I have been afforded. I hope that, as a teacher, I am able to give my elementary students the skills and inspiration that will come handy in their future pursuit of knowledge.

### References

- Aguinis, H. &. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology*, 451-457.
- American Psychiatric Association. (2018, August). *What Is Mental Illness?* Retrieved November 22, 2018, from psychiatry.org :  
<https://www.psychiatry.org/patients-families/what-is-mental-illness>
- Askill-Williams, H., & Cefai, C. (2016). Australian and Maltese teachers' perspectives about their capabilities for mental health promotion in school settings. *Teaching and Teacher Education*, 40, 61-72.
- Askill-Williams, H., & Lawson, M. J. (2013). Teachers' knowledge and confidence for promoting positive mental health in primary school communities. *Asia-Pacific Journal of Teacher Education*, 41(2), 126-143.
- Auger, R. W. (2004). THE ACCURACY OF TEACHER REPORTS IN THE IDENTIFICATION OF MIDDLE SCHOOL STUDENTS WITH DEPRESSIVE SYMPTOMATOLOGY . *41(3)*, 379-389.
- Australian Disability Clearinghouse . (2018). *Mental Health Condition* . Retrieved from ADCET:  
<https://www.adcet.edu.au/inclusive-teaching/specific-disabilities/mental-health-condition/>
- Beesdo, K., Bittner, A., Pine, D., Stein, M., Hofler, M., & Wittchen, H. (2007). Incidence of Social Anxiety Disorder and the Consistent Risk for Secondary Depression in the First Three Decades of Life. *Archives of General Psychiatry*, 64(8), 903-912.
- Bittner, A., Egger, H. L., Erkanli, A., Costello, E. J., Foley, D. L., & Angold, A. (2007). What do childhood anxiety disorders predict? . *Journal of Child Psychology and Psychiatry*, 1174-1183.
- Boston University. (2018). *How does mental illness affect my school performance?* Retrieved from BU Central for Psychiatric Rehabilitation:  
<https://cpr.bu.edu/resources/reasonable-accommodations/jobschool/how-does-mental-illness-affect-my-school-performance/>
- Bubier, J. L., & Drabick, D. A. (2009). Co-occurring Anxiety and Disruptive Behavior Disorders: The Roles of Anxious Symptoms, Reactive Aggression, and Shared Risk Processes. *Clinical Psychology Review*, 29(7), 658-669.
- Child Mind Institute . (2016). *2016 Child Mind Institute Children's Mental Health Report*. New York.

## American Elementary Teachers' Knowledge of Anxiety

- Child Mind Institute . (2018). *About Us* . Retrieved from Child Mind Institute:  
<https://childmind.org/about-us/>
- Christensen, H., Pallister, E., Smale, S., Hickie, I., & Clear, A. (2010). Community-Based Prevention Programs for Anxiety and Depression in Youth: A Systematic Review. *Journal of Primary Prevention* , 31(3), 139-170.
- Costello, E. J., Egger, H. L., & Angold, A. (2005). The developmental epidemiology of anxiety disorders: Phenomenology, prevalence, and comorbidity. *Child and Adolescent Psychiatric Clinics of North America*, 631-648.
- Creswell, J. W., & Creswell, D. J. (2018). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (Fifth Edition ed.). Los Angeles: SAGE.
- Cunningham, J. M., & Shannon, M. S. (2014). Accuracy of Teachers in Identifying Elementary School Students Who Report At-Risk Levels of Anxiety and Depression. *School Mental Health* , 237-250.
- Demissie, Z., & Brener, N. (2017). Mental health and social services in schools: Variations by school characteristics—United States, 2014. *Mental Health & Prevention* , 5-11.
- Diaz, A. (2018, August 17). *Miami-Dade Spends \$6.2 Million To Create Mental Health Department*. Retrieved December 15, 2018, from CBS Miami:  
<https://miami.cbslocal.com/2018/08/17/miami-dade-spends-6-2-million-to-create-their-own-mental-health-department/>
- Essau, C. A., Lewinsohn, P. M., Lim, J. X., Ho, M. R., & Rohde, P. (2018). Incidence, recurrence and comorbidity of anxiety disorders in four major developmental stages. *Journal of Affective Disorders*, 248-253.
- Fernandez-Castillo, A., & Gutierrez-Rojas, M. E. (2009). Selective Attention, Anxiety, Depressive Symptomatology and Academic Performance in Adolescents. *Electronic Journal of Research in Educational Psychology*, 49-76.
- Ford, T., Hamilton, H., Meltzer, H., & Goodman, R. (2008). Predictors of Service Use for Mental Health Problems among British Schoolchildren. *Child and Adolescent Health*, 13(1), 32-40.
- Franklin, C., Kim, J., Beretvas, T., Zhang, A., Guz, S., Park, S., . . . Maynard, B. (2017). The Effectiveness of Psychosocial Interventions Delivered by Teachers in Schools: A Systematic Review. *Clinical Child and Family Psychology Review*, 20, 333-350.
- Frauenholtz, S., Mendenhall, A. N., & Moon, J. (2017). Role of School Employees' Mental Health Knowledge in Interdisciplinary Collaborations to Support the Academic Success of Students Experiencing Mental Health Distress. *Children & Schools*, 39(2), 71-79.
- Gelley, C. (2014). Accuracy of Educators in Identifying Middle School Students with Elevated Levels of Anxiety or Depression. *Psychiatric and Mental Health Commons* , 1-264.
- Gibson, J. E., Stephan, S., Brandt, N. E., & Lever, N. A. (2014). Supporting Teachers Through Consultation and Training in Mental Health. In M. D. Weist, C. P. Bradshaw, N. A. Lever, & J. S. Owens (Eds.), *Handbook of School Mental Health* (pp. 269-282). New York : Springer.
- Gilliam, W. (2005). *Prekindergarteners Left Behind: Expulsion Rates in State Prekindergarten Systems*. New York: Foundation for Child Development .
- Graham, A., Phelps, R., Maddison, C., & Fitzgerald, R. (2011). Supporting Children's Mental Health in Schools: Teacher Views. *Teachers and Teaching*, 17, 479-496.

## American Elementary Teachers' Knowledge of Anxiety

- Graziano, P. A., Reavis, R. D., Keane, S. P., & Calkins, S. D. (2007). The role of emotion regulation in children's early academic success. *Journal of School Psychology, 45*, 3-19.
- Greenberg, M. T. (2010). School-based prevention: current status and future challenges. 27-52.
- Grover, R., Ginsburg, G., & Ialango, N. (2007). Psychosocial outcomes of anxious first graders: a seven-year follow-up. *Depression and Anxiety, 24*, 410-420.
- Gulliver, A. G. (2012). Internet-Based Interventions to Promote Mental Health Help-Seeking in Elite Athletes: An Exploratory Randomized Controlled Trial. . *Journal of Medical Internet Research.*
- Headley, C., & Campbell, M. A. (2013). Teachers' Knowledge of Anxiety and Identification of Excessive Anxiety in Children. *Australian Journal of Teacher Education, 28*(5).
- Kataoka, S. H., Zhang, L., & Wells, K. B. (2002). Full Access Unmet Need for Mental Health Care Among U.S. Children: Variation by Ethnicity and Insurance Status. *American Journal of Psychotherapy, 159*(9), 1548-1555.
- Kessler, R., Angermeyer, M., Anthony, J., Graaf, R., Demyttenaere, K., & Gasquet, I. (2007). Lifetime prevalence and age-of-onset distributions of mental disorders in the World Health Organization's World Mental Health Survey Initiative. *World Psychiatry, 6*(3), 168-176.
- Kutcher, S., Wei, Y., McLuckie, A., & Bullock, L. (2013). Educator mental health literacy: a programme evaluation of the teacher training education on the mental health & high school curriculum guide. *Advances in School Mental Health Promotion, 6*, 83-93.
- Labbé, D. (2008). *The Feeling of Anxiety: Phenomenology and Neural Correlates*. Skövde: University of Skövde.
- Macklem, G. (2011). *Evidence-Based School Mental Health Services: Affect Education, Emotion Regulation Training and Cognitive Behavioral Therapy*. Boston: Springer.
- Malik, S. (2015). Undergraduates' Statistics Anxiety: A Phenomenological Study. *The Qualitative Report, 120*-133.
- Martinelli, K., Cohen, Y., Kimball, H., & Miller, C. (2018). *Understanding Anxiety in Children and Teens*. New York : Child Mind Institute .
- Merikangas, K. R., He, J.-p., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., . . . Swendsen, J. (2010). Lifetime Prevalence of Mental Disorders in US Adolescents: Results from the National Comorbidity Study-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry, 49*, 980-989.
- Miami-Dade County Public Schools. (2018). *STATISTICAL HIGHLIGHTS 2017-2018*. Miami-Dade County Public Schools.
- Murphy, J., Guzmán, J., McCarthy, A., Squicciarini, A., George, M., Canenguez, K., . . . Jellinek, M. (2015). Mental Health Predicts Better Academic Outcomes: A Longitudinal Study of Elementary School Students in Chile. *Child Psychiatry Hum Dev, 46*(2), 245-256.
- National Center for Education Statistics. (2018). *Back to school statistics*. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=372>
- National Research Council of Medicine. (2009). *reventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities*. Washington, DC: The National Academies Press .
- Neil, A., & Christensen, H. (2009). Efficacy and effectiveness of school-based prevention and early intervention programs for anxiety. *Clinical Psychology Review, 208*-215.

## American Elementary Teachers' Knowledge of Anxiety

- Oh, E., Mathers, M., Hiscock, H., Wake, M., & Joradana, B. (2015). Professional help seeking for young children with mental health problems. *Australian Journal of Psychology*, 67, 187-195.
- Peate, I. (2017). Expelled students experience high levels of mental health issues. *British Journal of School Nursing*, 395-398.
- Perou, R., Bitsko, R. H., Blumberg, S. J., Pastor, P., Ghandour, R. M., Gfroerer, J. C., & Huang, L. (2013). Mental health surveillance among children—United States, 2005-2011. *Morbidity and Mortality Weekly Report Supplement*, 62(2), 1-35.
- Pullmann, M., Bruns, E., Daly, B., & Sander, M. (2013). Improving the evaluation and impact of mental health and other supportive school-based programmes on students' academic outcomes. *Advances in School Mental Health Promotion*, 226-230.
- Reinke, M., Stormont, Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly*, 26, 1-13.
- Rittblatt, S., Hokoda, A., & Charles, V. L. (2017). Investing in the Early Childhood Mental Health Workforce Development: Enhancing Professionals' Competencies to Support Emotion and Behavior Regulation in Young Children. *Brain Sciences*, 7, 1-19.
- Robinson, L., Holbook, J., Bitsko, R., Hartwing, S., Kaminski, J., Ghandou, R., . . . Boyle, C. (2017). Differences in Health Care, Family, and Community Factors Associated with Mental, Behavioral, and Developmental Disorders Among Children Aged 2–8 Years in Rural and Urban Areas — United States, 2011-2012. *Morbidity And Mortality Weekly Report. Surveillance Summaries*, 1-11.
- Roeser, R. W., & Midgley, C. (1997). Teachers' Views of Issues Involving Students' Mental Health. *The Elementary School Journal*, 98(2), 115-133.
- Rones, M., & Hoagwood, K. (2000). School-based mental health services: A research review. *Clinical Child and Family Psychology Review*, 3, 223-241.
- Rothi, D., Leavey, G., & Best, R. (2008). On the front-line: Teachers as active observers of pupils' mental health. *Teaching and Teacher Education*, 24, 1217-1231.
- Saavedra, L. M., Silverman, W. K., & Morgan-Lopez, A. A. (2010). Cognitive behavioral treatment for childhood anxiety disorders: long-term effects on anxiety and secondary disorders in young adulthood. *Journal of Child Psychology and Psychiatry*, 51(8), 923-934.
- Satcher, D., Friel, S., & Bell, R. (2007). Natural and Manmade Disasters and Mental Health. *Journal of the American Medical Association*, 298, 2540-2542.
- Spencer, A. M. (2013). *Blind Spot: The Impact of Missed Early Warning Signs on Children's Mental Health*. Hartford: Center for Children's Advocacy.
- Stanley, M. J., Canham, D. L., & Cureton, V. Y. (2006). Assessing Prevalence of Emotional and Behavioral Problems in Suspended Middle School Students. *Journal of School Nursing*, 40-47.
- Stormont, M., Reinke, W., & Herman, K. (2011). Teachers' Knowledge of Evidence-Based Interventions and Available School Resources for Children with Emotional and Behavioral Problems. *J Behav Educ*, 138-147.
- Taras, H. L. (2004). Policy Statement—School-Based Mental Health Services. *Pediatrics*, 113, 1839-1845.

## American Elementary Teachers' Knowledge of Anxiety

- Trudgen, M., & Lawn, S. (2011). What is the Threshold of Teachers' Recognition and Report of Concerns About Anxiety and Depression in Students? An Exploratory Study With Teachers of Adolescents in Regional Australia. *Australian Journal of Guidance and Counseling, 21*(2), 126-141.
- Walkup, J. T., Albano, A. M., Piacentini, J., Birmaher, B., Compton, S. N., Sherrill, J. T., & Kendall, P. C. (2008). Cognitive Behavioral Therapy, Sertraline, or a Combination in Childhood Anxiety. *The New England Journal of Medicine, 359*(26), 2753-2766.
- Walter, H. J., Gouze, K., & Lim, K. G. (2006). Teachers' Beliefs About Mental Health Needs in Inner City Elementary Schools. *Journal of the American Academy of Child and Adolescent Psychiatry, 45*(1), 61-68.
- Wang, P. S., Berglund, P., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Failure and Delay in Initial Treatment Contact After First Onset of Mental Disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 603-613.
- Wei, Y., McGrath, P. J., Hayden, J., & Kutche, S. (2015). Mental health literacy measures evaluating knowledge, attitudes and help-seeking: a scoping review. *BMC Psychiatry, 15*, 1-20.
- Weist, M. D., Lever, N. A., Bradshaw, C. P., & Sarno, J. O. (Eds.). (2014). *Handbook of School Mental Health: Research, Training, Practice, and Policy*. New York: Springer.
- Wolfe, D. A., & Mash, E. J. (Eds.). (2006). *Behavioral and Emotional Disorders in Adolescents*. New York: The Guilford Press.
- Wolk, C., Caporino, N., McQuarrie, S., Settapani, C., Podell, J., Crawley, S., . . . Kendall, P. (2016). Parental Attitudes, Beliefs, and Understanding of Anxiety (PABUA): Development and psychometric properties of a measure. *Journal of Anxiety Disorders, 31*, 71-78.
- World Health Organization. (2004). *Prevention of mental disorders: Effective interventions and policy options: Summary report*. Geneva, Switzerland: World Health Organization, Department of Mental Health and Substance Abuse.
- World Health Organization. (2013). *Mental health: A state of well-being*. Retrieved November 22, 2018, from World Health Organization: [http://www.who.int/features/factfiles/mental\\_health/en/index.html](http://www.who.int/features/factfiles/mental_health/en/index.html).
- World Health Organization. (2017, April 28). *Mental health in emergencies*. Retrieved from World Health Organization: <http://www.who.int/news-room/fact-sheets/detail/mental-health-in-emergencies>