

Anxiety in the School Setting: A Framework for Evidence-Based Practice

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Abstract Anxiety is a common emotional problem across development. Given that children spend approximately 50% of their waking-hours in school, it is important to consider how anxiety manifests within this setting and the unique difficulties that anxious children may experience while at school. The current paper reviews the impact of anxiety in children at the student, classroom, and district levels. Additionally, recommended treatment approaches at different developmental levels are discussed and secondary outcomes of treatments (i.e., social, emotional, and academic functioning, as well as attendance) are reviewed. Finally, recommendations for the school setting are offered at the universal, targeted, and indicated levels using a response to intervention framework.

Keywords Anxiety · School · Treatment · Child

Anxiety is one of the most common emotional problems in childhood and adolescence and is associated with impairment and interference across a myriad of domains, including social and emotional functioning, scholastic achievement, and family relationships (Langley, Bergman, McCracken, & Piacentini, 2004; Nail et al., 2015). Understanding how difficulties associated with anxiety in children and adolescents manifest in the school setting is particularly important, given that children spend half of their waking-hours in school. This review will focus on anxiety broadly, emphasizing aspects of anxiety disorders that are most likely to cause

difficulties within the school setting. For instance, children and adolescents with generalized anxiety disorder (GAD) often experience significant physiological symptoms, attention difficulties, and frequent worries across domains that are difficult for them to control and that can interfere with academic and social functioning in school (American Psychiatric Association [APA], 2013). On the other hand, social phobia is characterized by social-evaluative concerns and a fear of negative evaluation, prompting significant anxiety in social situations, such as the classroom (APA, 2013). Another common anxiety disorder experienced by children is separation anxiety disorder (SAD), in which children have difficulty separating from a loved one (APA, 2013). Anxiety disorders in youth can also present with school reluctance or school refusal that is motivated by a host of fears such as negative evaluation by peers or performance on an examination, the former referring to a child-motivated resistance to attend school or stay in class once at school, and the latter referring to the actual avoidance of school (Jones & Suveg, 2015; Kearney, 1996).

This paper discusses the impact of childhood anxiety at the student, classroom, and district levels. Additionally, a broad overview of empirically supported prevention and treatment approaches for childhood anxiety disorders and the impact of treatment on secondary outcomes (i.e., social and emotional functioning, academic achievement, and attendance) is provided. Interventions are classified based on established criteria for efficacy (see Southam-Gerow & Prinstein, 2014 for overview), and only those interventions with strong or good support (i.e., *well established* or *probably efficacious*, respectively) are included in this review. For an intervention to be considered *well established*, it must have demonstrated efficacy by two independent investigatory teams and the treatment must have been shown to be statistically superior to pill or psychological placebo, another active

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treatment, or to be equivalent to an already *well established* treatment. To be considered *probably efficacious*, an intervention must have been shown to be statistically superior to a waitlist control or to have demonstrated efficacy by a single investigatory team. Finally, specific recommendations for school mental health providers and areas for future research are discussed.

Impact on Schools

Student Level

Anxious youth experience greater difficulties in the school setting compared to their non-anxious counterparts in multiple domains, including social, emotional, and academic functioning, as well as attendance. A subset of children with anxiety will exhibit school reluctance or school refusal. School refusal among anxious youth is associated with greater psychiatric severity and poorer psychosocial functioning when compared to anxious children who are not school refusing (Ingul & Nordahl, 2013). While there is no literature to date that has examined academic achievement in school reluctant youth, initial evidence does suggest greater social and emotional difficulties (e.g., loneliness, negative affect), and greater clinician-rated anxiety severity when compared to their non-school reluctant, anxiety disordered peers (Jones & Suveg, 2015).

In addition to difficulties attending and staying in school, anxiety in children and adolescents is associated with global academic underachievement, as well as specific impairments in academic functioning (e.g., poor concentration, difficulty reading aloud/giving oral reports, and test anxiety; Nail et al., 2015). Active participation exercises, including reading aloud and presenting in class, are often a part of the curriculum at all stages of education, and difficulties performing these tasks may contribute to lower academic achievement (Van Ameringen, Mancini, & Farvolden, 2003). Further, a large body of research consistently finds that youth with anxiety experience difficulties regulating their emotions (Southam-Gerow & Kendall, 2000; Suveg & Zeman, 2004). Regulating emotions effectively to meet the demands of the environment is critical for multiple domains of functioning across age levels (e.g., social competence, academic achievement; Blair, 2002). As such, dysregulated emotions may interfere with academic performance, as emotion regulation is important in higher-order cognitive processes such as working memory, attention, behavioral control, and planning (Graziano, Reavis, Keane, & Calkins, 2007).

In sum, research shows that children and adolescents with anxiety are likely to experience significant difficulties across multiple domains (i.e., somatic symptoms, social, emotional, and academic functioning). Though anxiety

most certainly contributes to impairment across domains, it is important to also recognize the bidirectional effects in which difficulties in various domains (i.e., social, emotional, and academic) may lead to the development or maintenance of anxiety (e.g., Reijntjes, Kamphuis, Prinzie, & Telch, 2010).

Classroom Level

Social, emotional, and academic impairments extend beyond the individual student and can interfere at the classroom level (Killu, Marc, & Crundwell, 2016). For example, youth with social phobia have social-evaluative concerns, which oftentimes lead them to attempt to avoid active participation in the classroom (Nail et al., 2015). Anxious youth may also be reluctant to participate in group activities or projects, due to concerns related to social interactions or performance and subsequent evaluation (Weems, Silverman, & La Greca, 2000). These avoidance or withdrawal behaviors have the potential to create conflict within the group if the anxious student is not actively participating or is unwilling to complete his or her portion of the project. On the contrary, some anxious youth may try to exert control over their group members and their roles in the project due to concerns related to perfectionism (Kawamura, Hunt, Frost, & DiBartolo, 2001).

In addition to difficulties with participation and engagement in class activities, anxious youth may exhibit disruptive behaviors (Bubier & Drabick, 2009), and these behaviors may interfere with the learning of other students in the classroom. A subset of anxious youth, particularly younger children, may have difficulties separating from their caregiver upon arrival at school (Masi, Mucci, & Millepiedi, 2001). These children may tantrum upon separation, and these behaviors might be disruptive to the classroom (Doobay, 2008). Further, reassurance seeking is common in children with anxiety disorders (Beesdo-Baum et al., 2012) and may lead the child to ask questions repeatedly of the teacher or peers (e.g., “Am I doing this right?” and “Are you sure?”). Classmates and teachers may become annoyed and frustrated with this, and it may make it more difficult for other children in the class to focus. Taken together, anxious youth may experience difficulties (e.g., participation in class and group projects, social avoidance, and withdrawal) and exhibit disruptive behaviors (e.g., asking excessive questions in the classroom setting, restlessness, and inattention) that interfere with the classroom environment. However, more empirical research is needed to better understand how anxiety at the student level impacts the classroom setting and learning environment.

District Level

While there has been a focus on school-based prevention and intervention programs and district-level policy (for review, see Neil and Christensen, 2009; Sulkowski, Joyce, & Storch, 2012), a smaller body of research has focused on the impact of anxiety disorders at the school and district levels. As previously mentioned, anxiety disorders in children and adolescents are associated with poorer academic performance and school attendance. Specifically, youth with anxiety disorders may suffer from test anxiety or difficulties with concentration and attention (Von Der Embse, Bartenian, & Segool, 2013), which could contribute to poor test performance especially on high-stakes examinations. Educators are under increased pressure to meet yearly achievement targets, with possible consequences ranging from replacing school staff to having the State Department of Education take over the entire school district (Von Der Embse et al., 2013). Additionally, research suggests that older children and adolescents with anxiety disorders are at greater risk of dropping out of school prematurely compared to their non-disordered peers (Kessler, Foster, Saunders, & Stang, 1995; Van Ameringen et al., 2003). Not only is premature dropout from school associated with significant social and economic consequences (Kessler et al., 1995), but increased school dropout rates may also reflect poorly on the school and the school district. Due to the negative impact of child anxiety disorders at multiple levels (i.e., student, classroom, and district), it is important to understand the most effective treatment approaches for child anxiety disorders. Additionally, recommendations to help manage these school-interfering behaviors are offered later in the review.

Prevention and Treatment of Anxiety Disorders

As anxiety disorders in children and adolescents negatively impact schools at the student, classroom, and district levels, it is important to consider appropriate prevention and intervention programs to alleviate student anxiety. Prevention programs are provided in the school setting at either the universal, targeted, or indicated level. Services at the universal level are provided to all students, whereas those receiving targeted services are considered “at risk” of the development of anxiety, and those at the indicated level have some degree of anxiety which warrants individualized intervention (Sulkowski et al., 2012). A meta-analysis published by Stockings et al. (2016) found that cognitive behavioral therapy (CBT)-based preventive programs provided at the universal, targeted, and indicated levels produced reductions in internalizing disorder (i.e., anxiety and depressive disorder) onset at nine months post-program completion for elementary school-, middle school-, and high school-aged

youth. When examining CBT-based prevention programs, comparable effect sizes were found for anxiety prevention programs at post-program completion when delivered at the universal or targeted level (Werner-Seidler, Perry, Callear, Newby, & Christensen, 2017) and at the universal or indicated level (Corrieri et al., 2013) for elementary school-, middle school-, and high school-aged youth.

Preschool

With roughly nine percent of preschool-aged children experiencing clinically significant anxiety (Egger & Angold, 2006), there has been increased focus on empirical investigations of prevention and intervention strategies for anxiety disorders in this age group (for review, see Luby, 2013). A recent review by Higa-McMillan, Francis, Rith-Najarian, and Chorpita (2016) identified multiple components of cognitive behavioral interventions that are considered *well established* for the treatment of anxiety during the preschool period when implemented in the school setting. For example, modeling involves a peer or trusted adult demonstrating adaptive coping in an anxiety-provoking situation followed by the youth doing likewise. Further, graduated exposure in which the child is asked to confront feared stimuli in a hierarchical progression, beginning with situations that evoke little anxiety and working toward confronting very anxiety-provoking situations, is another basic behavioral strategy that can be implemented in either a group or individual format within the school setting (Higa-McMillan et al., 2016). Given the developmental level of preschool-aged youth, interventions for this age group always involve a parent or caregiver (Luby, 2013). The involvement of a parent or caregiver helps to ensure that the parent/caregiver is aware of the strategies used by school personnel to target the child’s anxiety and encourages generalization into the home setting. In sum, research supports the involvement of parents/caregivers and the implementation of basic behavioral strategies, such as modeling and exposure, for the treatment of preschool-aged youth with anxiety in the school setting.

Elementary School

When considering intervention for childhood anxiety disorders, results from recent meta-analyses suggest that CBT is *well established* for the treatment of anxiety disorders in elementary school-aged youth when delivered in either group or individual format within the school setting (Higa-McMillan et al., 2016). CBT includes the identification of symptoms of anxiety and exercises to calm physiological symptoms of anxiety (e.g., heart racing, tense muscles). Children are taught to identify thoughts that serve to maintain or increase their anxiety (e.g., “I know I’m going to fail this test!”) and replace them with coping thoughts (e.g., “I

studied hard for this test and I am well prepared to at least do OK!”). Additionally, as with individuals of all ages, children are gradually exposed to feared situations while using their coping skills in an effort to build a sense of self-efficacy. Additionally, relaxation (e.g., progressive muscle relaxation and diaphragmatic breathing) is considered *probably efficacious* when delivered in a group setting for the treatment of child anxiety within the school setting (Higa-McMillan et al., 2016).

Taken together, CBT is *well established* and relaxation is *probably efficacious* for the treatment of anxiety disorders in elementary school-aged youth, with each of these interventions garnering strong support for their implementation within the school setting.

Middle and High School

Middle school and high school encompass unique times in child development. The systematic reviews and meta-analyses discussed below do not explicitly separate findings in middle school- and high school-aged youth, with the exception of one intervention only examined in high school students. Though we are unable to effectively separate the status of prevention and treatment programs for middle school- and high school-aged youth in this review, it is nonetheless recommended that developmental considerations be made (e.g., cognitive ability, salience of examples, etc.) when implementing these interventions with middle school versus high school students.

The support for CBT in the treatment of anxiety disorders in adolescence is similar to that found in elementary school-aged children, and CBT delivered in the school setting for this age group is considered a *well-established* treatment approach (Higa-McMillan et al., 2016). In addition to CBT, exposure and modeling are also considered *well established* for the treatment of middle school- and high school-aged youth with anxiety and have strong support for their implementation within the school setting. Further, relaxation and assertiveness training delivered in a group setting are considered *probably efficacious* interventions for the treatment of anxiety in the school setting. Additionally, stress inoculation (e.g., progressive muscle relaxation, cognitive restructuring, and assertiveness training delivered in a group setting) has been shown to be *probably efficacious* in the treatment of anxiety in high school-aged youth. In sum, there is support for targeting anxiety symptoms through CBT-based interventions in the school setting for youth with anxiety disorders.

Collectively, research supports the implementation of prevention programs for anxiety symptoms at the universal, targeted, and indicated levels. There is strong empirical support for the use of CBT, as well as modeling and exposures (components of CBT), as a *well-established* intervention for the

treatment of anxiety disorders across developmental levels. Further, results are promising for other *probably efficacious* intervention approaches, such as relaxation, assertiveness training, and stress inoculation.

Treatment Outcomes

Given the broad impact of anxiety disorders in youth, it is important to examine the potential positive impacts of treatment on various developmental domains that impact youth's functioning in the school context.

Social

Children and adolescents with anxiety disorders are more likely than their non-anxious peers to experience social difficulties evident in the school setting, which may lead them to be viewed more unfavorably by their peers and contribute to avoidance of social activities and events (e.g., group projects and extracurricular activities; Kingery, Erdley, Marshall, Whitaker, & Reuter, 2010). Research has begun to examine the impact of CBT for child anxiety on social functioning with mixed findings. For example, Flannery-Schroeder and Kendall (2000) found no significant changes pre- to post-treatment on any social functioning variables (i.e., loneliness, friendships, and social activities) in children aged 8–14 years. On the other hand, Settapani and Kendall (2013) found that parent-reported child social competence was significantly related to decreases in child anxiety following treatment in a sample of 7–14-year-old youth. Wood (2006) found in a sample of children aged 6–13 years significant relationships between decreases in clinician- and child-reported anxiety following treatment and child-reported social acceptance. Additionally, clinician- and parent-reported decreases in child anxiety were significantly related to parent-reported child social competence (Wood, 2006). Suveg et al. (2009) found that mothers reported significant improvements in social competence for their children (age 7–14 years) that occurred following CBT treatment (post-assessment to one-year follow-up). Overall, the evidence supports the improvement in social competence following the treatment for child anxiety disorders; however, the limited data thus far do not support improvement for other social variables, such as loneliness and friendships.

Emotional

In addition to social difficulties, anxiety disorders in children are marked by difficulties in emotion regulation and emotion understanding, which may present unique challenges in the school setting (Southam-Gerow and Kendall, 2000; Suveg & Zeman, 2004; Zeman, Cassano, Perry-Parrish, &

Stegall, 2006). Suveg et al. (2009) examined pre- to post-treatment changes in emotional functioning in children aged 7–14 years following a standard CBT protocol for child anxiety. Results from this study showed significant increases in emotional awareness and coping from pre- to post-treatment. Additionally, there was evidence of less emotional dysregulation at post-treatment; however, this was only true for worry and was not seen for other emotions (Suveg et al., 2009). Further, broader emotion-focused approaches to CBT have been explored with the goal of targeting more emotions in addition to anxiety (e.g., sadness, anger; Suveg, Kendall, Comer, & Robin, 2006). Most recently, an RCT comparing an emotion-focused CBT program to traditional CBT in children aged 7–12 years found significant improvements in emotion regulation and reduction in emotion dysregulation across both treatments (Suveg et al., 2017).

Academic

Empirical studies have found a significant relationship between anxiety disorders in youth and poorer school performance and academic achievement (Essau, Conradt, Petermann, 2000; Ialongo, Edelsohn, Werthamer-Larsson, Crockett, & Kellam, 1995). Given the increased pressures for performance as children progress through middle and high school, there has been significant research on modified CBT interventions for youth with test anxiety. In a study of ethnic minority youth exposed to Hurricane Katrina, Weems et al. (2009) examined a CBT approach for test anxiety in ninth graders aged 13–16 years and found significant effects on academic performance as measured by grade point average. Bradley et al. (2010) found initial support for greater improvement on standardized test performance following a biofeedback intervention for those with high test anxiety compared to the control group in a sample of adolescents (mean age 15 years).

When using parent reports of child academic functioning, Wood (2006) found a significant relationship between improvement in anxiety symptoms and school performance from pre- to post-CBT in youth aged 6–13 years. A study by Suveg et al. (2009) in a sample of youth aged 7–14 years showed differences based on mother and father reports, with mothers reporting significantly greater improvement in academic functioning for boys in the active treatment conditions (family and individual CBT) in comparison with youth in the control condition. On the other hand, fathers endorsed greater improvement in academic functioning for younger children, regardless of treatment condition, compared to older children.

In sum, there is empirical support for improvement in academic functioning and scholastic performance following CBT interventions for test anxiety in high school-aged students and childhood anxiety disorders in elementary

school- and middle school-aged youth, as well as following biofeedback interventions for high school students with test anxiety. Given that interventions with text anxious youth were the only studies to examine direct academic performance outcomes (i.e., test scores and GPA), further research is warranted to examine these specific outcomes in CBT protocols for childhood anxiety disorders.

Attendance

School attendance is an important variable to consider, given its relationship to academic achievement (Roby, 2004). There is a subset of anxious youth who are also school refusing and struggle with poor attendance (Bernstein et al., 2000). In research that has examined changes in attendance following treatment for anxious school-refusing youth, results have been promising. For example, Last, Hansen, and Franco (1998) compared a CBT approach to a control condition (i.e., educational and supportive therapy) in anxious school-refusing youth aged 6–17 years and found that both groups showed improvement in attendance over time. Additionally, Heyne, Sauter, Van Widenfelt, Vermeiren, and Westenberg (2011) examined an augmented CBT approach (i.e., greater parent, teacher, and school personnel involvement) in anxious school-refusing adolescents aged 10–18 years and found a significant increase in attendance from pre- to post-treatment. Additionally, King et al. (1998) conducted a randomized controlled trial looking at changes in attendance in anxious school-refusing youth aged 5–15 years and found that adolescents in the CBT condition showed significant increases in attendance compared to youth in the waitlist condition and maintained these gains over time (King et al., 2001). Overall, there is consistent support for cognitive behavioral interventions in the treatment of anxious school-refusing youth and gains in school attendance appear to be maintained for an extended amount of time following treatment.

Recommendations

Given the impact of child anxiety disorders at multiple levels (i.e., student, classroom, and district) and the support for treatment approaches on the reduction in anxiety symptoms and improvements in other domains (i.e., social, emotional, academic, and attendance), recommendations are provided below for addressing anxiety within the school setting (see Table 1 for an overview). Stephan, Sugai, Lever, and Connors (2015) highlight some of the difficulties with implementing interventions within the school setting, such as a lack of training and support for school mental health providers, early identification of students who may benefit from services, privacy concerns, and lack of financial resources.

Table 1 Recommendations for addressing anxiety at multiple levels within the school system

Evidence-based approach	Implemented by	Settings for implementation	Timing of implementation
<p>Universal level</p> <p>Screening using self-report measures of anxiety symptoms (e.g., BESS; Strengths and Difficulties Questionnaire)</p> <p>School-wide positive behavioral interventions and supports (SW-PBIS)</p> <p>FRIENDS (CBT program designed for different age ranges)</p> <p>Fun friends (4–7)</p> <p>FRIENDS for life (8–11)</p> <p>My friend's youth (12–15)</p> <p>Adult resilience (16 +)</p>	<p>School counselor, teacher</p> <p>Trained school personnel (e.g., administrators, special education teachers) teach all teachers and staff within the school</p> <p>Trained facilitators (can be school teachers or other trained and certified personnel)</p> <p>School counselor, teacher</p>	<p>School/classroom</p> <p>All school settings: classroom, bus, playground, cafeteria</p> <p>School/classroom</p> <p>School/classroom</p>	<p>First month of school year</p> <p>Ongoing</p> <p>Ongoing</p> <p>Designed for 5, 2–2.5-h sessions, but can be divided and implemented, however, best fits the school/classroom schedule (i.e., weekly, monthly)</p> <p>Following universal-level screening</p>
<p>Targeted level</p> <p>Multi-reporter assessment (e.g., MASC—Child and MASC—Parent) and observations</p> <p>Group-based CBT interventions</p> <p>Group-based exposure interventions</p> <p>Group-based modeling interventions</p>	<p>School counselor, teacher</p> <p>Trained school counselor or social worker</p> <p>Trained school counselor</p> <p>Trained school counselor or teacher</p> <p>Trained school counselor or social worker</p>	<p>School/classroom</p> <p>School counselor's office, conference room, online</p> <p>School</p> <p>School counselor's office, conference room, online</p> <p>School counselor's office</p>	<p>Can be delivered at varying frequencies (i.e., daily to monthly). Duration varies, but is typically 8–16 weeks</p> <p>Can be delivered at varying frequencies (i.e., daily to weekly). Duration varies, but is typically no more than 14 weeks</p> <p>Can be delivered at varying frequencies (i.e., daily to weekly). Duration varies, but is typically no longer than 6 months</p> <p>Can be delivered at varying frequencies (i.e., daily to monthly). Duration varies, but is typically 8–16 weeks</p> <p>Can be delivered at varying frequencies (i.e., daily to weekly). Duration varies, but is typically no more than 14 weeks</p> <p>Can be delivered at varying frequencies (i.e., daily to weekly). Duration varies, but is typically no longer than 6 months</p>
<p>Indicated level</p> <p>Individual CBT</p> <p>Individual exposure interventions</p> <p>Individual modeling interventions</p> <p>Strategic accommodations delivered through an IEP^a</p> <p>Strategic accommodations delivered through a 504 plan^a</p>	<p>School counselor</p> <p>Trained school counselor</p> <p>Trained school counselor or teacher</p> <p>School personnel</p> <p>School personnel</p>	<p>School</p> <p>School counselor's office</p> <p>School counselor's office</p> <p>School</p> <p>School counselor's office</p> <p>All school settings</p> <p>All school settings</p>	<p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>

^aIt is recommended that caution be exercised when establishing accommodations for youth with anxiety, as many of these accommodations (e.g., more frequent visits to the nurse, more frequent bathroom breaks, alternative assignments) may lead to inadvertent maintenance or exacerbation of the child's anxiety

These issues are acknowledged, and attempts to address some of these difficulties are provided within the context of the recommendations offered below.

Universal Level

Prevention programs at the universal level are services delivered to every student in the school, regardless of the presence of anxiety symptoms or diagnoses, with the goal being to teach skills to all children regardless of the severity or presence of anxiety symptoms, in hopes to reduce their occurrence and lessen the need for additional services (Lowry-Webster, Barrett, & Dadds, 2001). A universal approach to the assessment and treatment of anxiety has the benefit of reaching a wide number of students, reducing difficulties with identifying students for inclusion, and decreasing stigmatization (Essau, Conradt, Sasagawa, & Ollendick, 2012). Schools utilize a response to intervention (RtI) framework to address the needs of all students. RtI is a multi-tiered approach to prevention and intervention that involves screening, early intervention, and continual monitoring of students (Sulkowski, Wingfield, Jones, & Coulter, 2011).

In the RtI framework, Tier 1 operates at the universal level and has two primary functions: screening and dissemination of evidence-based prevention services (Sulkowski et al., 2012). As noted in Table 1, school-wide screenings can be implemented in the school setting (e.g., classrooms, cafeteria) by a variety of staff members (e.g., teachers, counselors), at any time in the school year, and may occur at multiple time points (e.g., beginning of school year, half-way through school year). Universal screening allows identification of youth with elevated anxiety levels and may involve self-report measurement tools such as the Behavioral and Emotional Screening System (BESS; Kamphaus & Reynolds, 2015). Self-report administered screenings are cost-effective, require minimal training to administer and score, and are relatively easy to administer to a large group of students simultaneously (McLoone, Hudson, & Rapee, 2006). Notwithstanding, given the significant financial burden often experienced by schools (Stephan et al., 2015), free universal screening measures, such as the Strengths and Difficulties Questionnaire, may be preferable (Goodman, 1997, 1999; Goodman, Meltzer, & Bailey, 1998). Youth who are identified as at risk during the screening process may be referred for Tier 2 services, as discussed below.

The second function of RtI Tier 1 is the implementation of developmentally appropriate, evidence-based prevention services to all students in the school. Reviews by Neil and Christensen (2009) and Werner-Seidler et al. (2017) identified numerous school-based prevention programs for anxiety. CBT, or related components, comprised 78% of the programs in the review by Neil and Christensen (i.e., FRIENDS, Positive Thinking Program). Other therapeutic

practices such as teaching relaxation techniques, enhancing communication skills, and exercise were also shown to be effective (for review see Neil & Christensen, 2009). Meta-analyses by Werner-Seidler et al. (2017) and Stockings et al. (2016) found that universal prevention programs had long-term benefits on the reduction in internalizing disorder onset, which further highlights their utility for children regardless of risk status. As described in Table 1, these programs can be implemented by trained staff in a variety of different settings (e.g., classroom, cafeteria, playground). Depending on the program, it may be applied throughout the school year on an ongoing basis (e.g., school-wide positive behavioral interventions and supports), or rather it may be a time-limited program that occurs on a weekly or monthly basis for a specified amount of time (e.g., FRIENDS). These programs offer a variety of resources to teachers and service providers to help assist their training and implementation.

Targeted Level

For those children identified as at risk for anxiety difficulties by school-wide screenings or teacher identification, a more targeted assessment and intervention approach may be warranted (Sulkowski et al., 2012). Within the RtI framework, these children would progress from Tier 1 to Tier 2. More specific instruments that assess for anxiety symptoms may be beneficial at this juncture (e.g., Multidimensional Anxiety Scale for Children; March, 2012). As discussed in Table 1, these specific screening instruments can be given to children by the school counselor or the child's classroom teacher and typically take no longer than 10 minutes to complete. Further, a multi-method and multi-reporter approach is recommended and may include the addition of parent reports (e.g., Multidimensional Anxiety Scale for Children—Parent Version; March, 2012) and teacher reports (e.g., Teacher Report Form; Achenbach & Rescorla, 2001), as well as behavioral observations in the school setting. Behavioral observations within the classroom setting can be conducted by the school counselor or other trained personnel to better inform treatment recommendations.

Following a more focused symptom-specific screening, children who exhibit elevated levels of anxiety and may benefit from more targeted interventions can be identified. At the targeted level of intervention, group-based treatments might be most efficient (Sulkowski et al., 2012). CBT, exposure, and modeling are all considered *well-established* treatments at each developmental level and can be implemented in group settings (Higa-McMillan et al., 2016). Given the documented limited training and support for school mental health professionals (Stephan et al., 2015), workforce training such as continuing education workshops are recommended and are offered at many major national conferences that focus on both theory and practice of CBT (e.g.,

Association for Behavioral and Cognitive Therapies; American Psychological Association; Anxiety and Depression Association of America). Of course, when the child's anxiety is so severe that treatment within the school setting is not an option, the child's family can be provided with potential community resources. See Table 1 for recommendations on the implementation of the above interventions.

Indicated Level

For children who do not show significant gains following Tier 2 interventions and move to Tier 3, a more individualized approach should be considered. CBT, exposure, and modeling are considered *well-established* interventions for the treatment of anxiety at all developmental levels and have strong support for their deliverance via individual sessions (Higa-McMillan et al., 2016). Individual CBT sessions can be delivered at varying frequencies (i.e., daily to monthly), and a typical course of treatment usually lasts between 8 and 16 weeks. CBT sessions should be provided by a trained school counselor or social worker and can be held in the school counselor's office or another private room at the school. Further, exposure sessions and modeling interventions can be provided daily to weekly by a trained school counselor and typically do not last more than 14 weeks and 6 months, respectively. Table 1 details recommendations for the implementation of these interventions.

To address anxiety within the school setting and improve academic performance and school attendance among anxious youth, schools provide services such as Individualized Education Plans (IEPs). IEPs emerged from the Individuals with Disabilities Education Improvement Act (IDEIA) and are special education services provided to students who are eligible for an "emotional disturbance" or "other health impairment" disability classification under IDEIA. IEPs are individualized to the students presenting difficulties and are intended to help foster success in the school setting by describing what effect the student's disability has on academic performance, delineating goals to be addressed by the IEP, and describing supports and interventions that the student will receive (Sulkowski et al., 2012). Additionally, youth with anxiety disorders may also receive services under Section 504 of the Rehabilitation Act. This act seeks to provide reasonable accommodations to individuals with disabilities to aid in academic performance (e.g., more time on tests, grading and assessment changes). In contrast to IDEIA, Section 504 does not require a specific disability classification and can be implemented to address temporary or chronic problems. This act requires the child's anxiety symptoms to substantially limit at least one major life activity (e.g., speaking, reading, writing, self-care) as determined by multiple informants (Sulkowski et al., 2012). It is important that schools try to address children's anxiety in an

effective and efficient manner to reduce anxiety symptoms and the need for additional resources, rather than accommodating anxiety in a way that maintains the symptoms and need for resources over time (Lebowitz et al., 2013). To accomplish this goal, it is important that school personnel refer to evidence-based treatments for youth with anxiety when deciding on recommendations for accommodations to be sure that the services youth receive are supported by research (Killu et al., 2016). For example, a student presenting with generalized anxiety disorder who is having significant attention difficulties because of anxiety may benefit from taking examinations in a distraction-free setting, such as the school counselor's office. Over time, as the child becomes less anxious, he/she can be moved back into the regular classroom for test taking. Further, a student presenting with social phobia may benefit from initially being placed with familiar peers when conducting group projects, moving toward gradually adding unfamiliar peers to the group over the course of the academic year.

It is recommended that caution be exercised when establishing accommodations for youth with anxiety, as many of these accommodations may lead to inadvertent maintenance or exacerbation of the child's anxiety. For example, a child who experiences extreme separation anxiety, school refusal, or social phobia should generally not be recommended for homeschooling, as this allows for avoidance and reinforces the child's anxiety (Sulkowski et al., 2012). Taken together, although it is important for anxiety to be recognized and appropriate action taken, school personnel should be careful not to inadvertently reinforce the child's anxiety through accommodations.

Summary and Future Directions

A common difficulty across development, anxiety can interfere in multiple areas of daily life, including social and emotional functioning, scholastic achievement, and familial relationships (Langley et al., 2004; Nail et al., 2015). As children spend approximately 50% of their waking-hours at school, it is important to understand the presentation of anxiety and unique difficulties associated with anxiety in the school setting. Anxiety is associated with challenges at the student (e.g., physiological symptoms, academic underachievement, etc.), classroom (e.g., avoidance of active participation in the classroom, disruptive behaviors, etc.), and district (e.g., IEPs) levels. Research has identified multiple *well-established* interventions for the treatment of youth with anxiety, including CBT, exposure, and modeling that can be implemented in the school setting. Additionally, other interventions at each developmental level that are classified as *probably efficacious* are discussed. Many of these interventions can be applied across multiple developmental

levels and can be delivered in individual and group formats within the school setting. While CBT is considered a *well-established intervention* for anxiety in youth and a plethora of studies in the literature have examined changes in direct scholastic achievement following CBT interventions for test anxiety, only parent-proxy reports of academic functioning have been collected in treatment outcome studies examining CBT in the treatment of child anxiety more broadly. As such, it is recommended that future research aim to provide more concrete measures of scholastic achievement when evaluating the outcomes of CBT for child anxiety.

Recommendations are provided within the RTI framework and include universal screenings, positive behavioral intervention and supports, specific anxiety screenings, group-based treatment approaches, and individualized treatment approaches. Though it is important to provide appropriate accommodations to children and adolescents that experience impairing anxiety, accommodations should be implemented with caution, as not to inadvertently maintain or exacerbate anxiety symptoms. Schools often encounter barriers to implementation of recommended interventions in the school system, such as a lack of training and support for school mental health providers, early identification of students who may benefit from services, privacy concerns, and lack of financial resources (Stephan et al., 2015). Research supports the use of specific strategies by school mental health providers to offset the above identified barriers, including teaming between families, school, and communities to create a multi-systemic support system, as well as the use of resource mapping (Stephan et al., 2015). Though the field has experienced a surge in research on anxiety and its impact in the school setting, much work needs to be done given the prominence of this context to children's healthy development.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical Approval This article does not contain any studies with human participants performed by any of the authors.

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