Implementing a School-Based CBT Intervention for Autistic and Typically Developing Girls with Anxiety

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Abstract

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This study examined changes in anxiety among 3rd- to 5th-grade girls with and without autism following a modified Facing Your Fears–Schools (FYF-S) program and explored student, teacher, and parent perceptions of the intervention. By integrating autistic and typically developing (TD) girls in a shared therapeutic setting, the study aimed to (1) bridge the gap between research and school-based practice, (2) expand access to mental health services for autistic students within a multi-tiered system of support (MTSS), and (3) offer autistic girls opportunities to engage with TD peers in naturalistic settings to support social communication and empathy, promoting a more inclusive school climate. While changes in anxiety at post-intervention were not statistically significant, trends suggested decreases across student, parent, and teacher reports. Social validity findings indicated that the intervention was acceptable, helped students learn coping strategies, and, according to some parents, normalized experiences of anxiety. Results support future research on inclusive, school-based CBT approaches.

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Chapter One: Introduction

Mental Health Needs of Girls with Autism

Autism Spectrum Disorder, henceforth autism, is characterized by distinct social communication differences, such as difficulties with conversation initiation, understanding nonverbal signals, and restricted, repetitive behaviors and interests, including stereotypical movements, strict adherence to routines, and sensory differences (American Psychological Association, 2013). Approximately 1 in 31 children experience autism (Shaw, 2025), and males are three times more likely to be diagnosed than females (Maenner, 2023). When autism is present without an intellectual disability, girls tend to be misdiagnosed or only diagnosed later in childhood, leading to missed opportunities for early intervention and school-based support services (Hiller et al., 2016).

Autistic females, particularly during adolescence, exhibit higher levels of anxiety as reported by parents, a time when the intricacies of relationships intensify (Solomon et al., 2012). Despite often possessing a greater aptitude for socioemotional reciprocity compared to autistic males, girls with autism may still face social exclusion due to nuanced differences in language and social interaction (Mandy et al., 2012). Compounding this issue is the tendency of these individuals to camouflage their autistic traits to fit in, a strategy that can cause considerable stress (Solomon et al., 2012). In one study, Bargiela et al. (2016) interviewed 14 women on the autism spectrum who described lifelong feelings of being misunderstood and overlooked, particularly when seeking support. This led to efforts to conform to societal norms, resulting in private emotional breakdowns. During adolescence, some turned to alcohol and other substances to gain social confidence, which aggravated existing anxiety and depressive symptoms. The prevalence of internalizing concerns, combined with increased self-harm and thoughts of suicide

among autistic adolescents and women, indicates a critical need for early and effective mental health interventions in primary school settings (Duerden et al., 2012).

School-Based Mental Health

In recent years, there's been an enhanced focus on mental health within schools, recognizing its vital role in students' overall wellness, including their emotional, mental, and behavioral states (Humphrey, 2023). This focus acknowledges how mental health influences children's cognitive processes, emotional regulation, actions, stress management, relationships, and decision-making, which are all crucial for academic success (Durlak et al., 2011). Mental health disorders in children, such as anxiety and behavioral issues, mark significant departures from typical development patterns, leading to distress and daily challenges (APA, 2013).

Schools have witnessed a rise in mental health concerns over the years, with students between 6-17 years reporting diagnoses of anxiety or depression at 5.4% in 2003, 8% in 2007, and 8.4% in 2012 (Bitsko et al., 2018). Among autistic school-age youth, research has demonstrated that between 11% and 84% of children experience debilitating anxiety symptoms at any time (White et al., 2009). The COVID-19 pandemic further doubled the prevalence of anxiety and depression among children and adolescents (Racine et al., 2021), with contributing factors including social isolation, loneliness, parental stress, and lack of physical activity (Meade, 2021). Given the disproportionate frequency and severity of anxiety among autistic youth pre-pandemic (Van Steensel et al., 2011), it is likely autistic youth faced anxiety at rates beyond those of typically developing school-aged children.

School closures brought forth by the pandemic posed serious difficulties for the 80% of children who relied on school-based behavioral and mental health services to meet their needs

(Masonbrink & Hurley, 2020). In response, the American Rescue Plan Act of March 2021 allocated $170 billion for school funding, a portion of which was directed toward hiring mental health professionals like counselors and school psychologists (Abramson, 2022). Despite this, there's a push for more sustainable solutions to the mental health crisis exacerbated by the pandemic, including incorporating mental health education into curriculums and training teachers in preventive strategies based on psychological science (Abramson, 2022).

Schools are increasingly implementing multi-tiered systems of support (MTSS) to proactively address the mental health needs of students (Foxcroft, 2014). This MTSS framework consists of three tiers—Universal, Targeted, and Intensive—designed to provide increasing levels of support. The Universal tier (Tier 1) encompasses school-wide social-emotional learning (SEL), focusing on five key competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2020). Several meta-analyses have found that these universal interventions positively affect mental health in typically developing students, with effect sizes being more pronounced for externalizing problems like conduct issues, though they vary across outcomes (Corcoran et al., 2018; Wigelsworth et al., 2022). Despite a reduction over time, the impacts of SEL interventions persist, indicating their enduring influence. However, there's a notable lack of data on the efficacy of Tier 1 interventions for students with autism and other neurodevelopmental conditions (Clarke et al., 2017).

The Targeted tier (Tier 2) of MTSS offers small-group interventions for students at risk of developing more severe behavioral or mental health issues, while the Intensive tier (Tier 3) provides personalized support or special education referrals (Foxcroft, 2014). Yet, the model struggles to meet the needs of students with neurodevelopmental disabilities and anxiety disorders, particularly autistic students with comorbid anxiety symptoms (Sturm & Kasari,

2023). Challenges include limited recognition of mental health's effect on learning, a lack of mental health services and staff training, difficulties with intervention implementation, and restricted service access (Sturm & Kasari, 2023). There's also a significant dearth of information regarding effective interventions and prevention programs for autistic students (Bromley et al., 2004; Weinberg et al., 2019). Although various programs target subclinical and clinical mental health concerns, few have been tested explicitly for autism within the context of schools.

Implementing School-Based Cognitive Behavioral Therapy for Autistic Youth

Primary and secondary schools are optimal environments for providing mental health services to autistic youth (Strein et al., 2003). The widespread right to education in the United States sets the stage for potentially equitable access to such services and the opportunity for consistent monitoring and management of their delivery. Cognitive behavioral therapy (CBT) is the primary psychosocial treatment for anxiety, utilizing methods such as graded exposure and cognitive restructuring to help manage anxiety-provoking situations (Creswell et al., 2020). Adapting CBT for autistic individuals often undergoes modifications to meet their unique needs, such as the inclusion of visual aids and structured and focused activities (Kreslins et al., 2015; Sukhodolsky et al., 2013; Ung et al., 2015; Vasa et al., 2014). While adapted CBT has been deemed an empirically supported treatment for youth with autism (Kester & Lucyshyn, 2018), the effectiveness of these modified CBT interventions in school settings has shown varying results (Wood et al., 2020). Initial studies offer preliminary evidence that CBT can reduce anxiety symptoms in autistic students within school settings (Clarke et al., 2017; Drmic et al., 2017; Luxford et al., 2017; Reaven et al., 2022, 2024). However, translating CBT to school settings is challenging, and modifications are often necessary for its successful implementation.

Training and mastery among school staff have been inconsistent, highlighting the need for more comprehensive training and program adaptation (Drmic et al., 2017; Reaven et al., 2024).

Additionally, evidence for using CBT in school-based settings has been primarily based on studies conducted with male participants aged 10–15 years with IQs over 70 (Sturm & Kasari, 2023). This indicates that the current research may not extend to the broader spectrum of autistic students, including females, those with different intellectual abilities, younger children, and older teens. Furthermore, research has predominantly been conducted in high-income school settings with mostly White, middle-class participants. This suggests a gap in the representativeness of the research, which future studies need to address by including more diverse populations to create an inclusive evidence base for individuals with autism across a wider demographic spectrum.

Potential for Inclusivity in Therapeutic Practices to Enhance Social Dynamics

While research on school-based CBT interventions has expanded (Reaven et al., 2022, 2024), little attention has been given to the specific mental health needs of autistic girls, who often face social challenges linked to their distinct communication styles. These differences can make it more difficult to form friendships and engage comfortably with peers, ultimately affecting their school experience (Kerns et al., 2021). One approach to addressing anxiety related to social communication challenges in autistic girls is integrating typically developing (TD) peers into school-based CBT interventions adapted for autistic youth. However, research on mixed-neurotype intervention groups remains limited (Perihan et al., 2022).

Inclusive Tier 2 mental health programs may provide autistic students with opportunities to engage with TD peers in naturalistic settings, fostering organic social communication skill development. Additionally, group-based mental health interventions have been shown to enhance

resilience, reduce stigma, and strengthen social support networks (Weist et al., 2017). Beyond individual benefits, such interventions have the potential to promote empathy, increase mental health awareness, and contribute to a more inclusive and supportive school community.

Challenges with Inclusion in Social-Emotional Instruction

Integrating TD peers with autistic individuals into Tier 2 mental health interventions also presents a unique set of challenges that require thoughtful navigation to ensure the success and inclusiveness of such programs (Adelman & Taylor, 2009; Mirfin-Veitch et al., 2020; Odom et al., 2011). One of the primary concerns may be the management of complex social dynamics that emerge when blending diverse neurotypes (Hillary et al., 2020). The facilitation of these groups demands a nuanced approach to ensure that interactions remain balanced, with TD peers neither dominating the conversation nor inadvertently marginalizing their autistic counterparts. This delicate balance is crucial to fostering an environment where all participants feel valued and heard (Hillary et al., 2020).

Addressing the individual needs of participants within these mixed groups poses another significant challenge (Chen et al., 2021; Hillary et al., 2020). Each autistic individual brings their own set of requirements and preferences to the table, which may not always align neatly with the group's activities or the TD peers' expectations (Dundon, 2023). The risk here is twofold: not only might the autistic participants feel overlooked, but the TD students might also struggle to engage meaningfully without proper guidance (Kasari et al., 2012). Additionally, autistic youth often perceive their anxiety differently, sometimes struggling to identify and articulate their feelings due to challenges in self-awareness and communication (Ozsivadjian et al., 2012). Crafting interventions that cater to this wide array of needs, without singling out or stigmatizing any participant, is a complex task that requires careful planning and sensitivity.

The role of the facilitator is amplified in such integrated settings (Baourda et al., 2022; Bryde Christensen et al., 2021; De Jesus, 2012). They must possess a deep understanding of both TD and autistic ways of being, and be equipped with strategies to encourage positive, inclusive interactions (Odom et al., 2011). This necessitates specialized training to navigate the nuances of neurodiversity, ensuring facilitators can preemptively address potential conflicts, misunderstandings, or instances of unintentional exclusion (Hillary et al., 2020). The challenge extends to providing ongoing education and support for facilitators to adapt and respond to the evolving dynamics of the group (Reaven et al., 2018).

Moreover, the potential for misunderstanding and miscommunication looms large in these integrated interventions (Chen et al., 2021; Hillary et al., 2020). Despite the best intentions, differences in communication styles, sensory sensitivities, and social expectations can lead to confusion, discomfort, or even conflict among participants (Sedgewick et al., 2018). Addressing these differences openly and with empathy is vital, yet it requires a level of vigilance and adaptability from facilitators to manage effectively (Mirfin-Veitch et al., 2020).

Potential Solutions for Inclusive Social-Emotional Instruction

Ensuring that therapeutic interventions are inclusive for all students, including autistic individuals, requires intentional strategies that foster engagement, understanding, and accessibility. One key approach is differentiated instruction, where facilitators adjust the pace, level of support, and teaching methods to meet the diverse needs of participants (De Jesus, 2012). Establishing group norms collaboratively ensures that all participants, both TD and autistic, have a voice in setting expectations for respect and inclusion (Bieling et al., 2022). Reinforcing these norms throughout the program can help create a shared understanding and sense of belonging. Furthermore, parent and community involvement can extend social-

emotional support beyond the classroom, fostering a broader network of understanding and reinforcement (Reaven & Willar, 2017). Lastly, adapting the physical and sensory environment to accommodate sensory sensitivities and preferences ensures that all students feel comfortable and able to participate fully (Mirfin-Veitch et al., 2020). By integrating these strategies, group therapeutic programs can be more inclusive and supportive for autistic students, ultimately promoting a more accepting and understanding school environment.

Current Study and Intended Contributions to the Field

The present study examines the implementation of a school-based CBT intervention for 3rd- to 5th-grade girls, both with and without autism, who experience anxiety. The limited research on school-based CBT interventions for autistic youth, particularly girls, makes this study a valuable addition to literature by examining the acceptability and perceived effectiveness of such interventions among autistic and TD students, their teachers, and parents. Originally designed to assess both anxiety and social skill outcomes, the study was shortened due to logistical constraints, limiting the ability to examine social dynamics over time. However, changes in anxiety symptoms were still assessed from pre- to post-intervention to explore its potential impact. In addition, the study provides important insights into the social validity of a school-based CBT program, including stakeholder perceptions of its feasibility, relevance, and benefits. Understanding these perspectives is crucial for adapting CBT interventions to better support autistic youth in school settings. Ultimately, the findings can inform the implementation of inclusive, school-based mental health programs within the MTSS framework, particularly for autistic and TD girls.

Chapter 2: Literature Review

Autism Spectrum Disorder/Conditions (ASD/C)

Autism is a heterogeneous developmental condition affecting 1 in 36 children (Maenner, 2023), encompassing a spectrum of phenotypes shaped by intricate genetic interactions and environmental factors (Geschwind, 2011). Autism's effects are wide-ranging, affecting neurological, biological, adaptive, social, linguistic, and cognitive abilities, presenting a varied set of symptoms and needs that evolve over time. Despite its hereditary nature, no single gene or medical marker has been pinpointed for autism (Genovese & Butler, 2023). Diagnosis relies on evaluating a child's developmental history and observed behavior and cognitive function, which must align with the criteria set by experts in the DSM-5 (Charman & Gotham, 2013).

Diagnostic Criteria

According to the DSM-5 criteria, autism is marked by differences in social communication and restricted and repetitive patterns of behaviors and interests (RRBI; APA, 2013). Challenges in social communication include initiating and maintaining conversations and difficulty understanding nonverbal cues and gestures. At the same time, RRBI can manifest through unusual stereotypical motor movements, insistence on routines, and highly fixated interests. An intellectual or language impairment can accompany autism and may be associated with an underlying medical, genetic, or mental condition (Hus & Segal, 2021).

The DSM-5 presents a spectrum of severity levels for autistic symptoms—Level 1: "requiring support," Level 2, "requiring substantial support," and Level 3, "requiring very substantial support" (APA, 2013). The terms "high functioning" and "low functioning" are widely used in the autism literature to refer to individuals with Level 1 and Level 3 symptomatology, respectively. However, autistic self-advocates have warned against the use of

these terms as they may not adequately represent the capabilities and challenges of an individual with autism (Harrington, 2019). For example, a “high-functioning person” may have increased social communication skills and reduced RRBI, but may struggle with critical adaptive skills, such as dressing themselves or completing chores independently. Conversely, a “low functioning person” may brush their teeth or tie their shoes independently but have low verbal abilities or extreme communication challenges. Thus, individuals deemed “high functioning” will henceforth be referred to as people with “low support needs” or LSN, and individuals previously deemed “low functioning” will be referred to as people with “high support needs” or HSN.

Gender Disparities

Boys are three times more likely to be diagnosed with autism than girls, though the reasons for this remain unclear (Maener, 2023). Girls with autism are more often classified as having an intellectual disability (ID) than boys (42.1% vs. 36.9%), suggesting diagnostic practices may more readily identify autism in girls with co-occurring IDs. This could result in underdiagnosis of girls without ID, as their autism traits often differ from the more recognized patterns in boys.

In efforts to understand the disparity between diagnosis among males and females on the autism spectrum, researchers have proposed various models (Napolitano et al., 2022). The Brain Differences Model suggests biological distinctions between the sexes (Baron-Cohen, 2004) while the Greater Variability Model posits that wider genetic variation in males leads to more frequent autism diagnoses (Wing, 1981). The Liability/Threshold Model proposes that females have a higher threshold for displaying autism traits (Tsai et al., 1981). However, critics argue that these models overlook the full autism spectrum and the overlap in male and female traits, failing to consider social and environmental influences.

Autism research frequently lacks female participants, skewing data towards a male presentation of autism and obscuring the female phenotype characterized by less overt behaviors and internalized symptomatology (Young et al., 2018). This discrepancy contributes to the underdiagnosis or misdiagnosis of females, exacerbated by cultural stereotypes that shape both parental and professional recognition of autism in girls. Physicians, influenced by these factors, are more inclined to suggest assessments for males, especially those showing developmental delays and ID (Young et al., 2018). Moreover, diagnostic tools like the ADOS-2 may miss the distinct ways autism manifests in girls, as they often use more gestures, show fewer RRBIs, and employ camouflaging strategies (Dean et al., 2017; Rea et al., 2023). This can result in underdiagnosis and limit their access to essential services in school or clinic settings (Young et al., 2018).

Gender Differences in Social Communication

Research has found that while autistic boys and girls with HSN have similar presentations of the DSM-5 diagnostic criteria, autistic girls with LSN present with social and behavioral differences that indicate a female-specific phenotype, with distinct characteristics from conventional, male-centric conceptualizations of autistic symptoms (Nguyen & Ronald, 2014). In a review of studies on female clinical presentations of autism, Kirkovski et al. (2013) found that autistic girls with LSN had an increased difficulty in forming and maintaining friendships compared to boys with LSN. Kirkovski et al. (2013) hypothesize that girls experience greater barriers due to differing social expectations for female friendships that center around sharing feelings, emotions, and interests, compared to males who have less involved and more varied methods of socialization. Girls with autism who are placed into male dominated special education classrooms may also struggle to form peer relationships with their typically developing

female peers (McLennan et al., 1993; Nichols & Blakeley-Smith, 2009). Socializing predominantly with autistic males may lead girls with autism to form friendships that more closely resemble "male" friendships, which are often casual and activity-based, centered around shared interests (Knickmeyer et al., 2008). As such, autistic girls often report finding males with autism easier to connect with compared to NT girls (Cridland et al., 2014).

Despite the difficulty in initiating social interactions, girls with LSN express a greater desire to form friendships and to be appreciated compared to autistic males (Dean et al., 2017). Consequently, girls with LSN try to mask or “camouflage” their symptoms to fit in with their peer group. Camouflaging can be active, as in the deliberate imitation of peer behavior to “seem normal,” or passive, like the involuntary mimicking of behavior (e.g., accents; Dean et al., 2017). Autistic girls often camouflage their behaviors in both inclusive and special education settings (Halsall et al., 2021), leading to internalized feelings of exclusion and low self-esteem, which negatively impacts their emotional and physical well-being (Cook et al., 2018; Sandland, 2018). The impact of these masking behaviors becomes even more apparent when examining the social dynamics of peer groups, which further shape how autistic traits are expressed.

In an observational study of 96 elementary school children, 48 of whom had a diagnosis of autism, researchers found that the social dynamics of friend groups further influenced how autistic traits were expressed. Male friend groups tended to amplify autistic symptoms in boys, while female friend groups masked autistic traits in girls (Dean et al., 2017). Autistic girls often hovered in close proximity to female peers, which gave them opportunities for socialization, but they struggled with recognizing social cues and adapting to group social norms. In contrast, boys with autism were more likely to self-isolate and display more severe and unusual externalizing behaviors. Because autistic girls' social interactions often appear more socially appropriate

compared to those of boys, teachers are less likely to identify them as exhibiting autistic symptoms (Dean et al., 2017).

Camouflaging can also occur during diagnostic evaluations. Rynkiewicz et al. (2016) found that autistic girls with LSN have a better understanding of non-verbal communication compared to males on the ADOS-2. Their use of more pronounced gesturing may mask other autistic traits, making it harder for examiners to recognize signs of autism. At the same time, parents completing diagnostic reports may focus more on verbal communication challenges and overlook their child's non-verbal strengths or difficulties, further complicating the diagnostic process and increasing the likelihood of misdiagnosis in girls with LSN (Rynkiewicz et al., 2016).

Gender Differences in Restricted and Repetitive Patterns of Behaviors and Interests

The female autism phenotype is distinguished by differences in restricted and repetitive patterns of behaviors and interests (RRBI) (Napolitano et al., 2022; Rea et al., 2023). Studies, such as those by Hartley and Sikora (2009), have found that RRBI are less frequent in females. Lord et al. (1982) reported this in a study comparing boys and girls with autism aged 3-8 years old, noting a lower incidence of RRBI in girls when controlling for IQ. Additionally, age may affect the expression of RRBI, potentially becoming more subtle or socially appropriate over time. Dean et al. (2017) propose that females may engage in RRBI that align more with socially accepted norms. Boys with autism tend to have more striking repetitive behaviors (e.g., hand flapping) and unusual stereotypical interests (e.g., reciting tornado warning broadcasts) compared to girls who have more typically developing interests (e.g., socialization). Restricted interests in imitating peers may mask other clinical symptoms for autistic girls with LSN. Assessing RRBI in females may also be challenging, as tools like the Repetitive Behaviors

Scale-Revised (RBS-R) may employ male-centric examples (e.g., trains, cars, and dinosaurs) that overlook female-typical interests (Solomon et al., 2011). Young et al. (2018) emphasize a detailed inquiry into the quality and intensity of RRBI to assess their atypicality accurately.

Diagnostic and Screening Tools

The process of diagnosing autism involves an in-depth assessment of a child's behavior and development, supplemented by structured observations and interviews (Hus & Segal, 2021). These components are vital for establishing a consistent behavioral profile and heavily rely on the expertise of clinicians. The two primary instruments employed in this process are the Autism Diagnostic Observation Schedule- 2nd Edition (ADOS-2) and the Autism Diagnostic Interview-Revised (ADI-R) (Wiggins et al., 2015). The ADOS-2 involves observations by professionals across various settings, while ADI-R is an in-depth interview conducted with parents. Both of these instruments are highly regarded for their diagnostic precision and are often referred to as the "gold standard" in the field (Hus & Segal, 2021).

In the school setting, school psychologists are not tasked with diagnosing autism and often lack training in autism assessment practices (Aiello et al., 2017). However, school psychologists often use autism screening measures, such as the Social Communication Questionnaire (SCQ), to inform evaluation or treatment goals (Aiello et al., 2017). However, the SCQ and similar measures may not be as sensitive to identifying autism in girls (Lai et al., 2015). Autistic girls, especially those with intellectual disabilities, are underrepresented in mental health research that relies on self-reporting, leading to identification challenges (Gabrielsen et al., 2023). Moreover, there’s an even greater challenge in distinguishing social anxiety from autism in this group (Freeman & Grigoriadis, 2023).

Specific tools, such as the Camouflaging Autistic Traits Questionnaire (CAT-Q) and the Autism Spectrum Screening Questionnaire (ASSQ-REV), which includes the ASSQ-GIRLS subscale, provide more tailored approaches to autism assessment for girls (Hull et al., 2018; Kopp & Gillberg, 2011). The Questionnaire for Autism Spectrum Conditions (Q-ASC) is another tool designed to capture the unique presentation of autism in females across several dimensions (Attwood et al., 2011). The Samantha Craft Checklist, while not a diagnostic tool, can serve as a guide for further evaluation (Craft, 2016). Beyond screening scores, a comprehensive evaluation that includes multiple sources and domains is essential for autistic girls (Gabrielsen et al., 2023).

School psychologists play a crucial role in the recognition and support of girls with autism, who are often at risk for greater internalizing symptoms and face unique social challenges. Due to a history of autism research focused predominantly on males and societal gender expectations, these girls are frequently underdiagnosed or misdiagnosed, potentially leading to delayed support and exacerbating anxiety, which is more common in autistic girls than boys or their neurotypical counterparts (Solomon et al., 2011). The nuanced needs of girls with autism underscore the importance of tailored support to promote their inclusion and success.

The following section will explore anxiety in depth and its overlap with autism. Addressing only one dimension of an individual's experience often neglects other critical areas, highlighting the need for a comprehensive understanding of both autism and anxiety to support girls effectively.

Anxiety in Young Children

Anxiety is a multifaceted experience, manifesting through emotional discomforts such as unease and distress, cognitive patterns like excessive fears and worries, physiological symptoms including muscle tension, and behavioral changes such as avoidance (Beesdo et al., 2009). From

infancy, anxiety functions adaptively, equipping individuals to evade danger and navigate complex social settings. While normative anxieties, like separation anxiety or fears of specific situations, are a normal part of development and usually temporary, excessive anxiety can evolve into a disorder, marked by profound distress and functional impairments (Silverman & Ollendick, 2005). Interestingly, a lack of anxiety, manifesting as callous and unemotional traits, may also indicate a mental health disorder, suggesting a broad and complex spectrum of anxiety-related behaviors from infancy through adolescence (Beesdo et al., 2009). This underscores the importance of understanding anxiety not only as a potential mental health disorder but also as a crucial part of typical development, where distinctions between normative and pathological anxiety are vital for early identification and intervention.

Onset of Anxiety

Evidence consistently points to childhood as the period during which the first symptoms or syndromes of anxiety disorders typically emerge (Kessler et al., 2007). There is notable variation in the age of onset among different anxiety disorders, suggesting a sequence of risk periods during childhood and adolescence. Separation anxiety disorder and certain specific phobias (like those related to animals, blood injection injury, and the environment) usually begin before the age of 12 (Wittchen & Fehm, 2003). Social phobia often starts in late childhood through adolescence, with rare cases after age 25 (Beesdo et al., 2007). Panic disorder, agoraphobia, and generalized anxiety disorder (GAD) mainly have their onset in late adolescence to early adulthood, though panic attacks can occur as early as age 12 (Wittchen et al., 2008).

Sex Differences in Anxiety

Sex differences in anxiety disorders are evident, with these conditions more frequently affecting females than males in the general population (Beesdo et al., 2009). This disparity is

observable from childhood and becomes more pronounced during adolescence, such that 5% of teenage boys and 10% of teenage girls experience anxiety (Merikangas et al., 2010). Research from the Early Developmental Stages of Psychopathology (EDSP) study has shown distinct patterns in the cumulative incidence of anxiety disorders between females and males (Wittchen et al., 2008). For instance, panic disorder exhibits a marked period of increased incidence among females between ages 13 and 26, while for males, this increase is less pronounced and occurs at lower overall rates. Agoraphobia shows a steady rise in incidence among females from age six onwards, with a more variable and generally lower incidence among males, peaking between ages 15 and 20. Additionally, specific phobias, such as animal phobias, show a clear sex difference in prevalence from childhood, with a 3:1 female to male ratio by age 10. These patterns highlight the importance of considering sex differences in the onset and prevalence of anxiety disorders across different age groups.

Etiology and Risk Factors

The etiology and risk factors for anxiety disorders in children and adolescents are multifaceted, involving a combination of socioeconomic, environmental, biological, and psychological elements (Beesdo et al., 2009a). Key risk factors include low socioeconomic status, exposure to violence or trauma, and biological aspects such as heritability and temperament (Blanco et al., 2014). Children of parents with anxiety are at a heightened risk for developing anxiety disorders themselves, underscoring the influence of familial and genetic predispositions (Emerson et al., 2019).

The role of social media and online engagement has also emerged as a significant area of concern, with varying impacts on anxiety symptoms depending on factors such as gender, age, the specific social media platforms used, and the amount of time spent online (Cataldo et al.,

2021). Specific online behaviors like seeking validation and fear of missing out can exacerbate anxiety symptoms, with general anxiety symptoms being more common among boys and body image-related anxiety more prevalent among girls. Cyberbullying is particularly detrimental, increasing anxiety and the risk of developing anxiety disorders, although some youth find positive support in online communities (Cataldo et al., 2021).

Clinically, anxiety disorders in youth can present with a wide array of symptoms, including excessive anxiety, fear, or worry that is disproportionate to the circumstances (Beesdo et al., 2009). Physical manifestations often involve autonomic nervous system activation, such as sweating, palpitations, and nausea. Panic attacks, characterized by peak autonomic responses, can occur in association with any anxiety disorder. Behavioral indications, including avoidance, crying, tantrums, or clinging, are key to diagnosis, especially when these symptoms persist over time and impact the child or adolescent's functioning across various domains, including educational and social settings (Beesdo et al., 2009).

Longitudinal Outcomes

Longitudinal studies reveal that anxiety disorders in youth do not always persist uniformly into adulthood; rather, their stability is generally low to moderate. For instance, specific phobias and panic disorders exhibit some degree of stability, yet a significant portion of cases show change over time (Woodman et al., 1999; Yonkers et al., 2003). Moreover, anxiety disorders tend to fluctuate, with periods of remission and recurrence, highlighting their dynamic nature across developmental stages (Beesdo et al., 2009b).

Importantly, the presence of an anxiety disorder in childhood or adolescence significantly increases the likelihood of other mental health issues later in life, indicating a pattern of psychopathological continuity rather than complete recovery (Ginsburg et al., 2018). This is

exemplified by a substantial risk for developing other anxiety or depressive disorders, showcasing both homotypic (same disorder type) and heterotypic (different disorder types) continuity (Gregory & Eley, 2007). The interplay of multiple anxiety disorders, or comorbidity, is common and increases with age, influencing the development of secondary psychopathological issues like depression and substance use disorders (Beesdo et al., 2009). The relationship between anxiety and later mental health problems suggests shared underlying etiological factors and emphasizes the importance of early intervention (Ginsburg et al., 2018). The risk of developing secondary disorders, such as depression and substance use disorders, underscores the complexity of anxiety disorders and the need for comprehensive approaches to treatment and prevention that consider both immediate and long-term outcomes.

In tandem with these psychological implications, anxiety during childhood has profound effects on educational engagement and achievement (Silverman & Ollendick, 2005). Anxiety in children is linked to various educational challenges, including increased instances of school refusal, diminished academic achievement, and overall impairments in school-related functions (Fishstrom et al., 2022). Beyond academic difficulties, anxious children often face social and familial impairments as well (Parrigon et al., 2015). Without intervention, these anxiety disorders tend to persist, complicating the child's academic and social development over time. This evidence underscores the critical challenges anxious children encounter within the educational environment.

Anxiety and Autism

Anxiety and obsessive-compulsive behaviors are common in children with autism (Kerns & Kendall, 2012; Wood & Gadow, 2010). While 9.4% of school-age youth are diagnosed with anxiety, the prevalence of anxiety in autistic children ranges from 11% to 84%, with significant

variability (White et al., 2009). One meta-analysis reported that approximately 40% of school-aged autistic youth met DSM-IV criteria for at least one anxiety disorder, including specific phobia (29.8%), OCD (17.4%), and social anxiety disorder (16.6%) (Van Steensel et al., 2011). Kerns et al. (2021) suggest that the incidence could be as high as 69% when assessments are tailored specifically for autism, a rate that significantly exceeds what is observed in neurotypical youth. In line with the developmental trajectory of anxiety symptoms observed in the broader population, autistic adolescents more frequently receive diagnoses of GAD compared to younger autistic children, who are more likely to be diagnosed with separation anxiety and OCD (Van Oort et al., 2009; Van Steensel et al., 2011).

Research suggests that autistic girls tend to experience higher levels of anxiety, especially in late adolescence when compared to autistic boys and neurotypical girls (Kirsch et al., 2020; Solomon et al., 2012). Adolescence is particularly challenging for girls with autism due to the complexities of social interactions during this period. Although they may show a stronger capacity for socioemotional reciprocity, their struggles with language and social skills complicate forming and maintaining friendships (Solomon et al., 2011). Efforts to mask autism symptoms in social situations can lead to considerable distress. Additionally, puberty may exacerbate challenges, with some girls displaying more aggressive behaviors, possibly due to difficulties in expressing premenstrual discomfort (Cohen et al., 2010; Kyrkou, 2005).

Explaining the Comorbidity of Anxiety and Autism

Several theories offer insight into the high co-occurrence of autism and anxiety. One posits that the inherent social and communicative challenges of autism lead to heightened anxiety, particularly in school environments where social expectations and judgments are amplified, potentially resulting in social anxiety (Kerns & Kendall, 2012; Renno & Wood, 2013;

Simpson et al., 2019). Another theory links sensory sensitivities and repetitive behaviors, characteristic of autism, to increased anxiety levels (Kerns & Kendall, 2012). This is supported by findings that those with more acute sensory issues report greater anxiety (Ben-Sasson et al., 2008) and that autistic children often have intense anxiety responses to sensory-related stimuli, like certain songs or objects (Kerns et al., 2014, 2021). Anxiety stemming from a fear of change is also noted, with some individuals displaying enhanced repetitive behaviors to cope with routine alterations (Kerns et al., 2014). Genetic factors are also considered, as there is evidence of a familial trend in internalizing disorders among relatives of those with autism, suggesting a genetic or environmental inclination towards these conditions (Ginsburg et al., 2015; Mazefsky et al., 2010). Additionally, research indicates that the co-occurrence of anxiety and autism may be driven by shared neurobiological mechanisms; for instance, one study revealed that anxiety can modify amygdala function in autistic individuals, indicating that anxiety management may profoundly impact the core emotional and social challenges of autism (Herrington et al., 2016).

Challenges in Assessing Anxiety in Autism

There's a tendency to misattribute symptoms of anxiety to autism itself, coupled with diagnostic challenges that make accurate identification of anxiety disorders more complex in this population (Moskowitz et al., 2019). One challenge is that assessing anxiety often requires children to communicate their cognitive and affective states and relies on reports from parents and teachers about the child's thoughts, feelings, and behaviors. However, approximately 33% of youth with autism have a co-occurring intellectual disability (ID; Maenner, 2021), and at least 30% of children with autism do not develop spoken language (Tager-Flusberg & Kasari, 2013), and even youth with robust cognitive and language skills can still struggle to articulate their internal mental experiences (Leyfer et al., 2006). This challenge in communication can hinder

conventional methods of anxiety assessment that rely on self-reporting, and this becomes particularly problematic for those who are nonverbal or have limited verbal abilities (Hagopian & Jennett, 2008).

Another challenge is that beyond the typical anxiety indicators like excessive fear and worry, children with autism might exhibit less conventional signs of anxiety such as repetitive speech, humming, or covering their ears, as well as challenging behaviors including aggression and tantrums (Moskowitz et al., 2013; White et al., 2009). These atypical manifestations are particularly prevalent among those with limited verbal or cognitive abilities, potentially leading caregivers to overlook anxiety symptoms, thereby affecting the reliability of reports from stakeholders and creating inconsistencies between reports from parents and those from children themselves (Bitsika & Sharpley, 2020; Den Houting, 2019; Kalvin et al., 2020). This challenge often results in reliance on direct behavioral observations for assessment or the use of scales that haven't been validated for individuals with co-occurring intellectual disabilities (Appleton et al., 2019; Moskowitz et al., 2013)

Moreover, nearly half of youth with autism exhibit atypical “distinct” anxiety characterized by fears that deviate from typical anxiety disorders (Kerns et al., 2014). Common specific phobias, such as fear of needles, blood, germs, doctors, animals, and insects, as well as general social and situational worries, are well-noted in the literature (Leyfer et al., 2006). Nevertheless, Kerns et al. (2014) identified unusual anxiety symptoms in autism, including an overconcern with schedule changes and atypical fears, like apprehension towards men with beards or pervasive social discomfort not caused by the fear of negative social evaluation.

Furthermore, Kerns et al. (2021) later applied adapted semi-structured interviews to confirm the presence of significant fears and worries in autistic children aged 9 to 13 that did not

fit into standard DSM categories. These children expressed excessive worries about changes in their environment or routine, unusual fears to specific stimuli like toilets, and social fears rooted in a misunderstanding of social cues rather than apprehension about negative judgments. Furthermore, 8% exhibited compulsive behaviors that, unlike those seen in OCD, didn't appear to alleviate distress—such as the need to keep all doors closed or having drawings done a certain way only to be crossed out—indicating emotional distress without the typical OCD relief function.

Anxiety Assessment for Youth with Autism

Assessing anxiety in children with autism is notably complex and requires a comprehensive, multi-faceted approach. According to Seligman et al. (2014), this assessment should encompass various aspects, including the child's communication and social skills, the severity of their autism, and reports from multiple sources, such as parents, teachers, and the children themselves (White et al., 2009).

Generally, assessing anxiety in autistic populations has relied on measures validated initially for use in typically developing populations, and thus, multimodal assessment is particularly important for students with autism due to the questionable validity of some commonly used anxiety measures for these students (Grondhuis & Aman, 2012; White et al., 2009). Traditional autism assessment tools, like the Childhood Autism Rating Scale (CARS) and Autism Diagnostic Observation System (ADOS), focus primarily on autism's core features and are insufficient for identifying co-occurring anxiety (Lord et al., 2012; Schopler et al., 2010).

Clinically, structured interviews like the Anxiety Disorders Interview Schedule: Parent and Child Versions (ADIS) and its Autism Spectrum Addendum are key diagnostic tools, although they require adaptation for children with varying communication abilities (Kerns et al.,

2014, 2017). The Autism Comorbidities Interview- Present and Lifetime (ACI-PL) has strong psychometric properties and also has been adapted for autistic children and adolescents (Leyfer et al., 2006). In the school context, rating scales are often preferred in anxiety assessments as they are less resource-intensive than clinical interviews. School psychologists commonly use measures like the Behavior Assessment System for Children, Third Edition (BASC-3; Reynolds & Kamphaus, 2015) and the Multimodal Anxiety Scale for Children (MASC; March, 2013) for their relative ease of use (Achenbach et al., 2001; Nathanson & Rispoli, 2022). However, the efficacy of these scales for autistic populations is a subject of ongoing research.

There is a shift toward the use of autism-specific tools like the Anxiety Scale for Children with Autism Spectrum Disorder (ASC-ASD) and the Parent-Rated Anxiety Scale for Youth with Autism Spectrum Disorder (PRAS-ASD) for distinguishing anxiety from autism symptoms. For those with intellectual disabilities, measures such as the Nisonger Child Behavior Rating Form (NCBRF; Aman et al., 1996) and the Aberrant Behavior Checklist (ABC; Aman et al., 1985) are tailored to assess social competence and behavioral challenges, offering valuable insights.

Informant Discrepancies. Research on measuring anxiety in children with autism using self-report and teacher-report tools reveals a significant lack of empirical support (Syriopoulou-Delli et al., 2019). When considering self-reports of anxiety, research indicates that children and adolescents generally provide more accurate accounts than parents or teachers (Hope et al., 1999). However, this might be more complex in autistic populations. Autistic youth may over-report or under-report their anxiety symptoms (Hurtig et al., 2009; Russell et al., 2005), and parents often report higher levels of anxiety compared to their children's self-reports (Blakeley-Smith et al., 2012). Notably, these discrepancies are not unique to autism and are also observed in typically developing children and their caregivers (Kaat & Lecavalier, 2015), suggesting such

variations might be typical. Interestingly, greater agreement is found between caregivers and autistic children with higher IQ and social skills. This highlights the importance of self-reports, particularly in autistic individuals with LSN (Blakeley-Smith et al., 2012).

Teachers' observations offer valuable insights into students' emotional behaviors in educational settings (Richards et al., 2007). However, their reports are less researched for internalizing disorders, which are subtler and harder to identify as children age (Silverman & Ollendick, 2005; Volker et al., 2010). The effectiveness of teacher-report forms, such as the BASC-2 Teacher version, in assessing anxiety is particularly underexplored, even in the general child population. This oversight might be due to the perception that teachers are better at identifying externalizing rather than internalizing disorders (Lerner et al., 2017). However, teacher assessments remain a common request, highlighting the need for more focused research in this area, especially regarding children with autism, as Lerner et al. (2017) emphasize. Although, the School Anxiety Scale- Teacher Report (SAS-TR) has shown promise in identifying autistic children (Kester & Lucyshyn, 2022; Luxford et al., 2017).

To complement parent, child, and teacher reports, direct observations using methods like the Behavioral Avoidance Test (BAT; Dadds et al., 1994) and the Anxiety Dimensional Observation Schedule (Anx-DOS; Mian et al., 2015) provide in-depth behavioral analysis, beneficial for identifying specific anxiety-related conditions such as phobias or OCD. When structured observations are not possible, simple narrative observations or more formal ecological inventories may be conducted (Nathanson & Rispoli, 2022). These approaches collectively emphasize the need for multi-dimensional assessment strategies in understanding and addressing anxiety in children with autism, especially those with intellectual and developmental disabilities.

Anxiety Diagnosis

Diagnostic systems like the Diagnostic and Statistical Manual of Mental Disorders (DSM-V-TR; APA, 2013) and the International Classification of Diseases (ICD-10; World Health Organization, 1992) classify and describe various anxiety disorders. These disorders often share key features, including profound anxiety, physical symptoms of anxiety, behavioral issues like extreme avoidance of feared stimuli, and significant distress or impairment. However, there are differences between the systems, and within each disorder category, there is notable diversity or heterogeneity. For instance, panic disorder, agoraphobia, and specific phobia subtypes show a wide range of manifestations (Beesdo et al., 2009).

When diagnosing anxiety in children, adapting criteria is crucial due to their unique symptom presentations compared to adults (Beesdo et al., 2009). While the DSM-5 acknowledges child-specific symptoms for certain anxiety disorders, it does not uniformly distinguish between how these disorders manifest in children versus adults. An exception is a separation anxiety disorder, uniquely defined as occurring before adulthood, with other disorders such as posttraumatic stress disorder (PTSD) potentially including child-specific adjustments like lower symptom thresholds or relaxed duration requirements. Notably, for phobias, children might not need to recognize their anxiety as excessive (APA, 2013).

On the other hand, the ICD-10 offers a broader categorization of anxiety disorders from a global perspective, introducing categories such as "Mixed anxiety and depressive disorder," which lacks a direct DSM-5 equivalent, but is used when individuals exhibit symptoms of both depression and anxiety, with neither set of symptoms being dominant nor severe enough to warrant a separate diagnosis of either disorder on its own (Bandelow et al., 2017). Conversely, the DSM-5 delves into more granular diagnostic criteria for anxiety disorders, emphasizing the

specificity of symptoms, their duration, and the required intensity for a diagnosis (APA, 2013). This detailed approach aids in a more precise clinical assessment and treatment planning, primarily benefiting children receiving mental health support in the United States.

Clinical vs. Non-Clinical Anxiety

In assessing anxiety within children, particularly autistic individuals, distinguishing between transient, non-impairing anxiety and clinical anxiety is crucial to determining optimal treatment options. Mental health professionals rely on the "four Ds"—duration, deviance, dysfunction, and distress—as criteria for differentiation, aiding in identifying when anxiety surpasses normative responses to become clinically significant (Kerns, 2024).

1) *Duration* pertains to the persistence of anxiety symptoms—clinical anxiety often lasts longer, while non-clinical is temporary. Noting changes in a child's anxiety over time, as well as the nature of the relief provided by reassurance and their return to baseline, can be insightful.
2) *Deviance* evaluates if the anxiety exceeds cultural and developmental expectations and current challenges associated with autism.
3) *Dysfunction* examines how anxiety affects daily functioning, impacting areas like school and social life.
4) *Distress* considers the level of impairment on the child's social, academic, family life, physical health, or general well-being beyond the effects of autism alone. It is crucial to determine if this distress also extends to the parents or other family members, as they are often in positions of providing a lot of reassurance.

Kerns et al. (2016) and Vasa et al. (2016) introduce autism-specific considerations in diagnosing anxiety. This includes differentiating between typical autism-related behaviors and

those specifically tied to anxiety, such as heightened anticipatory fears or social avoidance marked by fear or physiological reactions. They emphasize the importance of recognizing when anxiety symptoms reflect an intensification of existing autism traits rather than entirely new behaviors, suggesting a nuanced approach to identifying and assessing anxiety in autistic individuals by considering both baseline autism symptoms and the specific characteristics of anxiety-related behaviors.

The interplay between anxiety and autism presents a challenging landscape for clinicians. The task of teasing apart clinical anxiety from its non-clinical counterpart within the autism context necessitates a nuanced approach. To address this, Kerns (2024) outlines specific diagnostic considerations tailored to various anxiety disorders within the autism spectrum.

The following section provides a brief overview of each anxiety disorder, as described in the DSM-V criteria, including nuances for children with autism.

Generalized Anxiety Disorder (GAD). GAD is characterized by persistent and excessive worry about various aspects of life, such as school, work, or health, which is difficult to control (APA, 2013). Symptoms may include restlessness, fatigue, difficulty concentrating, irritability, muscle tension, and sleep disturbances. Unlike adults, children may not recognize these worries as excessive and may struggle to articulate the specific things they worry about. Instead, they often express their anxiety through somatic symptoms like stomachaches or headaches.

Diagnosing GAD in children broadly entails identifying pervasive concerns about future events across various aspects of life, like social interactions, academic achievements, and personal adequacy (Kerns, 2024). It is vital to assess the anxiety's context to see if it is

disproportionate or maladaptive. For instance, a child with a specific learning difficulty might naturally avoid tasks that highlight this challenge. Distinguishing GAD from Social Anxiety Disorder (SAD) involves understanding the focus of the worry; GAD is characterized by broad, unrealistic self-expectations, not just concerns about social judgment. In GAD, worries extend beyond social or performance situations, affecting various life aspects.

In the realm of GAD, Kerns (2024) also highlights autism-specific anxieties related to focused interests and fears of change. Fears related to focused interests could look like waking up early due to worrying about not having enough time to research a special interest or a fear of others touching one's special figurine collection. Additionally, fears of change, like concern over schedule changes or needing reassurance about routine consistency, are common. While such behaviors may seem similar to GAD, a negative reaction to change does not always signify clinical anxiety, especially in the absence of anticipatory anxiety (Kerns, 2024).

Panic Disorder (PD). PD involves recurrent unexpected panic attacks, which are sudden surges of intense fear or discomfort peaking within minutes (APA, 2013). Symptoms during an attack can include heart palpitations, sweating, trembling, shortness of breath, feelings of impending doom, or fear of losing control. This disorder can lead to persistent concern about having additional attacks or their consequences. Diagnosing PD in children involves observing panic attacks that are not solely triggered by social or separation anxiety. Children might describe their panic attacks in less specific terms, such as stomachaches or fear of dying, vomiting, or getting sick, rather than the more adult-specific symptoms like fear of having a heart attack (Beesdo et al., 2009).

Individuals with autism often experience physiological over-arousal similar to panic disorder but without the typical misinterpretations that something terrible will occur (Hallett et

al., 2013; Storch et al., 2012). There is currently no evidence indicating a unique presentation of panic disorder in autism (Kerns et al., 2017).

Agoraphobia. Agoraphobia is characterized by intense fear or anxiety triggered by real or anticipated exposure to a wide range of situations where escape might be difficult or help might not be available in the event of developing panic-like symptoms (APA, 2013). Situations can include public transportation, being in open or enclosed spaces, standing in line, or being in a crowd. In children, agoraphobia may manifest as separation anxiety, school refusal, or social anxiety. For example, a child with agoraphobia may plead for a caregiver to stay with them at soccer practice and still feel anxious due to being an open space (Wittchen et al., 2010). Children may not always know how to express their fears, and thus an in-depth evaluation is required to determine the function of their avoidance (Beesdo et al., 2009).

Like panic disorder, there is no evidence to suggest a unique presentation of agoraphobia in autism. Panic and agoraphobia symptoms are reported less frequently in youth with autism compared to other anxiety subtypes, with prevalence rates as low as 1.8% (Van Steensel et al., 2011), similar to those seen in neurotypical adults (Kessler et al., 2007).

Specific Phobia. Specific Phobia involves a marked and persistent fear or anxiety about a specific object or situation, such as flying, heights, animals, receiving an injection, or seeing blood (APA, 2013). The phobic object or situation almost always provokes immediate fear or anxiety and is actively avoided or endured with intense fear or anxiety. When presented with a phobic object or situation, children may express their anxiety through crying, tantrums, freezing, or clinging.

In autistic youth, specific phobias may manifest as extreme reactions or unusual fears towards stimuli that are generally not seen as distressing, such as particular sounds or objects (Kerns, 2024). It is crucial to differentiate these from general sensory sensitivities, focusing on fear of specific stimuli like a microwave beep versus a broader sensitivity to noises. These autism-related phobias become clinically significant when they lead to substantial avoidance or distress in anticipation, such as fear-driven behaviors around fire alarms (e.g., avoiding school in anticipation of a fire alarm) or anxiety about haircuts (e.g., feeling anxious walking by a barbershop). The presence of avoidance behaviors or anxiety in situations potentially exposing the child to their fears, even without the direct trigger, marks the clinical threshold.

Social Anxiety Disorder (SAD). SAD is characterized by a significant fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others (APA, 2013). This includes social interactions, being observed, and performing in front of others. The individual fears that they will act in a way or show anxiety symptoms that will be negatively evaluated. In children, the DSM-5 specifies that fear or anxiety must occur in peer settings and not just during interactions with adults (APA, 2013). Similarly, to specific phobia, children with social anxiety may cry, throw tantrums, or fail to speak in social situations where interaction is expected.

Diagnosis of SAD in autistic youth should consider the number of opportunities the child has had to interact with peers, a child's social motivation, and awareness of social evaluation (Kerns, 2024). A diagnosis of social anxiety requires a fear of negative evaluation and anxiety that is excessive or poorly matched to the social context (e.g., a child experiencing bullying vs. a child who is well-liked). It is essential to differentiate this from other reasons for social difficulties, such as ADHD or inherent social communication challenges in autism. When a child

does not fit the criteria for social anxiety due to limited social awareness or motivation, or because their symptoms have a distinct nature, it is important to pay attention to behavioral signs of physiological distress (Kerns, 2024). Their fears might stem from challenges in understanding or predicting social cues and outcomes. If the anxiety is milder or shorter in duration, it could be considered subclinical social anxiety, indicating it is less intense but still present.

Separation Anxiety Disorder. Separation Anxiety Disorder involves excessive fear or anxiety concerning separation from those to whom the individual is attached (APA, 2013). The fear is beyond what is expected for the individual's developmental level and interferes with normal activities. In children, symptoms can include distress when anticipating or experiencing separation, worry about losing major attachment figures or potential harm to them, and reluctance to go away from major attachment figures.

Separation anxiety in autistic youth often appears as reluctance or refusal to separate from caregivers rather than a fear of being alone (Kerns, 2024). Physical symptoms like feeling sick in a parent's absence, school refusal, or withdrawing from activities highlight this anxiety. Important aspects include whether the child can stay alone without distress, how long reassurance effects last, and any necessary adjustments in parental behavior. However, it is crucial to consider the child's history of relying on caregivers for daily needs due to any physical or mental disabilities. In verbal children, exploring expressed worries about separation (e.g., "What if you don't come back?") is vital, as is determining the presence of anticipatory anxiety, which can also present behaviorally. Finally, distinguishing if anxiety is due to separation or changes in routine or environment further clarifies the nature of their anxiety (Kerns, 2024).

Selective Mutism (SM). SM is characterized by a consistent failure to speak in specific social situations despite speaking in other contexts (APA, 2013). It is primarily diagnosed in

children, often before age 5, and manifests as an inability to speak in social settings like school, despite being able to speak in more comfortable settings. This condition is distinct from autism unless there are no early developmental delays (Gabrielsen et al., 2023). Children with selective mutism set specific rules for communication that vary by setting—they may remain silent in school yet speak in other situations like ordering food or playing with friends. When coupled with autism, selective mutism is generally associated with heightened anxiety rather than being specific to any one setting. These children usually have better-developed social reciprocity than autistic peers but do not typically show the same levels of special interests or stimming behaviors as those with autism. Per Gabrielsen et al. (2023), accurate assessment requires looking at anxiety, speech, and language capabilities while also ruling out executive function challenges and employing autism-specific screening tools.

Obsessive-compulsive disorder (OCD). While OCD is often associated with high levels of anxiety, it is not classified as an anxiety disorder in the DSM-5-TR or the ICD-10. Instead, OCD is categorized under "Obsessive-Compulsive and Related Disorders" (APA, 2013) due to significant differences in brain function and chemistry between OCD and anxiety disorders (Krzanowska & Kuleta, 2017). However, the disorders share familial and genetic factors and can be significantly impairing for 0.25% to 4% of youth, including individuals with autism (Nazeer et al., 2020; Van Steensel et al., 2011).

OCD is characterized by a pattern of unwanted thoughts or fears (obsessions) that lead to repetitive behaviors (compulsions) (APA, 2013). These compulsions are performed in an attempt to alleviate the distress or prevent perceived dreaded events or situations despite being excessive or irrational. In children, common obsessions include excessive preoccupation with germs, dirt, or illness, intuitive thoughts about inappropriate or taboo subjects, or an overwhelming need for

things to be done “just right” (Helbing & Ficca, 2009). Compulsions may include repeated hand washing to the point of skin irritation, checking behavior, arranging and re-arranging toys in a specific way, and asking for reassurance excessively. It is not uncommon for family members to become a part of a child’s compulsive routines, which can be distressing for the entire family (Helbing & Ficca, 2009).

In differentiating OCD from typical autistic behaviors, it is crucial to discern compulsive actions linked to distress from those driven by a preference for routine or sameness (Kerns, 2024). For children with autism, compulsive behaviors may not always aim to reduce distress but could stem from a deep-seated need for consistency. Observing the child's emotional state during repetitive actions is informative; signs of pressure, discomfort, or distress suggest that the behavior is a compulsion aiming to mitigate unease, highlighting the nuanced relationship between OCD and autism (Kerns, 2024).

Incorporating specific considerations into the assessment process allows mental health professionals to distinguish between clinical anxiety, sub-clinical anxiety, and behaviors typically associated more precisely with autism. This nuanced approach ensures that interventions and support are appropriately tailored to meet the individual needs of those with autism, enhancing both diagnosis accuracy and the effectiveness of subsequent treatments, a process of utmost importance for autistic girls.

Cognitive Behavioral Therapy (CBT) for Youth with Autism

The most widely used method of treating anxiety symptoms in autistic children and adolescents is CBT (Kester & Lucyshyn, 2018). CBT aims to help individuals identify and change problematic thought patterns or behaviors to improve emotional regulation. CBT includes four primary intervention domains: psychoeducation, cognitive restructuring, relaxation

techniques, and graded exposure. Graded exposure is especially beneficial as it requires children to practice breathing in smaller steps while approaching a fearful situation and using effective coping mechanisms (Kester & Lucyshyn, 2018). This aspect of treatment is particularly vital for children with autism, considering their challenges in effectively expressing their emotions and feelings (Attwood & Scarpa, 2013).

While interventions for youth with autism share underlying principles with traditional CBT, the application of these interventions requires adaptation (Rosen et al., 2016). It is insufficient to slow down the pace of standard CBT programs; more nuanced and specific adjustments are necessary. An integral part of the therapeutic process is a detailed assessment of each child's cognitive strengths and challenges, which informs the customization of the intervention strategies to the child's distinct cognitive profile. Additionally, addressing a child's social and communication skills is imperative due to the crucial role these skills play in the child's overall success. CBT can be particularly verbally intensive, which presents additional challenges for autistic children with communication difficulties (Rosen et al., 2016). Therefore, motivation becomes a focal point, and employing a strengths-based approach that acknowledges the child's achievements and interests is key to fostering a sense of positivity and confidence.

Adaptations in CBT for autistic youth include employing visual aids, communication devices, reinforcement techniques, and integrating specific interests (Rosen et al., 2016). Other modifications encompass involving primary caregivers, extending session durations, utilizing social stories for problem-solving and cognitive restructuring, integrating relaxation strategies, and applying video modeling (Walters et al., 2016). These modifications ensure that the therapy is tailored to the unique needs of autistic children, thereby enhancing its effectiveness and relevance.

In their comprehensive review, Kester and Lucyshyn (2018) examined the effectiveness of CBT in treating anxiety among autistic children. They concluded that modified CBT interventions for youth with autism align with the Council for Exceptional Children (CEC)'s standards for empirically supported treatments (ESTs). The authors distinguish between empirically supported treatments (ESTs), which are interventions validated through specific evidence criteria, and evidence-based practices (EBPs), which combine research, clinical acumen, and stakeholder feedback. Thus, ESTs are a vital component of EBPs. Kester and Lucyshyn (2018) highlight that the Council for Exceptional Children (CEC) standards offer three advantages over other methods of determining EST status: tailored expert design for special education, incorporation of various research methodologies, and applicability by special educators independently.

Kester and Lucyshyn (2018) emphasized a variety of CBT interventions specifically adapted for children with autism, featuring diverse therapeutic techniques, both individually and in groups, active parent participation, and a combined focus on improving social skills and reducing anxiety. One such program is Facing Your Fears (FYF; Reaven et al., 2011).

Facing Your Fears (FYF)

FYF is a CBT-based manualized program for the reduction of anxiety in cognitively able autistic children with LSN (Reaven et al., 2011). FYF specifically targets social phobia, generalized anxiety disorder, separation anxiety disorder, and specific phobia. FYF is similar to evidence-based programs such as Coping Cat (Kendall & Hedtke, 2006) while incorporating components integral to the needs of autistic children, in particular, parent involvement.

FYF has been predominately conducted in hospitals or clinics and facilitated by mental health professionals (Drmic et al., 2017; Reaven et al., 2012, 2018, 2022, 2024). The program is

designed for the participation of four to five families, attending weekly 90-minute group sessions for 14 consecutive weeks. Each session is divided into large-group time, work time in parent and child dyads, and parents alone and children alone, all outlined in the manual, including the purpose, goals, objects, and activities for each session modality. The program follows the basic tenets of CBT, including psychoeducation, identification of anxiety symptoms, and identification of fears in preparation for graded exposure. In the parent curriculum, specific discussions focus on parental anxiety and styles and the particular social and communication challenges inherent to autism that may lead to a more protective parenting style (Reaven & Hepburn, 2006). The program also includes a booster session that may occur anywhere from four to six weeks post-intervention.

In a pilot study with 33 school-aged children with autism and LSN comparing FYF to treatment-as-usual, results demonstrated better parent-reported anxiety outcomes for the CBT group (Reaven et al., 2009). Furthermore, in a randomized trial with 50 children aged 7-14 years old, 50% of children in the CBT group showed reduced anxiety levels compared to the 8.7% in the waitlist control group (Reaven et al., 2012). In a recent multi-site trial implementing FYF, significant reductions in anxiety severity were observed, with many youth no longer meeting diagnostic criteria (29% for separation anxiety, 39.2% for GAD, and 52% for social anxiety) (Reaven et al., 2018). The strength of FYF lies in its broad applicability across clinical settings and age groups, highlighting its versatility and suggesting strong potential for school-based implementation.

School-Based CBT Interventions for Youth with Autism

Students with autism, particularly girls, face significant anxiety issues in school, largely due to their challenges with social skills and emotional regulation (Kerns & Kendall, 2012).

School-based anxiety interventions aim to lessen these anxieties by enhancing self-awareness and symptom recognition (Kerns & Kendall, 2012). While CBT is typically delivered in clinic settings, when applied in schools, it allows for the practical application of learned skills in the naturalistic environment, thereby increasing the treatment's ecological validity.

In a meta-analysis of school-based CBT interventions, Perihan et al. (2022), school-based interventions were deemed effective (g = -0.58) for decreasing anxiety symptoms in autistic children with LSN, albeit slightly less so than clinic-based interventions (g = 0.66; Perihan et al., 2020). However, only a handful of studies have focused on the effectiveness of CBT for children with autism in school settings (Bernstein & O'Neal, 2023; Clarke et al., 2017; Drmic et al., 2017; Fujii et al., 2013; Ireri et al., 2019; Kendall et al., 2013; Luxford et al., 2017; Ooi et al., 2008).

Notably, the study by Drmic et al. (2017) adapted the clinic-based FYF program for a school in Singapore, making cultural and school-specific modifications. These included the inclusion of in-school graded exposure practice, increased focus on emotion regulation, and incorporating three parent sessions to support the older adolescent participants in a school context. The program was facilitated by school staff with psychologist support, resulting in a decrease in both parent-reported and self-reported anxiety scores following the 10-week treatment (Drmic et al., 2017).

Facing Your Fears in Schools (FYF-S)

Following Drmic et al. (2017), a pilot feasibility study by Reaven et al. (2022) examined the school-based delivery of the Facing Your Fears- Schools (FYF-S) program in public schools, showing promising outcomes. The program addressed common school-related fears, such as making mistakes and navigating social interactions, through 12 weekly 45-minute sessions and

two face-to-face parent sessions. After training 34 interdisciplinary school providers, FYF-S was delivered to 29 autistic students in groups of 2–5, with at least two providers per group. Both parents and students reported significant reductions in anxiety, though teachers did not, despite anecdotal reports from school providers noting observable changes in student anxiety (Reaven et al., 2022). The authors suggest that teachers may not have noticed progress due to the internalized nature of anxiety symptoms, students' social communication challenges, or limited classroom visibility of certain fears. Additionally, teachers' limited contact with students may have further hindered their ability to detect changes.

To further assess FYF-S's sustainability and effectiveness, Reaven and colleagues (2024) conducted a randomized controlled trial across three diverse school districts in the U.S. Of the 13 teams administering FYF-S, adherence to the protocol was high, and there was significant improvement in the providers' CBT knowledge following a 12-hour training. Both providers and students reported positive feedback about the program. Treatment outcomes measured by the SCARED and PRAS-ASD tools showed significant anxiety reduction in students who received FYF-S compared to those in usual care, particularly in areas of Panic, Separation, and Social Anxiety according to parent reports, and in Separation and Social Anxiety according to student self-reports. Although these results are preliminary and less robust than clinic-based FYF trials, they are notable considering the reduced session time and less parent involvement in the school-based program.

The Role of School Psychologists in School-Based CBT Interventions

School psychologists are vital in bridging the gap between empirical research and practical application, especially in school-based CBT interventions for autistic students (Drmic et al., 2017; Kester & Lucyshyn, 2018). Their deep understanding of child development and school

systems places them uniquely positioned to guide the adaptation and integration of anxiety interventions within educational settings.

Previous studies have demonstrated that parents and educators recognize the need for the specialized skills of school psychologists, particularly for navigating the complexities of mental health issues in children with autism and anxiety (Kester & Lucyshyn, 2018). As both leaders and coaches, they facilitate the implementation of interventions like the FYF-S program by consulting with teachers, ensuring the fidelity of delivery, and fostering stakeholder engagement for successful collaboration (Drmic et al., 2017).

Particularly for girls with autism, who often encounter a "double whammy" of heightened internalizing symptoms and social skills difficulties, CBT interventions need to emphasize social competence and self-advocacy (Jamison & Schuttler, 2015; Solomon et al., 2011). School psychologists are critical in setting individualized goals, conducting continuous monitoring, and adjusting strategies based on feedback from key stakeholders. With the right training and resources, school psychologists can support the generalization of skills across various settings, enabling the students to navigate social complexities with greater ease and confidence (Gross & Thompson, 2007).

There's a call for more research on the transportability of such interventions to better meet the emotional needs of students with autism in school settings, especially girls. Through collaboration and continued education on the emotional complexities of students with autism, school psychologists are essential in ensuring these students receive comprehensive and effective support.

Proposed Study and Contributions to Gaps in the Field

Significant research gaps remain in school-based anxiety interventions for autistic youth, particularly regarding gender differences and the development of tailored interventions for autistic girls (Rynkiewicz et al., 2019; Sandland, 2018). Although autism is more frequently diagnosed in boys, autistic girls often experience heightened anxiety, which may go unrecognized due to gendered expectations and a lack of female-focused research (Hiller et al., 2016; Solomon et al., 2012). Additionally, evidence-based CBT programs that effectively address these needs within school settings are scarce, despite the increasing mental health demands highlighted by the COVID-19 pandemic (Drmic et al., 2017; Masonbrink & Hurley, 2020). There is an increasing demand for quality mental health services for all students within the multi-tiered systems of support (MTSS) framework (Perihan et al., 2022; Weist et al., 2017).

To this author’s knowledge, no studies have examined the inclusion of typically developing (TD) peers in a school-based CBT program adapted for autistic students, nor its impact on treatment effectiveness, social outcomes, or broader efforts to promote neurodiversity and mental health awareness in school settings. Including both autistic and TD students with anxiety in school-based interventions has the potential to not only support autistic girls' social-emotional development but also foster a more inclusive and understanding school community.

This study aimed to examine how FYF-S could be effectively integrated into school-based mental health services to support autistic girls' anxiety and social communication challenges within an MTSS framework. However, logistical constraints shortened the intervention length, limiting it to psychoeducational components, with only brief exposure to graded exposure strategies. As a result, social skill and friendship outcomes could not be analyzed as originally planned.

Despite these modifications, anxiety outcomes were still assessed to explore potential changes following the partial intervention. Research has shown that group-based psychoeducation for anxiety is effective in reducing symptoms among children (Baourda et al., 2022) and is commonly used in schools as both a preventive measure and a treatment for at-risk students (Gerrity & DeLucia-Waack, 2006). Given this, the study remains a valuable contribution to the anxiety intervention literature by exploring the impact and feasibility of a psychoeducational intervention for autistic and TD girls with anxiety.

By examining the perceptions of participating students, teachers, and parents, this study provides valuable insights into the social validity of school-based mental health interventions. Understanding how stakeholders view the acceptability, feasibility, and perceived benefits of the modified FYF-S program is essential for refining future interventions to better meet the needs of diverse learners, particularly autistic students. These perspectives contribute to the broader discussion on how inclusive, school-based interventions can effectively address anxiety while fostering empathetic and supportive school communities.

Research Questions & Hypotheses

1. *What is the impact of the modified FYF-S program, delivered by school-based mental health professionals, on the anxiety symptoms of girls with and without autism?*

   It was hypothesized that students would experience a change in anxiety symptoms following participation in the modified FYF-S program, as measured through parent, teacher, and self-report ratings.

2. *How do students, teachers, and parents evaluate the social validity and acceptability of the intervention?*

   It was expected that students, teachers, and parents would rate the FYF-S intervention as

socially valid and acceptable. This included participants' engagement with the psychoeducational components of the program (e.g., understanding of anxiety, use of coping strategies, and introduction to graded exposure). By assessing social validity, the study aimed to provide insight into how school-based mental health programs can be adapted to meet the diverse needs of both autistic and non-autistic students in inclusive therapeutic settings.

Chapter 3: Method

Study Context

The study took place at a large public elementary school in the greater Seattle area renowned for its cultural and linguistic diversity and commitment to providing students with individualized academic, social, and emotional support through rigorous and equitable education. The elementary school has a student body of 744, with a significant portion identifying as Asian (74%), followed by White (13%), Multiracial (8%), Hispanic (4%), and Black (1%). More than half of the students (54%) speak a language other than English at home, indicating a high degree of linguistic diversity. Additionally, a small percentage of students benefit from free or reduced meals (7%). The percentage of students receiving special education services (5%) is notably lower than the statewide average of 16% in Washington state (Washington Office of Superintendent of Public Instruction, 2024).

Recently, the school has observed an increase in its student population along with rising behavioral and mental health concerns. These developments have led to a greater demand for the student support team, which works to provide efficient and targeted interventions. In this context, the author as the school psychologist, and school counselor frequently conduct short-term, social-emotional learning groups to assist students grappling with anxiety and other mental health issues. However, there is a noted gap in services for students in special education, particularly those with significant anxiety needs, who require private therapy, which can be costly and challenging to obtain.

In response to these challenges, this study aimed to implement an anxiety intervention for 3rd- to 5th-grade girls with and without autism. The primary goal was to examine changes in anxiety symptoms, as measured through parent, teacher, and self-reports. While the intervention

was originally designed to also assess social skills and friendships, logistical constraints limited implementation to the intervention's psychoeducational components, preventing the evaluation of long-term social outcomes.

Participants

Per the FYF-S facilitator's manual (Reaven & Blakeley-Smith, 2023), the FYF-S program is designed for elementary and middle school students aged 8–14 years who are on the autism spectrum, show signs of autism or exhibit other social and learning challenges, compounded by anxiety that disrupt daily functioning. While the original studies only included autistic students with IEPs, the authors note that the FYF-S program can be equally beneficial for general education students who meet the specified eligibility requirements and can engage in the program.

Reaven and Blakeley-Smith (2023) outline the enrollment criteria for students in the "Facing Your Fears in Schools" program, focusing on two key areas:

Firstly, for students experiencing social and communication challenges, they recommend identifying those who demonstrate unconventional social behaviors, such as awkwardness in initiating interactions, difficulty with nonverbal cues, struggles in developing or maintaining friendships, tendencies to spend time in solitude during social periods like breaks, misinterpretation of social exchanges, display of rigid behaviors, or the presence of highly focused interests.

Secondly, for students displaying anxiety-related symptoms, they advise observing for specific fears, including loud sounds or the dark, a need to be first or an extreme aversion to losing, inflexibility regarding personal routines or rituals, difficulties with transitional changes,

social fears around the possibility of embarrassing oneself, a hesitance to speak up or participate in classroom settings, repetitive behaviors like asking questions over and over or seeking constant reassurance, excessive concern over everyday tasks and events, or significant distress over separating from parents or primary caregivers.

In accordance with prior studies and the recommended criteria by Reaven and Blakeley-Smith (2023), this study aimed to recruit seven student-parent dyads and their classroom teachers. A total of 14 students and their parents were initially recruited; however, five dyads either did not meet the inclusion criteria or declined to participate. Of the nine students and their parents who took part in the intervention, only seven parent-child dyads were included in the final sample, as two families opted out of data collection and reporting. The final sample consisted of seven students, seven parents, and five teachers, with some students having the same teachers.

Student participants were recruited into two groups: Autistic and Non-Autistic. Students in the Autistic group met the following inclusion criteria: (a) a medical diagnosis of autism; (b) no documented intellectual disability; (c) identification as female; (d) a chronological age between 8 and 11 years while living with someone who could provide informed consent; (e) significant anxiety-related behaviors and symptoms as reported by both a teacher and parent on the SAS-TR and SCARED assessments, respectively, defined as a sub-domain or total score that meets the instrument cut-off for clinical significance; and (f) challenges with social communication as indicated by IEP goals and/or teacher or parent report through the Social Responsiveness Scale-2nd Edition (SRS-2). Students in the Non-Autistic group met similar criteria, except they did not have a diagnosis of autism. Their inclusion criteria included: (a) being female-identifying; (b) a chronological age between 8 and 11 years while living with

someone who could provide informed consent; (c) significant anxiety-related behaviors and symptoms as reported by a teacher and parent on the SAS-TR and SCARED assessments, respectively; and (d) challenges with social communication as indicated by teacher or parent report.

A total of three students met criteria for the Autistic group and four students met criteria for the Non-Autistic group. In the Autistic group, all three girls identified as White and English-speaking, with two students in 5th grade and one in 3rd grade. All participants in the Autistic group met the clinical cutoff for social impairments associated with autism per the SRS-2 (see Table 2). In the Non-Autistic group, one girl identified as White, two as mixed race, and one as Asian. The languages represented in the Non-Autistic group included English, Tagalog, and Korean. One student in the Non-Autistic group was in 4th grade, while three were in 5th grade. All students were assigned to one of two intervention groups based on age: one group for 3rd–4th grade students and another for 5th grade students. The 3rd–4th grade group included one autistic and one non-autistic student, while the 5th grade group consisted of two autistic students and three non-autistic students. See Table 1 for student demographics.

Table 1

Student Demographic Characteristics

Intervention Group	Recruitment Group	Race/Ethnicity	Languages Spoken
3rd-4th Grade			
1	Autistic	White	English
2	Non-Autistic	Hispanic, Mexican	English
5th Grade			
3	Autistic	White	English
4	Autistic	White	English
5	Non-Autistic	Hispanic, Asian	English, Tagalog
6	Non-Autistic	Asian	English, Korean
7	Non-Autistic	White	English

Note. All female-identifying; All students Autistic students have a medical diagnosis of autism.

Table 2

SRS-2 Scores Among Autistic Participants

Participant	1		3		4	
Subscale	Parent	Teacher	Parent	Teacher	Parent	Teacher
Aw	50	57	71	80	81	57
Cog	71	67	78	83	84	79
Com	68	73	68	88	81	74
Mot	75	72	58	70	78	74
RRB	58	73	86	107	70	84
Social Com.	70	71	71	85	85	75
RRBI	58	74	86	107	70	84
Total	68	72	75	90	82	78

Note. T-scores ≥60 are clinically significant. SRS-2 subscales: Aw = Social Awareness, Cog = Social Cognition, Com = Social Communication, Mot = Social Motivation, RRB = Restricted Interests and Repetitive Interests; SRS-2 DSM-5 Compatible Subscales: Social Com. = Social Communication and Interaction, RRBI = Restricted Interests and Repetitive Behavior.

There were no specific inclusion criteria for the parent and teacher groups. The teacher group included the participants' classroom teachers, and the parent group consisted of one parent for each student. Of the seven parent participants, five were female and two were male. Four identified as White, one as Asian, one declined to share, and one did not complete the demographic questionnaire. Languages spoken included English and Korean. Three parents had a bachelor's degree, two had a master's degree, and one had some college or trade education. Among the five teachers, all identified as White, English-speaking, and had a master's degree as well as over 15 years of teaching experience. See Table 3 for parent demographics.

Table 3

Demographic Characteristics of Parents

Student	Gender	Race/Ethnicity	Languages Spoken	Level of Education
1	Female	--	English	Bachelor's
2	Female	White	English	Master's
3	Female	White	English	Some college/Trade
4	Female	White	English	Bachelor's
5	Female	--	--	--
6	Male	Asian	English, Korean	Bachelor's
7	Male	White	English	Master's

Note. -- = Parent did not endorse or did not complete demographic measure.

The intervention was facilitated by the author, a White, English- and Portuguese-speaking female, and the school counselor, an Asian, English-speaking female. We both worked at the school where the study took place as the school psychologist and school counselor, respectively, and were familiar with several participants through prior check-ins or small-group interventions. Our existing relationships with students and staff served as a strength, fostering trust, engagement, and rapport throughout the intervention. Additionally, our understanding of the school environment allowed for a more seamless implementation of the intervention and greater insight into the contextual factors influencing student experiences. Together, we had over 10 years of experience in school counseling and a background in implementing short-term CBT therapies for individuals with anxiety.

Research Design

A quasi-experimental pre-post group design was used to measure student anxiety, with assessments conducted before and after the modified FYF-S intervention. One limitation of this design is the lack of a control group, making it difficult to determine whether observed changes in anxiety were due to the intervention or external factors. Additionally, the absence of random assignment increases the risk of selection bias, potentially affecting group comparability. The

pre-post structure also introduces threats to validity, including maturation effects (natural developmental or emotional changes), history effects (external events influencing anxiety levels), and testing effects (pre-test exposure influencing post-test responses).

Despite these limitations, this design allowed for feasible implementation in a school setting, providing ecologically valid insights into the intervention's acceptability and perceived effectiveness. Quantitative and qualitative social validity data were collected post-intervention through Likert-based questions and short-answer responses from students, parents, and teachers, which were analyzed for patterns of acceptability, satisfaction, and perceived importance. Additionally, a descriptive time series design was used to assess the average level of implementation fidelity for program components across small-group sessions.

Procedures

Recruitment

Internal Review Board approval for this study was obtained through the University of Washington Human Subjects Division (STUDY00019709). Autistic participants were recruited through existing special education and Guidance Team data and Non-Autistic participants through Guidance Team and MTSS records for students needing extra social-emotional support due to anxiety. A detailed recruitment letter was sent to the parents and teachers of these students, explaining the study and intervention aims and inviting their participation, pending eligibility confirmation.

To determine eligibility, parents and students completed the Screen for Child Anxiety and Related Emotional Disorders (SCARED), while teachers completed the School Anxiety Scale-Teacher Report (SAS-TR). Clinically significant anxiety was defined as an elevated total or

subdomain score on both parent- and teacher-reported anxiety measures. The specific areas of elevation did not need to align between raters; for example, a parent-reported elevated separation anxiety score on the SCARED scale could co-occur with a teacher-reported elevated social anxiety score, as long as both measures indicated heightened anxiety symptoms in one or more of the following domains: social anxiety, generalized anxiety, separation anxiety, specific phobia, and total anxiety. Additionally, parents and teachers of students in the Autistic group completed the Social Responsiveness Scale-Second Edition (SRS-2) to confirm the presence of social communication challenges associated with autism, defined as an elevated total or subscale score. Once students were deemed eligible, parents and teachers were informed about the modified FYF-S intervention, study procedures, and their responsibilities, and consent was obtained.

Measures

Demographic Information

Demographic information was obtained from each participant's parent and teacher. Parents and teachers completed a brief questionnaire regarding their gender, race/ethnicity, languages spoken, and educational background (See Appendix B). Students' gender, race/ethnicity, and age were collected from existing school records and confirmed with parents.

The Screen for Child Anxiety and Related Disorders- Parent/Child Versions (SCARED)

At pre- and post-intervention, parents and students in both the Autistic and Non-Autistic groups completed the SCARED–Parent and Child Versions. Developed by Birmaher et al. (1999), the 41-item SCARED scale assesses child and parent perspectives on anxiety across five domains: Panic/Somatic, Generalized Anxiety, Separation Anxiety, Social Anxiety, and School Anxiety. A total score above 25 indicates clinically significant anxiety. This instrument was selected due to its strong psychometric properties and validation in both non-autistic and autistic

youth. Among non-autistic populations, the SCARED has demonstrated strong reliability and validity (Birmaher et al., 1999; Hale et al., 2011). In autistic youth, it has shown good sensitivity (0.71), specificity (0.67), internal consistency (Cronbach's $\alpha = 0.92$ for child total score, 0.90 for parent total score), and strong convergent validity with a gold-standard clinical interview (Stern et al., 2014). Additionally, it has been successfully used in prior treatment studies (Reaven et al., 2020, 2022, 2024).

School Anxiety Scale- Teacher Report (SAS-TR)

At pre- and post-intervention, teachers completed the SAS-TR, a 16-item questionnaire to evaluate anxiety symptoms in children aged 5-12 in the school context (Lyneham et al., 2008). The measure prompts teachers to rate observed behaviors, such as "fear of making mistakes," on a scale from "never" to "always." The tool combines social and generalized anxiety subscales for a total anxiety score (maximum score = 48), with scores above 17 indicating high levels of anxiety. The SAS-TR is shown to have reliable psychometric properties for neurotypical youth, marked by notable internal consistency ($\alpha > .90$) and the ability to differentiate between those with and without clinical anxiety levels accurately. In a sample of autistic children, satisfactory reliability ($\alpha > .70$) has been demonstrated (Luxford et al., 2017). This measure was chosen due to its prior use in intervention research (Kester & Lucyshyn, 2022).

Social Responsiveness Scale-Second Edition (SRS-2)

At pre- intervention, teachers and parents of students in the Autistic group completed the SRS-2 in accordance with previous FYF-S research (Reaven et al., 2020, 2022, 2024). The SRS-2 is a 65-item, parent-reported measure to assess significant challenges in reciprocal social behavior associated with autism via a 4-point Likert-type scale in which raw scores are converted into T-scores, where higher scores reflect greater social impairments (Constantino & Scale,

2012). The SRS-2 has demonstrated strong internal consistency (α = 0.95) and content validity (Constantino & Scale, 2012). The instrument consists of four subscales: Social Cognition, Social Motivation, Social Awareness, and Social Communication, that were used to inform parent-reported social communication challenges associated with autism.

Social Validity Questionnaires

Parents, teachers, and participants received a social validity questionnaire containing 12 to 18 items, including three narrative prompts (for parents and teachers), at the end of the intervention (See Appendixes C-E). Students were provided with a narrative prompt verbally in a group format (“What did you like about the group?” “What would you change?”) to reduce the need for writing. The purpose of the questionnaire was to gather insights into the perceived value and practicality of the objectives, methods, and results of the modified FYF-S program from the participants' perspectives. Responses were gauged using a 5-point Likert scale, ranging from "not helpful" to "extremely helpful" or a spectrum of agreement from "strongly disagree" to "strongly agree." A visual scale with faces depicting emotions from “very sad” to “very happy,” corresponding to the Likert scale's range, was employed for student participants. The cumulative scores derived from these evaluations were used as an overall measure of the intervention's social validity.

School-Based FYF Intervention

The CBT intervention used in this study is a modified version of the manualized Facing Your Fears-School (FYF-S) program, developed by Reaven and Blakeley-Smith (2023). FYF-S is derived from the clinic-based Facing Your Fears program, and consists of twelve, 40-minute sessions, delivered in small groups (between 2-5 students) within the school setting, and includes a brief parent component. FYF-S consists of two main components: psychoeducation (e.g.,

recognizing anxiety-provoking situations, learning relaxation techniques, and using cognitive strategies to enhance emotional regulation) and graded exposure (e.g., acknowledging fears and gradually confronting them in manageable steps). In the present study, three major modifications were made to the published manual.

First, due to scheduling conflicts with statewide testing and challenges in reaching participant families, the intervention was condensed into seven, 30-minute group sessions. This adjustment was feasible due to the intervention's flexibility, which includes optional activities and alternate stopping points that allowed for the combination of session topics. Second, three class sessions were conducted in each student's classroom, following a study by Kester and Lucyshyn (2022), which piloted the inclusion of class sessions in FYF-S and found them to be highly effective and well-received by teachers and students. Given the shorter timeline of the present study, these class sessions played a crucial role in reinforcing skills taught in the small-group format. The third and most significant modification was the reduced focus on graded exposure components. Due to time constraints and limited intervention facilitators, the modified FYF-S program focused primarily on psychoeducation and foundational anxiety management (See Appendix F). Key components included developing coping strategies such as somatic management, cognitive restructuring, and problem-solving, with only a brief introduction to graded exposure (i.e., building fear hierarchies). Each program component is outlined below.

Small Group

Each intervention group (3rd-4th grade group and 5th grade group) met weekly for 30 minutes over a seven-week period. In weeks 1–5, students learned to identify and manage anxiety symptoms using basic cognitive-behavioral strategies. In weeks 6–7, they were introduced to the concept of exposures and practiced creating fear hierarchies, which involved

breaking down a fear or anxiety-provoking situation into small steps, ranked from least to most anxiety-inducing. In session 7, students participated in an in vivo exposure and were encouraged to continue fear-facing outside of the group using their hierarchies.

Parent Group

Students' parents attended one synchronous virtual group session of an hour duration at the beginning of the program to receive an overview of the intervention. The group format was chosen based on previous research highlighting its effectiveness in supporting parents of autistic children (Reaven & Willar, 2017). Group settings not only provide structured intervention but also create opportunities for shared experiences, peer support, and collective problem-solving, which can be particularly beneficial in reducing isolation and fostering confidence in implementing strategies at home. In the second session, parents viewed a short video (15- 30 minutes) explaining additional session content and information about parental anxiety and behaviors that maintain children's anxiety symptoms, as well as how to support their child in recognizing and regulating anxiety symptoms. Parents were also sent weekly handouts following each small group session to maintain ongoing awareness of intervention skills.

Class Group

In weeks one, three, and six of the FYF-S content, three class-wide group sessions were conducted to reinforce intervention skills. These 30-minute sessions, designed for the study participants and their classmates, took place during the class' social-emotional instruction block. The sessions were designed to provide an opportunity for the participant's teacher and peers to learn and develop useful strategies to address stress and anxiety. Concepts included identifying and understanding anxiety, as well as strategies to cope with anxiety.

Procedural Fidelity

Procedural fidelity was assessed to ensure the intervention components were implemented as intended. After each small-group session as well as the first parent session, facilitators completed a checklist created by the FYF-S authors (Reaven & Blakeley-Smith, 2023; see Appendix A) documenting whether each intervention component was completed (yes/no) and rating the quality of delivery using a 5-point Likert scale (1 = "Poor," 5 = "Excellent"). This checklist was designed to capture both adherence to the intervention protocol and the consistency of implementation quality. Each facilitator completed a checklist, and the quality ratings were averaged across facilitators to attempt to reduce bias in individual ratings. Procedural fidelity was not calculated for class sessions, as the content was not part of the FYF-S manual.

Setting and Materials

The FYF-S program was delivered in the conference room during regular school hours at the elementary school. The synchronous parent group session was conducted virtually after school hours. Class sessions were conducted in each participating student's regular classroom during their scheduled social-emotional instructional block. Materials for the FYF-S intervention included the facilitator manual and parent and child workbooks, in addition to visual stress-o-meters, fidgets, and other visual supports. Materials for class-wide sessions were adapted from the child workbooks and presented via PowerPoint.

Data Analysis

Anxiety Outcomes

Analysis of anxiety outcomes involved comparing pre- and post-intervention anxiety scores across multiple informants (teachers, parents, and students). Several instances of missing

data occurred during data collection, affecting the total number of participants included in the analyses. One teacher went on unplanned medical leave, two weeks into the program, resulting in missing post-intervention SAS-TR data for two students in the Autistic group. As a result, pre-post analyses of teacher-reported anxiety included only five participants. Similarly, two parents did not complete the post-intervention SCARED measure, limiting parent-reported analyses to five participants. Additionally, one student did not complete the pre-intervention SCARED measure, thus restricting child-reported analyses to six participants.

Means and standard deviations (SDs) were calculated to summarize anxiety scores for each informant (teacher, student, and parent). Given the small sample size and presence of some missing data, the Wilcoxon Signed-Rank Test, a non-parametric test, was used to assess changes in anxiety scores between pre- and post-intervention. Additionally, effect sizes (*r*) were calculated to assess the magnitude of observed changes. Effect sizes (r) were interpreted according to Cohen's (1988) guidelines: small (0.10), medium (0.30), and large (0.50) effects. Medians and interquartile ranges (IQRs) were also computed to further describe score distributions for each anxiety domain and informant, consistent with the non-parametric nature of the analyses. For teacher-reported data on the SAS-TR, this analysis was conducted separately for Social Anxiety (SOC), Generalized Anxiety (GAD), and Total Anxiety (TOT) domains. Similarly, child- and parent-reported data on the SCARED assessment were analyzed separately for the Panic/Somatic (P/S), Generalized Anxiety (GAD), Separation Anxiety (SEP), Social Anxiety (SOC), School Avoidance (SA), and Total Anxiety (TOT) domains.

To examine differences between informants, Wilcoxon Rank-Sum Tests were conducted to compare student-, parent-, and teacher-reported total anxiety scores at pre- and post-intervention. Additionally, Spearman rank-order correlations were used to assess the strength of

associations between informants' reports of total anxiety. Correlation coefficients were interpreted as small (±.10), medium (±.30), or large (±.50 and above; Cohen, 1988). To evaluate the magnitude of changes, effect sizes (*r*) were calculated by dividing the Z-score by the square root of the sample size (*N*). Medians and interquartile ranges (IQRs) were computed to summarize distributions due to the non-parametric nature of the data. Finally, boxplots and/or bar charts were created throughout analyses to visualize changes in anxiety scores within individual measures, across reporters, and to highlight domains showing marginal significance. All statistical analyses and figures were conducted in RStudio.

Procedural Fidelity

Procedural fidelity for the small-group sessions and the first parent session was assessed by calculating the percentage of completed steps and averaging these values. Additionally, quality ratings were calculated and averaged across sessions to assess the perceived quality of implementation. These fidelity metrics were examined separately for the 3rd-4th grade and 5th grade groups to identify any differences in adherence or quality of delivery between groups.

Social Validity

The investigation into the social validity of the FYF-S program—specifically, how participants viewed its acceptability and practicality—was conducted through a mixed-methods approach. First, descriptive statistics were utilized to process quantitative feedback from educators, parents, and students. This involved calculating an overall average score from all responses to provide a composite social validity rating. Regarding the information gathered from the narrative questions, a thematic analysis was conducted as outlined by Braun and Clarke (2006). This process entailed reading the narrative data, generating initial codes, identifying themes, and then reporting vivid examples that connect to the research question. Identified

themes were also examined for patterns and contrasted both within individual groups and between the different groups (teachers, parents, vs. students). Themes identified among teachers were juxtaposed with those from parents and students to highlight both commonalities and distinctions in their perceptions of the intervention's social validity.

Chapter 4: Results

This study utilized a quasi-experimental pre-post design conducted within a real-world school setting, where certain variables could not be tightly controlled, including participant attendance, consistent completion of measures, and timing of the intervention sessions. Despite these limitations, detailed statistical analyses yielded several notable findings. The results are presented below, organized according to the two guiding research questions.

Research Question 1: Exploring Anxiety Outcomes

Teacher-Reported Anxiety

The SAS-TR was used to measure student anxiety symptoms as reported by teachers at pre- and post-intervention in three domains: social anxiety (SOC), generalized anxiety (GAD), and total anxiety (TOT). At pre-intervention, GAD scores were highest (M = 17.4, SD = 5.59) compared to SOC scores (M = 13.2, SD = 7.40). At post-intervention, SOC scores decreased (M = 10.0, SD = 5.10) while GAD scores remained stable (M = 17.2, SD = 7.56). TOT scores demonstrated a slight decrease, from a mean of 30.6 (SD = 10.60) to 27.2 (SD = 11.54). These findings indicate a decrease in TOT scores, likely driven by a reduction in SOC scores, while GAD remained relatively stable post-intervention. Table 4 summarizes the Ms and SDs for SAS-TR scores. Figure 1 shows the SAS-TR scores by timepoint.

Table 4

Descriptive Statistics for Teacher-Reported SAS-TR Scores

	M		*SD*	
Domain	Pre	Post	Pre	Post
SOC	13.2	10.0	7.40	5.10
GAD	17.4	17.2	5.59	7.56
TOTAL	30.6	27.2	10.60	11.54

Note. M = Mean; *SD* = Standard Deviation; SAS-TR anxiety domains: SOC = Social Anxiety, GAD = Generalized Anxiety, TOTAL = Total Anxiety.

Three Wilcoxon signed-rank tests were conducted to compare SOC, GAD, and TOT scores before and after the modified FYF-S intervention (Table 5). Effect sizes (r) were also calculated to measure the magnitude of these differences. The tests indicated that teacher-reported SOC scores did not significantly change from pre-intervention (Md = 14, IQR = 5) to post-intervention (Md = 12, IQR = 6), V = 8.5, p = .269, with a small effect size (r = 0.12). Similarly, GAD scores showed no significant difference between pre-intervention (Md = 17, IQR = 5) and post-intervention (Md = 10, IQR = 10), V = 6.5, p = .892, with a small negative effect size (r = -0.12). However, the increase in IQR from 5 to 10 suggests greater variability in post-intervention scores. TOTAL scores also showed no significant change from pre-intervention (Md = 35, IQR = 16) to post-intervention (Md = 26, IQR = 22), V = 4, p = .854. Despite the lack of statistical significance, the effect size (r = -0.42) suggests a medium effect, indicating a possible trend toward reduced anxiety.

Table 5

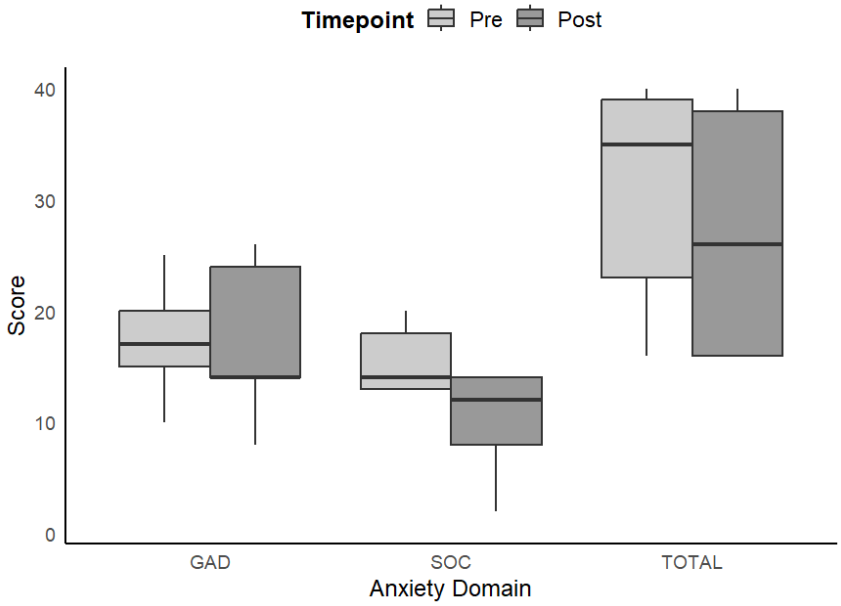
Results of Wilcoxon Signed-rank Test for Teacher-Reported SAS-TR Scores

Domain	Pre *Md*	Post *Md*	Pre IQR	Post IQR	*V*	*p*	*r*
SOC	14	12	5	6	8.5	.269	0.12
GAD	17	14	5	10	6.5	.892	-0.12
TOTAL	35	26	16	22	4.0	.854	-0.42

Note. Md = Median; IQR = Interquartile Range; *V* = Wilcoxon signed-rank test statistic; *p*-values are two-tailed; effect sizes (*r*) were calculated as $r = Z / \sqrt{N}$; SAS-TR anxiety domains: SOC = Social Anxiety, GAD = Generalized Anxiety, TOTAL = Total Anxiety.

Figure 1

Pre- and Post- Intervention SAS-TR Scores per Teacher Report



Note. SAS-TR anxiety domains: SOC = Social Anxiety, GAD = Generalized Anxiety, TOTAL = Total Anxiety. Light gray boxes represent pre-intervention scores; dark gray boxes represent post-intervention scores.

Child-Reported Anxiety

The SCARED was used to measure child-reported anxiety at pre- and post-intervention in several domains: Panic/Somatic (P/S), Generalized Anxiety (GA), Separation Anxiety (SEP), Social Anxiety (SOC), School Avoidance (SA), and total score (TOTAL). Among anxiety

domains, SOC scores (*M* = 8.20, *SD* = 3.35) were highest at pre-intervention, followed by GAD (*M* = 7.40, *SD* = 4.33) and P/S scores (*M* = 7.00, *SD* = 5.19), compared to SEP (*M* = 5.80, *SD* = 4.08), and SA (*M* = 2.00, *SD* = 1.58). At post-intervention, SOC scores decreased moderately (M = 5.00, SD = 3.32), while GAD scores (*M* = 5.80, *SD* = 4.54) and P/S scores (*M* = 5.60, *SD* = 4.22) demonstrated a slight decrease. TOTAL scores also decreased, from a mean of 31 (*SD* = 9.82) to 23 (*SD* = 6.96). These descriptive statistics suggest a trend toward lower anxiety scores across domains following the intervention (See Table 6).

Table 6

Descriptive Statistics for Child-Reported Anxiety SCARED Scores

	M		*SD*	
Domain	Pre	Post	Pre	Post
P/S	7.00	5.60	5.19	4.22
GAD	7.40	5.80	4.33	4.54
SEP	5.80	5.40	4.08	1.52
SOC	8.20	5.00	3.35	3.32
SA	2.00	1.20	1.58	1.09
TOT	31.00	23.00	9.82	6.96

Note. M = Mean; SD = Standard Deviation; SCARED domains: P/S = Panic/Somatic, GAD = Generalized Anxiety, SEP = Separation Anxiety, SOC = Social Anxiety, SA = School Avoidance, TOT= Total Anxiety.

A series of Wilcoxon signed-rank tests were conducted to examine changes in child-reported anxiety scores between pre- and post-intervention (See Table 7). Results indicated no significant change in P/S symptoms from pre-intervention (*Md* = 4, IQR = 7) to post-intervention (*Md* = 4, IQR = 6), *V* = 10, *p* = .098, with a medium effect size (*r* = 0.30). Similarly, GAD scores showed no statistically significant change between pre-intervention (*Md* = 5, IQR = 2) and post-intervention (*Md* = 4, IQR = 3), *V* = 12.5, *p* = .223. However, the effect size for the difference between pre- and post-intervention GAD scores was large (*r* = 0.60), despite the lack of

statistical significance. SEP scores remained stable from pre-intervention (*Md* = 5, IQR = 3) to post-intervention (*Md* = 6, IQR = 1), *V* = 5.5, *p* = 1, with a small effect size (*r* = -0.24). The decline in SOC scores from pre-intervention (*Md* = 7, IQR = 2) to post-intervention (*Md* = 6, IQR = 6), *V* = 13, *p* = .178, was not statistically significant; however, the large effect size (*r* = 0.66) suggests a notable shift. SA scores remained unchanged between pre-intervention (*Md* = 2, IQR = 2) and post-intervention (*Md* = 2, IQR = 2), *V* = 11, *p* = .408, with a moderate effect size (*r* = 0.42), indicating some variability despite the lack of significance. TOTAL scores also showed no significant change from pre-intervention (*Md* = 28, IQR = 10) to post-intervention (*Md* = 21, IQR = 9), *V* = 13.5, *p* = .136. However, the large effect size (*r* = 0.72) suggests a meaningful declining trend in overall anxiety. Figure 2 shows the child-reported SCARED scores by timepoint.

Table 7

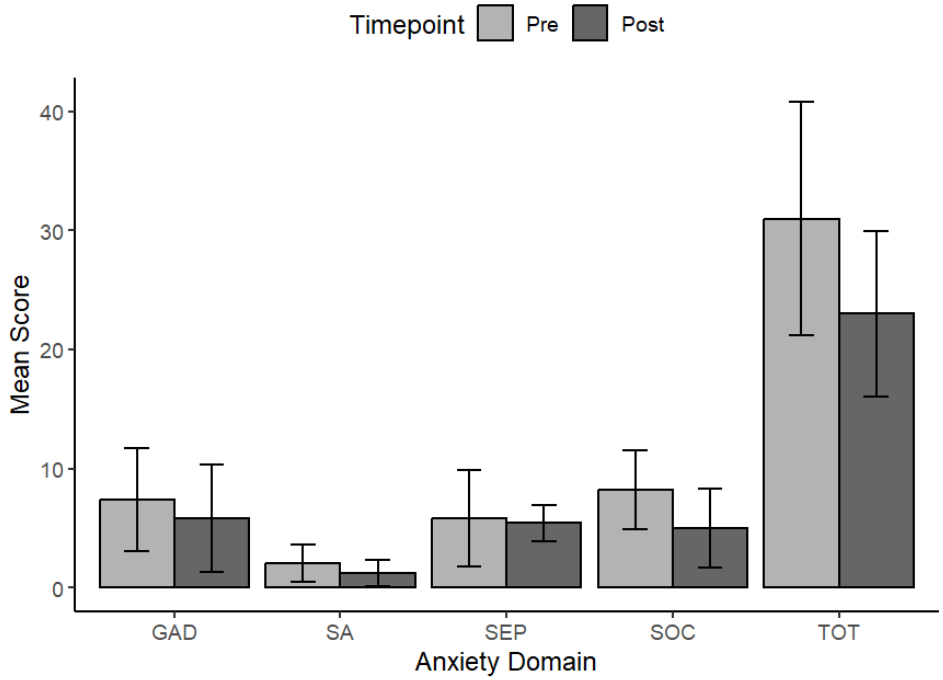
Wilcoxon Signed-Rank Test Results for Child-Reported SCARED Scores

Domain	Md (Pre)	IQR (Pre)	Md (Post)	IQR (Post)	*V*	*p*	*r*
P/S	4	7	4	6	10	.099	.302
GAD	5	2	4	3	12.5	.223	.603
SEP	5	3	6	1	5.5	1.000	-.241
SOC	7	2	6	6	13	.188	.663
SA	2	2	2	2	11	.408	.422
TOTAL	28	10	21	9	13.5	.136	.724

Note. *V* = Wilcoxon signed-rank test statistic; *p*-values are two-tailed; effect sizes (*r*) were calculated as $r = Z / \sqrt{N}$. SCARED domains: P/S = Panic/Somatic, GAD = Generalized Anxiety, SEP = Separation Anxiety, SOC = Social Anxiety, SA = School Avoidance, TOT= Total Anxiety.

Figure 2

Pre- and Post- Intervention SCARED Scores per Child Report



Note. SCARED domains: P/S = Panic/Somatic, GAD = Generalized Anxiety, SEP = Separation Anxiety, SOC = Social Anxiety, SA = School Avoidance, TOT= Total Anxiety. Light gray boxes represent pre-intervention scores; dark gray boxes represent post-intervention scores.

Parent-Reported Anxiety

The SCARED was also used to measure parent-reported anxiety symptoms at pre-and post-intervention. Among anxiety domains, GAD scores (M = 12.20, SD = 4.26) were highest at pre-intervention followed by SOC scores (M = 9.60, SD = 3.36), with P/S symptoms as the lowest reported (M = 2.80, SD = 1.30). At post-intervention, TOTAL scores declined from a mean of 33.40 (SD = 4.98) to a mean of 29.80 (SD = 11.09), while SOC scores showed a slight decrease (M = 9.69, SD = 5.41). GAD scores demonstrated a notable decrease (M = 8.00, SD = 6.16), while P/S scores increased (M = 6.00, SD = 4.94). These descriptive statistics suggest an overall reduction in parent-reported anxiety levels, with the most pronounced decline observed in GAD scores (See Table 8).

Table 8

Descriptive Statistics for Parent-Reported Anxiety SCARED Scores

	M		*SD*	
Domain	Pre	Post	Pre	Post
P/S	2.80	6.00	1.30	4.94
GAD	12.20	8.00	4.26	6.16
SEP	5.20	5.80	2.16	3.96
SOC	9.60	8.40	3.36	5.41
SA	3.40	2.40	1.14	0.89
TOT	33.40	29.80	4.98	11.09

Note. M = Mean; SD = Standard Deviation; SCARED domains: P/S = Panic/Somatic, GAD = Generalized Anxiety, SEP = Separation Anxiety, SOC = Social Anxiety, SA = School Avoidance, TOT= Total Anxiety.

Wilcoxon signed-rank tests were conducted to assess changes in parent-reported anxiety scores between pre- and post-intervention (see Table 9). P/S symptoms showed no significant change from pre-intervention (*Md* = 2, IQR = 1) to post-intervention (*Md* = 6, IQR = 3), *V* = 3, *p* = .276, with a small effect size (*r* = -0.33). Similarly, GAD scores remained stable from pre-intervention (*Md* = 14, IQR = 2) to post-intervention (*Md* = 6, IQR = 6), *V* = 9, *p* = .201, with a moderate effect size (*r* = -0.44). SEP scores showed no change from pre-intervention (*Md* = 6, IQR = 3) to post-intervention (*Md* = 5, IQR = 4), *V* = 4.5, *p* = 1, with a small effect size (*r* = -0.24). SOC scores also remained comparable between pre-intervention (*Md* = 12, IQR = 5) and post-intervention (*Md* = 9, IQR = 5), *V* = 5, *p* = .423, with a medium effect size (*r* = -0.32). SA scores showed no significant change, with pre-intervention scores (*Md* = 3, IQR = 1) and post-intervention scores (*Md* = 3, IQR = 1) remaining the same, *V* = 13, *p* = .168, with a moderate effect size (*r* = -0.47). TOTAL scores did not show significant pre-post differences, despite scores decreasing from pre-intervention (*Md* = 34, IQR = 4) to post-intervention (*Md* = 26, IQR = 7), *V* = 10, *p* = .588, though the moderate effect size (*r* = -0.30) suggests a possible trend toward reduction. Figure 3 shows the parent-reported SCARED scores by timepoint.

Table 9

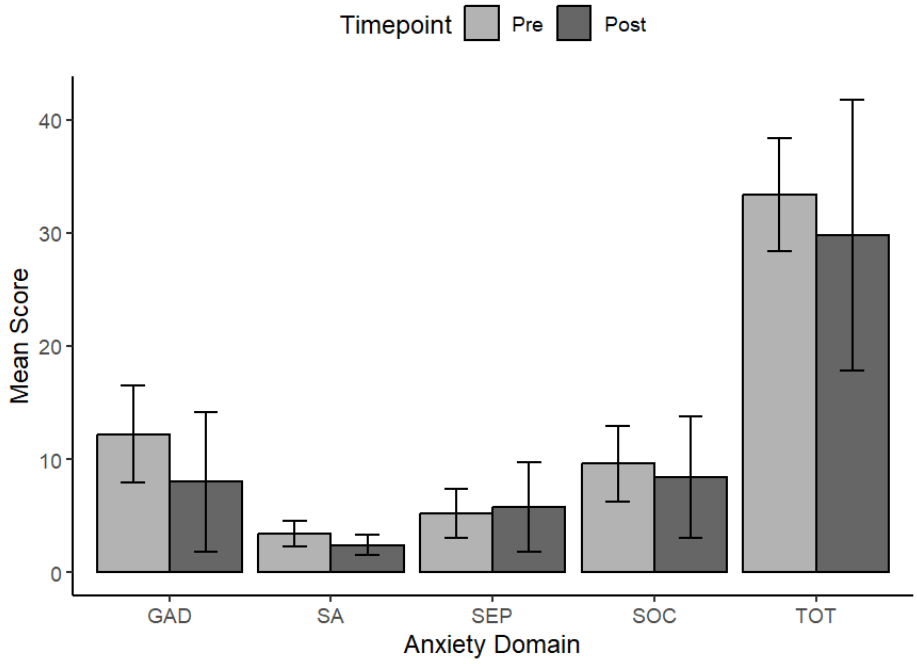
Wilcoxon Signed-Rank Test Results for Parent-Reported SCARED Results

Domain	Md (Pre)	IQR (Pre)	Md (Post)	IQR (Post)	*V*	*p*	*r*
P/S	2	1	6	3	3	.276	-0.33
GAD	14	2	6	2	9	.201	-0.44
SEP	6	3	5	4	4.5	1.000	-0.24
SOC	12	5	9	5	5	.423	-0.32
SA	3	1	3	1	13	.168	-0.47
TOTAL	34	4	26	7	10	.588	-0.30

Note. V = Wilcoxon signed-rank test statistic; *p*-values are two-tailed; effect sizes (*r*) were calculated as $r = Z / \sqrt{N}$. SCARED domains: P/S = Panic/Somatic, GAD = Generalized Anxiety, SEP = Separation Anxiety, SOC = Social Anxiety, SA = School Avoidance, TOT= Total Anxiety.

Figure 3

Pre- and Post- Intervention SCARED Scores per Child Report



Note. SCARED domains: P/S = Panic/Somatic, GAD = Generalized Anxiety, SEP = Separation Anxiety, SOC = Social Anxiety, SA = School Avoidance, TOT= Total Anxiety. Light gray boxes represent pre-intervention scores; dark gray boxes represent post-intervention scores.

Informant Comparisons

To examine differences in total anxiety scores reported by students, parents, and teachers, across measures, Wilcoxon rank-sum tests were conducted (See Table 10). Pre-intervention comparisons indicated no statistically significant differences between student- and parent-reported total anxiety scores, $W = 15$, $p = .430$, $r = -0.22$, between student- and teacher-reported scores, $W = 21.5$, $p = 1.000$, $r = 0.00$, or between parent- and teacher-reported scores, $W = 29$, $p = .609$, $r = -0.14$. Similarly, post-intervention comparisons revealed no statistically significant differences in total anxiety scores between student and parent reports, $W = 13.5$, $p = .569$, $r = -0.14$, between student and teacher reports, $W = 15$, $p = .745$, $r = -0.08$, or between parent and teacher reports, $W = 14.5$, $p = .753$, $r = -0.07$.

Table 10

Results of Wilcoxon Rank-Sum Tests Comparing Total Anxiety Scores Across Informants at Pre- and Post-Intervention

Comparison	*W*	*p*	*r*
Pre-Intervention			
Student vs. Parent	15	.430	-.22
Student vs. Teacher	21.5	1.000	.00
Parent vs. Teacher	29	.609	-.14
Post-Intervention			
Student vs. Parent	13.5	.569	-.14
Student vs. Teacher	15	.745	-.08
Parent vs. Teacher	14.5	.753	-.07

Note. W = Wilcoxon rank-sum statistic; r = effect size (small: .10, medium: .30, large: .50).

To further explore the relationships among informants, Spearman rank-order correlations were conducted (See Table 11). At pre-intervention, a strong positive correlation was observed between parent- and teacher-reported total anxiety scores, $r_s(5) = .93$, $p = .003$, indicating strong

agreement between these informants. However, correlations between student and parent reports (r_s = -.72, p = .103) and between student and teacher reports (r_s = -.83, p = .058) were not statistically significant. At post-intervention, no significant correlations were found between student and parent reports (r_s = -.10, p = .950), student and teacher reports (r_s = .46, p = .434), or parent and teacher reports (r_s = -.32, p = .684). Figure 4 shows total anxiety scores by timepoint and informant.

Table 11

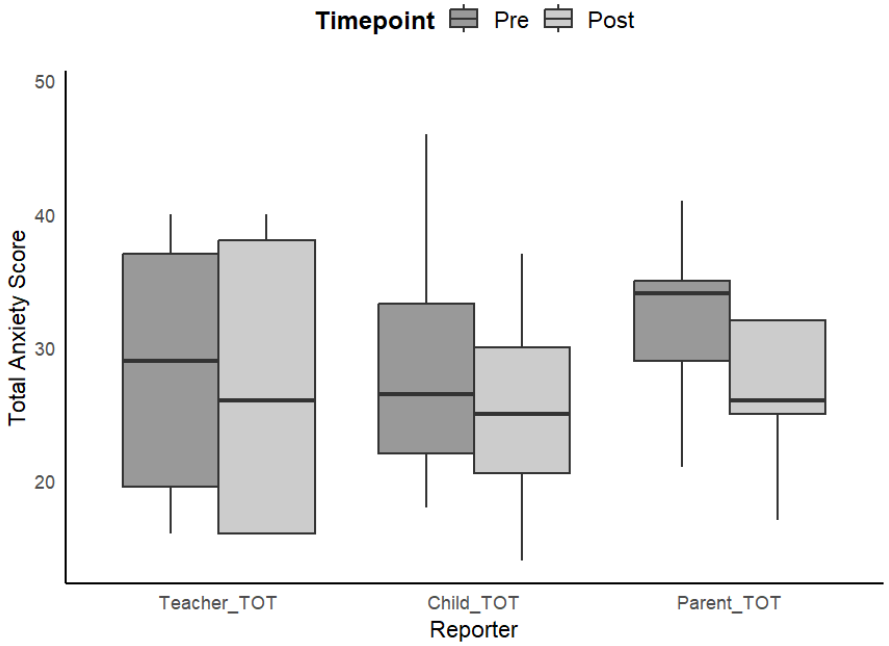
Spearman Rank-Order Correlations Among Total Anxiety Scores

Informants	r_s	p
Pre-Intervention		
Parent & Teacher	.93	.003*
Student & Parent	-.72	.103
Student & Teacher	-.83	.058
Post-Intervention		
Student & Parent	-.10	.950
Student & Teacher	.46	.434
Parent & Teacher	-.32	.684

Note. r_s = Spearman's rho correlation. Significant correlation ($p < .01$) indicated with an asterisk.

Figure 4

Pre- and Post- Intervention Anxiety Scores Across Reporters



Note. TOT = Total Anxiety; Dark gray boxes represent pre-intervention scores, and light gray boxes represent post-intervention scores.

Overall, findings indicate that no significant differences exist between teacher, child, and parent reported totally anxiety scores. Notably, strong agreement was observed between parent- and teacher-reported anxiety at pre-intervention, though this correlation was not maintained post-intervention.

Procedural Fidelity

Among the small-group sessions, facilitators implemented an average of 97% of intervention components across sessions, indicating a high level of adherence to the intervention protocol (See Figure 5 for a display of fidelity ratings over time). The mean quality ratings were 3.54 (*SD* = 0.35) for the 3rd-4th grade group and 3.55 (SD = 0.38) for the 5th grade group, suggesting that the overall quality in intervention delivery across intervention groups was adequate. While completion rates were uniformly high, quality ratings varied across sessions,

ranging from 3 (“adequate”) to 4 (“good”) in the 3rd-4th grade group and 2.71 (“fair”) to 4 (“good”) in the 5th grade group (See Figure 6). These results indicate strong fidelity in delivering intervention components, with some variability in perceived quality across sessions. In addition, procedural fidelity for the parent sessions was high, with 100% of session components completed and a perfect average quality rating ($M = 5$, $SD = 0$) indicating strong adherence to the intervention protocol and consistent implementation quality. Furthermore, although procedural fidelity was not calculated for class sessions, all materials created by the researcher were delivered as planned in weeks one, three, and six of the intervention program to three 5th grade classes, one 3rd class, and one 4th grade class.

Figure 5

Fidelity Ratings Across Small Group Sessions

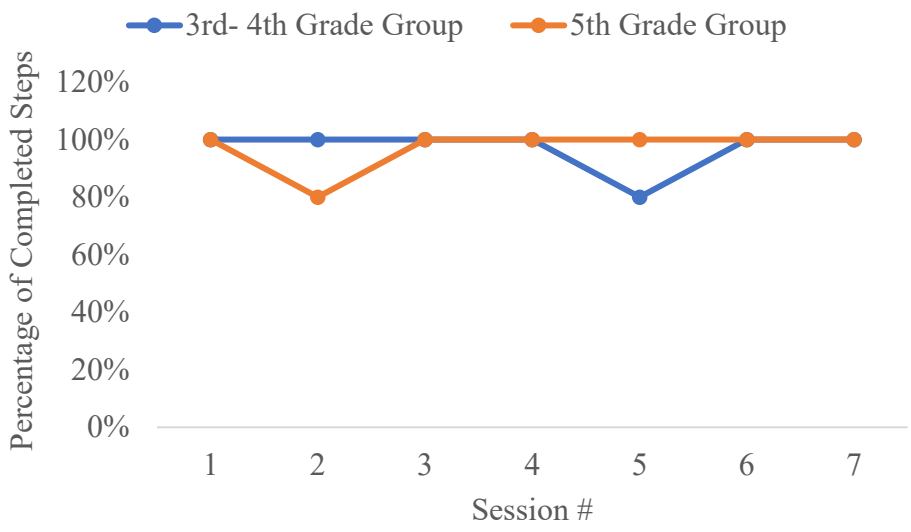
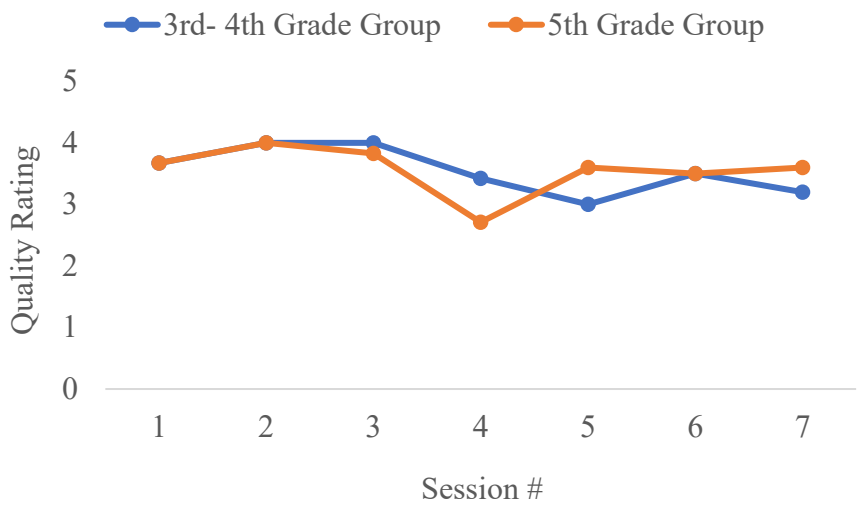


Figure 6

Quality Ratings Across Small Group Sessions



Research Question 2: Assessing Social Validity

Acceptability of the modified FYF-S program was highest among parents (M = 4.04, SD = 0.21) and teachers (M = 4.02, SD = 0.37), compared to students (M = 3.29, SD = 0.27). Among students, the average mean ratings of social validity were similar across Autistic (M = 3.33 SD = 0.08) and Non-Autistic students (M = 3.27, SD = 0.45). Table 12 summarizes the means, standard deviations, ranges and grand means of social validity ratings for educators, parents and students.

Table 12

Descriptive Statistics for Social Validity Questionnaires

	Students		Parents		Teachers		
	M (SD)	R	M (SD)	R	M (SD)	R	GM
Autistic	3.33(0.08)	3.25-3.41	4.04(0.77)	3.11-5.00	**4.18(0.92)**	**4.18**	3.83
Non-Autistic	3.27(0.45)	2.67-3.75	4.04(0.16)	3.83-5.00	3.97(0.76)	3.20-5.00	3.71
Total	3.29(0.26)	2.67-3.75	4.04(0.21)	3.11-5	4.02(0.37)	3.20-5.00	3.75

Note. M = Mean; SD = Standard Deviation; R = Range, GM = Grand Mean, Bold font = Results based on one teacher's reporting due to missing data.

Student Perspectives

Among the social validity items, the highest-rated statement among students was "I would like to go to Facing Your Fears group again" (M = 4.50, SD = 0.76), followed by "I liked going to Facing Your Fears group" (M = 3.67, SD = 0.74), and "I know how to use calm body and calm mind tools" (M = 3.50, SD = 0.97). The lowest-rated item was "I can calm myself down when I am worried" (M = 2.83, SD = 1.34). Regarding specific strategies learned in the intervention, the highest-rated tools were deep breathing (M = 3.83, SD = 0.89) and learning about false alarms (M = 3.83, SD = 0.89). The least helpful tool reported was the use of worry bugs and helper bugs (M = 2.50, SD = 0.95).

Student narratives highlighted several key themes, including engagement, strategies, and challenges. When asked about their experiences in the program, students expressed both enjoyment and specific preferences. One student shared, "I liked the group," while another noted, "I liked meeting new people." Some students also highlighted their interest in interactive elements, with one stating, "I would like to play more games." Students also commented on the strategies they learned, with one participant stating, "I learned new strategies for anxiety," and

another sharing, “I liked learning the different strategies.” However, not all strategies were equally well-received, as one student remarked, “I did not like the deep breathing. That doesn’t work for me.” In terms of challenges, some students mentioned logistical concerns, such as difficulty remembering group sessions when the schedule changed (“It was hard for me to remember to come to group when it changed the day of the week”). Others noted concerns about visibility, with one student stating, “I felt like people were watching me when I left for the group.”

Parent Perspectives

Among the social validity items, the highest-rated statements by parents were “The skills taught to learn how to face fears were easy to understand and learn,” “I would choose to participate in the Facing Your Fears Program again,” and “I would recommend the Facing Your Fears group to other parents,” all receiving a mean score of 4.50 (SD = 0.50). The lowest rated item was “I feel confident that I have learned skills to help my child face their fears” (M = 3.67, SD = 0.75). Regarding specific strategies learned in the intervention, the highest-rated tools were the stress-o-meter for worry ratings (M = 4.16, SD = 1.07), learning about false alarms (M = 4, SD = 0.82), and practicing facing fears (M = 4, SD = 0.816). The least helpful tool was reported to be learning about the model of anxiety (M = 3.5, SD = 0.96).

Parent commentary revealed three common themes: solidarity, tools, and recommendations. When asked what they liked about the program, three parents noted that their daughters' participation helped them realize they were not alone in their experiences with anxiety, which helped normalize their feelings. For example, one parent shared, “The ability for her to do the program at school with girls her own age helped her see that she is not the only one facing these challenges.” Several parents also highlighted the usefulness of the tools provided,

such as listing the fear-facing steps, and their impact. One parent noted, “The program has given us a set of practical tools to better identify and address the issues in a timely manner.” Additionally, one parent commented on the ease of generalizing tools between home and school due to the inclusion of a parent component in the intervention. When asked what they would change about the program, a general theme around recommendations emerged. One parent wished the program was longer, while another suggested incorporating a “parent/child structured and/or mediated session to facilitate communication between the student and the parents.” Additionally, one parent expressed a desire for the program to be more discreet, as their daughter was concerned about peers finding out and whispering about her participation.

Teacher Perspectives

Among the social validity items, the highest-rated statement by teachers was “The class sessions included useful information about anxiety” (M = 4.75, SD = 0.43), followed by “The students who participated in the facing your fears group benefited from the sessions” (M = 4.5, SD = 0.50), and “The CBT concepts and tools from facing your fears were easy for my students and me to implement” (M = 4.25, SD = 0.43), as well as “I enjoyed the facing your fears class sessions” (M = 4.25, SD = 0.29). The lowest rated items were “I think I am more prepared to support students with autism in coping with their anxiety” (M = 3.5, SD = 1.5), and “The students who participated are able to use the tools they learned in the Facing Your Fears group” (M = 3.5, SD = 0.86). Regarding specific strategies learned in the intervention, the highest-rated tools were using the stress-o-meter for worry ratings (M = 4.67, SD = 0.47), making a plan to get to the green (M = 4.33, SD – 0.47), and learning about false alarms (M = 4.33, SD = 0.94). The least helpful tools reported were relaxation exercises and deep breathing (M = 3.67, SD = 1.24), as well as changing unhelpful thoughts to helpful thoughts (M = 3.67, SD = 0.94).

Teachers provided feedback on both the strengths and areas for improvement in the program, with key themes emerging around effective strategies, normalization, group structure, and engagement. Several teachers highlighted the usefulness of the strategies taught, with one stating that the program provided "positive strategies [that were] easy for students to understand." Another teacher appreciated how the program helped normalize anxiety, sharing, "I liked how it put into words the things we all (kids and adults) go through. It normalized it and also help[ed] kids understand that there are ways through fears." Specific strategies, such as the "false alarm visualization," were also noted as particularly effective. Additionally, teachers observed that the small group format was beneficial, with one stating, "The small group seemed helpful to participants." Along with these positives, teachers also noted areas for improvement. Some expressed concerns about student engagement, with one stating, "Class sessions could be more engaging for students," and another noting that "the students didn't really know what to do with the paperwork [during the class sessions]." Suggestions for program refinement included adjusting the timing and structure of the whole-class sessions. One teacher recommended offering them earlier in the school year, noting that "if offered at the end of the year, they could be offered with a middle school prep lens."

Cross-Group Comparisons

Comparing perspectives across groups revealed both commonalities and distinctions in their evaluations of the program. Across all informants, strategies such as learning about false alarms and the stress-o-meter were consistently rated among the most useful, while relaxation exercises and abstract conceptual tools (e.g., the model of anxiety) were rated lower. Students and teachers highlighted the importance of group engagement, while parents emphasized the program's role in normalizing anxiety and providing structured tools for addressing fears.

Notably, while students and parents both expressed satisfaction with the intervention, students were more likely to express concerns about the logistics of group participation, such as schedule changes and visibility among peers. Teachers, in contrast, focused more on the broader applicability of the program in a classroom setting, particularly its ability to provide structured language and strategies for discussing anxiety. Taken together, these findings suggest that while the program was well received, further refinements in engagement strategies, structural flexibility, and implementation logistics may enhance its effectiveness across stakeholders.

Chapter 5: Discussion

The present study employed a quasi-experimental design to examine the impact of a modified version of the Facing Your Fears–Schools (FYF-S) program on anxiety symptoms in 3rd- to 5th-grade girls with and without autism, as well as to assess how students, teachers, and parents perceived the intervention. To my knowledge, this is the first school-based CBT study to include both autistic and non-autistic girls with anxiety in the same intervention group, with the primary goal of addressing the unmet needs of autistic girls with internalizing symptoms who are often excluded from Tier 2 social-emotional supports along the Multi-Tiered Systems of Support (MTSS) continuum. These girls frequently experience a "double whammy" of difficulties with both anxiety and social competence (Jamison & Schuttler, 2015), and by integrating them into an inclusive group with other girls facing similar challenges, this study aimed to provide a more accessible and supportive intervention. The study investigated the following research questions: 1) What is the impact of the modified FYF-S program, delivered by school-based mental health professionals, on the anxiety symptoms of girls with and without autism; and 2) How do students, teachers, and parents evaluate the social validity and acceptability of the intervention? I hypothesized that participants would report lower levels of anxiety at post-intervention compared to pre-intervention. Meanwhile, social validity outcomes were exploratory.

Anxiety Outcomes

Findings revealed no statistically significant changes in anxiety from pre- to post-intervention across self-report, parent report, and teacher report. This finding may be in part due to the small sample size. With only seven participants, the study lacked sufficient power to detect significant effects unless they were very large. These findings also may be explained by the brief duration in treatment (7 weeks), which largely focused on psychoeducation and merely

introduced students to graded exposure. Exposures have been identified as the most crucial component of CBT treatment among autistic and TD youth (Guzick et al., 2022; Peris et al., 2015; Whiteside et al., 2020). In TD youth, research has shown that once exposure exercises are introduced, anxiety symptoms tend to improve more quickly (Peris et al., 2015; Whiteside et al., 2020). In fact, several randomized control trials have demonstrated that CBT only outperforms control conditions after the exposure phrase begins, suggesting that the initial emphasis on psychoeducation and coping strategies does not yield the same benefits (e.g., Walkup et al., 2008; Wood et al., 2020).

Similarly for autistic youth, exposure appears to be beneficial regardless of how many preparatory sessions are conducted, the length of therapy sessions, or the extent of parental involvement (Guzick et al., 2022). However, unlike TD youth, cognitive aspects of CBT (e.g., cognitive strategies and techniques) are linked to a slower rate of progress, and the more rapid improvement observed during exposure sessions suggests that autistic youth may benefit most from practicing cognitive and somatic strategies in real-life situations (Guzick et al., 2022).

While Guzick et al. (2022) highlighted the importance of exposure for individuals with autism, their study also found that the early phase of therapy, which includes psychoeducation (and relaxation techniques in standard CBT), contributed to significant reductions in symptom severity. This suggests that the initial stage of CBT plays a valuable role by providing students and families with a structured approach to managing anxiety. Additionally, building a supportive therapeutic relationship during early sessions may further enhance symptom improvement (Karver et al., 2018). Consistent with these findings, the present study found large effect sizes for student-reported changes in generalized anxiety, social anxiety, and total anxiety. Moderate effect sizes were also observed for teacher-reported total anxiety symptoms and parent-reported

generalized and total anxiety. These results indicate a trend toward decreased anxiety symptoms following the psychoeducational components of the modified FYF-S intervention, aligning with findings from Guzick et al. (2022) and broader research on the effectiveness of group-based psychoeducation for reducing anxiety in school-aged children (Baourda et al., 2022).

Informant Comparisons

Although strong parent-teacher agreement on anxiety was observed at pre-intervention, this correlation was not maintained post-intervention. Several factors may explain this shift, particularly given the school-based nature of the intervention and the different contexts in which parents and teachers observe anxiety-related behaviors.

While both parents and teachers initially reported similar anxiety levels, their post-intervention ratings may have diverged due to differences in symptom presentation across settings. Parents may have continued observing internalized symptoms (e.g., excessive worry, avoidance) at home, while anxiety-related behaviors in structured school environments remained stable. Additionally, parents' increased engagement with intervention materials may have made them more attuned to subtle anxiety cues, leading them to perceive ongoing symptoms that were previously unnoticed. In contrast, teachers, who assess anxiety based on observable behaviors like class participation and peer interactions, may have reported little change if external symptoms remained the same.

Limited generalization of intervention effects across settings may have also contributed to this discrepancy. Since the intervention was delivered in school, students may have practiced coping strategies in the classroom but struggled to apply them independently at home. Research suggests that generalizing intervention effects beyond the treatment setting is a common

challenge in school-based mental health programs, particularly when structured parent-directed components are limited (Santiago et al., 2013).

These findings highlight the need for future research to examine how school-based interventions can better facilitate skill generalization across settings and support parents and teachers in reinforcing coping strategies consistently. Further studies could also investigate whether the timing of post-intervention assessments influences parent and teacher perceptions of anxiety, ensuring that evaluations capture meaningful changes in both home and school environments.

Procedural Fidelity

Non-statistical findings did not appear to be related to procedural fidelity, which remained high across small groups (97%) and the parent session (100%). However, the quality of intervention delivery varied, ranging from 3 to 4 in the 3rd-4th grade group and 2.71 to 4 in the 5th grade group. Quality depended on student engagement, such as participation in discussions and completion of independent activities. For instance, during Week 3, students were introduced to deep breathing techniques through a guided video. However, when students laughed and did not fully engage in practicing the skill, facilitators assigned a lower quality rating. Given these behavioral nuances, qualitative data may provide additional insight into perceived changes in anxiety symptoms and the intervention's usefulness.

Social Validity Outcomes

Both quantitative and qualitative data indicate that students, parents, and teachers viewed the modified FYF-S program as socially valid, with an overall rating of 3.75 out of 5, suggesting that its goals, procedures, and outcomes are acceptable and useful. The following section describes the outcomes as reported by students, parents, and teachers, highlighting how each

group experienced and evaluated the program. Their perspectives provide insight into the strengths and limitations of the intervention and offer direction for future adaptations.

Students

Students generally rated the intervention positively. They reported that they would be enthusiastic to attend the group again and expressed moderate satisfaction with the program, as well as their grasp of calming strategies. However, they reported lower confidence in their ability to independently calm themselves when worried. This finding underscores the need for more graded exposure practice, where students can build confidence in applying coping strategies in anxiety-inducing situations (Guzick et al., 2022; Peris et al., 2015). In terms of specific strategies, deep breathing and learning about false alarms were rated as most helpful. The endorsement of deep breathing as a helpful strategy is surprising given its implementation quality rating was poor. It is possible that presenting it differently and for a second time during the class sessions increased its acceptability. Similarly, false alarms were frequently emphasized in both small-groups and class sessions, with small-group meetings often beginning with students reflecting on any false alarms they had experienced that week. In contrast, the worry bugs/helper bugs activity was considered less engaging, possibly because it was optional and viewed by some as too "childish."

Parents

Parents provided high social validity ratings, especially valuing the clarity of the skills taught, their willingness to participate again, and their readiness to recommend the program. Despite reduced parental involvement compared to the clinic version (Reaven et al., 2011), parents still recognized the value of the approach. This is consistent with previous FYF-S studies (Reaven et al., 2020, 2022, 2024), where many parents noted that scheduling meetings posed a

significant barrier to participation. However, they felt less confident about their ability to help their child face fears independently, highlighting a gap in graded exposure in both the present study and the manualized FYF-S program. According to the manual, parents do not receive facilitator guidance in supporting their children through exposure and are expected to generalize these skills solely from the parent session videos and small-group session handouts. In the present study, one parent shared that the program may benefit from structured parent-child sessions to support graded exposure, as is done in the clinic version of FYF (Reaven et al., 2011). Among the tools, parents rated using the stress-o-meter for worry ratings, learning about false alarms, and practicing fear facing as most beneficial, while the abstract model of anxiety was less helpful. Since the model of anxiety explains how fear facing reduces anxiety while avoidance reinforces it, its effectiveness may have been limited without direct opportunities for students to apply this concept in real-world situations.

Teachers

Teachers endorsed the program overall, noting that the class sessions delivered useful information about anxiety and that students benefited from learning CBT concepts and tools. They appreciated the ease of implementation and the positive impact of the small-group format. However, teachers did not feel significantly more confident in supporting autistic students with anxiety by the end of the program, nor were they certain that students could apply the tools independently. This may be due to a lack of opportunities to observe students using these strategies in real-time. It also highlights the need for further training, particularly on the intersection of anxiety and autism, as this topic was not explicitly addressed in the class sessions. Teachers rated the stress-o-meter, planning to "get to the green," and false alarm visualization as particularly effective and easy to use. The stress-o-meter and plan to get to the green appear to

align with the school's social-emotional curriculum (RULER), likely contributing to teachers' confidence in using them. In contrast, somatic and cognitive strategies were seen as less relevant, perhaps because they are typically more individualized and less practical in a class-wide (Tier 1) setting. Students struggling with anxiety, particularly those with autism, may be more likely to receive small group (Tier 2) or one-on-one support (Tier 3) from school-based mental health professionals or their special education teachers, who can guide them through these strategies (Adelman & Taylor, 2009). However, this is not always the case, as general education teachers also may be involved in the delivery of Tier 2 or 3 interventions (Richards et al., 2007).

Qualitative Outcomes

Engagement and Enjoyment

Qualitative findings highlighted several factors that may have influenced the intervention's social validity. Across all informants, engagement and enjoyment were identified as key themes. Students generally expressed positive experiences with the group, particularly enjoying the opportunity to meet new people and participate in interactive activities. However, some suggested incorporating more engaging elements, such as games. Similarly, teachers noted that while the small-group format was beneficial for participants, class-wide sessions could be improved to better capture students' attention. Some students struggled with logistical aspects, such as remembering sessions when the schedule changed, and teachers also observed that some students had difficulty engaging with written materials. Parents, on the other hand, highlighted the ease of engagement due to the inclusion of a parent component, which helped them reinforce skills at home, consistent with previous findings (Reaven et al., 2022, 2024). One parent noted his daughter's fear of peers knowing about her participation in the group. This aligns with previous FYF-S focus group findings (Reaven et al., 2020), where parents recommended

reframing thoughts (e.g., “Many students in 5th grade attend groups”) to counter negative thinking. Overall, these findings suggest that while the intervention was generally engaging, enhancements to structure, scheduling, and interactive elements could further strengthen participation.

Strategies and Tools

All groups recognized the value of the strategies and tools introduced in the intervention. Students reported learning new anxiety management strategies, however, individual preferences varied. Parents echoed the effectiveness of the tools, particularly appreciating the structured steps for fear-facing and the ability to generalize strategies between home and school. Given the shortened timeline, parents may have taken on a coaching role for their children—modeling brave behaviors and offering encouragement or “cheerleading” as students faced their fears (Reaven et al., 2011). Teachers also found the strategies accessible and practical, with one noting that they were “easy for students to understand.” It is critical for strategies to be easy to apply, as teachers have expressed a strong need for resources to address anxiety—especially in light of increasing mental health needs in schools and the pressure they feel to act as mental health professionals, despite not being trained as such (Reaven et al., 2020). Furthermore, the stress-o-meter and false alarm visualization were specifically mentioned as useful in both classroom and small-group settings. These strategies align with principles of modified CBT, as students with autism benefit from visual supports to help them understand and manage their anxiety (Kester & Lucyshyn, 2018). These findings highlight the importance of continuing to provide a variety of strategies to accommodate individual preferences and ensure that the most effective tools are reinforced across different contexts.

Normalization and Social Support

A recurring theme across informants was the role of the intervention in normalizing anxiety and providing social support. Parents appreciated how the program helped their daughters recognize that they were not alone in their struggles, which validated their experiences and reduced feelings of isolation. Teachers also highlighted the program's ability to normalize anxiety, with one sharing that it helped students understand that "there are ways through fears." These findings align with research on group-based mental health interventions, which has shown that group therapy can promote resilience, reduce stigma, and strengthen social support networks (Weist et al., 2017). While students did not explicitly reference normalization, they did express appreciation for the social aspect of the group, with several noting that they enjoyed meeting new people. Together, these findings suggest that one of the program's strengths is fostering a sense of shared experience, which may help reduce stigma and encourage students to apply strategies with greater confidence (Reaven et al., 2020).

Research and School-Based Implications

This study contributes to the intervention literature by implementing a school-based CBT program for a group of autistic and TD girls with anxiety. Despite the high prevalence of anxiety among elementary-aged autistic youth (Van Steensel et al., 2011), particularly among autistic girls (Cook et al., 2018; Kerns et al., 2021; Solomon et al., 2012), autistic students are rarely included in school-based mental health interventions alongside their TD peers (Sturm & Kasari, 2023). While best practices emphasize that CBT interventions should be adapted to meet the needs of autistic individuals (Kester & Lucyshyn, 2018), little research has explored how including TD peers in an adapted CBT intervention might influence treatment effectiveness, social outcomes, or broader efforts to promote neurodiversity and mental health awareness in

school settings. Although these factors were not explicitly measured in this study, they have important implications for understanding how inclusive, school-based interventions like FYF-S may contribute to both individual and systemic benefits.

The inclusion of TD peers in this intervention serves multiple purposes: (1) expanding mental health support within the multi-tiered system of supports (MTSS) framework to ensure that both autistic and non-autistic students receive interventions from school-based mental health professionals; (2) addressing the unique challenges faced by autistic girls, particularly anxiety related to social interactions, which is often overlooked in traditional school-based interventions (Duerden et al., 2012); and (3) the potential to foster a more inclusive school climate by promoting empathy and understanding of neurodiversity and mental health. While the study originally aimed to examine social skill outcomes, logistical constraints shortened the group's duration, preventing this aspect from being assessed.

Expanding Mental Health Support in Schools

Research has consistently demonstrated that autistic students have limited access to mental health services. Parents of autistic children often face greater challenges in obtaining behavioral health support (Montes et al., 2009), with only 20% of autistic children receiving mental health care (Bromley et al., 2004). Providing short-term, school-based anxiety interventions is one way to reduce common barriers to treatment, such as transportation issues, childcare demands, and time constraints for families (Elkins et al., 2011). Additionally, treating anxiety within the school environment—where symptoms are likely to occur—may increase the generalization of coping skills and reduce the impact of anxiety on school functioning.

Although the study's results were not statistically significant, trends toward reduced anxiety at post-intervention, alongside positive social validity ratings, suggest that the modified

FYF-S program was valuable for participants, particularly in helping them learn new coping strategies and engage with peers experiencing similar challenges. These findings support the potential of FYF-S as a Tier 2 intervention within MTSS for both autistic and TD students. This challenges the assumption that social-emotional instruction for autistic students should be delivered solely within a special education context (Santiago et al., 2013; Weinberg et al., 2019). Instead, these findings reinforce the role of school-based mental health professionals, such as school psychologists and counselors, as key facilitators of interventions that address the emotional well-being of diverse student populations (Kester & Lucyshyn, 2018).

Addressing the Unique Challenges of Autistic Girls

Autistic girls, particularly those with lower support needs, often develop an acute awareness of their differences, which can negatively impact their peer relationships in school settings (Cook et al., 2018; Urbaniak & D'Amico, 2024). A structured group setting, where students can share experiences and learn coping strategies together, provides a natural opportunity for social skills development (Reaven et al., 2011). For example, participation in group discussions inherently involves social communication skills such as sharing personal experiences, responding empathetically to peers, practicing active listening, and engaging in conversational turn-taking.

Although social skill development was not explicitly assessed in the present study, social validity data suggest potential benefits in this area. Participants reported that the program helped normalize their experiences with anxiety, reinforcing previous research on the role of peer support in emotional regulation. The group format, which allowed participants to discuss shared challenges, aligns with findings that group cohesion—the bond among treatment group members—is positively associated with improved clinical outcomes (Lerner et al., 2013). Strong

group cohesion has been linked to greater reductions in anxiety symptoms (Shechtman & Mor, 2010) and is essential for treatment engagement and adherence (Burlingame et al., 2018; Christensen et al., 2021).

Promoting Inclusion and Neurodiversity Awareness

The successful inclusion of autistic students in the intervention contributes to broader efforts to integrate students with IEPs into general education settings, fostering greater acceptance of neurodiversity (Odom et al., 2011; Tsou et al., 2024). While not explicitly part of the FYF-S curriculum, the psychoeducational components—such as understanding anxiety and recognizing its varied presentations across individuals—align with school-based initiatives to promote neurodiversity awareness. Research suggests that children's attitudes toward peers with disabilities are strongly shaped by their level of knowledge (Lindsay & Edwards, 2013). Without sufficient awareness, misconceptions may persist, contributing to stigma and social exclusion (Chen et al., 2021; Lindsay & McPherson, 2012).

Negative peer attitudes remain a major barrier to the full social inclusion of students with disabilities in integrated school settings. A meta-analysis by Lindsay and Edwards (2013) found that the most effective disability awareness interventions included sustained social contact with individuals with disabilities—ranging from six weeks to one year—to foster understanding and relationship-building. While FYF is a short-term intervention, its group-based format may provide a foundation for increased peer understanding, which could, in turn, promote the acceptance of students with autism. Additionally, school-based mental health interventions have been shown to enhance mental health literacy and reduce stigma surrounding psychological distress (Ma et al., 2023). The structured format of FYF may contribute to these outcomes by providing students with a safe space to discuss anxiety, reducing the isolation that often

accompanies these experiences. This aligns with findings that school-based programs can be instrumental in improving students' understanding of mental health while simultaneously challenging misconceptions that contribute to stigma (Waqas et al., 2020).

The Role of Gender in Perceptions of Neurodiversity

Gender differences in attitudes toward neurodiversity also may be relevant to the present findings. Research suggests that female students tend to express more positive attitudes toward peers with disabilities compared to male students (Lindsay & Edwards, 2013). This may have contributed to the strong group cohesion observed in the current study, as all participants were girls. Future research should explore whether similar interventions yield comparable outcomes in mixed-gender or male-dominated groups, which could further inform best practices for fostering inclusive, school-based mental health programs.

Limitations

This study has several limitations, the first being the small sample size. Although recruitment efforts successfully met the target number of participants, the study was constrained to a single school site with a limited number of female students diagnosed or educationally classified with autism within the 3rd to 5th grade age range. This limitation impacted the comparability of results between Autistic and Non-Autistic and significantly restricted the generalizability of the findings. Additionally, the small sample size constrained the types of statistical analyses that could be conducted, necessitating caution when interpreting the results.

Another key limitation was the pre-post study design, which introduces threats to validity and makes it difficult to determine whether any observed changes in anxiety levels were due to the intervention or external factors. For example, it remains unclear whether the lack of significant findings reflects a true absence of treatment effects or if the study was underpowered.

Future school-based research utilizing randomized experimental designs with larger sample sizes is needed to better assess the intervention's effectiveness in reducing anxiety among students with and without autism.

Logistical constraints related to small-group implementation also introduced limitations. Absences were mitigated by providing 1:1 content delivery for students who missed sessions; however, this varied delivery format may have influenced participant experiences. Additionally, the limited number of facilitators (myself and my colleague) affected how procedural fidelity was collected. Because facilitators completed their own fidelity assessments, there is a potential for bias in these ratings. Furthermore, the absence of interobserver agreement measurement for intervention fidelity and quality during class-wide sessions makes it difficult to draw conclusions about the effectiveness of this component. Despite this, teachers reported perceiving benefits of the class-wide sessions in introducing strategies for managing anxiety, highlighting an area for further research.

Another limitation and potential contributor to the lack of significant findings was the shortened intervention timeline. Initially planned as a 10-week program, the intervention was reduced to seven weeks due to multiple logistical factors. First, approval for implementation was required at multiple levels, including district administrators, school administrators, frontline educators, parents, and students, which delayed the program's start. Second, state-mandated testing among 3rd to 5th grade students further restricted scheduling flexibility. These constraints resulted in the intervention concluding at the end of the school year, preventing the collection of follow-up data, which could have provided valuable insight into the intervention's longer-term effects. The timing of the study also created challenges in obtaining post-intervention data, as some parents were difficult to reach once summer vacation began. Additionally, any observed

trends in anxiety reduction must be interpreted with caution, as it is unclear whether they resulted from the intervention or the transition into summer break.

The shortened timeline also affected intervention content, as the graded exposure component of CBT was omitted, limiting the intervention primarily to psychoeducation on anxiety. As aforementioned, graded exposure is the most influential aspect of CBT interventions, particularly for autistic students (Guzick et al., 2022), and its omission likely limited the intervention's impact on levels of anxiety. Given that graded exposure is a core component of evidence-based treatments for anxiety (Perihan et al., 2020), future implementations should prioritize its inclusion to ensure students receive the full therapeutic benefits of the program.

The reduced timeframe also prevented the planned assessment of social variables (e.g., social skills, friendship development, community building), which could have provided further insight into the potential benefits of including TD peers in the group setting, particularly for autistic girls. Student input on these social variables would have strengthened the study's premise that inclusion of TD peers may facilitate organic social skill development, promote friendships, and foster empathy among students with diverse neurotypes.

Finally, another limitation of the study was the potential for participant desirability bias. Given that all participants had a vested interest in the intervention and its success, the high social validity ratings may have been influenced by a desirability effect. Socially desirable responding is a well-documented concern in survey research (McKibben & Silvia, 2016). However, the inclusion of qualitative data may have helped mitigate this potential bias by providing a more nuanced understanding of participant experiences. Future studies should consider having informants complete the questionnaires anonymously to reduce the possibility for desirability bias.

Future Directions

The results and limitations of this study suggest several important directions for future research. First, this study may serve as a model for further exploration of TD peer inclusion in FYF-S, particularly through randomized controlled trials (RCTs) to determine its effectiveness for both autistic students (Reaven et al., 2024) and their TD peers. Investigating whether the inclusion of TD students enhances or modifies outcomes will be essential in assessing the feasibility and impact of mixed-neurotype interventions.

Second, the integration of autistic and TD students provides a foundation for research into social outcomes, including the development of friendships, the formation of peer communities, and the fostering of greater understanding of neurodivergent experiences. Future studies could examine how aligning neurodiversity or autism awareness content with FYF-S principles influences student perceptions of anxiety and social communication challenges. Given that parents in this study highlighted how the intervention normalized feelings of anxiety, further research could explore whether structured psychoeducation on neurodiversity within FYF-S fosters empathy and peer support.

Third, future research should examine how FYF-S can be used to support autistic students with IEPs that include social-emotional goals related to mental health and anxiety. Previous studies have demonstrated that FYF-S can be implemented using a train-the-trainer model, allowing school-based staff, including special education teachers, to deliver the intervention (Reaven et al., 2020, 2022, 2024). While the FYF-S authors recommend that non-mental health school providers attend a two-day in-person or virtual training, financial constraints may limit accessibility at the individual level. However, when supported at the district level, training special educators in evidence-based anxiety interventions for autistic

students could expand access to school-based mental health support and improve implementation fidelity.

Fourth, research should examine how FYF-S principles align with school-wide social-emotional instruction, particularly given the high prevalence of anxiety among elementary-aged children (Bitsko et al., 2018). In this study, one teacher suggested that classroom-based sessions should begin earlier in the school year and incorporate themes relevant to fifth-grade students, such as transitioning to middle school. This recommendation highlights an opportunity to integrate anxiety-related discussions into existing social-emotional learning curricula, reinforcing coping strategies in a developmentally relevant way.

As schools continue to integrate autistic students and TD peers in inclusive mental health interventions, it is critical to ensure that these efforts align with neurodiversity-affirming practices. Dundon (2023) outlines seven core principles of neurodiversity-affirming practice, which emphasize presuming competence, promoting autonomy, respecting diverse communication styles, incorporating neurodivergent perspectives, using a strengths-based approach, honoring neurodivergent culture, and tailoring supports to individual needs. Future research on peer-integrated interventions such as FYF-S should consider these principles to ensure that inclusion efforts are affirming rather than unintentionally reinforcing conformity pressures. For instance, presuming competence fosters an inclusive and respectful group dynamic by affirming that autistic students are fully capable of engaging in therapy. Similarly, respecting diverse communication styles is essential in ensuring that peer integration efforts acknowledge and support nontraditional ways of expressing thoughts and emotions rather than centering verbal communication as the default. A strength-based approach could also be used to recognize the unique abilities of both autistic and TD students, facilitating peer connections and

mutual understanding. By incorporating neurodiversity-affirming principles, future research can explore how mixed-neurotype group interventions enhance social-emotional learning without reinforcing neurotypical social expectations. This approach may provide a more inclusive framework for school-based mental health interventions, ensuring that autistic students not only receive support but are also valued for their distinct perspectives and contributions.

Additionally, individual differences in co-occurring conditions should be considered in the design of future interventions. In this study, Attention Deficit Hyperactivity Disorder (ADHD) was not an exclusionary criterion; however, students with comorbid autism and ADHD may require additional support in structured group settings. While group-based treatments have been effective for students with both autism and ADHD, some individuals may benefit more from individualized support tailored to their executive functioning needs (Coelho et al., 2017). Future research should explore how environmental factors, such as the physical setting and potential distractions, influence participation and engagement. Examining optimal group sizes for students with autism and co-occurring conditions may also help determine the most effective structure for balancing group-based and individualized interventions. Understanding these factors will help refine inclusive interventions to ensure they are accessible and effective for students with diverse neurocognitive profiles.

Conclusion

This study provides a foundation for exploring how inclusive, school-based CBT interventions can support autistic and TD students alike by implementing a modified version of the FYF-S. While the results were not statistically significant, the program demonstrated high social validity and was well-received by students, parents, and teachers. These findings reinforce the potential for school-based mental health professionals to implement inclusive interventions

that integrate autistic students into general education settings while fostering greater neurodiversity awareness. Future research should continue to investigate the potential of mixed-neurotype group interventions to promote mental health, social-emotional learning, and peer understanding in school environments.

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Appendix A: Intervention Fidelity Checklist

Facing Your Fears – School-Based (FYF-SB)
Session By Session – Core Components

Instructions: Use the following session by session checklists to ensure that you have completed the core activities for each session. If you wish, you may provide a self-rating for how well you (or your team) implemented each of the core activities using the Quality/Skill Rating system. You may provide additional comments and suggestions in the "Comments" section below.

Quality/Skill Rating

Session 1: Welcome to Group	Completed?	Poor	Fair	Adequate	Good	Excellent
1. *Introductions and discuss the focus of group (include logistics and rules)	☐	1	2	3	4	5
2. *Ice breaker activity /getting to know each other/ create a name for group (*mark as completed if the group did at least one ice breaker)* **ALTERNATE STOP**	☐	1	2	3	4	5
3. Emotion game (optional for older students)	☐	1	2	3	4	5
4. Complete reward/Prize list (*mark as completed if the leaders ask the students to complete and bring next session*)	☐	1	2	3	4	5
5. *Offering advice and closing	☐	1	2	3	4	5

Comments/ Suggestions:_____

_____

Quality/Skill Rating

Appendix B: Demographic Questionnaires

Teacher

What is your name?

What is your gender?

What is your race and/or ethnicity?

What languages do you speak?

What is your level of education? (e.g., high school diploma, Bachelor's, Master's, PhD, etc.)

How many years of teaching experience do you have?

Parent

What is your name?

What is your gender?

What is your race and/or ethnicity?

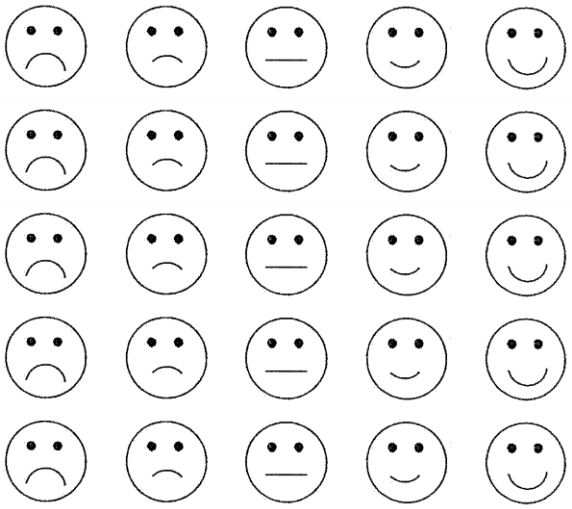
What languages do you speak?

What is your level of education? (e.g., high school diploma, Bachelor's, Master's, PhD, etc.)

Appendix C: Social Validity Questionnaire (Child)

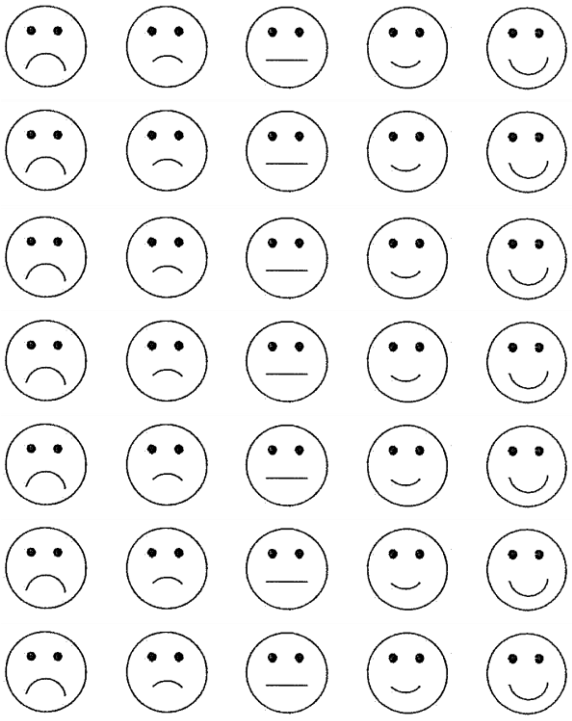
Tell me what you thought about Facing Your Fears group. Please circle the face that you think best describes what you think about Facing Your Fears group.

1. I liked going to *Facing Your Fears* group.
2. I know how to use Calm Body and Calm Mind tools.
3. I can calm myself down when I am worried.
4. The tools taught to learn how to face my fears were easy to understand and learn.
5. I would like to go to *Facing Your Fears* group again.



In group, you learned some new tools. Circle the face that best describes how helpful each tool is to you:

- Relaxation exercises
- Deep breathing
- Worry Bug and Helper Bug
- Learning about false alarms
- Changing unhelpful thoughts to helpful thoughts
- Using my stress-o-meter
- Making a fear ladder



Appendix D: Social Validity Questionnaire (Parent)

I am interested in your feedback about aspects of the school-based Facing Your Fears. Please take a few minutes to complete the questions below. Thank you for your input.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I enjoyed participating in the *Facing Your Fears* group.	1	2	3	4	5
2. My child enjoyed going to the *Facing Your Fears* group.	1	2	3	4	5
3. Overall, I found the *Facing Your Fears* group helpful in teaching me how to help my child cope with their anxiety.	1	2	3	4	5
4. Overall, I found the *Facing Your Fears* group helpful in enhancing my child's coping skills.	1	2	3	4	5
5. I have learned important skills by participating in the *Facing Your Fears* group.	1	2	3	4	5
6. I feel confident that I have learned skills to help my child face their fears.	1	2	3	4	5
7. My child is able to use the tools that they learned in the *Facing Your Fears* group.	1	2	3	4	5
8. The skills I learned will be helpful to me and my child in the future.	1	2	3	4	5
9. The skills taught to learn how to face fears were easy to understand and learn.	1	2	3	4	5
10. I would choose to participate in the *Facing Your Fears* group again.	1	2	3	4	5
11. I would recommend the *Facing Your Fears* group to other parents.	1	2	3	4	5

Please rate how helpful the following tools learned in the *Facing Your Fears* program are to you:

	Not helpful		Somewhat Helpful		Extremely Helpful
• Relaxation exercises and deep breathing	1	2	3	4	5
• Learning about false alarms	1	2	3	4	5
• Changing unhelpful thoughts to helpful thoughts	1	2	3	4	5
• Stress-o-meter for worry ratings	1	2	3	4	5
• Making a Fear Hierarchy	1	2	3	4	5
• Practicing facing fears	1	2	3	4	5
• Psychoeducation: Model of Anxiety	1	2	3	4	5

What did you like most about the *Facing Your Fears* program?

What so you think should be changed about the *Facing Your Fears* program?

Any other comments?

Appendix E: Social Validity Questionnaire (Teacher)

I am interested in your feedback about aspects of the school-based Facing Your Fears. Please take a few minutes to complete the questions below. Thank you for your input.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I enjoyed the *Facing Your Fears* class sessions.	1	2	3	4	5
2. The class sessions included useful information about anxiety.	1	2	3	4	5
3. Overall, I found the class sessions helpful in teaching my students to cope with their anxiety.	1	2	3	4	5
4. I learned important skills from the *Facing Your Fears* class sessions.	1	2	3	4	5
5. I think I am more prepared to support students with autism in coping with their anxiety.	1	2	3	4	5
6. The CBT concepts and tools from *Facing Your Fears* were easy for my students and me to implement.	1	2	3	4	5
7. The students who participated in the *Facing Your Fears* group benefited from the sessions.	1	2	3	4	5
8. The students who participated are able to use the tools they learned in the *Facing Your Fears* group.	1	2	3	4	5
9. I would recommend future students to participate in the *Facing Your Fears* program.	1	2	3	4	5
10. I would recommend the *Facing Your Fears* group to other parents and teachers.	1	2	3	4	5

Please rate how helpful the following tools learned in the *Facing Your Fears* program are to you when supporting a student with autism cope with their anxiety:

	Not helpful		Somewhat Helpful		Extremely Helpful
• Relaxation exercises and deep breathing	1	2	3	4	5
• Learning about false alarms	1	2	3	4	5
• Changing unhelpful thoughts to helpful thoughts	1	2	3	4	5
• Stress-o-meter for worry ratings	1	2	3	4	5
• Making a Fear Hierarchy	1	2	3	4	5
• Practicing facing fears	1	2	3	4	5
• Psychoeducation: Model of Anxiety	1	2	3	4	5

What did you like most about the *Facing Your Fears* program?

What do you think should be changed about the *Facing Your Fears* program?

Any other comments?

Appendix F: Facing Your Fears-Schools: Session Outline

Week	Small Group	Class	Parent
1	**Welcome to the Group/What Makes me Worried/Upset, and How I react** Introduction -Review logistics -Generate rules for the group -Discuss rewards for participation Getting to Know You Game -Questions from jar Everybody Worries and Gets Upset Sometimes -*What Makes Me Worried/Upset* & *Everybody Worries and Gets Upset Sometimes* worksheets How I React When I am Worried and Upset - *How I React When I am Worried and Upset* Worksheet Closing -Begin list of relaxation strategies -Prizes	**Managing Feelings: Session 1** Emotions- *What are some feelings we experience?* -Generate emotion words -Match emotion to the situation Anxiety- *What is it? What does it look like? How does it feel?* -Watch Video *Fight Flight Freeze* from Anxiety Canada False Alarms -Introduce concept -*What worries or upsets you?* Ask students to jot down examples Body Clues -Recognize where anxiety manifests in the body -*Body Clues* drawing activity Introduction to Calming Strategies -*Take a break, Take 3 deep breaths, Think helpful thoughts (e.g., "it's just a false alarm!")* *Teachers also receive handout explaining Week 1 activities*	**Introduction (Synchronous Virtual Session)** Introductions, Discuss Parent Participation, and Confidentiality Present: Overview of CBT for Anxiety in Students -PowerPoint: *Helping Students Manage Fears, Anxieties, and Worries* Review: Program Overview for FYF-S Review: Sessions 1-7 and Student Workbook Contents Goodbye *Parents also receive handout explaining Week 1 activities*

2	**Time Spent Worrying and/or Being Upset: Managing Upset/Worry** Check-in Time Spent Worrying and/or Being Upset -*Introduction: Time Spent Worrying and/or Being Upset* worksheet -*How Much Time do You Spend Worrying or Being Upset?* worksheet -*When Worry/Upset Decreases, I'll Have More Time to…* worksheet Share time Optional: Art Activity: *Externalizing Worry—Separating the Person from the Worry* worksheet -Creating "Worry Bugs" and "Helper Bugs" Closing -Add to list of relaxation strategies -Prizes	**Teachers receive handout explaining Week 2 activities**	**Parents receive handout explaining Week 2 activities**

3	**False Alarms: Learning to Calm My Body** Check-in Explain False Alarms Deep Breathing (Video) -Introduce calm-down strategies -Introduce deep breathing -Watch video and practice Stress-o-Meter -Introduce concept -Discuss sample stress-o-meter -Have students create a personalized stress-o-meter -Rate top 3-5 worries Closing -Add to list of relaxation strategies -Prizes	**Managing Feelings: Session 2** The Cognitive Triangle -Explain connection between thoughts, feelings, and actions -Identify thoughts, feelings, and actions in example scenarios -Students complete their own cognitive triangles Calm Mind -Use Maria worksheet to explain "Active Mind" -Students generate helpful thoughts for Maria -Students generate helpful thoughts for their own examples Calm Body -Box breathing -Progressive muscle relaxation *Teachers also receive handout explaining Week 3 activities*	**Parents receive handout explaining Week 3 activities**

4	**Managing My Mind: Active Minds/Helpful Thoughts** Check-in Revisit False Alarms Active Minds/Helpful Thoughts -Introduce concepts using vignettes (*Juan* or *Maria* worksheets) -Problem solve helpful thoughts for Juan or Maria -Make connection between active minds and the body's reaction to worry/upset -Identify a personal worry and generate helpful thoughts Closing -Deep breathing -Prizes	**Teachers receive handout explaining Week 4 activities**	**Parents receive handout explaining Week 4 activities**

5	**Plan to Get to Green; Putting it All Together- Calming My Body/Managing My Mind** Check-in -Ask about False Alarms What I Can Do to Relax -*Introduction: Plan to Get to Green, A Few Ways to Relax and Have Fun & What I Can Do to Relax or Have Fun (and Stay in Green) at School and at Home* worksheets Create and Share a Plan to Get to Green -Plan to Get to Green worksheet Share time Closing -Deep breathing -Prizes	**Teachers receive handout explaining Week 5 activities**	**Understanding Facing Your Fears (Video)** Watch *Facing Your Fears—School-Based Program Parent Video* -Cycle of anxiety -Parental protection -Facing Your Fears video example -Review *Cycle of Anxiety* and *Parental Protection* worksheets -Review student workbook pages for fear facing practice -Review *Parental Strategies to Support Students* worksheet *Parents also receive handout explaining Week 5 activities*
6	**Introduction to Facing Fears & Creating Steps to Success for Practicing Facing Fears** Check-in -Ask about False Alarms Watch Video -*Facing Your Fears of Toilets Flushing*	**Managing Feelings: Session 3** Summarize content Introduce Stress-o-Meter -Review example -Students personalize their own Stress-o-Meters	**Parents receive handout explaining Week 6 activities**

	-Complete *Strategies—To Help Manage Worry/Anxiety* worksheet Select Worries/Fear to Face -Use *Everybody Worries and Gets Upset Sometimes* and *Stress-o-Meter* worksheets along with *Steps to Success: Where do We Begin?* worksheets to select top three fears Record fears in fear tracker Identify steps to success -If time, use *Facing Fears Rating Sheet* to practice role playing and/or in vivo exposure Closing -Deep breathing -Prizes	Plan to Stay in the Green -Students complete *Stay in the Green* worksheet Goals -Students use plans to stay in the green to tackle worries using the following template: "I can manage my big feelings." "I will work on _____." "I will use the following strategy when I am feeling ____." Strategy: ___ (Calm Mind or Calm Body strategies) "If I need help, I will____." *Teachers also receive handout explaining Week 6 activities*	
7	**Practice Facing Fears & Closing** Check-in -Ask about False Alarms Review Fear Hierarchies -Steps to Success worksheet Practice Facing Fears -Use *Facing Fears Rating Sheet* to practice role playing and/or in vivo exposure Discuss Progress	**Teachers receive handout explaining Week 7 activities**	**Parents receive handout explaining Week 7 activities**

	-*Time Spent Worrying-Post* worksheet Complete post-measures -SCARED assessment -Social validity questionnaire Closing -Prizes -Certificates		