

Anxiety-Related School Refusal and the COVID-19 Pandemic: Biopsychosocial Considerations

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School attendance is vital for children's success in academic and social domains. Anxiety-related school refusal may take many forms, such as struggling to arrive on time, frequently leaving early, or not attending at all. While school refusal is not a *DSM-5* diagnosis, it can be a manifestation of many psychiatric disorders, including anxiety disorders (eg, generalized anxiety disorder, separation anxiety, panic disorder, specific phobias), mood disorders (eg, major depressive disorder), learning disabilities, substance use disorders, and neurodevelopmental disorders (eg, attention-deficit/hyperactivity disorder).^{1,2} Anxiety disorders constitute the most prevalent group of pediatric psychiatric disorders and may manifest in school refusal; however, anxiety disorders often co-occur and symptoms frequently overlap.^{3,4} Given the growing prevalence of school refusal, its complex relationship to the COVID-19 pandemic, and its ability to impede several domains of functioning, it is vital to provide patients with accurate assessment and appropriate treatment.

School refusal is present amongst 5-28% of children and adolescents, seen equally in boys and girls, and particularly more evident among low-income students.⁵ While current rates of school refusal during the pandemic are unclear, youth from under-resourced communities or those dependent on additional support at school are more likely to struggle with attendance. The development of a pattern of absenteeism is typically gradual and multifactorial; examples include anxiety disorders, bullying, and parental accommodation. Short-term consequences include social alienation, declining academic performance, and family disruption/conflict.¹ Long-term consequences include school dropout, substance misuse, violence, and difficulties with finances, interpersonal relationships, and the law.¹

To understand school refusal, it is important to go beyond diagnoses; children may avoid school for a variety of reasons, and both internal and external factors should be addressed. Clinicians should aim to create a detailed formulation that considers the relative contribution of neurobiological variations, social influences on behavior, and the emerging personality structure of the individual. Biologically, children may have variations related to the extent of their fear response. These vulnerabilities may be problematic depending on psychological factors (eg, fear of public speaking, social isolation) or social factors (eg, bullying, parental accommodation). In this article, we consider the problem of anxiety-related school refusal from a biopsychosocial perspective with a focus on the COVID-19 pandemic.

Neurobiological Factors

While the neural basis of anxiety disorders is complex, two neurobiological factors are particularly important to understand when assessing school refusal: anxiety sensitivity and excess fear response.

Anxiety sensitivity is the "fear of anxiety-related bodily sensations that are interpreted as having potentially harmful somatic, psychological, or social consequences."⁵ Being more sensitive to the physical sensation of anxiety, even when this anxiety is adaptive, makes the school environment more difficult to navigate due to its abundance of anxiety-provoking situations (eg, exams, presentations, navigating peer or romantic relationships). On the other hand, some children might have an excess fear response to particular environmental cues. Variations in amygdala firing might cause them to progress to an unmanageable emotional state due to overactivation of their sympathetic nervous system, a biological variant that may ultimately lead to avoidance of the stimuli altogether.^{6,7} Because their amygdala is

dysfunctional, they are less capable of tolerating what might be a mildly threatening stimulus to someone without an excessive fear response. These neurobiological predispositions can contribute to school avoidance and thus should be targeted in psychotherapeutic/psychopharmacologic treatment.

Psychosocial Factors

Because children spend most of their time in the classroom (whether virtual or in-person), it is not surprising that school is one of the most important factors for socioemotional development in youth.⁸ Going to school involves copious social interactions, careful navigation of peer groups, formation of intimate friendships, public speaking, and the demand of homework.⁹ Classmates become children's primary sources of support; thus, school plays a major role in the psychosocial development of children of all ages.¹⁰ The psychosocial factors related to a child's cognitive and physical experience of anxiety, the influence of parenting techniques such as accommodation, and social environment all play a role in school refusal.

In regards to the psychological factors influencing anxiety in school refusal, negative reinforcement (avoidance of school-based stimuli that provoke negative affectivity), positive reinforcement (pursuit of tangible rewards outside of school), automatic negative thoughts (concerning personal failure, hostility), negative cognitive errors (overgeneralizing, catastrophizing, all-or-nothing thinking), and the cognitive triad (negative thoughts about oneself, the world, and the future) may all contribute to absenteeism. The cognitive-behavioral model posits that adaptive behavior becomes maladaptive "when the youth's anxiety is disproportional to the actual severity or likelihood of the feared outcome."¹¹

Understanding the extent of stressors that children may be experiencing at home and at school is critical to an accurate formulation and a key factor that may be modified to advance treatment of school refusal. In the face of anxious symptoms driven by an excess fear

response or attention bias (the tendency to focus on certain elements while ignoring others), both the child and their caregivers are faced with choices of how to respond. Accommodation from the caregiver is typically viewed as nonadaptive parenting behavior and may reinforce the child's school refusal though negative reinforcement. Other social factors that must be considered in the context of school refusal include poverty leading to hunger, lack of transportation, lack of access to appropriate clothing, and countless other stressors.

School Refusal and COVID-19

The COVID-19 pandemic heightened social isolation amongst adults, children, and adolescents universally. During the pandemic, most children had minimal social interaction with their peers. Children with anxiety, particularly those with social phobia, will likely face significant challenges when schools fully reopen and there are no longer virtual options. The psychological impact of involuntary social isolation, worries about contracting COVID-19, and falling behind in schoolwork while at home are of uppermost importance. For example, children with social anxiety disorder are receiving positive reinforcement for avoiding exposure to feared situations, only encouraging this continued avoidance, making acute destabilization probable when schools fully reopen.

During the pandemic, environmental cues shifted drastically while exposure to social situations became exceedingly limited.¹² Even children without social phobia may exhibit anxiety surrounding school reopening considering they will be "out of practice" from socializing.¹³ Contrarily, in children with excess fear responses, social distancing may temporarily lessen distress.^{12,13} However, these social changes are inherently self-limited and may lull clinicians into a false sense of security.¹³ Children must receive treatment targeting anxiety sensitivity, excess fear response, or other neurobiological predispositions, as these propensities will likely come back full force when schools reopen.

Evidence-Based Considerations

For some children, alternative educational options are the most appropriate setting. For children with maladaptive school refusal, a nonjudgmental biopsychosocial approach that guides the family towards a broad consideration of short- and long-term consequences can be followed. Clinicians and school administrators must be flexible in their practices within the context of the COVID-19 pandemic. Specifically, the following recommendations are adapted from an evidence-based Response to Intervention (RtI) model to address school absenteeism:¹⁴

- 1. Neurobiological Strategies:** relaxation training, breathing retraining, child-based somatic control exercises, pharmacotherapy (with appropriate dosage changes and/or adjunctive medications once schools reopen)
- 2. Psychological Strategies:** Rewarding students for positive behaviors, emphasizing prosocial skills and behaviors, cognitive-behavioral therapy (to modify inaccurate beliefs about others or one's school environment, gradual reintegration into classes), family-oriented treatments, social and emotional learning programs (focuses on self-concept, interpersonal skills, socioemotional actions, etc.), character education (emphasizes training in core values and life skills), psychoeducation
- 3. Social Strategies:** School climate strategies (eg, fostering constructive student-teacher relationships, tangible rewards for good attendance), health-oriented strategies (eg, addressing chronic medical conditions), safety-oriented strategies (eg, bullying and violence prevention, conflict resolution practices), appropriate parental involvement (eg, limiting accommodation, establishing set morning routines), fostering positive peer relationships

While we are not yet sure how the COVID-19 pandemic may impact school refusal once schools fully reopen, we must be vigilant in addressing how this unparalleled time will impact children and adolescents. Many of the

above strategies will be virtual, and many will involve coordinating with caregivers as well as school administrators; increasing communication with schools and caregivers is essential to effectively address the biopsychosocial nature of school refusal and its complex relationship to the pandemic.

Take Home Summary

School refusal is increasingly prevalent, impedes several domains of functioning, and is greatly impacted by the COVID-19 pandemic. In this article, we review the neurobiological, psychological, and social considerations related to school refusal and recommend strategies for evaluation and treatment.

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