

# FSL FAQs

POPARD Family - School Liaison Newsletter



## FAQ: WHAT IS THE EMERGING RESEARCH REGARDING ANXIETY AND ASD?

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**Fear** is a response to an immediate threat and often resolves in fight or flight.



**Anxiety** is an anticipation of a threat and involves preparation for a threat (e. g., vigilance, muscle tension, etc.).

## When does anxiety become a disorder?

All of us experience anxiety from time to time. What differentiates an anxiety disorder from normal or “transient” anxiety is when the anxiety is developmentally excessive or persistent.

Anxiety disorders that are found in children are listed (developmentally) in the *Diagnostic and Statistical Manual of Mental Disorders, 5th Ed., Text Revision* [DSM5-TR (APA, 2022)]. They include:

- Separation anxiety disorder
- Selective mutism
- Specific Phobias
- Social anxiety disorder
- Panic disorder
- Agoraphobia
- Generalized anxiety disorder (rare in children)

While there is evidence of neurobiological contribution to the onset of anxiety, there are also environmental events that are sources of anxiety. These might include:

- Loss of a relative
- Moving from one school to another
- Moving to a new home
- Periods of separation related to disaster

- Parental overprotection
- Parental shyness
- Social isolation
- Childhood maltreatment
- Adversity
- Harm avoidance

Depending on the age of a child and the intensity and/or frequency of events such as the above, environmental sources might independently, or in concert with neurobiological influences, precipitate the onset of an anxiety disorder.

## Anxiety Disorders and Autism Spectrum Disorder

There may be differences between individuals with ASD and typically-developing individuals with respect to the frequency of occurrence of specific anxieties. According to the Kelty Mental Health Resource Centre (<https://keltymentalhealth.ca/autism-spectrum-disorder>, Section 2: How Do I know: Anxiety Disorders, para. 3), the most common anxiety disorders in children with ASD are:

- ·Obsessive-compulsive disorder
- ·Generalized anxiety disorder

- ·Social anxiety disorder
- ·Specific phobia
- ·Separation anxiety disorder

In a meta-analysis, van Steensel and Herman (2017) reported a prevalence rate of 40% for anxiety overall for children and youth with ASD. In their study, the level of overall anxiety of youth with ASD was compared to those of typically developing children and clinically referred children (who were not diagnosed with ASD). Their findings included:

- much higher anxiety levels overall among youth with ASD than among typically developing children;
- somewhat higher levels of anxiety for children with ASD than for children generally referred to clinics for treatment; specifically: higher levels of anxiety in youth with ASD than among youth with externalizing or developmental problems, but not clearly higher levels of anxiety than among children with internalizing problems;

- a difference in anxiety levels between children with ASD and typically developing children that increases with measured intelligence and
- a difference in anxiety levels between ASD and clinically referred children that increases with age

## Why do anxiety and ASD co-occur so Frequently?

### Core Symptoms of ASD

ASD is considered to be neurobiological in origin. "It is one of a group of conditions . . . that are characterized by developmental deficits or differences in brain processes that produce impairments of personal, social, academic, or occupational functioning (APA, 2022, p. 35)." Its core symptoms include:

- Impairments in reciprocal social communication and social interactions
- Restricted, repetitive patterns of behaviour, interests, or activities (APA, p. 60).

These symptom clusters reflect the difficulty that individuals with ASD have in managing social relationships successfully.

### Neurobiology

In their meta-analysis, van Steensel and Herman suggested "that children with ASD have a neurobiological predisposition which cause [sic] ASD-related difficulties which, in combination with environmental factors (bullying, parenting, etc.), may lead to anxiety (van Steensel and Herman, 2017, p.1754)."

Other researchers have investigated neurobiological links between ASD and anxiety (Zaboski, 2018). In a recent study, Bartolotti, Sweeney, and Mosconi (2020) identified decreased connectivity with respect to the amygdala [important for managing emotion and response to fear: [Amygdala Function and Location \(simplypsychology.org\)](https://www.simplypsychology.org/amygdala-function-and-location/)] for a group of children diagnosed with ASD and anxiety, when compared to a matched group of neurotypical children and a matched group of children with ASD but without a diagnosis of anxiety disorder.

They concluded that co-occurring anxiety in ASD is associated with disrupted emotion monitoring processes.

Results such as these support a neurobiological relationship between ASD and the symptoms of anxiety. This is consistent with previous findings that heritability is a significant contributor both to the onset of ASD and to the risk of experiencing social anxiety and generalized anxiety disorder (APA, 2022). The onset of both ASD and anxiety disorders may be viewed as "epigenetic" in that their manifestations reflect interactions between heritability and the environment (Barlett, Singh, and Hunter, 2017; Schiele and Domschke, 2018).

Core symptoms of ASD decrease the ability of individuals with ASD to predict the actions or interpret the beliefs of others, which may lead to a constant state of heightened worry. Repetitive behaviors may, in part, serve to instill predictability, so anxiety may lead to increased stereotyped behaviors or perseverative thoughts (Hyman, et al., 2020).

## Treatments for anxiety

Anxiety is one of the most common co-occurring conditions that are found when ASD is diagnosed. When an anxiety disorder is diagnosed, it may be responsive to both pharmacological and non-pharmacological treatments. For example, with regards to non-pharmacological interventions, cognitive behaviour therapy has emerged as an effective, evidence-based intervention for persons with age-appropriate, or close to age-appropriate, intellectual abilities.

The combination of both modalities of treatment may be more effective than either alone (Bartlett, et al. 2017). See POPARD FAQ [What is the Emerging Research Regarding Medications to Help Symptoms Associated with ASD?](#)

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