

# Understanding Adolescent Stress and Anxiety

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## Prevalence of Mental Illness

- 10-20% of youth are affected by mental illness.
- 70% of mental health problems have their onset during childhood or adolescence.
- Young people aged 15 to 24 are more likely to experience mental illness and/or substance use disorders than any other age group.
- 5% of males and 12% of females, between the ages of 12 and 19 years, have experienced a major depressive episode.
- The youth suicide rate in Canada is the third highest in the industrialized world.
- 1 out of 5 Youth with mental health problems receive services.
- 80% of individuals with mental illness are treatable.

Statistics Canada 2018

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## Prevalence of Anxiety Disorders

- Anxiety disorders are the most common mental health disorders of childhood and adolescence. Different kinds of anxiety affect young people at different times in development. Phobias and separation anxiety affect primarily young children; social anxiety develops later, as peer relationships become more important.<sup>2</sup>
- Nearly one in three adolescents (31.9%) will meet criteria for an anxiety disorder by the age of 18.
- Anxiety and panic disorders change from equal female–male prevalence to a 2:1 female–male prevalence after puberty.<sup>3</sup>
- All anxiety disorder subtypes were more frequent in girls than boys:
  - Social phobia: 11.2% females, 7.0% males
  - Specific phobia: 22.1% females, 16.7% males
  - Panic disorder: 2.6% females, 2.0% males
  - PTSD: 8.0% females, 2.3% males
  - Separation anxiety: 9.0% females, 6.3% males
- Anxiety rates are on the rise. High school students today have more anxiety symptoms and are twice as likely to see a mental health professional as teens in the 1980s.

Child Mind Institute 2017

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## Adolescent Brain Development

- Different parts of the brain develop at different rates
  - 'Emotional/pleasure' part (limbic system) of the brain before 'logical/decision-making' part (pre-frontal cortex)
- Gender differences
  - Increase in brain matter earlier for girls (adolescents begins earlier)
  - 'systemizing brain' vs. 'empathizing brain'
  - Sex hormones
- Adolescent brains are more sensitive to:
  - Dopamine, produced when risks are taken
  - Oxytocin, linked to social rewards

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## What are the Effects of these Changes?

**The teen brain:**

- **More likely to misinterpret facial expressions of emotion**
- **Uses less of the prefrontal cortex to interpret facial expressions**
- **Processes more in amygdala**
  - **Reacts more quickly**
  - **Sees anger when it isn't intended**

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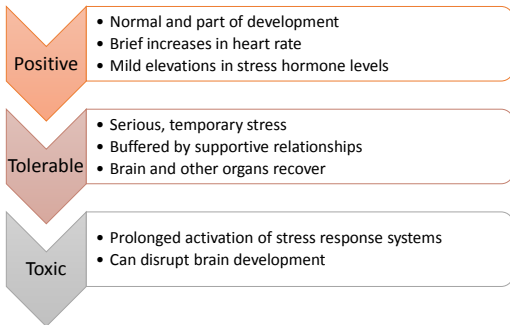
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## Stress Responses




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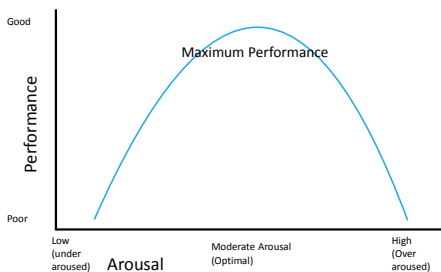
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### Relationship Between Arousal and Performance



Developed By: Dr. Stan Kutcher MD, FRCP, FCAHS

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Toxic stress is the only type of stress that's actually bad for you. Experiencing positive or tolerable stress actually makes us stronger, healthier and more understanding human beings!

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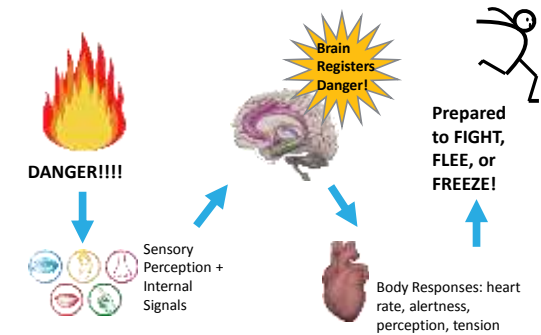
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### Fight, Flight or Freeze Response



Developed By: Dr. Stan Kutcher MD, FRCP, FCAHS

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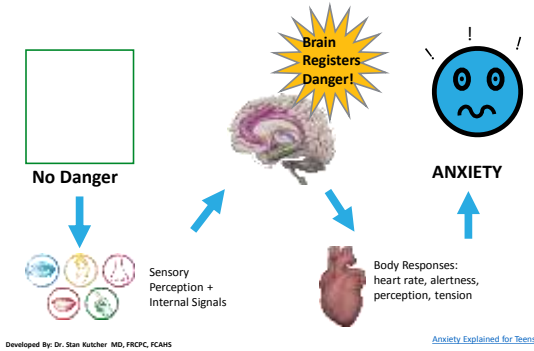
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## Anxiety




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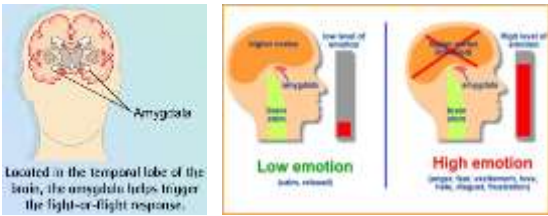
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## Anxiety and the Brain: the Amygdala Hijack




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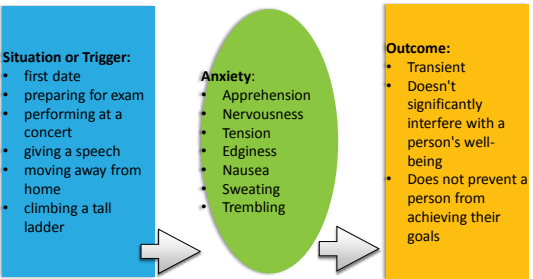
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## Normal Anxiety




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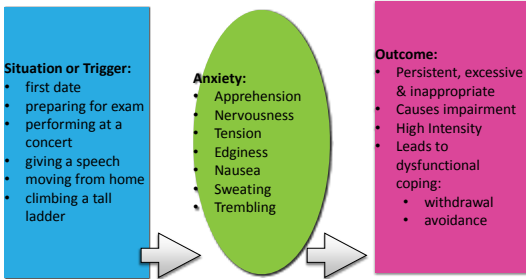
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## When is it not Normal Anxiety?



Developed By: Dr. Stan Kutcher MD, FRCP, FCAHS

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## When is it not Normal Anxiety?

- Refusing to go to school, participate in other activities, or see friends
- Difficulties at school, like problems concentrating or speaking in class
- Becoming very upset when parents or caregivers leave
- Often seeking reassurance that everything will be okay
- Avoiding specific things, like dogs, or situations, like large crowds
- Becoming very upset over minor problems or conflicts
- Expressing a lot of concerns or asking a lot of "What if...?" questions
- Difficulties sleeping well or eating well
- Physical complaints like stomach aches, headaches, shakiness, or dizziness
- Having panic attacks more than occasionally

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## Causes of Anxiety Disorders: Nature vs Nurture

- Anxiety disorders have multiple, complex origins.
- Genes play a role in causing anxiety.
- The environment (i.e., home, the neighbourhood, school and other settings) can also contribute to anxiety.
  - Some youth who live with too much stress can become anxious.
  - Other youth may "learn" to respond in an anxious way to new situations because a parent or other caregiver shows anxiety.
- In most youth it is a mix of these causes that leads to an anxiety disorder.

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## Common Anxiety Disorders

SEPARATION ANXIETY DISORDER

GENERALIZED ANXIETY DISORDER

SOCIAL ANXIETY DISORDER

PANIC DISORDER

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## Separation Anxiety Disorder

**Facts:**

- Approximately 4% of youth will suffer from separation anxiety disorder during any given school year.
- Separation anxiety disorder is the most common anxiety disorder in children under 12 years of age, with a gradual decrease in frequency as children mature into adolescence and adulthood. However, separation anxiety can continue well into adulthood, and even begin in adulthood.
- Onset of separation anxiety peaks at several points of development including with entry into Kindergarten, between ages 7-9, and again with either entry into Middle or High School.
- Boys and girls are equally affected by separation anxiety.

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## Separation Anxiety Disorder

Signs & Symptoms	
<p><b>Thoughts</b> (Note: very young children may be unable to identify specific fearful thoughts)</p> <ul style="list-style-type: none"> <li>• What if something bad happens to mom or dad?</li> <li>• What if I get lost?</li> <li>• What if grandma/parent picks me up after school?</li> <li>• What if I get kidnapped?</li> <li>• What if I get sick and mom isn't there to help me?</li> </ul>	<p><b>Emotions</b></p> <ul style="list-style-type: none"> <li>• Anxiety/fearful</li> <li>• Shame</li> <li>• Embarrassment</li> <li>• Helplessness</li> <li>• Sadness</li> <li>• Anger</li> </ul>
<p><b>Physical feelings</b></p> <ul style="list-style-type: none"> <li>• Stomachaches</li> <li>• Dizziness</li> <li>• Racing heart</li> <li>• General aches and pains</li> <li>• Headaches</li> <li>• Shortness of breath</li> </ul>	<p><b>Behaviors</b></p> <ul style="list-style-type: none"> <li>• School refusal</li> <li>• Avoiding participating in new activities or going places without a parent</li> <li>• Refusal to sleep alone</li> <li>• Nightmares</li> <li>• Asking a parent to be present or available</li> <li>• Crying or having tantrums</li> <li>• Refusal to be alone in a room</li> </ul>

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## Separation Anxiety Disorder

- **Common Situations or Affected Areas:**
  - School absenteeism
  - Refusing to attend school field trips, sleepovers, or other events
  - Inability to make and maintain friendships due to fear of being away from parents
  - Lack of independence in a variety of domains (e.g., sleeping, playing, socializing, going away to college, etc.)
  - Increased dependence among family members

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## Generalized Anxiety Disorder (GAD)

- **Facts:**
  - Although younger children can show signs of excessive worry, children usually develop GAD at about 12 years old.
  - Girls are more likely to have GAD than boys. In fact, 2 out of every 3 children with GAD are girls.
  - Many children with GAD also have other anxiety problems. The most common problems are social anxiety, depression, separation anxiety, and attention-deficit hyperactivity disorder (ADHD).

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## Generalized Anxiety Disorder

Adolescents with GAD are often described as "little worriers"

Most frequent worries include tests/grades, natural disasters, being physically attacked, future school performance, and social relationships

Often worry about adult concerns, like family finances

Place high standards on themselves, self-conscious and require frequent reassurance from others. It is not the number of worries, but rather the *intensity* of the worries that separates adolescents with GAD from non-referred adolescents

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## Social Anxiety Disorder

**Facts:**

- Social anxiety disorder usually begins in early adolescence although can start earlier during the elementary school years.
- Social anxiety disorder can develop suddenly after a stressful or embarrassing experience, or slowly over time.
- There is some evidence that social anxiety runs in families, so there may be other members who share similar difficulties as your child.
- An equal number of girls and boys experience social anxiety, and in any given school year about 7% of children will have a diagnosis of social anxiety.
- Some of the problems associated with social anxiety disorder include poor school performance, low confidence in social situations, trouble developing and maintaining friendships, depression, and alcohol or drug use.

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## Social Anxiety Disorder

Signs & Symptoms	
<p><b>Thoughts:</b> Older, very young children may be unable to identify specific fears</p> <p><b>Thoughts:</b></p> <ul style="list-style-type: none"> <li>• I'm going to say something stupid</li> <li>• They won't like me</li> <li>• I'm an idiot</li> <li>• People can tell I'm nervous</li> </ul> <p><b>Physical sensations:</b></p> <ul style="list-style-type: none"> <li>• Blushing/flushing</li> <li>• Sweating</li> <li>• Trembling</li> <li>• Muscle tension</li> <li>• Irritability</li> <li>• Feeling detached from one's body (derealization)</li> </ul>	<p><b>Emotions:</b></p> <ul style="list-style-type: none"> <li>• Awkward/shy/feeling</li> <li>• Embarrassment</li> <li>• Shame</li> <li>• Helplessness</li> <li>• Sadness</li> <li>• Anger</li> </ul> <p><b>Behaviors:</b></p> <ul style="list-style-type: none"> <li>• School refusal</li> <li>• Avoiding peer talking in new activities or group events</li> <li>• Making a excuse to be absent or avoiding</li> <li>• Seeking emotional support from adults</li> <li>• Not answering in class</li> <li>• Crying or fleeing a situation</li> <li>• Refusing to go in a day with without a parent</li> <li>• Avoidance of peer eye contact</li> <li>• Staying home or avoiding rather than hanging out with friends</li> </ul>

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## Panic Disorder

**Facts:**

- Panic Disorder usually begins in late adolescence.
- Girls are more likely to experience panic attacks than boys.
- Teens with a family history of anxiety or depression are at greater risk for developing Panic Disorder.

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## Panic Disorder

- An abrupt surge of intense fear or intense discomfort that reaches a peak within minutes (**Panic attacks**)
- Panic attacks are recurrent and unanticipated by the individual
- Individuals with recurrent panic may avoid social situations or going out in public altogether.
- Can lead to withdrawal from friends and family and absence from school.

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### Treatment Options




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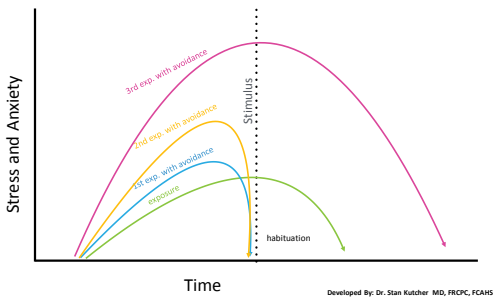
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## Exposure Curve




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