Anxiety in Children with Autism:
A Parent’s Guide

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Superheroes social skills training, Rethink Autism internet interventions, parent training, EBP classroom training, functional behavioral assessment: An autism spectrum disorder, evidence based (EBP) training track for school psychologists US Office of Education Personnel Preparation Project: H325K120306 Principal Investigators: William R. Jenson, PhD, Elaine Clark, PhD Grant Director Julia Hood, PhD
Introduction

The term autism spectrum disorder (ASD) refers to the group of lifelong neuropsychiatric disorders that include Autistic Disorder, Asperger’s Disorder, and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS). The characteristic deficits associated with ASDs are categorized in three main areas of development: social and emotional reciprocity, stereotyped or restricted repertoire of interest and activity, and difficulties with speech and language. The deficits displayed by an individual with an ASD are on a continuum, or spectrum of severity, ranging from very severe deficits as seen in individuals with classic autism to less severe among those with Asperger’s Disorder and PDD-NOS. For each individual with an ASD the presentation of deficits is just that, individual. The core traits may be similar, but it is important to remember that each individual’s experience is different. However, one core issue that is common to most individuals on the autism spectrum is the issue of anxiety.

Anxiety is “a normal adaptive reaction” that is a common experience for most people, regardless of age (Huberty, 2013). Most people have experienced some level of anxiety when facing stressful events such as tests in school, public speaking, going to the dentist, going on a first date, etc. A small amount of anxiety can be helpful in certain situations because it helps an individual to be alert and prepared for a perceived threat. Anxiety becomes problematic when an individual’s perceptions of the threats in their surrounding environment are out of proportion with the actual threat. This becomes especially problematic for individuals with ASDs because these individuals may already struggle to interpret
environmental cues. It is this difficulty that can lead to or exacerbate problem behaviors such as self injury, destruction of property, and harm to others. This manual is provided as a resource for parents and caregivers of children with ASDs to help provide a better understanding of what anxiety is, what it may look like in a child with ASD, and what can be done to help an anxious child.

**What is Anxiety?**

As stated earlier, anxiety is a “normal adaptive response” (Huberty, 2013). This is the body’s natural alarm system, which enables us to recognize and respond to threats in our environment. However, problems occur when we have too much anxiety, or excessive worry. Too much worry can cause maladaptive behavior, in other words behavior that is not adaptive. This can be a common problem for many children, especially when faced with such tasks as test taking or answering questions in class. There are numerous other stress inducing activities, events, or environments for children, only a few are mentioned for the sake of brevity.

For children with autism, appears to be a natural byproduct of the challenges that these children face. Due to the sensory sensitivities associated with an ASD, children on the autism spectrum already experience a heightened state of alarm, and may often experience sensory overload. When many children with an ASD experience this overload they will engage in avoidance behaviors in order to escape the noxious stimulus in the environment, and thereby reduce the amount of threat they perceive to be associated. However, these avoidance behaviors can be harmful to the child (e.g., self-injurious behaviors), harmful to others (e.g., hitting, kicking, biting), or destructive of property (e.g., throwing objects). Thus, it is critical to understand what anxiety is, and what can provoke an
anxious response in a child with autism. Once these things are better understood, the easier it is to develop preventative strategies to work with your child, and to intervene when your child is in crisis.

This manual is intended to be used by parents to assist their child who may be experiencing difficulties at home and at school related to anxiety. However, this manual is not intended to replace consultation with licensed medical and/or mental health personnel. It may be used in conjunction with other outside resources as childhood anxiety can be a very serious issue, and is likely to affect the child’s functioning in a variety of settings.

**What Causes Anxiety**

There are many theories about what may cause anxiety. “Biological theories explain the causes of anxiety disorders by emphasizing the role of genetic factors in creating a vulnerability to maladaptive reactions to threatening or by locating the causes of the disorder in physiological or neurophysiological processes (e.g., a highly reactive autonomic nervous system)” (Sattler & Hoge, 2006). Other researchers are looking into the role that specific neurotransmitters may play in anxiety. However, research in these areas is still ongoing, and is not yet conclusive.

A large amount of research has been devoted to studying genetic and environmental causes of anxiety. Researchers have found that genetic contributions account for approximately 30% of childhood anxiety disorder cases (Huberty, 2008). However, a larger proportion of cases have been found to have an environmental cause, rather than being a genetic predisposition. A biological trait within the child that may lead to a greater likelihood of anxiety is temperament/personality. Children who tend to be more tentative and cautious have a
higher likelihood of experiencing anxiety. Factors that are external to the child that may also promote higher stress/anxiety levels within children are: an overprotective parenting style and parent modeled anxious behavior (Huberty, 2013; Sattler & Hoge, 2006).

Psychological theories, such as Freud’s psychoanalytic theory and Erickson’s psychosocial theory offer psychological explanations for the causes of anxiety disorders. However, a more pertinent psychological theory for the purposes of this manual is behavioral learning theory. “Learning theory explains anxiety reactions in terms of either (a) classical conditioning (whereby a fear response becomes conditioned to a previously neutral object or situation) or (b) cognitive schemas that interfere with rational interpretations of stimuli” (Sattler & Hoge, 2006). In the case of children with an ASD, it is thought that anxiety or fear responses are produced by a combination of biological factors (e.g., a highly reactive autonomic nervous system) and conditioned responses in reaction to aversive stimuli within the child’s environment.

Common Symptoms of Anxiety

The common symptoms of anxiety can be broken down into three main categories: thinking/learning, behavioral, and physical. Not all children will display the same symptoms to the same degree. When trying to assess your child’s level of anxiety there are three things to keep in mind. First, does your child’s anxiety level appear to be excessive or atypical for your child’s age or developmental level? Second, does your child’s anxiety level appear to be inappropriate or excessive for the situation frequently? Third, have these symptoms persisted for several weeks or months? If you have answered yes one or more of these questions it may be appropriate to consult
with your child’s pediatrician and/or a mental health specialist who has expertise in the area of treating childhood anxiety disorders.

The first category that will be discussed are the symptoms that may be seen in a child’s thinking or learning. The hallmark symptom of anxiety in children is excessive worry, or rumination over situations or events beyond the child’s control. Children who are experiencing anxiety may demonstrate difficulty in concentrating. They may also show signs of difficulty remembering things, and they may have great difficulty paying attention even during a preferred activity. Some children also show greater difficulties with problem solving. Children with an ASD may tend to display more worry, over some of the other symptoms in this category.

The second category of symptoms deals with some of the behaviors that a child with anxiety may display. Anxious children tend to very restless and fidgety. Children also may display task avoidance when confronted with a task that produces more anxiety. For children who are verbal speech may become more rapid. Children may become irritable and withdrawn, and may refuse to participate in family or class activities Higher functioning children may demonstrate perfectionistic qualities in school work or chores at home. Anxious children will often fail to complete tasks, or seek easier tasks. Other more serious behavioral symptoms that may be common for children with ASD are injurious behaviors such as head banging, hitting, kicking, scratching, or biting. Some children may have a tendency to run when confronted with a situation that produces a lot of anxiety. Other behaviors may include destruction of property, such as the throwing of objects in an attempt to escape or avoid the negative stimulus.
Finally, the third category of symptoms related to anxiety is the physical symptoms. Children who may be experiencing anxiety may complain of frequent stomach aches, headaches, and nausea. Children may also experience a more rapid heart rate and muscle tension. Flushing of the skin and higher levels of perspiration are also common signs of anxiety in children. It also quite common for anxious children to experience disturbance in their sleep routine.

**Strategies for Supporting Your Child at Home**

This section is provided in order to provide parents with some tools to help work with their children experiencing anxiety. Examples of some of the tools are provided in the appendix to this manual.

The first category of tools that will be discussed will be breathing and relaxation techniques. These will be critical tools to be used as first line interventions, particularly when your child may be in the middle of a panic/anxiety attack. Breathing techniques can be used before, during, and after a panic attack. Learning to breathe calmly will help prevent hyperventilation, or over-breathing, which can lead to more anxiety due to increased heart rate, dizziness, or headache. The steps to learning to breathe calmly are simple and portable, but do require some practice in order to be most effective. Breathing calmly will be most effective when your child is seated upright, as this will increase the capacity of the lungs to fill with air. Learning to breathe calmly also requires the child to take smooth, slow, and regular breaths. This technique is best taught when the child is calm, and then once the skill is learned begin to teach the child how to use this technique when in anxiety producing situations. The four steps to breathing calmly are as follows: take a slow deep breath in through the nose, breathing into the
lower stomach (e.g. belly breath) for about
four seconds, hold breath for about 1-2
seconds, exhale slowly through the mouth
for about four seconds, wait a few seconds
before taking another breath. Repeat this
process for at least 6-8 breathing cycles per
minute. This process should be practiced at
least twice a day for five minutes.

It may be difficult to get your child
to sit still long enough (i.e. 15-20 minutes)
to learn how to use progressive muscle
relaxation techniques, so this manual will
only cover an abbreviated version of muscle
relaxation. If interested, further information
on progressive muscle relaxation may be
obtained via the internet on
www.anxietybc.com, www.childanxiety.net,
or entering the search term progressive
muscle relaxation. The abbreviated muscle
relaxation technique consists of teaching
your child to tense and relax the major
muscle groups while using calm breathing.
You will begin by teaching your child to
tense the major muscles in their lower limbs
(e.g. feet and legs) for a few seconds. Have
them release the tension in these muscles
while using calm breathing. Next have your
child tense the muscles in their stomach and
chest. To release tension you will have your
child follow the same procedure as
described above. The next group of muscles
that you will teach your child to tense and
release will be the muscles in the hands,
arms, and neck. Your child will release the
tension as described above. The final muscle
group that will be focused on by this
exercise are the muscles of the face. To
tense the muscles of the face have your child
raise their eyebrows as high as they can and
hold that position for a few seconds. Have
your child release by doing calm breathing.
Again this technique is best taught when the
child is calm, and then move to teaching
when your child is confronted with a feared
situation. You may also help your child to
recognize where he or she may first feel
anxiety in their body, and then teach them to relax the muscles in that part of the body. Using the visuals Chester the Cat Feels Anxious!, and How Do I Feel Anxiety in My Body? provided in the appendix may be useful tools to help your child visualize the area/s where they may feel anxiety the most.

The My Fear Thermometer visual is an important tool to help your child understand different levels of anxiety, with 1 being I feel good/happy, and 10 being I feel very scared/anxious. This tool will be important to use in combination with the breathing and relaxation techniques. It will be very important for your child to understand when it is important to use calm breathing, and/or muscle relaxation. Teach your child that it will be good to use these skills when they are feeling like they're at a 5 or 6 on the thermometer. It is especially critical to teach them that these skills should absolutely be used if they are feeling like they are at a 7 or higher on the thermometer.

The second category of tools that will be talked about in this section are dealing with thoughts, thought chains, and learning how to stop or re-direct negative thoughts. It is very important to understand what produces anxiety. Anxiety or fear begins as a thought or perception of a situation that gets interpreted negatively, and thus produces a fear response. It will be important for you to help your child identify the thought that produced the negative feeling, and consequently produced the reaction. This process may take time because it is not always easy to readily identify thoughts. The What Am I Thinking? and Thoughts Affect Feelings forms have been provided to help you teach your child about positive and negative thoughts.

Once a thought can be indentified, it will be important to teach your child about how these thoughts can be traps that lead to more fearful thoughts. Thinking Traps and Hopping Down the Worry Path forms can be
used to help teach about how thoughts can spiral out of control if we let them.

Once your child has a good concept of how thoughts and feelings work, it will be important to teach your child how to stop or redirect their thoughts when they start having negative thoughts about a certain situation. The STOP Plan and Challenging Negative Thinking forms may be helpful in teaching your child how to formulate alternative positive thoughts when confronted with something that they perceive as negative.

With each of these suggested intervention ideas always keep in mind the developmental level of your child, and tailor the forms as you may see fit to meet the needs of your child. Remember you know your child best, and are in a position to provide the best help for your child. It is hoped that this manual will be useful in providing you with information about anxiety, and how to help your child when they are experiencing fear/anxiety.


Appendix

My Fear Thermometer
What Am I Thinking?
Thoughts Affect Feelings Form
The STOP Plan Handout
Hopping Down the Worry Path
Thinking Traps
Challenging Negative Thinking
Chester the Cat Feels Anxious!
How Do I Feel Anxiety in My Body?
Additional Resources
My Fear Thermometer
What am I Thinking?

www.anxietybc.com
FEELING: __________________________

FEELING: __________________________

www.anxietybe.com
Thoughts → Feelings!
What feelings would follow these thoughts?

That dog is looking at me. He seems interested and friendly. I bet he just wants to play!

FEELING:

That dog is staring at me. He looks mean. I bet he wants to jump on me, or bite me!

FEELING: ____________________

www.anxietybc.com
This STOP Plan is for:

- **Scared?**
- **Thoughts?**
- **Other helpful thoughts?**
- **Praise and Plan!**

<table>
<thead>
<tr>
<th>Scared?</th>
<th>Thoughts?</th>
<th>Other helpful Thoughts?</th>
<th>Praise and Plan!</th>
</tr>
</thead>
<tbody>
<tr>
<td>What's going on in your body?</td>
<td>What are you thinking?</td>
<td>What is something else you can think?</td>
<td>What is something nice you can say to yourself? What can you do next time?</td>
</tr>
</tbody>
</table>

www.anxietybe.com
Hopping Down the Worry Path

Pretend you are Buster the Bunny. You are a hungry bunny. Every time you face something scary, you move one step closer to the carrot garden.

If I keep moving forward I will get to the end. I'll just take small steps! Here I go!

Step 1: ____________________________

Step 2: ____________________________

Step 3: ____________________________

Step 4: ____________________________

Yahoo!!! I faced my fears, and reached my yummy carrot!
Notes about Activity:

Important!

- Read through *Helping Your Child Face Fears: Exposure* guidelines for instructions on how to do this activity (as well as examples of Fear Ladders for different fears/goals).

- This activity is best done after your child is familiar with anxiety, can recognize his symptoms, and has learned how to use the *Fear Thermometer.*

Goals of this Activity:

- To slowly introduce to young children the idea of taking small steps towards goals
- To track progress and build confidence through success
- To give opportunities for praise and rewards!

Hint: Make sure the steps are not too far apart! Remember, you can create several new "Worry Paths" and build on smaller goals!

For example:

**Goal = Sit on the edge of pool next to mom** (working towards larger goal of overcoming fear of water/swimming)

- **Step 1.** Hold mom’s hand and stand 5 feet away from pool
- **Step 2.** Hold mom’s hand and stand 2 feet away from pool
- **Step 3.** Sit beside mom right next to pool, feet *not* touching water
- **Step 4.** Sit beside mom right next to pool, feet touching water
<table>
<thead>
<tr>
<th>Thinking Traps</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fortune-telling:</strong></td>
<td>&quot;I know I will fail the exam&quot;</td>
</tr>
<tr>
<td>This occurs when we predict</td>
<td>&quot;I know we will get in another car accident&quot;</td>
</tr>
<tr>
<td>that things will turn out</td>
<td></td>
</tr>
<tr>
<td>badly. However, we cannot</td>
<td></td>
</tr>
<tr>
<td>predict the future because we</td>
<td></td>
</tr>
<tr>
<td>don't have a magic ball.</td>
<td></td>
</tr>
<tr>
<td><strong>Overgeneralizing:</strong></td>
<td>&quot;I always make mistakes&quot;</td>
</tr>
<tr>
<td>This is when we use words</td>
<td>&quot;My mother is never on time&quot;</td>
</tr>
<tr>
<td>like &quot;always&quot; or &quot;never&quot; to</td>
<td></td>
</tr>
<tr>
<td>describe situations or events.</td>
<td></td>
</tr>
<tr>
<td>This is a problematic way of</td>
<td></td>
</tr>
<tr>
<td>thinking because it does not</td>
<td></td>
</tr>
<tr>
<td>take all situations or events</td>
<td></td>
</tr>
<tr>
<td>into account. For instance,</td>
<td></td>
</tr>
<tr>
<td>sometimes we make mistakes</td>
<td></td>
</tr>
<tr>
<td>but we don't always make</td>
<td></td>
</tr>
<tr>
<td>mistakes.</td>
<td></td>
</tr>
<tr>
<td><strong>Mind-reading:</strong></td>
<td>&quot;Others think I'm stupid&quot;</td>
</tr>
<tr>
<td>This happens when we believe</td>
<td>&quot;She doesn't like me&quot;</td>
</tr>
<tr>
<td>that we know what others are</td>
<td></td>
</tr>
<tr>
<td>thinking and we assume that</td>
<td></td>
</tr>
<tr>
<td>they are thinking the worst</td>
<td></td>
</tr>
<tr>
<td>of us. However, we can't</td>
<td></td>
</tr>
<tr>
<td>mind-read so we don't know</td>
<td></td>
</tr>
<tr>
<td>what others are thinking.</td>
<td></td>
</tr>
<tr>
<td><strong>Labeling:</strong></td>
<td>&quot;I'm stupid&quot;</td>
</tr>
<tr>
<td>Sometimes we talk to</td>
<td>&quot;I'm a failure&quot;</td>
</tr>
<tr>
<td>ourselves in a mean way and</td>
<td></td>
</tr>
<tr>
<td>we use a single negative word</td>
<td></td>
</tr>
<tr>
<td>to describe ourselves.</td>
<td></td>
</tr>
<tr>
<td>However, this kind of</td>
<td></td>
</tr>
<tr>
<td>thinking is unfair and we are</td>
<td></td>
</tr>
<tr>
<td>too complex to be summed up</td>
<td></td>
</tr>
<tr>
<td>in a single word.</td>
<td></td>
</tr>
<tr>
<td><strong>Filtering:</strong></td>
<td>Believing that only bad things happen to you because you did poorly on</td>
</tr>
<tr>
<td>This happens when we take</td>
<td>a test and got into a fight with a friend. However, you ignore the</td>
</tr>
<tr>
<td>note of all the bad things</td>
<td>good things that have been happening, such as getting a good grade on</td>
</tr>
<tr>
<td>that happen, but ignore any</td>
<td>a homework assignment and getting invited to a classmate's birthday</td>
</tr>
<tr>
<td>good things.</td>
<td>party.</td>
</tr>
<tr>
<td><strong>Overestimating:</strong></td>
<td>&quot;I will faint&quot;</td>
</tr>
<tr>
<td>This happens when we believe</td>
<td>&quot;I'll go crazy&quot;</td>
</tr>
<tr>
<td>that something that is</td>
<td>&quot;I'm dying&quot;</td>
</tr>
<tr>
<td>unlikely to occur is actually</td>
<td></td>
</tr>
<tr>
<td>about to happen.</td>
<td></td>
</tr>
<tr>
<td><strong>Catastrophizing:</strong></td>
<td>&quot;I'll embarrass myself and everyone will laugh&quot;</td>
</tr>
<tr>
<td>This is when we imagine the</td>
<td>&quot;I'll freak out and no one will help&quot;</td>
</tr>
<tr>
<td>worst possible thing is about</td>
<td></td>
</tr>
<tr>
<td>to happen and we will be</td>
<td></td>
</tr>
<tr>
<td>unable to cope with it.</td>
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</tbody>
</table>
### Challenging Negative Thinking

Questions to ask yourself to help challenge your negative thoughts or self-talk:

- Am I falling into a thinking trap (for example, catastrophizing or mind-reading)?
- What is the evidence that this thought is true? What is the evidence that this thought is not true?
- What would I tell a friend if he or she had that thought?
- Am I confusing a "possibility" with a "probability,"? It may be possible, but is it likely?
- Am I 100% sure that _____________ will happen?
- How many times has _____________ happened before?
- Is _____________ really so important that my future depends on it?
- What is the worst that could happen?
- Is this a hassle or a horror?
- If it did happen, what can I do to cope or handle it?
Chester the Cat feels anxious!
How does Chester feel anxiety in his body?

- Headache
- Big eyes
- Can't talk
- Lump in throat
- Face goes red
- Clenched fist
- Butterflies in stomach, or sore tummy
- Cold hands and feet
- Shaking legs
How do YOU feel anxiety in your body?
Reading Resource List

Recommended Children's Books:

Alexander and the Terrible
Horrible
No Good
Very Bad Day
First Grade Stinks
How Are You Peeling? Foods with Moods
When I Feel Angry
Scaredy Squirrel Makes A Friend
Sharing
How Kindness Grows

Recommended Readings for Parents and/or Teachers:


March, J. S. (1995). Anxiety disorders in children and adolescents. [John March is head of the RUPP study, and is out of Duke University. He is a psychiatrist.]

Manassis, K. (1996). Keys to parenting your anxious child. NY: Barrons Education Series. [Very practical overview of anxiety concerns. Dr. Manassis is a child psychiatrist and the director of the anxiety disorders program at Toronto’s Hospital for Sick Children]
Rapee, R.M., Spence, S.H., Cobham, V., & Wignall, A. (2000). Helping your anxious child: A step-by-step guide for parents. Oakland, CA: New Harbinger. [This book helps parents understand the most frequently experienced anxiety problems among children and provides instruction in how parents can help their children overcome their fears. The entire range of anxiety is covered including the small fears experienced by many children all the way to full-blown anxiety disorders. Skills and strategies are covered in detail. The authors recommend that this book be used in conjunction with consultation with a qualified mental health professional to best apply this book to the individual needs of each child.]


Sorenson, E. S. (1993). Children's stress and coping: A family perspective [Provides a perspective on how children deal with stress and how parents and clinicians can teach them effective coping strategies.]

Recommended Websites:

http://www.anxietylab.educ.ubc.ca
Run and operated by the Anxiety Projects Lab at the University of British Columbia, a research laboratory, headed by Dr. Lynn Miller, which focuses on childhood anxiety.

www.anxietybc.com
Run and operated by the Anxiety Disorders Association of BC, a nonprofit organization whose mission is to increase awareness and promote education of anxiety disorders, increase access to evidence-based treatment, and to encourage and develop new treatments and delivery. Has a click and print self-test for anxiety disorders for adults. Video clips with “child experts” explain the different subtypes of anxiety disorders, with tips for parents.

www.adaa.org
Run and operated by the Anxiety Disorders Association of America. Has a very good page on literature for children, adolescents, parents, and professionals. Has a click and print test for adolescents for anxiety disorders.

www.childanxiety.net
A nonprofit educational website.