ANXIETY

This article appeared in the Summer 2013 issue of *ASQ* (www.ASQuarterly.com), which is available both in print and via free app by searching on Autism Spectrum Quarterly.

Treating Fears and Phobias in Children with ASD

Part One of a Three-Part Series

Karen Levine, Ph.D.

He gets on the school bus at 7:30 each morning, enters the main school door, and meets his teacher in his classroom. One morning after a restless night, Mike wakes up irritable and fearful, anticipating his doctor's appointment that afternoon. The bus is 20 minutes late and Mike becomes even more upset, as fear of being late is a phobia of his. Due to construction at the school, he has to go in the side door, but going in different doors makes him anxious. When he gets to his classroom and learns that there is going to be a math test—another phobia of his—he bursts into tears and tries to run from the room. Even though the staff try to calm him down and offer him rewards for starting his work, Mike continues to be upset on and off throughout the day. Mike has substantial anxiety, and events such as these are very difficult for him to manage.

Anxiety, and especially specific fears and phobias, are very common in the general population, and even more common in people with ASD. Some studies report that about 40% of people with an ASD diagnosis also meet criteria for an anxiety diagnosis, most commonly specific phobias (van Steensel, Bogels, and Perrin, 2011). Treatments, such as cognitive behavioral therapy (CBT) are often ineffective for many people with ASD due to their communication and/or cognitive challenges.

The focus of this series of articles is to provide pleasurable strategies that families, teachers, and therapists can use to help anxious children cope with fears. These strategies are based on components of evidence-based methods of CBT.

What is a Phobia?

Healthy fear is adaptive. In fact, many children with ASD don't experience enough healthy fear responses to some situations, and this can lead to dangerous behaviors such as bolting. Fear is considered maladaptive—a phobia—when the child's fear is extreme, out of proportion to the situation (often referred to as irrational), and/or interferes with his or her functioning. Here are examples of some common phobias:

A child ...

- ♣ spends the morning at school fearfully anticipating the lunch bell;
- ▼ panics while approaching the doctor's office and needs to be sedated for routine medical care;
- screams in distress throughout hair washing;
- ♣ dreads going to school on special-event days and has trouble sleeping in the days leading up to them;
- ➡ is so afraid of making mistakes that he or she doesn't want to do school work;
- ➡ is so worried about losing that he or she avoids playing games with peers.

How Does a Phobia Develop?

Typically, though not always, a child experiences an event that he or she finds frightening, startling, or unpleasant. This event can then come to serve as a trigger for fear. For example a child may have been startled on hearing a balloon pop, or highly distressed from getting soap in his or her eyes during hair washing. The unpleasant event then serves as the trigger for the child's fear reaction when he or she approaches the same (or similar) event, as this fear typically expands to things associated with the original event. For example, if the child is initially afraid of thunderstorms, he or she may then become fearful of clouds in the sky because they might lead to a thunderstorm. This is referred to as *anticipatory anxiety* or "fear of fear."

In the face of this type of cycle, people naturally try to avoid the feared situation. As a result they don't get practice experiencing

Fear is considered maladaptive a phobia—when the child's fear is extreme, out of proportion to the situation...and/or interferes with his or her functioning. that they can, in fact, tolerate it. Caregivers may try to protect the child by avoiding the feared situation. This may be the best solution, provided that it does not severely limit the child's or family's life; however, sometimes this isn't possible as in the case of avoidance of school due to fear of a fire drill. Even when avoidance is feasible, it can limit children's experiences and keep them from being able to access enriching and fun-filled activities.

Another common approach employed by caregivers is to refrain from telling the child, in advance, about an upcoming feared event, in order to avoid anticipatory anxiety. Unfortunately, because this generally does not diminish the anxiety the child experiences during the actual event, he or she will continue to associate it with fear. Also this approach can make the child even more anxious, as he or she may worry about the event occurring at any time with no warning.

With effective treatment, even though the actual event may still be unpleasant, one can very often reduce the anticipatory anxiety leading up to it as well as decrease the degree of anxiety experienced within it. In other words, while shots still hurt; sounds still startle or hurt; and losing is less fun than winning, by reducing the degree of anxiety before and during events, these experiences can often become much more manageable for children. *

How to Treat Fears / Phobias

The key to treating phobias is to create a series of gradual steps consisting of tolerable levels of exposure to each feared component of the trigger event, while accompanying each step of that exposure with strategies to help the child decrease his or her level of distress.

The three-step process for treating fears / phobias consists of the following:

1. Figure out the components of the event that the child fears. While some fears may have just one component that is scary to the child, over time most take on multiple "bundled" components as discussed previously (e.g., fear of clouds vis-à-vis their association with a thunderstorm). Other fears are more complex and contain multiple bundled anxiety-triggering components from the start. For example, a child who is fearful about school birthday parties may also be afraid of the schedule changes that the parties involve and the sensory components associated with the singing and clapping. Hence, sensory, emotional, and associational components of events are all likely fear-inducing culprits that trigger anxiety.

Even if one is unable to figure out *all* of the feared components involved in a child's phobia, it is important to figure out as many as possible, since breaking down or "unbundling" feared events into their separate components, and desensitizing the child to each one, is more likely to be successful than trying to desensitize a child to a bundled package of multiple fears.

- 2. Determine and use self- and/or co-regulation strategies to decrease the child's distress during guided exposures to the feared event. The specific strategies most effective for helping a child relax vary across children and situations. Many children benefit from co-regulating strategies; that is, those that involve another person, such as sharing humor with a favorite adult or peer, especially if the humor involves components of the feared event (e.g., the child pretends to give the adult "100 shots" while the adult yelps playfully), or adult-guided relaxation strategies. Self-regulating strategies include deep breathing, relaxation exercises, and other sensory activities. Favorite music, books, and even electronics can reduce anxiety and help a child tolerate small amounts of exposure to the feared situation. Self- and co-regulating strategies can also be combined.
- 3. Determine the techniques / procedures to use for desensitizing the child to each of the event's components and then pair them with anxiety-decreasing measures. Determining the techniques / procedures to use may seem puzzling at first. The goal is to figure out ways to increase exposure gradually so that each step is not scary and may even be pleasurable for the child. That said, it is critically important to monitor the child's responses to these techniques and to adjust what you do accordingly, so as to maximize child interest and minimize fear.

Below are some examples of techniques and procedures that can be used to gradually desensitize the child to various components of the feared situation or event:

Role play and pretend play. Use increasingly real props (e.g., the child's favorite superhero can go into the tub, be afraid of hair washing, and then be seen to "survive.") The child's doctor or dentist can supply real accessories such as a tourniquet and plastic tubing to use on dolls or stuffed animals or on the adult caregiver. These types of techniques are described in detail in the book, *Replays: Using Play to Enhance Emotional and Behavioral Development for Children with Autism Spectrum Disorders* (Levine and Chedd, 2009).

Electronics. For most feared situations (e.g., blood draws, fire drills, dentist visits, bugs, or birthday parties), there are

It is critically important to monitor the child's responses to these techniques and to adjust what you do accordingly, so as to maximize child interest and minimize fear.

Youtube or other videos online that caregivers may find helpful. Increasingly, there are Apps available to address common phobias in fun, child-friendly formats (e.g., Toca Boca series; My Playhome). There are also sites on the Internet (e.g., Soundsnap) that provide many feared sounds (e.g., toilet flushing, vacuum cleaners, loud laughing) that can be used in desensitization activities. One can also make video clips of oneself, a peer, or a teacher, doing the feared thing. Having the actor "ham it up"—for example, playfully feigning initial fear (e.g., dipping one toe in the pool and quickly removing it before ultimately swimming)—enables the child watching to vicariously experience gradual exposure to the fear paired with relaxed fun.

The adult can adjust these experiences to suit the situation. For example, watch video clips with the child initially with no sound; then have him or her control the loudness level by gradually increasing the volume. The same can be done with audio tapes that initially are barely audible. The adult can then act out pretend discomfort by covering his or her ears.

Structure real-life versions of the feared situation or event, absent the offending elements. For example, visit the doctor's office when the child does not have an appointment; spend time in the school cafeteria having snack with only a favorite adult and one other child.

To summarize, fears and phobias can be very debilitating. Yet, they can be treated, resulting in elimination of the fear in some cases and reduction of it in others. In the next two articles in this series I will provide many specific examples of how to treat various phobias using the model and steps delineated above.

*Medication to decrease anxiety and phobias can be helpful for some children. Further, working with a mental health counselor, behavioral consultant, and/ or occupational therapist can also be beneficial.

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NewsBrief

UC Davis Mind Institute's Rogers Receives Prestigious Autism Centers of Excellence Award from the NILI

April 2, 2013—Autism researchers at the UC Davis MIND Institute have received a prestigious \$13 million award from the National Institutes of Health to establish an Autism Center of Excellence and Treatment Network, making the MIND Institute one of only nine such centers in the United States.

Announced on World Autism Awareness Day, the Autism Center of Excellence, or ACE, award underwrites a research program aimed at advancing the quality, pace, and coordination of autism research and is led by Sally J. Rogers, Ph.D., professor

of psychiatry and behavioral sciences and principal investigator. Rogers will collaborate with scientists at Vanderbilt University, Nashville; the University of Washington, Seattle; and Harvard to conduct the research. The award will support two separate treatment studies designed to provide the most up-to-date data possible on the most effective methods of treating very young children with autism spectrum disorder (ASD).

Editor's Note: Congratulations to Dr. Sally Rogers, a member of *ASQ's* advisory board.

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Treating Fears and Phobias in Children with ASD

Part Two of a Three-Part Series

Karen Levine, Ph.D.

In the first article in this series I outlined three steps for treating fears and phobias. In this article, while I specifically describe how to treat a child for the common phobia of getting shots or blood draws, similar steps can also be used for treating other concrete fears—for example, those related to haircuts, nail trimming, buzzers, or balloons.

lared's Fears

Jared, a 10-year-old boy with ASD has a longstanding, intense fear of getting shots and blood draws. Whenever he learns that he has a doctor's appointment he becomes agitated, covers his ears, and yells, "NO SHOTS." Trips to the doctor are stressful for all involved whether or not they result in Jared's getting a shot. The family, pediatrician's nurse, and school OT agree to work on this problem together.

Step 1: Figure out the components of the event the child fears. While initially the pain associated with the shot or blood draw was likely the impetus for this fear, given Jared's relatively high pain tolerance it didn't seem that this was the primary issue anymore. The family had noticed at "non-shot" doctor visits

that Jared was nonetheless afraid of many things associated with shots such as the latex gloves and alcohol wipes. Moreover, the doctor's office itself had become an anxiety trigger. Jared especially didn't like being confined / held down for medical procedures. To further complicate matters, as Jared's anticipatory fear of appointments took on more components, it evolved into a more generalized "fear of fear," as illustrated in Figure 1.

Step 2: Determine and use self– and/or co-regulation strategies. Many things helped Jared to become calmer when he was mildly anxious, including listening to his favorite music, playing with Lego figures, and engaging in playful, slapstick humor. He adored his older brother and would sometimes do things with him that he was scared to do otherwise, such as going into noisy environments. His teacher noticed that Jared was less anxious when he had a specific job to do in anxiety-provoking situations (e.g., taking pictures during class parties).

Step 3: Determine the techniques to use for gradually exposing the child to each of the components from Step 1, and then pair these with the anxiety-decreasing measures from Step 2.

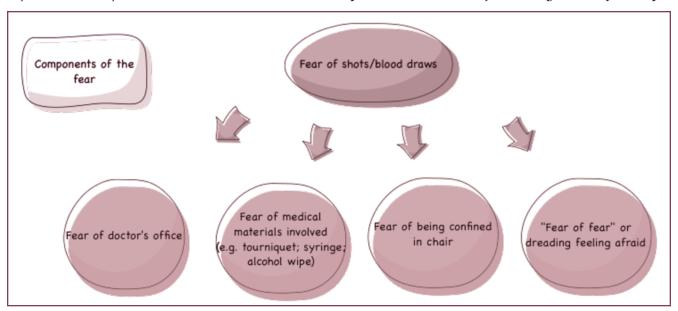


Figure 1. Components of Jared's phobia

The team obtained a variety of materials used in blood draws from the pediatrician's office (absent the needle!) in order to create gradually increasing approximations of the actual experience. In addition, the family purchased a toy doctor kit and downloaded from the Internet several video clips of children having shots or blood draws. Coincidentally, Jared's older brother had to have blood drawn and was happy to have his father videotape this. During the procedure, he made goofy faces to show that he was not scared and to help defuse the stressful situation.

The Desensitizing Process

Now the team was ready to combine gradual exposure to the components that caused the fear from Step 1 (e.g., the medical materials, the "fear of fear," the doctor's office), with the antianxiety measures (as will be delineated below) from Step 2.

First, Jared's father showed him one of the video clips of a child getting a blood draw, but Jared ran out of the room yelling, "NO SHOTS." This reaction meant that they had to switch to less direct, less anxiety-provoking, exposure initially. Jared's mother got out the real medical material to play doctor, but this also was too scary for Jared, so they shifted to starting with the toy doctor kit.

Where to start; what to include; and how quickly to proceed in the desensitizing process, is based upon the child's response. The goal is to have the child interested, but not afraid. If the child is scared by what you do, start with something less realistic and more playful and add more anti-anxiety measures. If the child doesn't seem to make the connection between what you are doing and the real event, add more realism.

Jared's mother then moved to less realistic and more playful activities, putting a Lego figure in a chair and giving him a "shot" with the toy syringe. She had the figure pretend to run away saying, "NO SHOTS!" thus using the type of symbolic play scenario described in *Replays* (Levine and Chedd, 2009). Jared watched, laughing; not afraid, but fascinated. He said, "Again!" and she did it again. She then handed him the toy syringe and he gave the figure a shot as Mom pretended to have the figure wiggle away saying, "No Shots." Jared wanted to play this game over and over again. Sometimes his mother would have the figure say, "Okay" and sit still; other times she would have it wiggle away saying, "No Shots." She used her son's reactions as a guide for determining how much he wanted to "practice" pretending the figure was afraid.

Jared's parents and school OT then began to add pieces of the real medical equipment and to include aspects of the Where to start; what to include; and how quickly to proceed in the desensitizing process, is based upon the child's response.

procedural elements of the process into the Lego play. For example, they set up a chair in the living room to serve as the blood-draw chair, taped a pillow to the armrest, and used a toy golf club over the "patient's" lap to simulate the confinement component of the procedure. His big brother sat in the chair and Jared gave him pretend shots using doctor gloves and alcohol wipes, as his brother at times playfully pretended to be scared and at other times to be "okay," based on Jared's interest and responses. Jared laughed when his brother pretended to be scared, sometimes telling him, "Be scared;" sometimes saying, "It's Okay." Soon Jared was willing to have the family give *him* pretend shots in the chair using the real medical materials. Thus, through this type of play Jared was becoming desensitized to each of his fear components.

As the child becomes more comfortable at one level of exposure, add more realistic props, sounds, etc. Add more anti-anxiety measures as needed. The goal is always to keep the child's interest without scaring him or her.

The next step in the process was to show Jared the video of his brother getting a blood draw. He watched it over and over, laughing each time. Given Jared's positive reaction to this video, the parents now re-introduced the Internet video clips that had initially frightened him. This time they turned the sound off and put on his favorite music at the same time. Jared no longer seemed afraid. He especially focused on when the boy in the video expressed mild fear, wanting to watch just that part many times, desensitizing himself to this fear component. His parents also introduced several different video clips to generalize desensitization to more than just one very specific script.

The pediatrician's office even allowed the family to have some practice visits. His parents told Jared that he could take pictures of equipment and select some toys to bring to the doctor's office for the playroom. These "jobs" were given both to decrease his anxiety (as per his teacher's earlier comments) and to make it clear that it wasn't a medical appointment for him. After a few of these non-appointment visits Jared was no longer anxious about going to the doctor's office.

As the child becomes more comfortable at one level of exposure, add more realistic props, sounds, etc.

The Real Thing

When the time came for an actual blood draw, the team felt that Jared was ready. Both the video of his brother and one that Jared found particularly funny of the Lego figure getting a shot were loaded onto his mother's cell phone. Jared watched the videos in the car on the way to the visit and in the waiting room. Although he was becoming more anxious as his turn approached, he began to relax when the phlebotomist watched the videos, laughing with Jared as she got him seated in the chair.

For the first time Jared was able to sit through the blood draw without being terrified. In fact, he was so proud of himself that he even asked to do it again!

In the final article in this three-part series I will discuss how to treat more abstract or complex fears such as losing in games, and fear of being late, making mistakes, doing things out of order, or not being first.

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Nearly One-Third of Children with Autism Also Have ADHD

Researchers find children with co-occurrence of ASD and ADHD face greater impairments

BALTIMORE, Md. (June 5, 2013)—In a study of the co-occurrence of attention deficit hyperactivity disorder (ADHD) and autism spectrum disorder (ASD) in early school-age children (four to eight years old), researchers at the Kennedy Krieger Institute found that nearly one-third of children with ASD also have clinically significant ADHD symptoms. Published in *Autism: The International Journal of Research and Practice* (Epub ahead of print), the study also found that children with both ASD and ADHD are significantly more impaired on measures of cognitive, social and adaptive functioning compared to children with ASD only.

Distinct from existing research, the current study offers novel insights because most of the children entered the study as infants

or toddlers, well before ADHD is typically diagnosed. Previous studies on the co-occurrence of ASD and ADHD are based on patients seeking care from clinics, making them biased towards having more multi-faceted or severe impairments. By recruiting patients as infants or toddlers, the likelihood of bias in the current study is significantly reduced.

"We are increasingly seeing that these two disorders co-occur and a greater understanding of how they relate to each other could ultimately improve outcomes and quality of life for this subset of children," says Dr. Rebecca Landa, senior study author and director of the Center for Autism and Related Disorders at Kennedy Krieger. "The recent change to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) to remove the prohibition of a dual diagnosis of autism and ADHD is an important step forward."

Participants in this prospective, longitudinal child development study included 162 children. Researchers divided the children into ASD and Non-ASD groups. The groups were further categorized

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ANXIETY

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Treating Fears and Phobias in Children with ASD

Final Installment in a Three-Part Series

Karen Levine, Ph.D.

In the first article in this series I outlined three steps for treating fears and phobias. In the second, I described using these steps to treat specific concrete phobias such as getting shots. In this final article, I describe how to treat a child for the common fear of making mistakes. This example is illustrative of how to use this model for treating similar, more complex fears such as losing in games, being late, doing things out of order, fear of unexpected changes, or not being first.

Lilly's Fears

Lilly is a 12-year-old girl with ASD who gets extremely distressed when she makes mistakes and is corrected, especially in school work and most especially in math, a subject in which she performs well. She often becomes upset / worried in anticipation of possibly making a mistake and will put off or object to doing work in class or at home as a result. When she does make a mistake, and her teacher or parents correct her, she usually cries or shrieks and makes negative self-statements (e.g., "I'm horrible at everything!" or "You hate me!"), even though she is typically a happy, confident child who has close relationships with her parents and teachers. While Lilly has many other sources of anxiety, her school team and family decided to work on this problem together, since her fear of making mistakes was interfering so much with her wellbeing at home and at school, and with her relationships with peers.

Step 1: Figure out the components of the event the child fears.

Lilly's parents, teachers, and peers were not punitive regarding mistakes so her fear likely didn't come from them. Some children with this fear like having things in the right order and become distressed when things are mixed up, as is the case when mistakes are made; however, since Lilly didn't demonstrate this pattern of behavior it was unlikely that it

Because of Lilly's black and white thinking and tendency to catastrophize, she may have viewed mistakes as indicative of abject failure.

was a component of her distress. On the other hand, Lilly had difficulty interpreting degrees of emotion in others which may have caused her to misinterpret small corrections by adults as indicating intense anger. In addition, like many children with ASD, Lilly also evidenced a tendency to think in black and white terms, and to process information in a manner associated with anxiety known as catastrophizing (believing things to be worse than they actually are). For example, when she was younger, if there was a small blemish on a paper or in a book she would become very upset. She may have felt that a mistake meant that her whole paper was ruined. Also, because of Lilly's black and white thinking and tendency to catastrophize, she may have viewed mistakes as indicative of abject failure. Her statements when she was distressed gave clues as to her feelings and thought process regarding making mistakes and being corrected. While such statements in some children may reflect overall low self-esteem or depression, this did not seem to be the case with Lilly as she only made derogatory statements after making mistakes or losing in games (another phobia trigger to work on next!).

As with most phobia triggers, Lilly also had anticipatory anxiety about school work due to worrying about the possibility of making mistakes; that is, she evidenced "fear of fear" (see Figure 1).

Step 2: Determine and use self- and/or co-regulation strategies.

What helped Lilly most to reduce her anxiety was to have playful "joking-around" times with her older sister and favorite



Figure 1. Components of Lilly's Fear of Mistakes and Corrections

adults. Hence, the school-based team decided to find different ways of using interactive humor to work on each component of her fear. Lilly also loved to look at video clips of her favorite singers on the computer and, because she would do this as a calming activity when she was stressed, the team set out to find ways to use this strong interest in her treatment.

Step 3: Determine the techniques to use for gradually exposing the child to each of the components from Step 1, and then pair these with the anxiety-decreasing measures from Step 2.

The team directed Lilly's teacher to make worksheets like those in her homework assignments but to label them, "UN-HOMEWORK," something that Lilly would likely find funny. To help desensitize her to each component of her fear, the team decided to experiment by having her make mistakes on purpose on her un-homework worksheet. They also found some "blooper" video clips on the Internet in which one of her favorite performers makes mistakes. Finally, the team decided to incorporate use of *The Incredible 5-Point Scale* (Dunn Buron & Mitzi Beth, 2012) as a means of helping Lilly to better understand differences in degrees of emotion in adults when they were correcting her mistakes. It is important to note that Lilly had experienced success with this tool when applied to her own emotions at an earlier time.

The Desensitizing Process

Now the team was ready to combine gradual exposure to the components that caused the fear from Step 1 with the anti-anxiety measures from Step 2. This process is delineated below.

Lilly was very close to her speech language pathologist (SLP), and she did her homework with her mother, so the team decided to work through them. Her SLP, Ellen, quickly re-introduced the 5-Point Scale and used it interactively with Lilly and some

peers in a few group sessions. Ellen had the children first pick random words to say "at a 1" then "at a 5," using the number system to indicate degrees of anger (e.g., "macaroni;" "seahorse"). Next, she had them say "correction" phrases such as, "Oops, you multiplied instead of divided," at various levels of anger from neutral to very angry. To add humor and decrease anxiety, the SLP also used other emotion scales so that

the group also said random words and correction phrases in excited and scared levels too. Everyone, including Lilly, had fun with this game. Thus, amidst lots of laughter, Lilly slowly became desensitized to the use of correction phrases. Moreover, she also learned to distinguish the differing tones of voice and body language associated with the varying degrees of anger applied to the phrases. Importantly, if Lilly had shown signs of distress as the level of emotion increased vis-à-vis the correction phrases, Ellen would have *decreased* the exposure level by using more subtle and less apparent correction phrases (e.g., "Is that multiplication or division?") before again trying more direct correction phrases.

Next, Lilly's teacher and Ellen used the "un-homework" sheets to work on desensitizing her to small mistakes so that she would no longer view them as ruining whole pages. Ellen began by making small silly mistakes that Lilly would likely find funny, accompanying these with exaggerated pretend displays of acting as though all was ruined. For example, Ellen wrote a very simple math problem, 2+1 =__, and then wrote in the correct number, backwards: $2+1 = \varepsilon$. Since this was not the kind of mistake that Lilly was apt to make, it was felt that she would probably interpret it as a "playful error." Ellen then said, "Oh no! It's backwards! It's all ruined!" in a playfully "distressed" voice while using the phrases Lilly used when upset. "What am I going to do?" Lilly laughed and said, "That's just backwards! Just erase it!" while handing Ellen the eraser. Lilly's mother did this, as well, gradually using math problems that were more like those in Lilly's real work while gradually making bigger mistakes. Lilly greatly enjoyed this, laughing gleefully as she "corrected" the adults' initially silly and then bigger mistakes.

Her mother and Ellen also used this approach to address Lilly's feelings of failure when she made a mistake. For example, they would make pretend mistakes and then react to them by Within a few weeks Lilly's responses to making mistakes and being corrected were routinely mild, both in class and at home.

using the language that Lilly would typically use: "Oh No!! I'm horrible at everything!" Lilly laughed as children often do when hearing adults express playfully exaggerated versions of their own feelings (Levine and Chedd, 2007), and quickly corrected them saying, "You are good at *many* things." This led to some discussions about what Lilly was good at. Periodically, the adults would go through the whole routine again making different "mistakes." It is important to note that had Lilly become upset during this process—as some children do when they hear their own words—the adults would have shifted to using more subtle, indirect language such as, "I made a terrible mistake!" and then adjusted their emotions and words to decrease her distress.

The goal in this approach to the desensitizing process is to capture the child's interest and help him or her to recognize the relationship between what the adult is doing and his or her own experience, free of distress. If the child is upset by what you

do, start with something more playful and less like the actual trigger, and add more anti-anxiety measures. If, however, the child doesn't seem to make the connection between what you are doing and the real event, gradually add more realism.

Finally, Lilly and her classmates also watched the funny "blooper" video clips of the singers making mistakes. And, because she and her peers enjoyed this so much, it proved to be another very successful step in desensitizing Lilly to the experience of making mistakes.

The Real Thing

In class, Lilly's teacher sometimes prefaced making corrections by pointing out, "I'm not mad but ..." She also used the same type of humor that Ellen and Lilly's mother were using with her when she corrected Lilly and other students (e.g., "It's not an emergency, so no need to call an ambulance, but when I give you back your papers, we need to fix the problems that have correction marks next to them.") Within a few weeks Lilly's responses to making mistakes and being corrected were routinely mild, both in class and at home. And, as evidence of her progress, she no longer avoided her math homework but instead chose to start with it, recognizing that it was something she was good at.

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