Haircuts, Pets, Showers, & More: Helping Children with Autism-Spectrum Disorders Overcome Mild Phobias and Aversions

Robert T. Peyton, Ph.D., BCBA-D
Wisconsin Early Autism Project

Why do children with Autism-Spectrum Disorders develop phobias and aversions?

- Partly for the same reason everyone else does – Watson & Rayner (1920) showed a phobia could be conditioned with multiple aversive experiences & exposure.
- Partly for “idiosyncratic” reasons: The aversive experience may be a violation of the need for sameness or exposure to a stimulus that typically-developing people wouldn’t recognize as aversive (No research found).

Systematic Desensitization

- Systematic Desensitization (Wolpe, 1958; 1961) Gradually exposes person to the thing feared by moving through an anxiety hierarchy while delivering stimuli that are incompatible with anxiety, like relaxation. Theoretically arousal/aggression could also work, but these haven’t been tried: based on counterconditioning.
- Often starts with in-vitro (imagined) stimuli, and moves to in-vivo (real) ones.
- An intense form of imagined treatment, called Implosion (Tryon, 2004), has some empirical support, but I have no experience with it.
Example Anxiety Hierarchy

- 0 – Imagine a dead spider on highway 18
- 10 – Imagine a live spider at neighbor’s
- 20 – Imagine a live spider in basement
- 30 – Imagine a live spider in next room
- 40 – Imagine a live spider in my desk
- 50 – There is actually a spider in my desk
- 60 – Look at spider in tube across room
- 70 – Hold tube with spider in it, name it
- 80 – Watch me let spider cross my hand
- 90 – Allow spider to cross you hand
- 100 – Set the spider free by taking from tube & releasing it in your room (actually on his porch).

Case Study 1 - Mason

- 12 year-old in middleschool attending a special school for children with ASDs, about to transition to public school. Technically “High-Functioning Autism” due to history, highly intelligent and very intellectual.
- Mother who has her own spider phobia and has modeled this for him since birth.
- Difficulty doing things outside or in basement due to spider fears.
- Completed entire anxiety hierarchy listed (with more steps, imagining spider in hand)
  Named 1st spider Turkey, 2nd spider Chicken.

Progressive Muscle Relaxation (Jacobson, 1974)

- Forces the body to relax by tensing and holding muscles under tension until some exhaustion (~10 sec.), then releasing
- Hands, forearms, biceps, face, throat, shoulders, forehead, nose, eyes, lips, tongue, neck, chest, stomach, back, thighs, buttocks, calves, & feet.
- Once practiced many times, begin shifting from tension to visualization to relax muscles, and eventually just thinking about them.
- Most effective relaxation practice, but very time intensive and complicated
- Popular Press Version Available in The Relaxation & Stress Reduction Workbook by Davis, Eshelman, & McKay or in The Anxiety and Phobia Workbook by Bourne. Both books also do include some less empirically supported techniques. (lots of places have this – even internet).
Relaxed Pose

- Developed to be less complex than PMR.
- 1) Sit all the way back in a chair, 2) sit up straight, 3) knees shoulder width apart, 4) feet flat on floor, 5) tuck elbows into sides and let your hands fall onto your lap with the palms up, 6) Tilt your head slightly back, 7) Allow your eyes to close, 8) let you mouth hang open, 9) take a deep breath, 10) take 2 or more deep breaths, each held longer than the last one.
- Can be done discretely at a desk if you just keep your eyes open – good for school.

“The Walnut”

- Combines all the parts of PMR into 1 big contraction
- Scrunch face and clench jaw while raising shoulders, pulling in stomach, clenching fists, squeezing biceps, tensing thighs (butt should lift) and calves.
- Hold for 10 seconds – breathe at least 1x
- Often best to follow with relaxed pose.

Exposure (with reinforcement)

- Exposure (e.g., Marks, 1975, no clear “creator”) Shown to be the key mechanism of change in systematic desensitization by showing that desensitization with relaxation was no more effective and took longer than desensitization without relaxation. Exposure requires the person to contact their feared stimulus without fleeing. Reinforcement included in several studies.
- Hypothetically works via respondent extinction, like what Watson did in reverse – the now conditioned thing is presented repeatedly without any aversive event.
Case Study 2  Sam

- Sam was the first child on the spectrum I treated with a phobia. At Kennedy Krieger Institute with Thompson Davis.
- Sam was afraid of water. He was 8 years old and his mother had been giving him sponge baths for the past 4 years.
- Sam loved World War 2
- To treat him, we visited with him once, got to know him, watched some WW2 videos. On the next visit, we brought squirt guns and toy WW2 battleships, destroyers, etc. Started a game of blasting the ships… then floated them in the tub to make the game better... then introduced the “super blaster” detachable shower head… then got in the tub to blast them better. On the third visit started blasting ships, went to blasting each other, brought mom in on the game.
- After visit 5 Sam took his first shower in 4 years, 6 months later he was showering regularly and mom got him to go in a swimming pool using similar techniques.

Case Study 3  Mitch

- Mitch was a 6-year-old boy with PDD-NOS, who was terrified of getting his hair cut, and had significantly injured his very large father on the last haircut (he typically had to be held down).
- Mitch really liked playing with toy cars.
- I had already been helping Mitch for about 1 month when I started treatment.
- Treatment was the “clipper car”
- 2 years later, Mitch was still having no problems getting his hair cut.
Clipper Car – Haircuts

- Be SURE you can remove the blade from your trimmer/clipper – screws on the front are a good indicator. Take blade out.
- Initiate play routine with cars in which you run a car all of your (first) and the child’s body and head. Do this until child is totally comfortable with it – MUST BE FUN!!!
- 2nd Session (or later), introduce your awesome clipper car with a motor that really works! Initiate the same play routine using your awesome clipper car, building to spending more and more time on your (first) and child’s head. May allow child to “drive” it too, but don’t do this if child will not return it.
- 3rd session (or later), start doing races across the child’s back and over their head, being sure to go over parts they don’t normally like until no longer showing aversion.
- Finally, put the blade back into the trimmer/clipper and do the races across the child’s head, this time cutting their hair.
- REMEMBER: You need to keep this fun and light throughout, if the child is pulling away or showing fear signs, you’re going too fast, ease back and move forward about ½ as fast as you were.

Case Study 4 Danny

- 10-year-old boy with PDD-NOS
- Verbal, but with a mild intellectual disability.
- Afraid of dogs, but older brother really wanted to get one as a pet.
- I’d been treating him for 6 months to keep him in school when his family asked me how to resolve this.
- Brother got dog, but initially kept it at grandparents house. Brother trained dog and cared for it for ~3 months prior to exposing Danny.
- First had brother do tricks on other side of gate while Mom stayed by Danny, then moved closer to gate, then started dropping treats for dog, then signaled dog to do a trick, then went on walk with brother keeping dog well in front of mom & Danny, then next to them, finally Danny walked dog.
- Dog eventually moved into Danny’s house.
A cautionary Case Study 5 - Bill

- Bill was a 6-9 year old during the time I treated him. He was intelligent but largely nonverbal.
- Treated fear of thunderstorms (thundergame)
- Treated aversion to seeing people out of their designated setting – exposure
- Treated fear of firetrucks – exposure
- Treated fear of buses – exposure
- Treated fear of fire alarms – tape from school.
- Fear of fireworks being treated when I left.

Flooding

- Flooding (Stampfli, 1967)
  - In its traditional form exposes person to feared item at full strength (e.g., holding a spider on 1st session) and keeping them in it until fear passes. Now sometimes used to simply mean exposure (usually without escape).
  - Can be extremely intense, but is certainly the fastest of all these approaches.

Case Study 6 - Amelia

7-10 year old girl during the time I treated her, mild I.D., PDD-NOS, limited language.

Terrified of dogs or cats.

Raised by single parent living in an apartment complex full of animals.

Mom lost her car when she lost her job, but had to still get the shopping done.

Flooding was the only viable option, and would have occurred naturally anyway if I hadn’t assisted them.
### Things to Remember: Systematic Desensitization

- Treatment is really happening with exposure, the imagined parts and relaxation actually delay recovery, but for a more cognitively advanced child it can be a more pleasant experience.
- Must create anxiety hierarchy and move through it step-by-step, not too fast, you’ll know because anxiety will appear.
- Only do this with the help of an experienced professional.

### Things to Remember: Exposure

- You don’t have to block escape, but you MUST model a lack of fear and should model fun! The more fun, the quicker/better.
- You can include reinforcement. One method is to simply put out reinforcers far from feared stimulus and bring them closer over time (e.g., Ricciardi et al., 2006).
- For anything more than a mild aversion, again you should consult a professional.
- Be prepared for one aversion to be replaced by others. Continued exposure can eventually result in decreased general aversion.

### Things to Remember: Flooding

- If doing traditional flooding, must prepare yourself and possibly the child for the anxiety this WILL produce (at first).
- You CANNOT allow the child to flee the situation or else you may intensify the aversion, continue until they look relaxed.
- Should be obvious, but you will also need the help of an experienced professional.
Some Other Empirically Supported Techniques

- Modeling – can create and remove phobia
- EMDR – largely done with people overcoming a stress (PTSD), eye movements are used. Keep in mind possibility of “Purple Hat Technique” (Tryon, 2004).
- Cognitive Restructuring – Requires a cognitively advanced individual (no ASD research)
- Imagery-based relaxation, often less effective for ASDs but may be good for highly verbal child. Powers & Spirito (Handbook of Child & Adolescent Psychiatry v. 6) give a method of determining imagery or body-based relaxation.
- In Vitro or Virtual Reality based Exposure consistently less effective than in Vivo, but sometimes only one possible & may add to longevity of traditional exposure.

Thank You!

Feel free to contact the Wisconsin Early Autism Project at any of our locations (Eau Claire, Green Bay, Madison, Milwaukee).

I work at the Madison location: 608-662-9327.

I will stay to take specific questions, assist if possible, or if there aren’t any I have a few more case studies.

A few other Case Studies

- Mason & Lawrence – both treated for school phobia/avoidance
- Brett – treated for fear of swimming
- Morton – a “failure” of sorts in a treatment of a dog phobia. Parents stopped treatment after lack of success with uncontrolled puppy (not my recc.)
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