

Understand research evidence about impact of anxiety in those with autism

By Louise Bedrossian

According to the Centers for Disease Control and Prevention, autism spectrum disorders are the fastest-growing disability, estimated at approximately 1 in 68 people in the United States. ASD is almost five times more common among males (1 in 42) than among females (1 in 189). Service providers are likely to have experienced a rapidly growing population of students with ASD on their campuses due to better diagnoses and earlier interventions.

With nearly half of those with ASD also having some type of anxiety by adulthood, and the likelihood that even more are undiagnosed, it is important for service providers to understand the impact anxiety has for this large population. Recently, increasing attention is being given to adults with ASD, including higher-functioning individuals often previously undiagnosed, but action for adults is still lagging behind research and services for children.

At the recent International Meeting for Autism Research in May 2015, researchers D. N. Top, K. Stephenson, M. South and C. B. Kirwan presented findings of a classical conditioning and extinction study, the first one employing functional MRI to determine fear reactions in participants having autism.

Using harmless intermittent puffs of air paired with having subjects view blue or yellow squares on a screen, the researchers conditioned a “fear” reaction to the squares. Later, reactions were measured again as the colors were presented with no accompanying air puffs.

They presented evidence that individuals with autism initially have less activation in brain networks during incidents when fear should be conditioned, but later show a slower than expected extinction — or deactivation — of fear networks in the brain. This suggests that people with ASD are slower to differentiate safety versus danger.

The researchers hypothesize that for those with ASD, chronic anxiety may result because they have difficulty reading situational cues for both fear and safety. This difficulty in adapting to changing situations results in anxiety.

In a follow-up study using a different imaging method, diffusion tensor imaging, the researchers also found that connections between the amygdala

and insula (which discern “fear”) and the frontal cortex (which controls reasoning and emotions) were only about half the size in those with autism than in those without.

This research information has implications for service providers who teach strategies and for other campus professionals who provide interventions for this population.

We know that those on the spectrum struggle with social cue perception, sensory sensitivity, organization and the unexpected, among other things, which can underlie anxiety. The research described above confirms that those with autism are slower to recognize and become conditioned to fear-generating circumstances, and that once those fears are established, they are much more difficult to dispel.

Although the triggers and resulting degree of anxiety differ among individuals, it is important to identify and understand the possible sources of difficulty among our students with ASD. The following are areas for consideration when problems arise.

Sensory overload and resulting anxiety may be triggered by:

- Crowded places like large lecture classes, meetings, concerts and cafeterias.
- Loud sounds/noise including emergency alarms, crowd noise at pep rallies/sporting events, or loud music at parties.
- Smells and odors in food areas or residence halls, chemicals in science labs, soaps and other personal grooming items in bathrooms, and perfumes or fragrances.

Other anxiety triggers include:

- ✓ Disruption of routines or expectations, unanticipated changes, including alterations in test or assignment due dates, cancellations, room changes, roommate shifts, travel delays, and even unexpected or unstructured free time.
- ✓ Communication deficits that impede meeting new people and conversing with professors, administrators or health professionals.

With this knowledge, service providers can assist students to develop appropriate coping strategies and decrease inappropriate anxiety responses. It should be noted, however, that effective behavior modification requires time and practice. ■

About the author

Louise Bedrossian recently retired as director of the Disability Resource Center at Clayton State University in Georgia and is now engaged in consulting and private coaching and counseling. *For more information, contact her at louisebedrossian@clayton.edu.* ■