

## Ask a Lurie Center Researcher

### Q. “How is ASD different in females than in males?”

Autism is a diverse condition that affects individuals of all genders. Although it is still more commonly diagnosed in males, recent research suggests that the disparity is shrinking as awareness of how autism presents in females increases. According to the Centers for Disease Control and Prevention (CDC), as of March 2023, about 4% of boys and 1% of girls aged 8 years have ASD in the United States. The overall prevalence estimate of ASD for all genders is 1 in 36 children.

While ASD may appear similar regardless of gender among those with significant intellectual disability, women with an average IQ or above tend to exhibit autism differently. This has led to misdiagnosis and underdiagnosis. One contributing factor is that the diagnostic criteria have historically been based on observations of males, resulting in a male-biased understanding of the condition. Females with autism can display subtler symptoms or develop compensatory strategies to mask their challenges. As a result, females are often more likely to be diagnosed later in life, if at all, and are often initially diagnosed with other conditions like anxiety and mood disorders before their ASD is recognized.

Recognizing the incredible heterogeneity of autism and the uniqueness of each individual's experience, what is known about females on the spectrum?

#### **Social Interaction and Communication:**

Females with autism may have better social imitation skills and the ability to mimic social behavior compared to males. They may show a strong imagination and engage in fantasy play. Due to their social foundation, girls may develop one or two close friendships, using them to learn about social rules and norms. Their strong social interest may lead them to "camouflage" or compensate for social understanding and communication challenges, making these vulnerabilities difficult to detect in everyday interactions or larger classroom settings.

#### **Special Interests and Repetitive Behaviors:**

Both genders exhibit restricted interests and repetitive behaviors, but the nature of these behaviors can differ. Traditionally, providers have been trained to recognize male-associated restricted interests like transportation vehicles, dinosaurs, and spacecraft. In contrast, autistic females may develop interests that are more closely aligned with societal norms, such as animals, art, celebrities, or literature. This divergence in special interests can contribute to the misconception that females are simply displaying enthusiastic hobbies rather than autistic traits. Repetitive patterns of behavior in females may manifest as classic ASD behaviors like rocking or hand/finger movements, but they may also appear as perfectionistic tendencies and restrictive patterns of eating and eating disorders.



**Masking and Camouflaging:**

Some autistic females can be skilled at masking their autistic traits in social situations. They may adopt strategies to imitate neurotypical behavior, observe and mimic social cues from peers, or develop social "checklists" to respond in socially appropriate ways. This ability to camouflage their challenges can lead to a misinterpretation of their struggles, as they may appear more socially competent than they truly are. While non-autistic people of both genders and autistic men also engage in masking, autistic women tend to do so to a greater degree. The burden of masking can be exhausting and may contribute to mental health issues and feelings of isolation.

**Co-occurring Conditions:**

Since some autistic females' symptoms of ASD may present differently than males, they may receive other diagnoses first, such as anxiety and mood disorders, learning disorders, and/or eating disorders. This phenomenon is called diagnostic overshadowing, which occurs when a person's symptoms are attributed to a psychiatric problem versus an underlying developmental delay such as autism. This can complicate the diagnostic process, as the focus may be on managing these secondary conditions rather than recognizing the underlying autistic traits.

**Overcoming Challenges and Providing Support:**

Recognizing and understanding how autism presents in females is crucial for accurate diagnosis, appropriate support, and targeted interventions. Women who receive a diagnosis often experience a positive impact on their well-being and self-esteem. It helps them better understand themselves and advocate for themselves or receive support from family. A diagnosis ensures they receive the right support, access to services, and available resources.

The evolving understanding of gender differences in autism is dismantling the notion that autism is a "male condition". Healthcare providers are becoming more attuned to this female phenotype of ASD. When meeting with a provider, ask about their experience with females on the spectrum and how they tailor assessment methods and support for female patients/clients. Females often benefit from female-specific supports and resources.

The majority of research in this area focuses on cisgender individuals, or those who have a gender identity that matches their sex assigned at birth. Many individuals, including autistic persons, embody a range of gender identities including but not limited to nonbinary and transgender. Recent research has shown an increase in gender diversity within the autistic community compared to the population at large. Therefore, there has been a recent shift towards embracing gender diversity beyond the cisgender paradigm in research. Embracing a more inclusive perspective ensures that all individuals, regardless of gender, receive the recognition and support they deserve.

Note: This article includes the use of both person-first (individual with autism) and identity-first (autistic individual) language to honor the diversity of preferences when discussing autism in the community.

## **Resources**

### **Books for Children and Teens:**

Asperger's and Girls by Tony Attwood

M in the Middle: Secret Crushes, Mega-Colossal Anxiety and the People's Republic of Autism by The Students of Limpsfield Grange of Limpsfield Grange School and Vicky Martin

M is for Autism by The Students of Limpsfield Grange of Limpsfield Grange School and Vicky Martin

Sisterhood on the Spectrum: An Asperger Chick's Guide to Life by Jennifer Cook O'Toole, illustrated by Anne-Louise Richards

Slug Days by Sarah Leach

The Autism-Friendly Guide to Periods by Robyn Steward

The Growing Up Guide for Girls: What Girls on the Autism Spectrum Need to Know by Davida Hartman, illustrated by Margaret Anne Suggs

### **Books for Women:**

Camouflage: The Hidden Lives of Autistic Women by Dr. Sarah Bargiela

22 Things a Woman with Asperger's Syndrome Wants Her Partner to Know by Rudy Simone

The Autistic Brain: Exploring the Strengths of a Different Kind of Mind by Temple Grandin

Odd Girl Out: An Autistic Woman in a Neurotypical World by Laura James

### **Books for Parents:**

A Guide to Mental Health Issues in Girls and Young Women on the Autism Spectrum: Diagnosis, Intervention and Family Support by Dr. Judy Eaton

Girls Growing Up on the Autism Spectrum: What Parents and Professionals Should Know About The Pre-Teen and Teenage Years by Shana Nichols with Gina Marie Moravcik and Samara Pulver Tetenbaum

Have a question? Submit it [here](#) and we may answer it in a future newsletter.

**About the Author:**



Dr. Alyssa Milot Travers is a licensed psychologist at the Lurie Center for Autism and Instructor in Psychiatry at Harvard Medical School. Dr. Travers joined the Lurie Center in September 2015, after completing a postdoctoral fellowship in neuropsychological and psychological assessment at the Learning and Emotional Assessment Program at Massachusetts General Hospital. Dr. Travers provides neuropsychological evaluations for children, adolescents, and young adults with autism spectrum disorder and other developmental and learning disabilities. She has a particular expertise in evaluating and treating females on the autism spectrum.