

# Females with Autism Spectrum Disorder (ASD)

## Riley Guffey, SLP-BS

Faculty Sponsor: Aaron Doubet, MS CCC-SLP

Riley Guffey, BS-SLP is currently attending Fontbonne University as a graduate student. Riley received her Bachelor of Science in Communication Sciences and Disorders from Fontbonne University where she is now working towards her masters to become an SLP (speech and language pathologist). Currently, Riley is working as the SLP-A at Newburg R-II school district where she hopes to continue in the near future as the full time SLP. Riley's professional interests are in the areas of autism and language impairments.

### Abstract

The American Speech-Language and Hearing Association (ASHA) states that social communication deficits can be present alongside a wide variety of diagnoses and are characterized by the difficulties in the usage of language in social contexts, which can affect language expression and comprehension ("Autism spectrum disorder," n.d.). "Research reveals that males are 4 times more likely to receive a diagnosis of ASD compared to females" (Fletcher, 2022). The criteria for diagnosis are viewed in terms based on a male's inability to present appropriate social communication and pragmatic skills. This oftentimes leads to missed or inaccurate diagnoses for females. The literature reviewed will provide research on differences between males and females- their social communication deficits, how those deficits are perceived by others, and how this impacts the diagnosis itself. By recognizing the unique characteristic differences between the two genders, females will have more opportunity for an accurate and timely diagnosis, along with treatment options best suitable for them.

### Introduction

"Autism spectrum disorder (ASD) is a developmental disability that can cause significant social, communication, and behavioral challenges. The term "spectrum" refers to the wide range of symptoms, skills, and levels of impairment that people with ASD can have" (National Institute on Deafness and Other Communication Disorders [NIH], 2020). This neurodevelopmental disorder is specifically characterized by the difficulties individuals face in everyday interactions. Majority of diagnoses are pertaining to males rather than females. Research reveals that males are 4 times more likely to receive a diagnosis of ASD compared to females (Fletcher, 2022). In 2021, the Center for Disease Control and Prevention (CDC) reported that approximately 1 in 44 children in the U.S. is diagnosed with an autism spectrum disorder (ASD), according to 2018 data. 1 in 27 boys are identified, whereas 1 in 116 girls are identified. This is due to females' ability to hide repetitive behaviors and present different symptoms. Common symptoms viewed while diagnosing ASD: avoiding eye contact, delayed speech and communication skills, reliance on rules and routines, being upset by relatively minor changes, unexpected reactions to sounds, tastes, sights, touch and smells, and difficulty understanding other people's emotions (*Centers for Disease Control and Prevention, 2022*). Although autism affects all ethnic and socioeconomic groups, and cannot be determined by one etiology, there are risk factors that may impact the child no matter their gender. These include environmental, biologic, and genetic factors such as: having a sibling with ASD, having certain genetic or chromosomal conditions, experiencing complications at birth, or even being born to older parents (Chaste & Leboyer, 2012). The number of diagnoses continues to rise due to better and earlier screening, increased usage of technology, changes to the condition's diagnostic criteria, and more research. "Pediatrics in 2019 found that the prevalence of autism in the United States rose from 1 in 91 children in 2009 to 1 in 40 in 2017" (Rudy, L. 2021). Majority of diagnoses are also being provided at a younger age now too. ASD typically begins before the age of 3 years and can last throughout a person's life. Some children show symptoms within the first 12 months of life whereas others may not show symptoms up until 24 months of age or later. Some children with ASD gain new skills and meet developmental milestones until around 18 to 24 months of age, and then they stop gaining new skills or lose the skills they once had (*Centers for Disease Control and Prevention, 2022*). By the age of 2, a diagnosis provided by an expert can be considered reliable. Nevertheless, these diagnoses often go unnoticed in females even at a young age due to the criteria for diagnosis being developed specifically around males. As children with ASD become adolescents and young adults, they may have difficulties developing and maintaining friendships, communicating with peers and adults, or understanding what behaviors are expected in school or on the job. At this age, it becomes even more difficult to diagnose a female because females with ASD tend to try harder to fit in by mocking the behaviors around them. The behaviors that would qualify someone as having autism are viewed in females with far less significance and often leads to a misdiagnosis (Szalavitz, 2016). "Nearly 80% of women with autism are misdiagnosed – often with conditions such as borderline personality disorder, eating disorders, bipolar disorder and anxiety" (Rudra, A. 2022). Current tools used to diagnose people with these conditions tend not to recognize female symptoms as readily because girls with autism may have less obvious social difficulties and often have better verbal communication than a boy with autism might.

The purpose of this presentation is to bring more attention to the scale the diagnosis is being determined on, testing to determine a diagnosis, and standards required to be diagnosed as being on the autism spectrum.

### Methodology

- ❖ Preliminary research shows that the hallmark "brain differences" in autism vs. typical peers seems to hold true for boys, but not girls. (Minot, D., et. al., 2020)
- ❖ Recent studies continue to report a male bias in ASD prevalence, but also suggest that sex differences in phenotypic presentation, including fewer restricted and repetitive behaviors and externalizing behavioral problems in females, may contribute to this bias (Werling, D. and Geschwind, D., et. al., 2013)
- ❖ Boys with autism tend to have very repetitive and limited areas of play. Girls with autism are less repetitive and have broader areas of play. Girls with autism are more likely than boys to be able to respond to non-verbal communication such as pointing or gaze following (Rudy, L., et. al., 2022)
- ❖ The average age of diagnosis in girls is four years old, in comparison to a little over three years old for boys. (McPherson, D., et. al., 2022)
- ❖ Studies indicate that females diagnosed are typically lower-functioning and tend to have more severe difficulties communicating and learning communication skills, as well as lower cognitive levels compared to males at a similar level. Symptoms may not fit autism stereotypes unless the symptoms are extremely severe. (Cleveland Clinic HealthEssentials, et. al., 2019)
- ❖ (Adley, M., et. al., 2019) states that recent research has suggested that girls with autism may be under-identified or given another diagnosis, such as anxiety or ADHD. "This can especially be true for higher-functioning girls who present without intellectual impairment. This research suggests these girls may show more social interests and less apparent restrictive interests and receptive behaviors."
- ❖ Girls' restricted interests may also be missed because they are more likely to be age-appropriate interests, such as animals or celebrities. (Adley, M., et. al., 2019)
- ❖ The desire to fit in with neuro-typical peers may also influence the use of camouflaging behaviors. An interview study reported autistic girls (n = 10, aged 13–16) were motivated to make friends, yet often imitated neurotypical peers, and masked feelings of unhappiness and anxiety in social situations to prevent relationship breakdown (Tierney et al. 2016).
- ❖ The symptoms that are included in the assessment for obtaining an autism spectrum disorder diagnosis might be more applicable to the ways males behave as opposed to females. (Halladay, Bishop, Constantino, et. al., 2015).
- ❖ When females are diagnosed with autism spectrum disorder, it's likely because they have behavioral issues or developmental delays. Females with higher IQs are often undiagnosed. (Boorse, J., Cola, M., Plate, S. et al., 2019)

### Learning Outcomes

At the culmination of this session, participants will be able to:

1. The participant will be able to identify the results in autistic females not receiving much-needed diagnosis and support, with negative effects on their mental health and well-being.
2. The participant will be able to list camouflaging behaviors that females face while pursuing the desire to fit in with neuro-typical peers.
3. The participant will be able to describe features/symptoms associated with ASD diagnosis in males versus females.

### Results

#### Clinical Implications

- Examine the amount of intervention the child has received prior to diagnosis.
- Be mindful of family history and background information, along with concomitant disorders or misdiagnosed disorders which may influence prognosis.
- Present parents with information about all social communication deficits.
- Support parents by giving resources about support groups and other information they may find helpful.
- Encourage parents to continue to ask questions.
- Consider the child and family and adjust counseling and intervention accordingly.

#### Inside the Mind of Autism

-When speaking with a female individual who has been diagnosed with Autism, they represent these experiences tied to what research shows...

Q: What, who, or how did you figure you were on the autism spectrum?

A: "For as long as I can remember and as much as I've been told, I have been viewed as quiet, shy, and someone who followed the rules my whole life. I knew I was different but it didn't affect me too much. I didn't cause problems, and I was always successful throughout school, so no one thought there was anything wrong. My demeanor growing up never changed but once I turned 18 and was about to head to college I was diagnosed with Autism because my mom and dad were concerned with some of my impairments in social settings. They had thought I'd grow out of some things but I just thought normal was boring!"

Q: What are some challenges you face?

A: "Being a female who is considered highly intelligent along with being on the spectrum has presented me with some interesting challenges. I am working towards a college degree in engineering, and I currently work at a local business to pay for school. I interact with people on a daily basis, so it appears that I am normal and doing great to the outside world. It's not very obvious I am on the spectrum and only the people that truly know me see how often I'm on my own to figure out how to navigate the challenges of being on the spectrum. The term high functioning means I get no assistance even though I am facing more complex, internal struggles than the average human."

Q: How did you go so long without a diagnosis?

A: "Majority of people view autistic people as those who just talk nonstop about their personal areas of interest, or can't complete daily tasks like wiping their butt, without someone to assist them, but that is not true at all, especially for a female with a high IQ. People like me can become very good at "masking" or "camouflaging" our symptoms. Masking is how I survive in a neurotypical world. Some of us become so good at masking that being officially diagnosed is difficult. There are even days when I feel like I should be an actress!"

### Conclusion

Research has failed to provide accurate characteristics among females with ASD. The represented inconsistencies oftentimes result in females being misdiagnosed or diagnosed at a later age. Since early intervention for those with autism is crucial to the effects of everyday life, the time lost can be detrimental to the individual's success. Further research identifying social communication differences from gender to gender could assist with identifying ASD in a timely manner for females. Screening tools based on gender would help in identifying and providing more accurate results.

### Acknowledgements

