CONTENT EXPERTISE

Drowning, Not Waving: Autism in Women and Girls

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Recent research strongly indicates emerging evidence for an autistic female phenotype that differs from presentations of autism in males. The hallmarks of autism in women and girls are difficulties in social relationships, often accompanied by the phenomenon of camouflaging or masking. An estimated 80 percent of autistic females remain undiagnosed by the age of 18, resulting in the potential for enormous mental health challenges for a significant number of women. Key concepts in identifying autism in women and girls is an ability to articulate the characteristics of the autistic female phenotype, to define the phenomenon of masking and the instruments designed to measure it, and to identify the challenges with the current "gold-standards" of autism assessment. Sharing new knowledge in this newly-emerging field of female autism is critical to ensure clinicians are kept up-to-date in their assessment practices and professional counseling approaches.

> I've always been floundering and struggling. People will say "look how far you swam!" when all I did was barely tread water as the current dragged me along. And since they don't notice the lungful of sea water I've inhaled, people truly believe that I can swim.
>
> — *R.H., diagnosed at age 29.*

In the United States, 1 in 36 people are estimated to be autistic; of these, the common ratio of male to female diagnosis is given at a ratio of 4:1 (Maenner et al., 2023). Emerging research, however, proposes that females are significantly undiagnosed when compared with males. Estimates of the male to female diagnosis ratio ranges from 2.57 to 1 (Attwood & Garnett, 2023) to 3 to 4 (McCrossin, 2022). One reason is that existing criteria for diagnosing autism is based on conceptualizations of how autism has presented in males. Increasingly, there is evidence of a Female Autism Phenotype (FAP), characterized by excessive camouflaging or masking, a phenomenon used by females to compensate for and hide characteristics of autism.

The hallmarks of FAP include difficulties in social relationships, especially maintaining long-term friendships, and special interests that are not as stereotyped as those found in boys, but nonetheless maintain a similar intensity. As such, the presentation of autism can often be missed in girls,

resulting in the potential for significant impact on the future developmental and psychological health of thousands of women. (Cassidy et al., 2022; Cola et al., 2022; Duvall et al., 2022; Freeman & Grigoriadis, 2023; Harrison et al., 2020; Hull et al., 2020; McCrossin, 2022; Pearson & Rose, 2021; Sarris, 2015; Simcoe et al., 2022).

Throughout this article, I use identity-first language throughout this article in deference to my own preferences as an autistic woman and that of the majority autistic community. Identity-first language reflects "an important part of ... [my] sense of self ... [and is] a means to confront ableism" (Marini et al., 2024, p. 80), is in keeping with "evidence that autistic people tend to dislike or find the use of the person-first language ... offensive" (Botha, 2023, p. 82), and the fact that "autistic people hear and see the language" used about them and "feel deeply hurt and unheard" when their language preference for identity-first description is not used (Hartman et al., 2023, p. 18). The illustrative quotes used to describe autistic experience were garnered from narrative documents submitted to the researcher by autistic people, identified with initials only, and used in this article with written permission from each person.

Emerging Female Autistic Phenotype

Stereotypical presentations of autism in boys are described as "classic and clearly diagnostic" and considered "red flags" for autism (Duvall et al., 2022, p. 1172). These symptoms include repetitive, restrictive behavior, unusual speech, lack of eye contact, avoidance of interaction with others, aggressive behavior, hand-flapping, and intense interests in such things as dinosaurs, mechanics, or trains (Duvall et al., 2022; Hull et al., 2020). Presentation in girls, in contrast, is characterized by significant difficulties in social relationships, especially beginning in middle-childhood, and often accompanied by the phenomenon of camouflaging, defined as hiding natural traits in order to appear less autistic and more socially acceptable (Hull et al., 2020). Coupled with intense interest in topics that are more often social than those found in boys – and the presence of depression and/or anxiety in the pre-adolescent period – are the hallmarks of autism in girls.

To address the differences of autistic presentation in girls, Duvall et al. (2022) propose a range of "pink flags" described as characteristics that suggest autism but are not classically definitive and may overlap with symptoms of other differential diagnoses. One example is focused and intense interests, which differs from that found in boys. For girls, special interests can be just as intense but have a more social focus – potentially reflecting the acculturation of females during childhood – and range from animals, fictional characters, literature, music, fashion, philosophy thought, or horses. As these interests are often considered "relational" in nature, they are not as readily identified as stereotypically autistic (Hull et al., 2020, pp. 308–309).

Compounding the problem of defining such relational interests is its often nuanced expression. Many little girls, for example, love horses. The allistic, or non-autistic, girl who loves horses may play with her *My Little Pony* set *with*

other friends who love horses; she may have posters of horses in her room or school locker to share and enjoy *with* her friends; she may talk about horses *with* her friends; she may wear T-shirts with horses or have horse jewelry along *with* her friends. In contrast, the autistic girl who loves horses will have read – multiple times – every book in her local library on equine nutrition and memorized nutritional facts about equine feeds, or who will sit alone in a roundpen with a foal for five or six hours at a time, focusing on gaining the trust of that horse without any desire or interest for interaction with anyone.

Pre-Adolescent Social Interaction in Girls

> I was a perfect angel at school. Teachers loved me. They constantly told my mom I was one of their best students. I was kind and helpful and did everything they asked. At home, I was a nightmare. I would scream and cry and beg not to go anywhere or do anything.
>
> — *M.T., diagnosed at age 41.*

Social and relational interactions among girls increases markedly during the pre-adolescent stage between 9 and 12 years of age (Kail & Cavanaugh, 2019). Here is the start of female gendered socializing, with intense pressure on girls to fit in, the rise of cliques, and the concomitant pain found in social exclusion for those who are considered "weird" or "strange." Autistic girls conscientiously copy the facial expressions or body movements of their peers in an attempt to fit in. They often force eye contact, trying to learn confusing social rules that are not innate to them, and learn by intense observation how to make "normal" social connections. Girls in particular are acutely aware of difference and those who do not fit in. The mental and emotional exhaustion of striving to be accepted and be a "good" student and friend, can create enormous pressure on autistic girls throughout their school day. One characteristic of female autism is a phenomenon described as the "4:00 p.m. explosion" (Batalla-Duran, 2021), where on arrival home from school autistic girls can "explode" with psychological and emotional release of the pressure, often to the bewilderment of parents or siblings (Sarris, 2015).

During the school day, teachers report substantially fewer concerns about social skills in autistic girls compared to autistic boys, in part because girls "blend in" or "camouflage" with peers at the surface level of observed behavior despite internal struggles that ultimately increase their risk of developing anxiety or depression. For their study on gendered differences in social language skills for autistic boys and girls, Cola et al. (2022) studied diagnostic interviews of children between the ages of 6 and 15. Of 101 autistic participants, 25 were female, and from 34 non-autistic participants, 24 were female. The study's findings indicated that autistic girls' heightened social word use may reflect the influence of years-long exposure to gendered sociocultural norms, in which girls are expected to show more advanced interpersonal skills and focus more on social relationships compared to boys.

As a result, autistic girls are more likely to be accepted by non-autistic girls as fringe members of female social groups until adolescence when female friendships evolve and begin to require considerably more nuanced social skills.

It is important to note that Cola et al. (2022) found that the clinicians in their study detected social communication challenges in autistic girls despite elevated levels of social talk, suggesting that merely *using* social words is different from demonstrating social skills or possessing social understanding. More concerning is the possibility that other adults who are not autism experts, such as teachers, primary care physicians, and parents and caregivers, may observe increased social talk in autistic girls—compared to autistic boys—and interpret it as an indication of increased social competence, thus reducing the likelihood that girls are referred for an autism evaluation. Autistic girls are also more likely than boys to be subjected to bullying from their peers when they misstep socially. This explanation fits with the results of qualitative research, whereby autistic girls report experiencing increased relational conflict from non-autistic peers who punish them for "not getting it" socially by excluding them from the group or making them the butt of jokes (Cola et al., 2022).

Challenges with Social Behaviors

Theory of mind is proposed to be a "naïve understanding of the relations between mind and behavior" and, during the final phase of early childhood, "children understand that people may feel one emotion but show another," such as a child disappointed with a birthday present who smiles regardless because she doesn't want her parents to know her real feelings (Kail & Cavanaugh, 2019, p. 111). To the autistic girl, however, such a reaction would be unthinkable: it's insulting, a lie, and wrong. Here, we see evidence of black and white binary thinking coupled with a strong sense of social justice that characterizes female autism. Kail and Cavanaugh discuss the concept of theory of mind in autistic people as being entirely absent: autistic people are claimed to be uninterested in others "and, when they do interact, those exchanges are often awkward, as if individuals with ASD aren't following the rules that govern social interactions" (p. 111).

While it is true that autistic girls have difficulty following the social rules – mostly because those rules seem alien – it is not due to the absence of theory of mind. The original description from Simon Baron-Cohen in 1990, often attributed as "mind blindness," has now been ostensibly refuted in the autistic community, notably by Baron-Cohen himself, and replaced with the double-empathy problem (Milton, 2012). This concept, at its core, proposes that non-autistic people don't understand autistic people just as much as autistic people don't understand non-autistic people (Crompton et al., 2020). Rather than social communication difficulties being a one-sided autistic deficit, reframed through the lens of double empathy it becomes a matter of difference from *both* autistic and non-autistic perspectives.

In contrast to the type of aggression often seen in autistic boys, autistic girls in middle childhood years are more likely to be on the receiving end of relational aggression from non-autistic girls, an act exemplified by gossip and exclusion designed to damage relationships with other peers and to establish cliques (Kail & Cavanaugh, 2019). At this time, peer relationships take on an important role and "friendships become more complex" (Kail & Cavanaugh, 2019, p. 243). For girls, there is the worry of rejection and how they fit in a dominance hierarchy within established social norms – norms to which members strongly encourage others to conform, and with which "members go along willingly because they want to identify with the group" (Kail & Cavanaugh, 2019, p. 246). The rules of being "well-liked" for girls are to be "pleasant, friendly, and socially skilled" – the very things that autistic girls are often perceived as significantly lacking. Autistic girls are at real risk of falling into the category of "rejected children," those who are "socially unskilled and unable to regulate their emotions" (Kail & Cavanaugh, 2019, p. 247). Consequently, rejected children have a far greater likelihood of being withdrawn and lonely, with a concomitantly likely presence of anxiety or depression. Compounding this is the concept of masking or camouflaging, and autistic girls are significantly at risk of either external bullying through their rejected status or internal bullying through disavowing their own natural inclinations, feeling forced to wear a mask of being someone they are not.

Camouflaging and Masking: Hiding in Plain Sight

As Hull et al. have pointed out, Lorna Wing was the first autistic researcher to propose the "camouflaging hypothesis" in females, writing in 1981 – and almost as an afterthought – that "some autistic girls with no intellectual disability may be missed in clinical assessments" (2020, p. 309). It has taken nearly forty years for the issue of autism in females to gain mainstream research attention. While some camouflaging or masking can be helpful in terms of connecting with others and navigating a world not designed for autistic people, prolonged and continuous camouflaging, or hiding natural proclivities in order to appear "normal," is associated with poor mental health, anxiety, depression, and suicidal ideations (Hull et al., 2020). Added to this, the internalized expectation about the need to meet others' expectations of what constitutes "acceptable" can have enormous limitations on the development of a girl's self-worth.

Masking or camouflaging can also become so familiar and ingrained that autistic girls' natural feelings and reactions begin to feel abnormal to the point where they are actively repressed (Hull et al., 2020). Considering the powerful social, emotional, and psychological system of reward and punishment meted out by non-autistic females to girls who do not belong, and the devastating cost of learning to mask and camouflage in order to gain acceptance and a sense of belonging (Hull et al., 2020), it is not difficult to provide one explanation as to why there are increased rates of depression and anxiety in 10-year old autistic girls (Sarris, 2015). Here, we see an example

of cognitive dissonance, or the discrepancy between two contradictory ideals resulting in stress, especially if the incongruity is not resolved or ameliorated (Pearson & Rose, 2021). Milton and Moon (2012) have also described this phenomenon as a psycho-emotional disablement of autistic identity.

Masking, and the social context in which it begins, draws from social concepts of stigma and marginalization (Pearson & Rose, 2021). As another characteristic flag of autism in girls emerging in middle school, masking often accompanies the demand for increased social nuances in female peer relationships, particularly in terms of superficial interactions versus reciprocating friendship. Autistic girls often adopt the use of scripting, a form of masking, at this stage in an attempt to make friends, which literally involves using a standardized social script of initial interactions and overtures, often involving the adoption of vogue phrases or the vernacular of a particular social group. One example from my own research is the girl who used the word "Snap," as a means to contribute to social conversations while being unaware that the currency of that word had fallen into disuse within the group. "You don't get out much, do you?" was the wry and dismissive response made by one of the group members. While scripting may be a successful strategy to recruit friendships, as a script it is neither natural nor organic – and rarely sustainable. The problem, therefore, becomes one of *keeping* friends, with the latter indicating the need for deeper, more innate engagement with others (Duvall et al., 2022).

Not Waving, Drowning

> I have lived my life in complete self-preservation instead of truly living. I felt useless, confused, lost, lonely, worthless, empty. Why couldn't anyone understand that I wanted to be everything they wanted me to be, but I never could. I was aware that I was the problem: not the teachers, not the bullies, not my parents. The problem was me.
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> — *N.M., diagnosed at age 35.*

Robert McCrossin's 2022 study of autistic girls is noted for its assertion that the ratio of autistic males to females is likely closer to 3:4; that is, for every three autistic males there are four autistic females. McCrossin's work involved a psychological clinical dataset of 1,711 children aged between 1 and 18 with a diagnosis of autism made with DSM-5 TR (APA, 2022) criteria. Four distinct methods were applied to an inductive study to quantify potential biases involved in autism diagnosis in girls, with a mathematical formula devised to compare the four sets of findings with current published research. McCrossin concluded from this study that an estimated 80 percent of autistic females are undiagnosed by the age of 18, a finding that has enormous potential consequences for the mental health of thousands of autistic girls and women.

The importance of recognizing and diagnosing autism in girls is critically important for not only their mental health as children and adolescents, but in laying a foundation for adult life. Suicide is the leading cause of premature death for autistic people without intellectual disability, and autistic females are more likely to die of suicide than autistic males – the inverse of the general population (Beck, 2019). In a recent United Kingdom study, Cassidy et al. (2022) examined coroner's reports, physician records, and conducted family interviews of suicides, looking specifically for evidence of undiagnosed autistic traits. The findings indicated that 41.4 percent of the 372 suicides had evidence of these traits, which is 11 times higher than the current estimated rate of autism in the United Kingdom.

Differential and/or Misdiagnoses

> My current therapist asked what I thought I would gain by seeking an autism diagnosis, and I told her that it would give me permission to not be perfect all the time, to forgive myself, to be kinder and gentler with myself, and validation, because I've been asking the question my whole life "why am I different?" – and I think I finally know.
>
> *— A.T., diagnosed at age 35.*

Common differential diagnoses – and, often, misdiagnoses – for autism in girls include language disorders, anxiety disorders, obsessive-compulsive disorder, social phobia, bipolar disorder, selective mutism, oppositional defiance disorder, schizophrenia, attention-deficit hyperactivity disorder, trauma or post-traumatic stress disorder, and borderline personality disorder (Duvall et al., 2022; Sarris, 2015). The so-called "pink flags" of autism in girls include high-functioning parents who can compensate for deficits in their daughters through supervising social opportunities, or parents who normalize their children's challenges by asserting that "I was different, too, when I was a child" – a potential flag in itself for undiagnosed autism in the parent. Other indications of autism in girls includes high cognitive ability, the presence of a niche interest or interests that may be relational in nature, different presentations at home or with adults than with peers, and *not* avoiding eye contact (Duvall et al., 2022). Autism is not a mental deficiency; rather, it is a multi-domain form of neurodivergence, or difference in ways of thinking and seeing the world, which includes cognitive, social, and sensory processing perceptions (Pearson & Rose, 2021). Clinicians need to be aware that autism can present differently in girls and, therefore, it is critical that they "receive adequate training and continued professional development around autism from those who understand these concepts" (p.58).

Theories and Models of Assessment

> The GQ-ASC asks a question that inherently requires someone to compare themselves to another. This, to an autistic mind, is a very neurotypical thing to do. We are not mind readers. Social comparison is not really an autistic thing.
> — R.E., diagnosed at age 46.

One of the major challenges facing clinicians and diagnosticians is the selection of instruments and protocol that can reliably contribute to the diagnostic assessment process of autism in women and girls. To date, there is no diagnostic protocol and/or instrument designed specifically to identify autistic traits in females, and almost certainly none that has been designed and developed solely by autistic and neurodivergent researchers. While there has been reference made to the 2019 Autism Spectrum Scale for Females (ASSF) by Ahmad and Jones comprising 144 yes/no questions, the instrument does not appear to have yet been published and was developed from a very small sample of 47 autistic women and 47 non-autistic women (Attwood & Garnett, 2023). Similarly, the Self Assessment of Autistic Traits (SAAT) is a preliminary inventory that involved a small sample size, though its development is being led by two autistic researchers, which demonstrates a tangible and laudable move towards more direct involvement by autistic people in developing the instruments that assess them (Ratto et al., 2023). The Wilderwood Reflective Assessment and Diagnostic Indicator of Autistic and Neurodivergent Cognitive Expression, or the WRADIANCE (Evanko & Evanko, 2021), has been in development for three years and currently draws from a pool of over 500 data points. It is approaching the end of its first phase development of diagnostic trial and data analysis, and into the second phrase involving a revised version of the instrument, a rubric for interpreting the discursive analysis of its narrative component, and on into clinical trial.

When discussing instruments currently in use for autism assessment, I will first present objective assessment instruments, then discuss subjective observational and interview-based assessment methods. I am omitting reference to instruments that are not related to identifying autistic traits, including intelligence tests or tests of cognitive function. I also exclude common pre-screening assessments, such as the Autism Quotient or AQ (Baron-Cohen et al., 2001), the Ritvo Autism Asperger Diagnostic Scale-Revised or RAADS-R (Ritvo et al., 2011), or the Perth Alexithymic Questionnaire or PAQ (Preece et al., 2018) and other instruments that are under development, such as the SAAT (Ratto et al., 2023). Instead, my focus on instruments that claim to measure the traits of autism or have been designed to consider measuring aspects of autistic traits – such as camouflaging – and which have been published less than 10 years ago or, if greater than a decade, considered a "gold standard" assessment. These instruments include the Camouflaging Autistic Traits-Questionnaire, or CAT-Q (Hull et al., 2019) the Girls Questionnaire for Autism Spectrum

Conditions – Adult Women, or GQ-ASC (AW) (Brown et al., 2020), the Autism Diagnostic Observation Schedule, Second Edition, Module 4, or ADOS-2 M4 (Lord et al., 2012), the Social Responsiveness Scale, Second Edition, or SRS-2 (Constantino & Gruber, 2012), and the interview protocols of both the Autism Diagnostic Interview-Revised, or ADI-R (Lord et al., 2001) and the Autism Clinical Interview for Adults, or ACIA (Wigham et al., 2020).

Camouflaging Autistic Traits-Questionnaire (CAT-Q)

In terms of construct validity, the Receiver Operating Characteristics (ROC) for the CAT-Q indicate precision in differentiating between autistic and non-autistic people aged only over the age of 15, suggesting that the CAT-Q may be particularly helpful with assessment in clinical settings to identify characteristics of camouflaging in adult women. There is high internal consistency for the total scale (Cronbach's alpha coefficient of 0.94); Compensation (0.91), Masking (0.85, and Assimilation (0.92), and test-retest reliability acceptable at 0.77. Inconsistent findings have been identified, however, relating to construct validity. Sensitivity (.58) and specificity (.74) were only modest in relation to diagnosis of autism; however, it is important to note that the CAT-Q was developed as a means to measure camouflaging not as a diagnostic instrument for autism (Hull et al., 2019).

Girls' Questionnaire-Autism Spectrum Condition (Adult Women)

The GQ-ASC (AW) has been adapted from the Girls' Questionnaire for Autism Spectrum Conditions (Brown et al., 2020). Although not diagnostic, the instrument provides useful qualitative and descriptive information for the clinician working with autistic women and comprises five domains: Imagination and Play (5 items); Camouflaging (4 items); Sensory Sensitivities (4 items); Socializing (4 items); and Interests (4 items). Responses are recorded on a 4-point Likert-type scale ranging from Definitely Disagree to Definitely Agree. A score of >56 indicates sensitivity to the assessment in 80 percent of the cases. There is some internal inconsistency with several of the items, however, switching between past and present tense with resulting unclear parameters relating to whether an item refers to recollected memory of childhood or to present-day adulthood, such as found in Item 11: "I *expressed* distress ... when I *am* touched" (emphasis added). Item 20 and Item 21, while both within the same domain area, mix childhood and adulthood recollection: "My interests *were* advanced for my age" (Item 20) followed by "I *am* talented in music" (Item 21, emphasis added). Finally, Item 8 is problematic in terms of the reaction it elicits from clients with whom we administer assessments: "I am attracted to females with strong personalities who tell me what to do." This item is almost unanimously met with an expression of incredulity, followed by a statement clearly conveying that *nobody tells me what to do*.

Autism Diagnostic Observation Schedule-2, Module 4 (ADOS-2 M4)

It is statistically questionable as to whether the ADOS-2 M4 assessment is, in fact, a "gold standard" instrument given validity concerns raised in relation to that module by both the assessment developers themselves (Lord et al., 2012) and a subsequent meta-analysis (Lebersfeld et al., 2021). Autistic researcher Devon Price (2022) is vociferously critical of the ADOS-2 M4, writing about a friend who was assessed for autism using this instrument. In the process, Price's friend was required to narrate stories from a child's picture book, a methodology that, according to Price, is based on a now-discredited assertion that autistic people are unimaginative and unable to tell stories. Specifically, however, it has been asserted that the ADOS-2 M4 is simply not adept at identifying autism in either girls *or* women (Freeman & Grigoriadis, 2023; Simcoe et al., 2022) because the instrument "relies on diagnostic cut-offs developed using a majority-male sample, and the measure is less sensitive for cognitively unimpaired adolescents and adult females" (Beck, 2019, pp. 3–4; see also Lebersfeld et al., 2021; Rynkiewicz et al., 2019). Finally, the observational component of the ADOS-2 M4 is also problematic as observational protocols do not sufficiently accommodate for camouflaging. One of the characteristics of autistic women is the degree to which they have become adept at wearing a mask, and this is particularly applicable in social-communication settings such as the interview or when they know they are being observed.

The Social Responsiveness Scale- 2 (SRS-2)

The SRS-2 (Constantino & Gruber, 2012) is a strong and statistically dependable vehicle, though designed by non-autistics looking from the outside in. The instrument's wording leans heavily on negative verbiage, highlighting the deficiencies of autism rather than identifying what Ratto et al. phrased beautifully as "autistic strengths and joy" (2023, p. 102). The SRS-2 uses a 4-point Likert-type scale of Not True, Sometimes True, Often True, and Almost Always True. One example of negative phrasing can be found in Item 29: "I am regarded by others as odd or weird," which also inherently asks for mind-reading as to what others purportedly think. Another example is Item 41: "I sometimes seem to wander aimlessly from one activity to another." Here, the possible selection of an "almost always true" response negates "sometimes," and the concept of "wandering aimlessly" has a negative overtone. Seen from an autistic perspective, in contrast, the description can be cast as a form of recalibration or preparatory transition to a new activity. A third example is Item 54:"I tend to think about people the same way that I do objects." This statement inherently positions the autistic person as being incapable of seeing people as human beings.

There is also a lack of distinction in the way autistic people group or categorize people who are important to them. In the 65 items on the SRS-2, there are 24 direct and 8 implied references to "others," which at 49.2 percent is nearly half the items. No distinction is made, however, to define the

difference between "close others" (people with whom the autistic person feels comfortable) or "others" outside that group, leading to potential interpretive confusion or inaccuracy of responses drawn from the inability of individuals to read the minds of others. Finally, accuracy and honesty is important to autistic people – and because of this a Likert-type scale can be difficult, with the struggle to decide which is the absolutely correct response: Is it 1 (sometimes true) or 3 (always true) or is there ever a situation where something is always, *always* true? What about the time when I didn't feel that way? Or the one time that I did? Is it a 2? A 3? I don't know! Can I do a 2.579?

Observational and Interview Models

The Autism Clinical Interview for Adults, or ACIA (Wigham et al., 2020) comprises a series of scored, semi-structured interview-based questions combined with observational components and is a relatively recent entry to the assessment of autism in adults. Both an interview and observational structure, however, do not mitigate the effects of camouflaging in autistic women, and may result in an assessment that is based on responses given while masking.

In a systematic review of psychometric properties of structured questionnaires and other diagnostic measures used in assessing autism, there was limited evidence found to support the use of structured questionnaires (Wigham et al., 2019). Similarly, the Autism Diagnostic Interview-Revised, or ADI-R (Lord et al., 2001) is strongly based on observational assessment and, although now significantly dated is still used frequently and considered one of the "gold-standard" instruments. Perhaps the greatest anomaly, however, is that autism is defined as difficulty with social-communication, so why an interview set-up, which by default comprises social communication, is used to assess and measure autistic traits seems counter-intuitive. In such a situation, autistic women are much more likely to camouflage and respond in learned ways. I contend this sets them up for failure before they've even begun. Skilled at masking in such situations, now evaluators expect the mask to somehow slip and the "real" persona to be revealed. Often, women even struggle to identify what their "real" persona is after years of refining the mask. Such phenomena cannot easily be eradicated from either observational or interview-based assessment protocols.

The WRADIANCE

Current assessment instruments are inadequate to accurately identify female autism and none, to date, have been developed by and with the direct lived experiences of autistic females. The WRADIANCE, or Wilderwood Reflective Assessment and Diagnostic Indicator of Autistic and Neurodivergent Cognitive Expression (Evanko & Evanko, 2021), is a 150-item True/False assessment instrument and narrative diagnostic protocol currently under research and development as part of a new autistic-led research design to aid in the diagnosis of autism in women. The instrument

comprises 55 items relating to childhood and 95 items about adulthood. The narrative component draws on both child and adult recollections and seeks to both emphasize and validate the authentic autistic voice. The first phase has involved three years of field testing and diagnostic trial, initial analysis, and revision. The second phase, slated to begin in 2025, will invite broader analysis and application through clinical comparative trial.

In the course of the three years to date working on development of the WRADIANCE and assessing women – predominantly from the United States, but also from across the world – the process has been unique in that adult autism is the only condition that was assessed. Such a singular focus has provided an inordinate opportunity to closely examine thousands of pages of narratives, former assessment reports, documents, and other collateral evidence. What has become apparent is a marked and significant lack of knowledge about autism in women within the medical and psychological communities, and an absence of accessible instruments to reliably assess for autism in adult women.

Negative representation by non-autistic professionals in relation to autistic women expressing elements of their own lives is evident from a majority of the women assessed as part of the WRADIANCE study. Women convey that they have had traumatizing experiences when they reach out for assessment, including being told "you can't have autism [sic] because …" with a litany of reasons including "you make eye contact, you have a degree, you have a job, and – in at least three documented occasions from three different providers – being told "you don't like trains." The issue here is not one of perseveration about autism's cliches, but of a lack of training, awareness, and perception from providers and professionals about female autism and the lack of reliable autistic-designed assessment instruments and protocols to better reflect, and thereby assess, an autistic way of viewing the world. Where the practitioner sees deficit, the autistic person sees strength; what the assessor identifies as abnormal, the autistic person considers normal.

Autistic women are routinely silenced, and their concerns about their own lives remains essentially unheard. This is also apparent in the existing protocols for autism assessments that frequently comprise three components: the face-to-face interview, the assessment instrument(s), and the written report. These three components of assessment reflect an inherently non-autistic approach, one that contains redolent traces of the medical model of disability and an intrinsic lack of recognition for authentic autistic voice (Ratto et al., 2023). The face-to-face interview is problematic due to the very real challenges autistic people face with social communication and interaction – ironically designated as one of the key components required for a diagnosis of autism in adults. The face-to-face interview is, inherently, a manifestation of social communication and interaction, requiring eye contact, "appropriate" responses – whether cognitive or physical – and are frequently conducted in an unfamiliar space. Here, the autistic person is expected to feel enough self-comfort and confidence to articulate spoken and unspoken

evidence to support their belief they may be autistic. What is missing here is the component of masking, a phenomenon that undiagnosed autistic adults have typically honed as a survival strategy and which can be convincingly real. This is why the WRADIANCE protocol contains a significant narrative component, coupled with an overlay of critical discourse in terms of evaluating and assessing the components of autistic traits along with a rubric to help other clinicians similarly identify those traces within the written narrative.

On the instrument itself, the eight domains of the WRADIANCE reflect a combination of Diagnostic and Statistical Manual of Mental Health Disorders (DSM-5 TR, American Psychiatric Association, 2022) criteria for autism as well as acknowledging autistic people's strengths. We considered social communication difficulties – when interacting with non-autistic people – and included what the DSM-5 TR describes as restrictive, repetitive behavior, but re-visioned it to reflect what autistic people are inclined to see as focused movements to assist with regulation or moments of deep concentration. And, we considered sensory difficulties as well, including vision, hearing, smell, taste, and touch. The other five domains were developed to recognize autistic people's strengths and challenges, including proprioception, interoception, and alexithymia; leadership, achievement, and success; sensitivity, and philosophical intuition; being solitary, autonomous, and liberated; and a history of mental health consultations – often without any improvement.

Recommendations for Practitioners

> "Thinking you have a case of autism," he said, "is a classic case of GAD. Do you know how I know you don't have autism? Because if you had autism, you wouldn't be sitting here talking to me right now. You wouldn't have been able to greet me when I came in. You wouldn't be making eye contact. You wouldn't have a Master's."
>
> "Ph.D," I croaked, trying not to cry.
>
> "Exactly. Exactly! No, what you have is a lot of anxiety about things, I promise. I think last time you were here I mentioned yoga?"
>
> — *R.E., diagnosed at age 36.*

Female autism presents differently than it does in males. The so-called Female Autistic Phenotype can manifest at around the age of 10 in autistic girls and may be mistaken for multiple other conditions. Pink flags such as the "4 o'clock explosion," anxiety or depression, focused relational interest(s), apparent ability to make eye contact, and high cognitive development are all characteristics that justify placing autism on a differential diagnostic list. The importance of ongoing professional development and education for

counselors and clinicians to be aware of the changing dynamics of autism and its presentation in females is an urgent issue, as the effects of autistic girls who are diagnostically missed portends poorly for their later mental health as they mature into adulthood.

For women, practitioners should be looking for a history of employment difficulty, a sense of bewilderment at not belonging, a recurring and distressing refrain of there being "something wrong with me," and a history of diagnoses that may include bipolar disorder, borderline personality disorder, depression, social anxiety disorder, obsessive-compulsive disorder, irritable bowel syndrome, Ehlers-Danlos syndrome, and eating disorders. New instruments and assessment protocols are also needed to identify autism more accurately in women and girls, with the WRADIANCE, currently in development, leading the way in a next-generation, autistic-informed approach to female autism so that in the future our autistic women and girls can start waving, not drowning.

Conclusion

This article presented discussion of recent research that strongly indicates the emergence of an autistic female phenotype that differs from presentations of autism in males. These presentations in women and girls include difficulties in social relationships, often accompanied by the phenomenon of camouflaging or masking. As an estimated 80 percent of autistic females remain undiagnosed by the age of 18, there is potential for enormous mental health challenges in a significant number of undiagnosed women. Key concepts in identifying female autism is an ability to articulate the characteristics of the autistic female phenotype, to define the phenomenon of masking and the instruments designed to measure it, and to identify the challenges with the current "gold-standards" of autism assessment. Sharing new knowledge in this emerging field of research is essential to keep rehabilitation counseling professionals up-to-date when interacting with both autistic and potentially undiagnosed autistic clients, especially girls and women.

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References

American Psychiatric Association. (2022). *Diagnostic statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425787

Attwood, T., & Garnett, M. (2023). *Masterclass: Diagnosis for autistic girls and women*. Attwood and Garnett Events. https://attwoodandgarnettevents.com

Baron-Cohen, S., Wheelwright, S., Skinner, R., Martin, J., & Clubley, E. (2001). The autism-spectrum quotient (AQ): Evidence from Asperger syndrome/high-functioning autism, males and females, scientists, and mathematicians. *Journal of Autism and Developmental Disorders*, *3*(1), 5–17. https://doi.org/10.1023/a:1005653411471

Beck, J. (2019). *"Camouflaging" in women with autistic traits: Measures, mechanisms, and mental health implications* [Unpublished doctoral dissertatino]. Brigham Young University.

Botha, M. (2023). Community psychology as reparations for violence in the construction of autism knowledge. In D. Milton & S. Ryan (Eds.), *The Routledge international handbook of critical autism studies*. Routledge.

Brown, C. M., Attwood, T., Garnett, M., & Stokes, M. A. (2020). Am I autistic? Utility of the Girls Questionnaire for Autism Spectrum Condition as an autism assessment in adult women. *Autism in Adulthood*, *2*(3), 216–226. https://doi.org/10.1089/aut.2019.0054

Cassidy, S., Au-Yeund, S., Robertson, A., Cogger-Ward, H., Richards, G., Allison, C., Bradley, L., Kenny, R., O'Connor, R., & Mosse, D. (2022). Autism and autistic traits in those who died by suicide in England. *British Journal of Psychiatry*, *221*(5), 683–691. https://doi.org/10.1192/bjp.2022.21

Cola, M., Yankowitz, L., Tena, K., Russell, A., Bateman, L., Knox, A., Plate, S., Cubit, L. S., Zampella, C. J., Pandey, J., Schultz, R. T., & Parish-Morris, J. (2022). Friend matters: Sex differences in social language during autism diagnostic interviews. *Molecular Autism*, *13*(5), 1–16. https://doi.org/10.1186/s13229-021-00483-1

Constantino, J. N., & Gruber, C. P. (2012). *The Social Responsiveness Scale 2*. Western Psychological Services.

Crompton, C. J., Ropar, D., Evans-Williams, C. V., Flynn, E. G., & Fletcher-Watson, S. (2020). Autistic peer-to-peer information transfer is highly effective. *Autism*, *24*(7), 1704–1712. https://doi.org/10.1177/1362361320919286

Duvall, S., Armstrong, K., Shahabuddin, A., Grantz, C., Fein, D., & Lord, C. (2022). A road map for identifying autism spectrum disorder: recognizing and evaluating characteristics that should raise red or 'pink' flags to guide accurate differential diagnosis. *The Clinical Neuropsychologist*, *36*(5), 1172–1207. https://doi.org/10.1080/13854046.2021.1921276

Evanko, R., & Evanko, M. A. (2021). *The Wilderwood Reflective Assessment and Diagnostic Indictor of Autistic and Neurodivergent Cognitive Expression (WRADIANCE)* [Unpublished assessment instrument and diagnostic protocol].

Freeman, N. C., & Grigoriadis, A. (2023). A survey of assessment practices among health professionals diagnosing females with autism. *Research in Developmental Disabilities*, *135*, 1–10. https://doi.org/10.1016/j.ridd.2023.104445

Harrison, K. B., McCredie, M. N., Reddy, M. K., Krishnan, A., Engstrom, A., Posey, Y. S., Morey, L. C., & Loveland, K. A. (2020). Assessing autism spectrum disorder in intellectually able adults with the personality assessment inventory. *Journal of Autism and Developmental Disorders*, *50*(11), 3935–3943. https://doi.org/10.1007/s10803-020-04450-2

Hartman, D., O'Donnell-Killen, T., Doyle, J. K., Kavanagh, M., Day, A., & Azevedo, J. (2023). *The adult autism assessment handbook: A neurodiversity-affirmative approach*. Kingsley.

Hull, L., Mandy, W., Meng-Chuan, L., Baron-Cohen, S., Carrie, A., Smith, P., & Petrides, K. V. (2019). Development and validation of the camouflaging autistic traits questionnaire (CAT-Q). *Journal of Autism and Developmental Disorders*, *49*(3), 819–833. https://doi.org/10.1007/s10803-018-3792-6

Hull, L., Petrides, K. V., & Mandy, W. (2020). The female autism phenotype and camouflaging: A narrative review. *Journal of Autism and Developmental Disorders*, *7*, 306–317. https://doi.org/10.1007/s40489-020-00197-9

Kail, R. V., & Cavanaugh, J. C. (2019). *Human development: A life-span view* (8th ed.). Cengage.

Lebersfeld, J. B., Swanson, M., Clesi, C. D., & O'Kelley, S. E. (2021). Systematic review and meta-analysis of the clinical utility of the ADOS-2 and the ADI-R in diagnosing autism spectrum disorders in children. *Journal of Autism and Developmental Disorders*, *51*(11), 4101–4114. https://doi.org/10.1007/s10803-020-04839-z

Lord, C., Rutter, M., DiLavore, P., Risi, S., Gotham, K., & Bishop, S. (2012). *Autism Diagnostic Observation Schedule, second edition (ADOS-2). Manual (Part I): Modules 1–4*. Western Psychological Services.

Lord, C., Rutter, M., & Le Couteur, A. (2001). Autism Diagnostic Interview-Revised (ADI-R). A revised version of a diagnostic interview for caregivers of individuals with possible pervasive developmental disorders. *Journal of Autism and Developmental Disorders*, *24*(5), 659–685. https://doi.org/10.1007/BF02172145

Maenner, M. J., Warren, Z., Williams, A. R., Amoakohene, E., Bakian, A. V., Bilder, D. A., Durkin, M. S., Fitzgerald, R. T., Furnier, S. M., Hughes, M. M., Ladd-Acosta, C. M., McArthur, D., Pas, E. T., Salinas, A., Vehorn, A., Williams, S., Esler, A., Grzybowski, A., Hall-Lande, J., ... Shaw, K. A. (2023). Prevalence and characteristics of autism spectrum disorder among children aged 8 years. *Autism and Developmental Disabilities Monitoring Network Morbidity and Mortality Weekly Report*, *72*(2), 1–14. https://doi.org/10.15585/mmwr.ss7202a1

Marini, I., Fleming, A. R., & Bishop, M. (Eds.). (2024). *The psychological and social impact of chronic illness and disability* (8th ed.). Springer.

McCrossin, R. (2022). Finding the true number of females with autism spectrum disorder by estimating the biases in initial recognition and clinical diagnosis. *Children*, *9*(2), 272. https://doi.org/10.3390/children9020272

Milton, D. (2012). On the ontological status of autism: The "double-empathy problem." *Disability and Society*, *27*(6), 883–887. https://doi.org/10.1080/09687599.2012.710008

Milton, D., & Moon, L. (2012). The normalisation agenda and the psycho-emotional disablement of autistic people. *Autonomy, the Critical Journal of Interdisciplinary Autism Studies*, *1*(1). https://kar.kent.ac.uk/id/eprint/62638

Pearson, A., & Rose, K. (2021). A conceptual analysis of autistic masking: Understanding the narrative of stigma and the illusion of choice. *Autism in Adulthood*, *3*(1), 52–61. https://doi.org/10.1089/aut.2020.0043

Preece, D., Becerra, R., Robinson, K., Dandy, J., & Allan, A. (2018). Perth Alexithymia Questionnaire (PAQ). In *APA Psyc Tests*. https://doi.org/10.1037/t68335.000

Price, D. (2022). *Seeking an autism diagnosis? Here's why you might want to rethink that*. Medium. https://devonprice.medium.com/seeking-an-autism-diagnosis-heres-why-you-might-want-to-rethink-that-530e79c272a0

Ratto, A. B., Bascom, J., daVanport, S., Strong, J. F., Anthony, L. G., Verbalis, A., Pugliese, C., Nadwodny, N., Brown, L. X. Z., Cruz, M., Hector, B. L., Kapp, S. K., Onaiwu, M. G., Raymaker, D. M., Robison, J. E., Stewart, C., Stone, R., Whetsell, E., Pelphrey, K., & Kenworthy, L. (2023). Centering the inner experience of autism: Development of the self-assessment of autistic traits. *Autism in Adulthood*, *5*(1), 93–105. https://doi.org/10.1089/aut.2021.0099

Ritvo, R. A., Ritvo, E., Guthrie, D., Ritvo, M. J., Hufnagel, D. H., McMahon, W., Tonge, B., Mataix-Cols, D., Jassi, A., Attwood, T., & Eloff, J. (2011). The Ritvo Autism Asperger Diagnostic Scale-Revised (RAADS-R): A scale to assist the diagnosis of autism spectrum disorder in adults. *Journal of Autism and Developmental Disorders*, *41*(8), 1076–1089. https://doi.org/10.1007/s10803-010-1133-5

Rynkiewicz, A., Janas-Kozik, M., & Słopień, A. (2019). Girls and women with autism. *Psychiatry Poland*, *53*(4), 737–752. https://doi.org/10.12740/PP/OnlineFirst/95098

Sarris, M. (2015). *Are girls with autism hiding in plain sight?* Spark for Autism/Interactive Autism Network. https://iancommunity.org/ssc/girls-autism-hiding-plain-sight

Simcoe, S. M., Gilmour, J., Garnett, M. S., Attwood, T., Donovan, C., & Kelly, A. B. (2022). Are there gender-based variations in the presentation of autism amongst female and male children? *Journal of Autism and Developmental Disorders*, *53*(9), 3627–3635. https://doi.org/10.1007/s10803-022-05552-9

Wigham, S., Ingham, B., Le Couteur, A., Berney, T., Ensum, I., & Parr, J. (2020). Development and initial utility of the autism clinical interview for adults: A new adult autism diagnostic measure. *Autism in Adulthood*, *2*(1), 42–47. https://doi.org/10.1089/aut.2019.0052

Wigham, S., Rodgers, J., Berney, T., Le Couteur, A., Ingham, B., & Parr, J. R. (2019). Psychometric properties of questionnaires and diagnostic measures for autism spectrum disorders in adults: A systematic review. *Autism: International Journal of Research and Practice*, *23*(2), 287–395. https://doi.org/10.1177/1362361317748245