UNDERSTANDING AUTISM: DIAGNOSIS, PREVALENCE, AND PSYCHOLOGICAL INTERVENTIONS

Assoc. Prof. Dr. Elvan KİREMİTÇİ CANIÖZ
Balıkesir University, Department of Psychology

AUTISM

Autism is a neurodevelopmental condition that emerges in early childhood and persists throughout an individual's life. It is rooted in differences in brain development and in the way information is processed. Autism is not a disease but a difference, and it does not result from parenting style.

The official term currently used in diagnostic systems is Autism Spectrum Disorder (ASD) (American Psychiatric Association [APA], 2022; World Health Organization [WHO], 2019).

The DSM-5-TR bases the diagnosis on two core domains (APA, 2022):

1. **Persistent deficits in social communication and social interaction.** This domain encompasses difficulties in social-emotional reciprocity; differences in the use and understanding of nonverbal communicative behaviors such as eye contact, gestures, and facial expressions; and difficulties in developing, maintaining, and understanding relationships.
2. **Restricted, repetitive patterns of behavior, interests, or activities.** This domain comprises four features: repetitive motor movements or speech, such as hand-flapping or echolalia (repeating what one hears); insistence on sameness and resistance to change in routines; highly restricted and intense interests; and hyper- or hyporeactivity to sensory input such as sounds, lights, textures, or smells. At least two of these four features must be present.

For a diagnosis of autism, these symptoms must be present in the early developmental period. However, they are not always immediately apparent; in some children, they become evident only when social demands increase and exceed the child's capacities. The symptoms also cause clinically significant impairment in the individual's everyday functioning (APA, 2022).

History

Autism was first formally described by Leo Kanner in 1943. The children Kanner observed markedly avoided contact with others and insisted that the objects in their surroundings remain unchanged (Kanner, 1943). The following year, Hans Asperger (1944) described a behaviorally somewhat different group: children whose language and intellectual development were relatively preserved but whose social interaction was markedly atypical. Asperger's work remained largely unknown in the English-speaking world for many years. It

was Lorna Wing's 1981 paper that introduced his work to the field, and the term "Asperger syndrome" came into use after its publication (Wing, 1981).

Autism Spectrum Disorder

The term "spectrum" is used to convey that autism does not manifest in the same way or with the same severity in every individual. Wing and Gould (1979) demonstrated that difficulties in social interaction, communication, and imagination (the "Wing triad") do not fall into sharply delineated categories but are distributed along a continuum. The contemporary understanding of the autism spectrum derives largely from this work.

The official change in diagnosis came in 2013 with the publication of the DSM-5. Until then, autistic disorder, Asperger's disorder, childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified had been treated as separate diagnoses. With the DSM-5, they were consolidated under the single category of "Autism Spectrum Disorder" (APA, 2022; WHO, 2019). Consequently, "Asperger syndrome" is no longer an official diagnosis, although the term remains in everyday use.

Differences within the spectrum can be described along three dimensions:

1. **Level of support needed.** The DSM-5-TR specifies three levels of support: "requiring support" (Level 1), "requiring substantial support" (Level 2), and "requiring very substantial support" (Level 3) (APA, 2022).
2. **Accompanying features.** Clinicians must also assess whether the presentation is accompanied by intellectual impairment, language impairment, or a known genetic or medical condition. Thus, an individual who does not speak at all and an individual who excels academically but struggles with friendships may receive the same diagnosis.
3. **Co-occurring conditions.** Attention-deficit/hyperactivity disorder (ADHD), anxiety disorders, epilepsy, sleep problems, and gastrointestinal problems frequently co-occur with autism (Lord et al., 2018, 2020).

It is misleading to picture the spectrum as a ruler with "mild" autism at one end and "severe" autism at the other. The same individual may show considerable strengths in one area while requiring substantial support in another. Understanding the individual therefore requires attention to their individual profile rather than to a single label.

Prevalence

Approximately one in every 100 children worldwide is estimated to be on the autism spectrum (Zeidan et al., 2022). In the United States, the most recent report from the monitoring network of the Centers for Disease Control and Prevention (CDC) estimated the prevalence of ASD among 8-year-old children at approximately 1 in 31 (Shaw et al., 2025). However, this discrepancy and the increase over the years are thought to reflect broadened diagnostic criteria, greater awareness, and cross-national variation in access to screening and services, rather than a true rise in the occurrence of autism.

With respect to sex differences, boys are diagnosed with ASD approximately three to four times more often than girls (Loomes et al., 2017). This comparison should be interpreted

with caution: because girls and women tend to camouflage, or "mask," their symptoms in social settings, their diagnosis is often delayed or never made.

Diagnosis and Support

The diagnosis of ASD is based on developmental history and direct observation. The most commonly used diagnostic instruments are the Autism Diagnostic Observation Schedule, Second Edition (ADOS-2) and the Autism Diagnostic Interview–Revised (ADI-R). A reliable diagnosis can generally be made at around 2 years of age (Lord et al., 2020).

There is no cure for autism. The aim of intervention is to support the individual's communication, independence, and quality of life. Evidence-based approaches include early intensive developmental-behavioral interventions, speech and language therapy, occupational therapy, parent training, and educational accommodations (Lord et al., 2018).

Key Considerations in the Psychological Intervention Process

1. **Individualized, multidimensional assessment.** Each individual's characteristics and needs are different, so the intervention plan should be tailored to the individual. The intervention process should begin with a comprehensive psychosocial and behavioral assessment. This assessment examines difficulties in social communication and repetitive behaviors, and it should also address co-occurring problems such as anxiety (Hai et al., 2025; Zaboski & Storch, 2018).
2. **Behavioral interventions.** Applied behavior analysis (ABA) is among the approaches with the strongest research support. ABA has been found effective in improving social and self-care skills in autistic children. Cognitive behavioral therapy (CBT) and speech and language therapy are also commonly used. CBT appears to be particularly beneficial in managing anxiety and obsessive thoughts (Hai et al., 2025; Vause et al., 2017).
3. **Managing anxiety and co-occurring problems.** Anxiety symptoms are common in autism. If left unaddressed, they can exacerbate social difficulties and other behavioral problems. Anxiety symptoms should therefore be carefully assessed and then addressed with methods such as CBT adapted for autism. Pharmacological treatment should be used only when clearly necessary and with caution (Zaboski & Storch, 2018).
4. **Family and environmental involvement.** Active family involvement in the intervention process makes a substantial difference. Family support becomes even more important in cases of feeding problems or marked food selectivity, where support provided at home facilitates the process (Blennerhassett et al., 2025). Family-based treatments are recommended in such cases. These approaches help parents feel more competent in managing their child's symptoms.
5. **Early diagnosis and early intervention.** The earlier intervention begins, the more favorable the developmental outcomes. Reliable screening tools should be used so that early signs can be detected at 18–24 months of age. Children identified early can also begin appropriate educational and therapeutic programs earlier (Abualait et al., 2024).
6. **New technologies and innovative approaches.** Play-based therapies are increasingly used to support social interaction and skill development through play. Methods such as noninvasive brain stimulation (noninvasive brain modulation) target neuroplasticity, and these methods have the potential to improve behavioral and cognitive functioning (Eshraghi et al., 2023; Prasad & Bhatia, 2025).

7. **Teamwork and regular monitoring.** The intervention team typically includes psychologists, speech and language therapists, physicians, educators, and the family. The intervention process is not static; as the individual's needs change, the plan is updated through regular reassessment (Hai et al., 2025).

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