

# **Autism**

Autism, also known as autism spectrum disorder (ASD), [a] is a condition characterized by differences or difficulties in social communication and interaction, a need or strong preference for predictability and routine, sensory processing differences, focused interests, and repetitive behaviors. [4] Characteristics of autism are present from early childhood and the condition typically persists throughout life. [5][6] classified as a neurodevelopmental Autism is disorder, [7] and formal a requires diagnosis professional assessment that the characteristics lead to significant challenges in several areas of daily life to a greater extent than expected given a person's age and social environment. [8][9][10][11] Motor coordination difficulties are common but not required. Because autism is a spectrum disorder, presentations vary and support needs range from minimal to being nonspeaking or needing 24-hour care. [12][8][9][13]

Autism diagnoses have risen since the 1990s, largely because of broader diagnostic criteria, greater awareness, and wider access to assessment. [2] Changing social demands may also play a role. [14][15] The World Health Organization estimates that about 1 in 100 children were diagnosed between 2012 and trend.[b][2][3] notes the increasing Surveillance studies suggest a similar share of the adult population would meet diagnostic criteria if formally assessed. [16] This rise has fueled anti-vaccine activists' disproven claim that vaccines cause autism, [17] based on a fraudulent 1998 study that was later retracted. [18] Autism is highly heritable and involves many genes, while environmental factors appear to have smaller, [19]mainly prenatal role. [20][21][22] Boys are diagnosed several times more often than girls,  $\frac{[2][23]}{[23]}$ conditions such as anxiety, depression, attention deficit hyperactivity disorder (ADHD), epilepsy, intellectual disability are more common among autistic people.[24][25][26]

#### **Autism**

#### Other names

Autism spectrum disorder, [a] autism spectrum condition

Formerly: Kanner
syndrome/autistic
disorder/childhood autism,
Asperger syndrome,
childhood disintegrative
disorder, pervasive
developmental disorder not
otherwise specified









Autism has many presentations around the world.

From top left: an autistic toddler stacking cans; an autistic <u>figure skater</u> competitor; a child using an <u>abacus</u> at school run by Autism Somalia Center; banker <u>Donald Triplett</u>, the first person to be diagnosed with autism.

Specialty

<u>Psychiatry</u> (<u>neuropsychiatry</u>), <u>clinical psychology</u>, <u>pediatrics</u>,

occupational medicine

**Symptoms** 

Difficulties in social interaction, verbal and nonverbal communication; inflexible routines; focused

There is no cure for autism. [27] There are several autism therapies that aim to increase self-care, social, and language skills. [28] Reducing environmental and social barriers helps autistic people participate more fully in education, employment, and other aspects of life. [29][30][31] No medication addresses the core features of autism, but some are used to help manage commonly co-occurring conditions, such as anxiety, depression, irritability, ADHD, and epilepsy. [32][33]

Autistic people are found in every demographic group with appropriate supports that promote independence and self-determination, can participate fully in their communities and lead meaningful, productive lives. [34][35] The idea of autism as a disorder has been challenged by the neurodiversity framework, which frames autistic traits as a healthy variation of the human condition. [36] This perspective, promoted by the autism rights movement, has gained research attention. [37] but remains a subject of debate and controversy among autistic people, advocacy groups, healthcare providers, and charities. [38][39]

## Classification

The DSM-5 and ICD-11 are the two main diagnostic manuals in use today, and both define autism as a neurodevelopmental disorder with a spectrum of highly varied presentations. [40][41] The spectrum concept signals diversity rather than a simplistic range from mild to severe. [42] Before the DSM-5 (2013) and ICD-11/ICD-11 CDDR (2019/2024), [40][43] autism fell within a broader pervasive developmental disorder category that included labels such as Asperger syndrome and classic autism, Kanner syndrome, or childhood autism. Because these diagnoses overlapped, the manuals unified them under *autism* spectrum disorder (ASD).[44]

Since 1980, the committees behind both manuals have aimed for greater convergence, incorporating biological research while keeping behavior-based criteria. [45][46][47][48] DSM-5 grades support needs in three levels, from level 1 to level 3.[49] ICD-11 instead records whether the person also has intellectual disability or language impairment. [50]

interests; repetitive body movements; unusual sensory responses

**Complications** Social isolation, educational

and employment problems, anxiety, stress, bullying, depression, self-harm,

suicidality

Onset Early childhood

**Duration** Lifelong

Multifactorial, with many Causes

uncertain factors

**Risk factors** Family history, certain genetic

> conditions, having older parents, certain prescribed drugs, perinatal and neonatal

health issues

**Diagnostic** Based on a combination of

method clinical observation of

behavior and development

and comprehensive

diagnostic testing completed

by a team of qualified

professionals. For adults, the use of a patient's written and

oral history of autistic traits

becomes more important

**Differential** 

Attention deficit hyperactivity diagnosis disorder, intellectual disability,

language disorders, social

(pragmatic) communication disorder, selective mutism,

stereotypic movement

disorder, Rett syndrome,

anxiety disorders, obsessivecompulsive disorder,

schizophrenia, personality

disorders<sup>[1]</sup>

Applied behavior analysis, Management

> cognitive behavioral therapy, occupational therapy, speech-

language pathology

Frequency One in 100 people (1%)

worldwide<sup>[2][3]</sup>

Current research questions whether existing criteria capture the full phenomenon, prompting proposals for prototype descriptions, transdiagnostic biological markers, or separate consideration of common behavioral traits and rare genetic or environmental factors. Some proposed alternatives to the disorder-focused spectrum model deconstruct autism into separate phenomena: a non-pathological spectrum of behavioral traits in the population, and the effect of rare genetic mutations and environmental factors influencing neurodevelopmental and psychological conditions. Clinical and policy guidance in Australia, the United States, and the United Kingdom now promotes neurodiversity-affirming language—for example, saying "characteristics" instead of "symptoms" and avoiding words such as "cure".

### **DSM**

The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, *Fifth Edition, Text Revision* (DSM-5-TR), released in 2022, is the current version of the DSM. [56] Its fifth edition – DSM-5, released in May 2013 – was the first to define ASD as a single diagnosis, encompassing the previously distinct diagnoses of classic autism, Asperger syndrome, childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified (PDD-NOS). [58][59] This is still the case in the DSM-5-TR. [1]

The DSM-5 and DSM-5-TR adopt a dimensional approach, with one diagnostic category for disorders that fall under the autism spectrum umbrella. Within that category, the DSM-5 has a framework that differentiates each person by dimensions of symptom severity and by associated features (i.e., the presence of other conditions or factors that likely contribute to the symptoms, other neurodevelopmental or mental conditions, intellectual disability, or language impairment). The symptom domains are (a) social communication and (b) restricted, repetitive behaviors, and there is the option of specifying a separate severity—the negative effect of the symptoms on the person—for each domain, rather than just overall severity. Before the DSM-5, the DSM separated social deficits and communication deficits into two domains. Further, the DSM-5 changed to an onset age in the early developmental period, with a note that symptoms may manifest later when social demands exceed capabilities, rather than the previous, more restricted three years of age. These changes remain in the DSM-5-TR.

#### **ICD**

The <u>World Health Organization</u>'s <u>International Classification of Diseases</u> (11th revision), <u>ICD-11</u>, was released in June 2018 and came into full effect as of January 2022. [63][45] It describes autism spectrum disorder (6A02 (https://icd.who.int/browse/latest-release/mms/en#437815624)) as follows: [40]

Autism spectrum disorder is characterised by persistent deficits in the ability to initiate and to sustain reciprocal social interaction and social communication, and by a range of restricted, repetitive, and inflexible patterns of behaviour, interests or activities that are clearly atypical or excessive for the individual's age and sociocultural context. The onset of the disorder occurs during the developmental period, typically in early childhood, but symptoms may not become fully manifest until later, when social demands exceed limited capacities. Deficits are sufficiently severe to cause impairment in personal, family, social, educational, occupational or other important areas of functioning and are usually a pervasive feature of the individual's functioning observable in all settings, although they may vary according to social, educational, or other context. Individuals along the spectrum exhibit a full range of intellectual functioning and language abilities.

# Signs and characteristics

Autism is primarily characterized by differences and difficulties in social interaction and communication, alongside restricted or repetitive patterns of interests, activities, and behaviors (stimming), and in many cases distinctive reactions to sensory input. The specific presentation varies widely. Clinicians often consider assessment for autism when these characteristics are present, especially if they are associated with difficulty in obtaining or sustaining employment or education, difficulty in initiating or sustaining social relationships, involvement with mental health or learning disability services, or a history of neurodevelopmental conditions (including learning disabilities and ADHD) or mental health conditions. In most cases, signs of autism are first observable in infancy or early childhood and remain throughout life. Autistic people may be significantly disabled in some respects, but average—or in some cases superior—in others.

#### Social and communication skills

Autistic people may have differences in social communication and interaction, which can lead to challenges in environments structured around norms of those that do not have autism. The current social criteria for autism diagnosis require people to have difficulties across three social domains: social-emotional reciprocity, nonverbal communication, and developing and sustaining relationships. [1]

#### Social-emotional reciprocity

Common early signs of autism include little or no <u>babbling</u> as an infant. <u>[64]</u> Difficulty may also be apparent in traditional forms of reciprocal social interactions, as in games like <u>peek-a-boo</u> or <u>patacake</u>, as well as in shared attention to objects of interest. <u>[64]</u> Historically, autistic children were said to be delayed in developing a <u>theory of mind</u>, and the <u>empathizing-systemizing theory</u> has argued that while autistic people have compassion (<u>affective empathy</u>) for others with similar autistic features, they have limited, though not necessarily absent, <u>cognitive empathy</u>. This may present as social naïvety, lower than average intuitive perception of the utility or meaning of <u>body language</u>, social reciprocity, or social expectations, including the <u>habitus</u>, <u>social cues</u>, and some aspects of sarcasm, which to some degree may also be due to co-occurring <u>alexithymia</u>. Recent research has increasingly questioned these findings, as the <u>double empathy problem</u> theory (2012) argues that there is a lack of mutual understanding and empathy between both non-autistic and autistic individuals.

Thus, there has been a recent shift to acknowledge that autistic people may simply respond and behave differently than non-autistic people. [77][79] Autistic interests, and thus conversational topics, seem to be largely driven by an intense interest in specific topics (monotropism). [80]

#### Nonverbal communication

Autistic people display atypical nonverbal behaviors or show differences in <u>nonverbal communication</u>. They may make infrequent <u>eye contact</u>, even when called by name, or avoid it altogether. This is because they find it uncomfortable, distracting, or disturbing. [81] Autistic people often recognize fewer emotions and their meaning from others' facial expressions, and may not respond with facial expressions expected

by their non-autistic peers. [82][83] Autistic people struggle to understand the social context and subtext of non-autistic people in conversational or printed situations, and form different conclusions about the content. [84] Autistic people may not control the volume of their voice in different social settings. [85] At least half of autistic children have atypical prosody. [85]

### **Developing and sustaining relationships**

Signs of autism in childhood include less apparent interest in other children<sup>[64]</sup> or caretakers, possibly with more interest in objects. What may look like self-involvement or indifference to non-autistic people stems from autistic differences in recognizing other people's personalities, perspectives, and interests. Most published research focuses on the interpersonal relationship difficulties between autistic people and their non-autistic counterparts and how to solve them through teaching social skills, but newer research has shown that autistic people often have good social relationships with other autistic people, which positively influences quality of life. Children on the autism spectrum are more frequently involved in bullying situations than their non-autistic peers, and mostly experience bullying as victims rather than perpetrators or victim-perpetrators. For autistic people who have a desire for friendships, lower friendship quantity and quality often lead to increased loneliness. Autistic people frequently have significant challenges developing romantic relationships compared to non-autistic people. As they progress through life, autistic people observe and form models of social patterns, and develop coping mechanisms, some of which are referred to as "masking". Masking is associated with worse mental health outcomes as well as later diagnosis, which prevents the autistic person from accessing needed supports.

### Restricted and repetitive behaviors

The second core feature of autism is a pattern of restricted and repetitive behaviors, activities, and interests. To be diagnosed with autism under the DSM-5-TR, a person must have at least two of the following behaviors: [1][91]

■ Repetitive behaviors: behaviors such as rocking, hand flapping, finger flicking, head banging, or repeating phrases or sounds (including echolalia [72]). [92] These behaviors may occur constantly or only when the person is stressed, anxious, or upset. They are also known as stimming. Other signs include playing with toys in ways non-autistic people consider limited or unusual [64] (e.g., arranging toys into a row [72]).



A young autistic boy who has arranged his toys in a row

- Resistance to change: strict adherence to routines, such as always performing daily tasks in a specific order or exhibiting strong reactions to changes non-autistic people may perceive as small. [93] The person may become distressed if their routine changes or is disrupted. [93]
- <u>Focused interests</u>: intense interest in a particular activity, topic, or hobby, and devoting all one's attention to it; for example, having a strong attachment to certain objects<sup>[1]</sup> or constantly thinking and talking about a specific topic.<sup>[94]</sup>
- Sensory reactivity: an unusual reaction to certain sensory inputs, such as aversion to specific sounds or textures, fascination with lights or movements, or apparent indifference to pain or heat.

It is increasingly argued that these characteristics should be accepted, which is supported by their recognized functions, such as self-regulation. Focused interests can also offer significant personal fulfillment and foster the development of specialized knowledge. A distinction must be made between these features and those of obsessive—compulsive disorder, which can co-occur with autism and involves distressing compulsions or obsessions aimed at preventing feared negative events. [98]



An autistic boy arranging <u>brads</u> on a cork coaster

### Speaking, minimally speaking, non-speaking

Differences in verbal communication become noticeable in childhood, as many autistic children develop language skills at an uneven pace. Verbal communication may develop later or never (non-speaking autism), while reading ability may be present before school age (hyperlexia). Less joint attention may distinguish autistic from non-autistic infants. Infants may show later onset of babbling, unusual gestures, lower responsiveness, and vocal patterns that are not synchronized with the caregiver. In their second and third years, autistic children may have less frequent and less diverse babbling, consonants, words, and word combinations, and their gestures may be less often integrated with words. Autistic children are less likely to make requests or share experiences and more likely to simply repeat others' words (echolalia). Around 25–35% of autistic school-age children are non-speaking or minimally speaking. The age at which a child acquires speech and the complexity of their early language development are significant predictors of their verbal communication abilities in later life. [101]

### Mental health, self-injury, and suicide

Self-injurious behavior (SIB) is approximately three times more common in autistic people than non-autistic people. These behaviors include head-banging, hand-biting, and skin-picking, and can lead to serious injury or, in rare cases, death. Multiple theories explore the development and persistence of SIB within developmental conditions, including autism. Explanations include communication difficulties, leading people to use self-injury as a way to express needs, distress, or other messages. Additionally, SIB may be linked to efforts to regulate sensory input or modulate pain perception, particularly for those experiencing chronic discomfort or medical conditions. Neurological factors are also under investigation, with anomalies in basal ganglia connectivity suggested as a potential biological predisposition in some autistic people. 104

Other risk factors for self-harm and <u>suicidality</u> include circumstances that could affect anyone but are more common among autistic people, such as <u>mental health problems</u> (e.g., <u>anxiety disorder</u>) and social problems (e.g., <u>unemployment</u> and <u>social isolation</u>). In addition, there are autism-specific factors, such as exhausting attempts to behave like a non-autistic person to avoid stigma and negative reactions of society towards autistic people (<u>masking</u>). Autistic people are also at significantly increased risk of victimization, including bullying, sexual assault, and other forms of criminal abuse. A 2019 meta-analysis found autistic people to be four times more likely to have depression than non-autistic people.

Rates of suicidality vary significantly depending upon what is being measured. This is partly because questionnaires developed for non-autistic subjects are not always valid for autistic people. As of 2023, the Suicidal Behaviours Questionnaire—Autism Spectrum Conditions (SBQ-ASC) is the only test validated for autistic people. According to some estimates, about a quarter of autistic youth and a third of all autistic people have experienced suicidal ideation at some point. Autistic people are about three times as likely as non-autistic people to make a suicide attempt. Almost 10% of autistic youth and 15% to 25% of autistic adults have attempted suicide. Rates of suicide attempts and suicidal ideation are the same for people formally diagnosed with autism and people who have typical intelligence and are believed to be autistic but have not been diagnosed. The suicide risk is higher for autistic people who are not cisgender males and do not have intellectual disabilities.

### Fatigue, burnout, inertia, meltdown, shutdown

Several models that are not formal medical diagnoses have been used to describe and conceptualize challenges that autistic people face in their daily lives. [112] They lack formal diagnostic criteria, but are described by autistic people. [112][113]

Autistic fatigue or an autistic burnout is a prolonged state of intense mental and physical symptoms, notably exhaustion. [114][113][112][115] It is described as distinct from but similar to occupational burnout, resulting from pressure to camouflage or mask autistic traits in social interactions. [113][114] The term "autistic burnout" was first used in 2008, with research into the phenomenon undertaken in the 2020s. [114] Several researchers have made characterizations of autistic burnout, but there is no consensus on the definition criteria. Depression can be misattributed to autistic burnout, as they have several overlapping criteria. Solutions used to overcome burnout include reduced masking, increased stimming, engaging in special interests and in familiar activities, and getting relief from stress. Some affected people temporarily withdraw from social contacts as a recovery strategy; while providing relief, interpersonal withdrawal can also result in loneliness and worsening mental health. There is little data on professional solutions. [114]

Autistic inertia is a difficulty experienced among autistic people with initiating, transitioning between, or stopping activities or mental states. [113] It can manifest as a feeling of being "stuck", where people find it challenging to begin a task, shift focus to a different activity, or disengage from an action, even when they want to [112]

A meltdown may arise if, upon processing large amounts of information, an autistic person experiences anxiety or feels overwhelmed. Triggers may be sensory or social, and include unpredictability, unmet basic needs, and emotional situations, and often accumulate. A meltdown can be expressed audibly (e.g., screaming or crying) or physically. The person often shows signs of distress beforehand, such as pacing, asking repetitive questions, trembling, or sweating. An autistic shutdown is similar, but inward, and the autistic person is often unable to speak or withdraws completely. Meltdown or shutdown can be prevented by eliminating the distressing factors. They may be ameliorated by avoiding further questions or pressure, showing the person that one is there to help, and allowing the person to calm down by leaving the situation or breathing slowly.

#### Other features

Autistic people may exhibit traits or characteristics that are not part of the formal diagnostic criteria but can nonetheless affect their personal well-being or family dynamics. [117]

- An estimated 60–80% of autistic people have motor signs that include poor muscle tone, poor motor planning, and toe walking; [118][119] difficulties in motor coordination are pervasive across the autism spectrum. [120][121]
- Unusual or atypical eating behavior occurs in about 70% of children on the autism spectrum, [122] to the extent that it was formerly a diagnostic indicator. [117] Selectivity is the most common characteristic, although eating rituals and food refusal also occur. [122]
- Most studies report moderate correlations between autism, problematic internet use, and gaming disorder. [123]

### Skill profile

Autistic people tend to show a "spiky skills profile", with strong abilities in some areas and much weaker abilities in others. [124] Some autistic people show unusual or notable abilities, ranging from splinter skills (such as memorization of trivia) to rare talents in mathematics, music, or artistic reproduction, which in exceptional cases are considered a part of the savant syndrome. [125][126] Some autistic people demonstrate superior skills in perception and attention relative to the general population. [127]

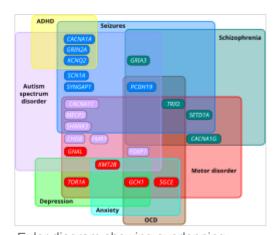
#### **Caregivers**

Families who care for an autistic child face greater stress. [128] Parents may struggle to understand their child and to find appropriate care options. Affiliate stigma also decreases quality of life, where negative attitudes toward the autistic child are extended to those close to the child. [129] Family members who are themselves autistic are often better able to understand the autistic child. [86]

## **Co-occurring conditions**

Several conditions can co-occur with autism at a higher rate than in the rest of the population. This may be referred to as comorbidity, and may increase with age, causing difficulties for youth on the autism spectrum, and can make interventions and therapies more challenging. Features of autism and other diagnoses often overlap, and autism's characteristics can make traditional diagnostic procedures more difficult. This is sometimes known as diagnostic overshadowing. Common co-occurring conditions are:

- <u>ADHD</u> is seen in between 25% to 32% of autistic people. [134] Characteristics similar to those of ADHD can be part of an autism diagnosis. [135]
- Epilepsy occurs in about 10% of autistic people. [136]
   The risk is higher for older autistic people and those with intellectual disability. [137]
- Intellectual disabilities are some of the most common co-occurring conditions with autism (30% to 40%).<sup>[138]</sup> As diagnosis is increasingly given to



<u>Euler diagram</u> showing overlapping <u>clinical phenotypes</u> in genes associated with <u>monogenic forms</u> of autism, dystonia, epilepsy and schizophrenia:

Genes associated with epilepsy

Genes associated with schizophrenia

Genes associated with autism

Genes associated with dystonia

- people with lower support needs, there is a tendency for the proportion with co-occurring intellectual disability to decrease over time.
- Various anxiety disorders can co-occur with autism, with overall co-occurring rates of 17% to 23%. [134] Many anxiety disorders have characteristics better explained by autism itself, or are hard to distinguish from autism's features. [139]
- Rates of co-occurring depression in autistic people range from 9% to 13%. [134]
- Obsessive—compulsive disorder (OCD) occurs in 7% to 10% of autistic people. [134]
- Starting in adolescence, some autistic people fall under the criteria for the similar-looking schizoid personality disorder, which is characterized by a lack of interest in social relationships, a tendency toward a solitary or sheltered lifestyle, secretiveness, emotional coldness, detachment, and apathy. [140]
- Genetic conditions: About 10% of autistic people are diagnosed with a rare genetic syndrome such as Prader–Willi, Angelman, Fragile X, or 16p11.2 deletion syndrome. [141]
- Gastrointestinal problems are one of the most commonly co-occurring medical conditions in autistic people. These are linked to greater social difficulties, irritability, language difficulties, mood changes, distressed behavior, and sleep problems. [142][143]
- Sleep problems affect about two-thirds of autistic people at some point in childhood. These most commonly include symptoms of insomnia, such as difficulty falling asleep, frequent nocturnal awakenings, and early-morning awakenings. Sleep problems are associated with difficult behaviors and family stress, and are often a focus of clinical attention over and above the autism diagnosis.
- Motor difficulties, including features of <u>dyspraxia</u>, are highly prevalent in autistic people, [145] and there is a significantly higher rate of joint hypermobility/hypermobility spectrum disorders/Ehlers-Danlos syndrome in autistic people. [146]
- There is tentative evidence that gender dysphoria occurs more frequently in autistic people. [147][148]

## Management

Currently, there is no cure for autism. [27] From the perspective of <u>neurodiversity</u>, "curing" or otherwise treating autism may not be an appropriate goal. [54][149]

Interventions targeting specific challenges or co-occurring conditions associated with autism are widely regarded as important. Perspectives on the goals of these interventions vary: the medical model of disability often focuses on addressing core characteristics such as social communication difficulties and restricted/repetitive behaviors. The neurodiversity movement supports interventions aimed at enhancing functional communication (spoken or non-spoken), managing related issues like anxiety or inertia, or addressing behaviors considered harmful, rather than seeking to alter core autistic features [152][151]

Studies of interventions have methodological problems that prevent definitive conclusions about  $\underline{\text{efficacy}}, \underline{^{[153]}}$  but the development of evidence-based interventions has advanced.  $\underline{^{[154]}}$  Several therapies can help autistic children,  $\underline{^{[155]}}$  and they are typically tailored to the child's needs.  $\underline{^{[156]}}$  The main goals of therapy are to lessen associated difficulties and family distress, and to increase  $\underline{\text{quality of life}}$  and functional independence. In general, higher  $\underline{\text{IQs}}$  correlate with higher responsiveness to interventions and larger intervention outcomes.  $\underline{^{[157][154]}}$  Behavioral, psychological, educational, and skill-building interventions may be used to help autistic people learn skills for living independently, as well as other

social, communication, and language skills. Therapy also aims to reduce behaviors perceived as inappropriate and to build upon strengths. Medications have not been found to reduce autism's core features, but may be used for associated difficulties, such as irritability or inattention. [159]

### Non-pharmacological interventions

Certain interventions, such as intensive, sustained special education, remedial education programs, and behavior therapy, are considered beneficial early in life for autistic children to acquire self-care, social, and job skills. Available approaches include applied behavior analysis, developmental models, structured teaching, speech and language therapy, cognitive behavioral therapy, social skills therapy, and occupational therapy. These interventions may either target autistic features comprehensively or focus on a specific area of difficulty. [154]

### **Applied behavior analysis**

Applied behavior analysis (ABA) is a behavioral therapy that aims to teach autistic children certain social and other behaviors by prompting using rewards and reinforcement learning. This includes learning fine and gross motor and language skills through play, expressive labeling, and requesting. It also seeks to reduce aggressive and self-injurious behavior by assessing its environmental causes and reinforcing replacement behaviors. Early, intensive ABA therapy has demonstrated effectiveness in enhancing preschool children's language skills, adaptive functioning, and intellectual performance. [162][163][164][165] Another review reported a lack of adverse event monitoring, although such adverse effects may be common. [166]



An autistic boy works with a behavioral therapist to identify different letters of the alphabet as part of a therapy program.

Interventions for early childhood may be based on different theoretical frameworks, such as ABA (with its <u>structured</u> and <u>naturalistic</u> approaches) and <u>Developmental Social Pragmatic</u> (DSP) models. Research indicates that in acquiring spoken language, autistic children with higher <u>receptive language skills</u> tend to make progress with fewer hours (2.5 to 20 per week) of a naturalistic approach, whereas those with lower receptive language skills tend to show more progress only with a greater intensity of intervention (25 hours per week) using discrete trial training, a structured form of ABA. [162][164]

ABA has faced criticism. [167][168][169] Sandoval-Norton et al. describe it as unethical and argue that it has unintended consequences, such as prompt dependency, susceptibility to psychological abuse, and overemphasis on compliance, which can create challenges in the transition to adulthood. [167] Increasingly, ABA is also criticized for trying to reduce or eliminate autistic behaviors to make children appear less autistic, rather than respecting neurodiversity. [170] A problem with unreported conflicts of interest in ABA research has been described, with potential effects on the quality of evidence. [171] In response, some ABA advocates suggest that instead of discontinuing the therapy, efforts should focus on increasing protections and ethical compliance. [172]

A related type of intervention is parent training models. These teach parents to implement various ABA and DSP techniques themselves. Several parent-mediated behavioral therapies target social communication difficulties, while their effect on restricted and repetitive behaviors (RRBs) is uncertain. Similarly, teacher-implemented interventions that combine <u>naturalistic ABA</u> with a developmental social pragmatic approach have been associated with effects on young children's social-communication behaviors, although there is limited evidence regarding effects on broader autistic characteristics. [154]

### Inclusion in education and the workplace

<u>Inclusive education</u> models strive to support autistic students in mainstream educational settings, moving away from segregated <u>special education</u> environments toward participation alongside their peers. Despite these efforts, autistic students can face significant barriers, sometimes leading to <u>trauma or emotionally-based school non-attendance</u>. This avoidance is often rooted in overwhelming sensory environments, social anxieties, communication breakdowns, <u>bullying</u>, or lack of adequate support and understanding, rather than defiance. [174][175]

Central to successful inclusion is the application of frameworks like <u>Universal Design for Learning</u> (UDL), which proactively designs <u>curricula</u> and learning environments to be accessible and engaging for all students, including those who are autistic. [176] UDL principles accommodate varied learning styles, sensory sensitivities, and communication preferences often present in autistic people. [176]

The SPACE framework (sensory, predictability, acceptance, communication, empathy) developed by Doherty et al. primarily for healthcare settings offers a lens for identifying and addressing common environmental barriers that can contribute to distress and avoidance behaviors for autistic people.  $\frac{[29]}{\text{Accommodations}}$  may include providing quiet spaces as a retreat for people feeling overwhelmed.  $\frac{[177]}{\text{Autistic}}$  Students may also need help initiating and maintaining social relationships with their peers if they wish to do so.  $\frac{[174]}{\text{Especially}}$  Especially in higher education, some autistic students may need help with executive functioning, e.g., managing their own work, and the ability to initiate and complete tasks.  $\frac{[178]}{\text{Especially}}$ 

Transitioning to adulthood, autistic people often encounter substantial barriers to securing and maintaining meaningful employment, leading to high rates of <u>unemployment</u> and <u>underemployment</u> compared to the general population. Challenges can include navigating traditional interview processes, difficulties with unspoken social rules in the workplace, sensory sensitivities to office environments (e.g., lighting, noise), and needs for clear, direct communication and structured tasks. Effective workplace inclusion involves implementing reasonable adjustments such as flexible working hours or locations, providing noise-canceling headphones, staff training, and mentorship programs. Working from home can help to avoid overwhelming sensory or social situations, even if this means losing desirable social contact. Autism-friendly workplaces not only allow autistic employees to utilize their unique skills and perspectives but also benefit employers through increased innovation, problem-solving capabilities, and employee loyalty.

### Pharmacological interventions

Autistic people may be prescribed medication to manage specific co-occurring conditions or behaviors, such as <u>ADHD</u>, <u>anxiety</u>, aggression, or self-injurious behaviors, particularly when non-pharmacological interventions alone have been insufficient. [184][185] Medications are not routinely recommended for

autism's core features, such as social and communication difficulties or restricted and repetitive behaviors. [186]

More than half of autistic children in the United States are prescribed psychoactive drugs or anticonvulsants. [187] Commonly used drug classes include antidepressants, stimulants, and antipsychotics. [187] Among antipsychotics, risperidone and aripiprazole are the only medications approved by the U.S. Food and Drug Administration specifically for reducing irritability, aggression, and self-injurious behaviors in autistic people. [159][188] These drugs can have significant side effects and responses to them may vary. [159] The UK's National Health Service cautions against the overprescription of antipsychotics and recommends their use only for specific indications, at the lowest effective dose and for the shortest duration necessary. [189]

Some research suggests that risperidone and aripiprazole may also reduce restricted and repetitive behaviors, such as hand-flapping or body-rocking. The evidence supporting this use has limitations, including study size and scope, alongside concerns about adverse effects. A meta-analysis found no significant efficacy of these antipsychotics or  $\underline{SSRI}$  antidepressants in reducing these behaviors. Stimulant medications like  $\underline{methylphenidate}$  may reduce inattention or hyperactivity in some autistic children, particularly when  $\underline{ADHD}$  is also present. But methylphenidate's efficacy is lower in autistic people with ADHD compared to non-autistic people with ADHD, and side effects are more common.

#### Alternative medicine

Alternative therapies have been researched and implemented, and many have resulted in harm to autistic people. For example, chelation therapy is not recommended as a treatment for autism, with risks outweighing potential benefits. Reports of death from botched chelation therapy as treatment for autism have been documented. Medical authorities have condemned bleach-based approaches, such as chlorine dioxide solutions marketed as Miracle Mineral Solution, as dangerous and ineffective. The British NHS also warns against CEASE therapy, which rejects vaccinations and recommends potentially harmful amounts of dietary supplements. There is also no evidence for the efficacy of hyperbaric oxygen therapy and its use is not recommended.

Although sometimes used for autistic people, no reliable evidence indicates a gluten- and casein-free diet as a standard intervention. [199][200][201] Autistic children's preference for unconventional foods as well as gastrointestinal problems and lack of exercise can lead to reduction in bone cortical thickness, and this risk is greater in those on casein-free diets, as a consequence of the low intake of <u>calcium</u> and <u>vitamin</u> D.[202]

## **Emerging evidence-based interventions**

Interventions for autistic adults have limited evidence; cognitive behavioral approaches and mindfulness are considered promising. Music therapy for autistic people likely improves overall autism severity, global functioning, and quality of life, but evidence is unclear for social and communication skills. Animal-assisted activities and therapies show promise in improving social communication, irritability, hyperactivity, and word usage in autistic people. [205]

## **Prognosis**

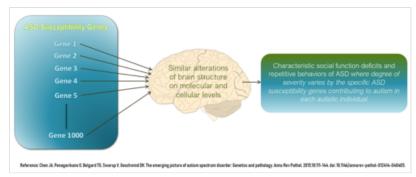
With appropriate supports that promote independence and self-determination, autistic people can participate fully in their communities and lead meaningful, productive lives. [34][35] Autism typically persists whether diagnosed in children or in adults, but those who no longer meet the criteria for diagnosis may have it removed. [6] Some report that those with limited support needs are likely to have lessened autistic features over time, [206] while others argue that this perception is likely due to masking; i.e., hiding autistic characteristics to avoid stigma. [207] About 85% of autistic people need support with independent living in adulthood. [208] Factors such as developing spoken language before age six, having an  $\underline{IQ}$  above 50, and possessing marketable skills are associated with a higher likelihood of independent living in adulthood. [209]

### **Causes**

The exact causes of autism are unknown, [210][211][212][213] with genetics likely being the largest contributing factor. It was long presumed a single cause at the genetic, cognitive, and neural levels underpinned the social and non-social features. [214] Increasingly, autism is assumed to be a complex condition with distinct, often co-occurring, causes for its core aspects. [214][215] It is unlikely that autism has a single cause; [215] research has identified many factors as potential contributors, [216] including genetics, [91] prenatal and perinatal (shortly after birth) history, [216] neuroanatomical anomalies, changing social demands in the workplace or in school, [14] and environmental influences. [216] It is possible to identify general factors, but difficult to determine specific ones. [217] Research into causes is complex due to challenges in identifying distinct biological subgroups within the autistic population. [218]

### **Genetics**

Autism has a strong genetic basis, although the genetics of autism are complex and it is unclear whether autism is explained more by rare mutations with major effects, or by multi-gene interactions variants. [219][220] genetic common Twin studies indicate that autism is highly heritable, with genetic factors explaining most of the risk and shared environmental effects playing a minor role.[19] Numerous genes have been found, with most loci individually



Hundreds of different genes are implicated in the likelihood of being autistic, most of which influence the brain structure in a similar way.

explaining less than 1% of autism cases [221] and having only small effects. [219] While these genetic variants are associated with a higher likelihood of being autistic, they do not individually determine whether someone will be autistic. [222] Complexity arises due to interactions among multiple genes, the environment, and heritable epigenetic factors (which influence gene expression without changing  $\underline{DNA}$  sequence). [223]

Typically, autism is not traceable to a single-gene (Mendelian) mutation or chromosome anomaly, and no associated genetic syndrome selectively causes autism. [219] If autism is one characteristic of a broader medical condition, such as <u>fragile X syndrome</u>, it is referred to as <u>syndromic autism</u>, as opposed to non-syndromic or idiopathic autism, which is typically polygenic without a known cause. [224] Syndromic autism is present in approximately 25% of autistic people. [225] Research has suggested that autistic people with intellectual disability tend to have rarer, more impactful, genetic mutations than those found in people diagnosed solely with autism. [226] A number of genetic syndromes causing intellectual disability may also be co-occurring with autism, including <u>fragile X</u>, <u>Down</u>, <u>Prader–Willi</u>, <u>Angelman</u>, Williams syndrome. [227] and SYNGAP1-related intellectual disability. [228]

Research suggests that autism is associated with genes that influence neural development and connectivity. These are involved in key neuronal processes such as protein synthesis, synaptic activity, cell adhesion, and the formation and remodeling of synapses, as well as the regulation of excitatory and inhibitory neurotransmission. Studies have identified lower expression of genes linked to the inhibitory neurotransmitter gamma-aminobutyric acid, alongside higher expression of genes associated with glial (e.g., astrocytes) and immune (e.g., microglia) cells, correlating with higher numbers of these cells in post-mortem brain tissue. Genes associated with variation in the mTOR signaling pathway, which is involved in cell growth and survival, are also under investigation. [229] Some hypotheses from evolutionary psychiatry propose that certain autism-associated genes may persist in the population due to their links to traits such as intelligence, systemising abilities, or innovation.

If parents have one autistic child, the chance of having a second autistic child ranges from 7% to 20%. [91] Although autism is highly heritable, many autistic people have only non-autistic family members. In some cases, this may be explained by de novo structural variations—such as deletions, duplications, or inversions—that arise spontaneously during meiosis and are not present in the parents' genomes. [231][232] The likelihood of being autistic is greater with older fathers than with older mothers; two potential explanations are the known increase in the number of mutations in older sperm and the hypothesis that men marry later if they carry a genetic predisposition and show some signs of autism. [233]

## **Evolutionary psychiatry**

Research exploring the evolutionary advantages of autism and associated genes has suggested that autistic people may have contributed uniquely to human development, particularly in technological innovation (such as tool-making) and in the detailed observation and analysis of the natural environment. [234] Systematic reviews emphasize that these ideas remain speculative and that no single evolutionary explanation has been established. [235]

### **Social factors**

Social factors such as upbringing are not known to cause autism, but it is possible that increasing demands for flexibility and social interaction in education, or in one's personal and professional life, may cause people to exhibit pronounced difficulties that would not have led to diagnosis in a different setting. [14][15]

### **Neurocognitive theories**

Various theoretical frameworks attempt to integrate underlying genetic and environmental causes with observed neurobiological findings and behavioral traits. For instance, the Intense World Theory proposes that a higher neural responsiveness in autism leads to more intense sensory perception, attention, memory, and emotional responses, shaping the person's experience. The Enhanced Perceptual Functioning model of autism posits that superior and more independent functioning of auditory and visual perception is the root cause of the specific pattern of cognitive, behavioral, and neural performance observed in autistic people. The model asserts the importance of perception, arguing it is more central to the autistic phenotype than social or higher-order cognitive processes.

Beyond models of causation and brain function, cognitive theories have been developed to explain patterns of information processing common in autistic people, to better understand the autistic phenotype. This includes theories suggesting a tendency to focus on details over broader context (weak central coherence theory), and distinct cognitive styles related to analyzing systems versus empathizing with others (empathising—systemising theory). While these cognitive accounts describe how autistic traits may manifest, they are generally viewed as explanations of the behavioral and cognitive consequences of the underlying neurobiological development rather than primary causes themselves. [237]

### Early life and prenatal or perinatal factors

Certain factors during pregnancy and birth may increase the likelihood of autism, [238] although no single factor is conclusive and study results are often inconsistent. [239] These factors include advanced parental age, [240][241] maternal health conditions (e.g., gestational diabetes, infections, inflammation [242]), exposure to certain medications (e.g., valproate [239]), and some environmental exposures like significant air pollution during pregnancy. [243] While many environmental factors have been investigated, few have established links, [239] and some prominent claims (e.g., vaccines or parenting styles) have been disproven. [244]

### Disproven refrigerator mother hypothesis

Work on autism in the mid-20th century proposed the "frigid mother" or <u>refrigerator mother hypothesis</u>, according to which poor parenting or lack of emotional support from parents leads to autism. [245] When it was proposed, the hypothesis contributed to considerable media attention about autism, which had previously been mostly ignored. [246] The hypothesis has since fallen out of favor, and has not garnered support when studied. [245] But the blame placed on parents of children on the autism spectrum, especially mothers, has contributed to substantial stigma. [247][248]

Early social experiences, such as caregiver interactions or deprivation, may shape the development of autism, potentially via gene—environment correlations, and are distinct from the discredited refrigerator mother hypothesis. [22]

#### Disproven vaccines hypothesis

Parents may first become aware of autistic characteristics in their child around the time of a routine vaccination. This has led to theories – subsequently disproven – blaming <u>vaccine</u> "overload", the <u>vaccine</u> preservative thiomersal, or the MMR vaccine for causing autism. [249] In 1998, British physician Andrew

<u>Wakefield</u> led a fraudulent, litigation-funded study that suggested that the <u>MMR vaccine</u> may cause autism. [250][251][252][253][254] His co-authors have since recanted the claims made in the study. [255] Wakefield was <u>struck off</u> the British medical register for "serious professional misconduct" after determination that his involvement in the study amounted to fraud, leading to the loss of his right to practice medicine. [256]

Two versions of the vaccine causation hypothesis were that autism results from brain damage caused by either the MMR vaccine itself, [17] or by [17] or by [17] used as a vaccine preservative. [257] No convincing scientific evidence supports these claims. [17] They are biologically implausible, [249] and further evidence continues to refute them, including the observation that the rate of autism continues to climb despite elimination of [17] they are biologically implausible, [17] and further evidence continues to refute them, including the observation that the rate of autism continues to climb despite elimination of [17] they are biologically implausible, [17] and further evidence continues to refute them, including the observation that the rate of autism continues to climb despite elimination of [17] they are biologically implausible, [17] and further evidence continues to refute them, including the observation that the rate of autism continues to climb despite elimination of [17] they are biologically implausible, [17] and further evidence continues to refute them, including the observation that the rate of autism continues to climb despite elimination of [17] they are biologically implausible, [17] and further evidence continues to refute them, including the observation that the rate of autism continues to climb despite elimination of [17] they are biologically implausible, [17] and [17] they are biologically implausible, [17] they are biologically

A 2014 meta-analysis examined ten major studies on autism and vaccines involving 1.25 million children worldwide; it concluded that neither the vaccine preservative thimerosal (mercury), nor the MMR vaccine, which has never contained thimerosal, [262] lead to autism. [263] Despite this, misplaced parental concern has led to lower rates of childhood immunizations, outbreaks of previously controlled childhood diseases in some countries, and the preventable deaths of several children. [264][265]

### False claims of links to paracetamol in pregnancy

On 22 September 2025, US president <u>Donald Trump</u> gave a press conference on the findings of an investigation led by Secretary of Health and Human Services <u>Robert F. Kennedy Jr.</u>, in which he falsely claimed that they had found <u>Tylenol</u> (<u>paracetamol</u>, also known as acetaminophen) taken during pregnancy was the cause of autism. <u>[266]</u> Trump instructed the U.S. <u>Food and Drug Administration</u> to notify physicians to stop recommending acetaminophen use during pregnancy due to the alleged links to autism and <u>ADHD</u>. <u>[266][267]</u> The FDA issued a statement as announced by Trump, but did not follow the wording of the announcement, instead saying doctors "should consider minimizing" its use and noting that "a causal relationship has not been established" and that the matter was "an ongoing area of scientific debate". The FDA statement also noted that acetaminophen remains the safest <u>analgesic</u> and <u>antipyretic</u> option in pregnancy compared to alternatives like <u>aspirin</u> and <u>ibuprofen</u>. <u>[267][268]</u>

Following the <u>Trump administration</u>'s announcement, news and fact checking organizations around the world reported broad rejections by international medical experts. [267][269][270] The president of the <u>American College of Obstetricians and Gynecologists</u> called the announcement "irresponsible" and "highly unsettling", saying it is "not backed by the full body of scientific evidence and dangerously simplifies the many and complex causes of neurologic challenges in children". The <u>Society for Maternal-Fetal Medicine</u> highlighted that not treating a fever in pregnant women can increase the risk of miscarriage and other problems. [271] On 24 September 2025, the <u>World Health Organization</u> refuted the claim, stating there is no conclusive scientific evidence linking paracetamol use during pregnancy to autism. [272]

Multiple international health authorities, including the <u>Society of Obstetricians and Gynaecologists of Canada</u>, the <u>Medicines and Healthcare products Regulatory Agency</u> in the UK, and the <u>European Medicines Agency</u>, recommend acetaminophen as the first-line treatment for pain and fever during pregnancy when used at the lowest effective dose for the shortest duration. Current high-quality evidence shows no causal link between prenatal use and autism or other <u>neurodevelopmental disorders</u>, while untreated pain or fever poses risks to both mother and fetus. [273][274][275][276]

Very large population-based studies indicate that prenatal acetaminophen use is not clearly linked to autism, ADHD, or intellectual disability, and studies comparing siblings suggest that earlier reported links were likely due to other factors, not acetaminophen itself. [277][278][279]

# **Demographics**

Autism occurs in every country and demographic group. [34][2][3] Most professionals believe that race, ethnicity, and socioeconomic background have limited effect on the occurrence of autism. [280]

Research <u>indicates that autistic people</u> are significantly more likely to be <u>LGBTQ</u> than the general population. [281] Autistic people are also significantly more likely to be <u>non-theistic</u> or <u>non-religious</u>. [282]

### **Epidemiology**

The World Health Organization estimates about 1 in 100 children were autistic between 2012 and 2021 with a trend of increasing prevalence over time. This may reflect an underestimate of prevalence in low-and middle-income countries. [2][3] Surveillance studies in community samples of adults suggest a similar share of the adult population would meet diagnostic criteria if formally assessed. [16] The number of people diagnosed has increased since the 1990s, likely due to a combination of increased recognition of autism, better availability of diagnosis, and changes to the diagnostic criteria. [2] The increase in autism is largely attributable to changes in diagnostic practices, referral patterns, availability of services, age at diagnosis, and public awareness, [283][284][285] particularly among women, [286] though unidentified environmental factors cannot be ruled out. [287]

Males are about three times more likely to be diagnosed with autism than females. [23] Several theories about the higher prevalence in males have been investigated. [288] Females, for example, are more likely to have associated cognitive disability, suggesting that less obvious forms of autism are likely being overlooked. [289] Prevalence differences may also be a result of gender differences in expression of characteristics, with autistic women and girls showing less atypical behaviors and therefore being less likely to be diagnosed with autism. [290]

The <u>Centers for Disease Control</u>'s Autism and Developmental Disabilities Monitoring Network reported that approximately 1 in 31 children in the United States is diagnosed with autism, based on data collected in 2022. For 2016 data, the estimate was 1 in 54, compared to 1 in 68 in 2010 and 1 in 150 in 2000. Diagnostic criteria for autism have changed significantly since the 1980s; for example, <u>U.S.</u> special-education autism classification was introduced in 1994.

# History

### **Etymology**

In 1911, Swiss psychiatrist <u>Paul Eugen Bleuler coined</u> the German term *Autismus* to characterize the social withdrawal he observed in people with <u>schizophrenia</u>. Rendered in English as *autism*, the term derives from the Greek word <u>autos</u> ("self"). Bleuler used the term for a symptom of adult schizophrenia: a person's retreat from reality into their own subjective world. He also mentioned "autistic

thinking" as a fleeting, illogical thought process everyone experiences. In the mid-1920s, German psychiatrist Fritz Künkel categorized over 100 schizophrenic patients into four groups, one of which he labeled "autistic", highlighting disturbances in emotional life. In 1926, building on his work and Bleuler's, Grunya Sukhareva published an article about six boys who were musically gifted and had a tendency toward abstract thinking. She called their affects "flattened" and their tendency to avoid other children an "autistic attitude". Scholars have credited Sukhareva with making observations that closely mirror ASD as described by the DSM-5 and ICD-11. Her work expanded on the definition throughout her career while making great strides in differentiating ASD and schizophrenia nearly 30 years before the establishment of separate classifications for these diagnoses with the 1980 publication of the DSM-III. [297]

# **Society and culture**

The <u>autistic rights</u> and <u>neurodiversity</u> movements argue autism should be accepted as a difference to be accommodated instead of cured, [299][300][301][302][303] although a minority of autistic people might still accept a cure. [304] Social-science scholars study autistic people in hopes of learning more about "autism as a culture, transcultural comparisons ... and research on social movements". [303] Events related to autism include World Autism Awareness Day, Autism Sunday, Autistic Pride Day, Autreat, and others. [305][306][307][308]

<u>Focused interests</u> are commonly found in autistic people and can include activism. Environmental activist <u>Greta Thunberg</u> has spoken favorably about her autism diagnosis, saying that autism can be a source of <u>life purpose</u>, as well as the basis of careers, hobbies, and friendships. [309][310][298] Entrepreneur and co-founder of <u>Microsoft Bill Gates</u> has written, "If I were growing up today, I probably would be diagnosed on the autism spectrum."[311]



In 2021, Swedish climate activist <u>Greta</u> <u>Thunberg</u> likened her autism to a "superpower", crediting her success to her focused interests. [298]

### Legal implications of diagnosis

In some countries, people with an autism diagnosis are required to provide additional proof of suitability to apply for a driver's license  $\frac{[312]}{}$  or to handle firearms. They may face barriers to entering military service.

#### **Discrimination**

Autistic people may face <u>discrimination</u> of various kinds, both directly and indirectly, in a variety of settings, professional, educational, or clinical. Such discrimination is often initiated after other people identify the autistic person as different from themselves, which may occur very quickly. This discrimination sometimes leads to <u>violence</u>, <u>assault</u>, or <u>social exclusion</u>. Various legal limitations on people with an autism diagnosis have also been considered discriminatory. [312][313]

### **Neurodiversity movement**

Some autistic people and affiliated researchers [316] have advocated a shift in attitudes toward the view that autism is a difference, rather than a disease that ought to be treated or cured. [317][318] Critics have bemoaned the entrenchment of some of these groups' opinions, and that they speak to a select group of autistic people with limited difficulties. [301][319][303][320][321]

The neurodiversity movement and the <u>autism rights</u> <u>movement</u> are <u>social movements</u> within the context of disability rights, emphasizing the concept of neurodiversity,



The neurodiversity movement has many symbols, but is often represented by the infinity symbol.

which describes the autism spectrum as a result of healthy and valuable variations in the <a href="https://human.brain.com/human.brain">human.brain</a> rather than a disorder to be cured. <a href="[301][322]">[301][322]</a> The autism rights movement advocates including greater acceptance of autistic behaviors, therapies that focus on coping skills rather than <a href="imitating the behaviors">imitating the behaviors</a> of non-autistic people, <a href="[323]">[323]</a> and the recognition of the autistic community as a <a href="minority group.">minority group.</a>. <a href="[323][321]</a> Autism rights or neurodiversity advocates believe that the autism spectrum is genetic and should be accepted as a healthy variation in the <a href="human.genome">human.genome</a>. <a href="[301]">[301]</a> These movements are not without detractors. A common argument against neurodiversity activists is that most have relatively low support needs, or are <a href="minority-self-diagnosed">self-diagnosed</a>, and do not represent the views of autistic people with higher support needs. <a href="[321][324][325]">[321][324][325]</a> The argument has been made that only autistic people with lower support needs should be included under the neurodiversity banner, as autism with high support needs "may rightfully be viewed as a disability". <a href="[321]">[321]</a> The concept of neurodiversity is contentious in autism advocacy and research groups and has led to infighting. <a href="[319][303]">[319][303]</a>

### See also

- Outline of autism
- Animal model of autism
- Autism and memory
- Autism in popular culture
- Autistic art
- Controversies in autism

- Global perceptions of autism
- List of autistic fictional characters
- List of films about autism
- Mechanism of autism
- Violence and autism
- Empathy in autistic people

### Notes

- a. Medical diagnosis term. See Classification.
- b. However, this figure may reflect an underestimate of prevalence in low- and middle-income countries.

### References

1. DSM-5-TR.

- 2. Zeidan J, Fombonne E, Scorah J, Ibrahim A, Durkin MS, Saxena S, Yusuf A, Shih A, Elsabbagh M (15 May 2022). "Global prevalence of autism: A systematic review update" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9310578). *Autism Research*. **15** (5): 778–790. doi:10.1002/aur.2696 (https://doi.org/10.1002%2Faur.2696). ISSN 1939-3806 (https://search.worldcat.org/issn/1939-3806). PMC 9310578 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9310578). PMID 35238171 (https://pubmed.ncbi.nlm.nih.gov/35238171).
- 3. "Autism" (https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders). World Health Organization. 30 March 2022. Archived (https://web.archive.org/web/2020041 0103835/https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders) from the original on 10 April 2020. Retrieved 8 May 2022.
- 4. *Diagnostic and Statistical Manual of Mental Disorders* (https://archive.org/details/diagnostics tatis0005unse) (5th ed.). American Psychiatric Association. 2013. p. 31.
- 5. Whiteley P, Carr K, Shattock P (7 October 2019). "Is Autism Inborn And Lifelong For Everyone?" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6789180). Neuropsychiatric Disease and Treatment. 15: 2885–2891. doi:10.2147/NDT.S221901 (https://doi.org/10.2147%2FNDT.S221901). PMC 6789180 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6789180). PMID 31632036 (https://pubmed.ncbi.nlm.nih.gov/31632036).
- Steinhausen HC, Mohr Jensen C, Lauritsen MB (13 January 2016). "A systematic review and meta-analysis of the long-term overall outcome of autism spectrum disorders in adolescence and adulthood". *Acta Psychiatrica Scandinavica*. 133 (6): 445–452. doi:10.1111/acps.12559 (https://doi.org/10.1111%2Facps.12559). ISSN 1600-0447 (https://search.worldcat.org/issn/1600-0447). PMID 26763353 (https://pubmed.ncbi.nlm.nih.gov/26763353).
- 7. Kamp-Becker I (March 2024). "Autism spectrum disorder in ICD-11—a critical reflection of its possible impact on clinical practice and research" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11153155). *Molecular Psychiatry*. **29** (3): 633–638. doi:10.1038/s41380-023-02354-y (https://doi.org/10.1038%2Fs41380-023-02354-y). ISSN 1476-5578 (https://search.worldcat.org/issn/1476-5578). PMC 11153155 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11153155). PMID 38273107 (https://pubmed.ncbi.nlm.nih.gov/38273107). "In DSM-5 as well as in ICD-11, ASD is assigned to the category "neurodevelopmental disorders", characterized by impairments in cognition, communication, behavior and/or motor skills resulting from abnormal brain development."
- 8. (World Health Organization: International Classification of Diseases version 11 (ICD-11)): https://icd.who.int/browse/2024-01/mms/en#437815624
- 9. "IACC Subcommittee Diagnostic Criteria DSM-5 Planning Group" (https://iacc.hhs.gov/about-iacc/subcommittees/resources/dsm5-diagnostic-criteria.shtml). iacc.hhs.gov. Retrieved 1 August 2024.
- Guidelines from the UK National Institute for Health & Care Excellence (NICE): https://www.nice.org.uk/guidance/cg170/resources/autism-spectrum-disorder-in-under-19s-support-and-management-pdf-35109745515205
- Fuentes J, Hervás A, Howlin P, ESCAP ASD Working Party (2020). "ESCAP practice guidance for autism: a summary of evidence-based recommendations for diagnosis and treatment" (https://www.autismeurope.org/wp-content/uploads/2020/09/Fuentes2020\_Article\_ESCAPPracticeGuidanceForAutism.pdf) (PDF). European Child & Adolescent Psychiatry.
   30 (6): 961–984. doi:10.1007/s00787-020-01587-4 (https://doi.org/10.1007%2Fs00787-020-01587-4). PMC 8140956 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8140956). PMID 32666205 (https://pubmed.ncbi.nlm.nih.gov/32666205).
- 12. Zhuang H, Liang Z, Ma G, Qureshi A, Ran X, Feng C, Liu X, Yan X, Shen L (2024). "Autism spectrum disorder: Pathogenesis, biomarker, and intervention therapy" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10908366). Medcomm. 5 (3) e497. doi:10.1002/mco2.497 (https://doi.org/10.1002%2Fmco2.497). PMC 10908366 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10908366). PMID 38434761 (https://pubmed.ncbi.nlm.nih.gov/38434761).

- 13. Waizbard-Bartov E, Fein D, Lord C, Amaral DG (2023). "Autism severity and its relationship to disability" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10500663). *Autism Research*. **16** (4): 685–696. doi:10.1002/aur.2898 (https://doi.org/10.1002%2Faur.2898). ISSN 1939-3806 (https://search.worldcat.org/issn/1939-3806). PMC 10500663 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10500663). PMID 36786314 (https://pubmed.ncbi.nlm.nih.gov/36786314).
- 14. Anderson-Chavarria M (14 September 2022). "The autism predicament: models of autism and their impact on autistic identity" (https://www.tandfonline.com/doi/full/10.1080/09687599. 2021.1877117). Disability & Society. 37 (8): 1321–1341. doi:10.1080/09687599.2021.1877117 (https://doi.org/10.1080%2F09687599.2021.1877117). ISSN 0968-7599 (https://search.worldcat.org/issn/0968-7599).
- 15. Ogundele MO, Morton MJ (3 April 2025). "Subthreshold Autism and ADHD: A Brief Narrative Review for Frontline Clinicians" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC12030661). Pediatric Reports. 17 (2): 42. doi:10.3390/pediatric17020042 (https://doi.org/10.3390%2Fpe diatric17020042). ISSN 2036-749X (https://search.worldcat.org/issn/2036-749X). PMC 12030661 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC12030661). PMID 40278522 (https://pubmed.ncbi.nlm.nih.gov/40278522).
- 16. Hirota T, King BH (10 January 2023). "Autism Spectrum Disorder: A Review". *JAMA*. **329** (2): 157–168. doi:10.1001/jama.2022.23661 (https://doi.org/10.1001%2Fjama.2022.23661). ISSN 1538-3598 (https://search.worldcat.org/issn/1538-3598). PMID 36625807 (https://pubmed.ncbi.nlm.nih.gov/36625807).
- 17. DeStefano F, Shimabukuro TT (September 2019). "The MMR Vaccine and Autism" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6768751). *Annual Review of Virology*. **6** (1): 585–600. doi:10.1146/annurev-virology-092818-015515 (https://doi.org/10.1146%2Fannurev-virology-092818-015515). PMC 6768751 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6768751). PMID 30986133 (https://pubmed.ncbi.nlm.nih.gov/30986133).
- 18. "General Medical Council, Fitness to Practise Panel Hearing, 24 May 2010, Andrew Wakefield, Determination of Serious Professional Misconduct" (https://web.archive.org/web/20110809092833/http://www.gmc-uk.org/Wakefield\_SPM\_and\_SANCTION.pdf\_32595267.pdf) (PDF). General Medical Council. Archived from the original (http://www.gmc-uk.org/Wakefield\_SPM\_and\_SANCTION.pdf\_32595267.pdf) (PDF) on 9 August 2011. Retrieved 18 September 2011.
- 19. Tick B, Bolton P, Happé F, Rutter M, Rijsdijk F (2016). "Heritability of autism spectrum disorders: a meta-analysis of twin studies" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4 996332). Journal of Child Psychology and Psychiatry. **57** (5): 585–595. doi:10.1111/jcpp.12499 (https://doi.org/10.1111%2Fjcpp.12499). ISSN 1469-7610 (https://search.worldcat.org/issn/1469-7610). PMC 4996332 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4996332). PMID 26709141 (https://pubmed.ncbi.nlm.nih.gov/26709141).
- 20. Hodges H, Fealko C, Soares N (February 2020). "Autism spectrum disorder: definition, epidemiology, causes, and clinical evaluation" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7082249). Translational Pediatrics. **9** (Suppl 1): S55–S5S65. doi:10.21037/tp.2019.09.09 (https://doi.org/10.21037%2Ftp.2019.09.09). ISSN 2224-4344 (https://search.worldcat.org/issn/2224-4344). PMC 7082249 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7082249). PMID 32206584 (https://pubmed.ncbi.nlm.nih.gov/32206584).
- 21. Ratajczak HV (1 March 2011). "Theoretical aspects of autism: Causes—A review" (https://www.tandfonline.com/doi/full/10.3109/1547691X.2010.545086). Journal of Immunotoxicology. **8** (1): 68–79. doi:10.3109/1547691X.2010.545086 (https://doi.org/10.3109%2F1547691X.2010.545086). ISSN 1547-691X (https://search.worldcat.org/issn/1547-691X). PMID 21299355 (https://pubmed.ncbi.nlm.nih.gov/21299355).

- 22. Mandy W, Lai MC (March 2016). "Annual Research Review: The role of the environment in the developmental psychopathology of autism spectrum condition". <u>Journal of Child Psychology and Psychiatry, and Allied Disciplines.</u> **57** (3): 271–292. doi:10.1111/jcpp.12501 (https://doi.org/10.1111%2Fjcpp.12501). eISSN 1469-7610 (https://search.worldcat.org/issn/1469-7610). ISSN 0021-9630 (https://search.worldcat.org/issn/0021-9630). OCLC 01307942 (https://search.worldcat.org/oclc/01307942). PMID 26782158 (https://pubmed.ncbi.nlm.nih.gov/26782158).
- 23. Loomes R, Hull L, Mandy WP (1 June 2017). "What Is the Male-to-Female Ratio in Autism Spectrum Disorder? A Systematic Review and Meta-Analysis" (https://www.jaacap.org/article/S0890-8567(17)30152-1/abstract). Journal of the American Academy of Child & Adolescent Psychiatry. 56 (6): 466–474. doi:10.1016/j.jaac.2017.03.013 (https://doi.org/10.1016%2Fj.jaac.2017.03.013). ISSN 0890-8567 (https://search.worldcat.org/issn/0890-8567). PMID 28545751 (https://pubmed.ncbi.nlm.nih.gov/28545751).
- 24. Bertelli MO, Azeem MW, Underwood L, Scattoni ML, Persico AM, Ricciardello A, Sappok T, Bergmann T, Keller R (2022), Bertelli MO, Deb S(, Munir K, Hassiotis A (eds.), "Autism Spectrum Disorder" (https://books.google.com/books?id=4mtvEAAAQBAJ&pg=PA391), Textbook of Psychiatry for Intellectual Disability and Autism Spectrum Disorder, Cham: Springer International Publishing, p. 391, doi:10.1007/978-3-319-95720-3\_16 (https://doi.org/10.1007%2F978-3-319-95720-3\_16), ISBN 978-3-319-95720-3, retrieved 8 June 2022, "Persons with autism spectrum disorder and/or other neurodevelopmental problems are more likely than the general population to have transgender identity, non-heterosexual sexual orientation, and other gender non-conformities."
- 25. Lord C, Charman T, Havdahl A, Carbone P, Anagnostou E, Boyd B, Carr T, de Vries PJ, Dissanayake C, Divan G, et al. (2022). "The Lancet Commission on the future of care and clinical research in autism" (https://fhi.brage.unit.no/fhi-xmlui/bitstream/handle/11250/29758 11/Lancet+Commission.pdf?sequence=1) (PDF). The Lancet. 399 (10321): 299–300. doi:10.1016/s0140-6736(21)01541-5 (https://doi.org/10.1016%2Fs0140-6736%2821%2901 541-5). hdl:11250/2975811 (https://hdl.handle.net/11250%2F2975811). PMID 34883054 (htt ps://pubmed.ncbi.nlm.nih.gov/34883054). S2CID 244917920 (https://api.semanticscholar.or g/CorpusID:244917920) via Norwegian Institute of Public Health.
- 26. Graham Holmes L, Ames JL, Massolo ML, Nunez DM, Croen LA (1 April 2022). "Improving the Sexual and Reproductive Health and Health Care of Autistic People". <a href="Pediatrics">Pediatrics</a>. 149
  (Supplement 4). American Academy of Pediatrics: e2020049437J. <a href="doi:10.1542/peds.2020-049437J">doi:10.1542/peds.2020-049437J</a>. ISSN 0031-4005 (https://search. worldcat.org/issn/0031-4005). PMID 35363286 (https://pubmed.ncbi.nlm.nih.gov/35363286). "A substantial proportion of autistic adolescents and adults are LGBTQIA+. Autistic people are more likely to be transgender or gender nonconforming compared with non-autistic people, and findings from a recent autism registry study suggest that among autistic people able to self-report on a survey, up to 18% of men and 43% of women may be sexual minorities."
- 27. "Fake and harmful autism 'treatments' " (https://www.nhs.uk/conditions/autism/autism-and-e veryday-life/fake-and-harmful-treatments/). nhs.uk. 2 May 2019. Archived (https://web.archive.org/web/20221201180111/https://www.nhs.uk/conditions/autism/autism-and-everyday-life/fake-and-harmful-treatments/) from the original on 1 December 2022. Retrieved 29 April 2022.
- 28. CDC (18 July 2024). "Treatment and Intervention for Autism Spectrum Disorder" (https://www.cdc.gov/autism/treatment/index.html). Autism Spectrum Disorder (ASD). Retrieved 28 November 2024.
- 29. Doherty M, McCowan S, Shaw SC (2 April 2023). "Autistic SPACE: a novel framework for meeting the needs of autistic people in healthcare settings" (http://sro.sussex.ac.uk/id/eprint/11854/1/Autistic%20SPACE%20published.pdf) (PDF). British Journal of Hospital Medicine.

  84 (4): 1–9. doi:10.12968/hmed.2023.0006 (https://doi.org/10.12968%2Fhmed.2023.0006). ISSN 1750-8460 (https://search.worldcat.org/issn/1750-8460). PMID 37127416 (https://pubmed.ncbi.nlm.nih.gov/37127416).

- 30. Mukerji C, Mottron L, McPartland JC (2013), "Enhanced Perceptual Functioning" (https://linkspringer.com/referenceworkentry/10.1007/978-1-4419-1698-3\_723), in Volkmar FR (ed.), Encyclopedia of Autism Spectrum Disorders, New York, NY: Springer, pp. 1117–1118, doi:10.1007/978-1-4419-1698-3\_723 (https://doi.org/10.1007%2F978-1-4419-1698-3\_723), ISBN 978-1-4419-1698-3, retrieved 30 April 2025
- 31. Doyle N (14 October 2020). "Neurodiversity at work: a biopsychosocial model and the impact on working adults" (https://academic.oup.com/bmb/article/135/1/108/5913187). British Medical Bulletin. 135 (1): 108–125. doi:10.1093/bmb/ldaa021 (https://doi.org/10.109 3%2Fbmb%2Fldaa021). ISSN 0007-1420 (https://search.worldcat.org/issn/0007-1420). PMC 7732033 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7732033). PMID 32996572 (https://pubmed.ncbi.nlm.nih.gov/32996572).
- 32. "Medication Treatment for Autism" (https://www.nichd.nih.gov/health/topics/autism/conditioninfo/treatments/medication-treatment). National Institute of Child Health and Human Development. 19 April 2021. Archived (https://web.archive.org/web/20230207142659/https://www.nichd.nih.gov/health/topics/autism/conditioninfo/treatments/medication-treatment) from the original on 7 February 2023. Retrieved 21 February 2023.
- 33. Rzepka-Migut B, Paprocka J (2020). "Efficacy and Safety of Melatonin Treatment in Children with Autism Spectrum Disorder and Attention-Deficit/Hyperactivity Disorder—A Review of the Literature" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7226342). Brain Sciences. 10 (4): 219. doi:10.3390/brainsci10040219 (https://doi.org/10.3390%2Fbrainsci10040219). ISSN 2076-3425 (https://search.worldcat.org/issn/2076-3425). PMC 7226342 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7226342). PMID 32272607 (https://pubmed.ncbi.nlm.nih.gov/32272607).
- 34. CDC (15 April 2025). "Living with Autism Spectrum Disorder" (https://www.cdc.gov/autism/living-with/index.html). *Autism Spectrum Disorder (ASD)*. Retrieved 31 July 2025.
- 35. Office of National Autism Coordination (28 September 2023). 2021-2023 INTERAGENCY AUTISM COORDINATING COMMITTEE strategic plan for autism research, services, and policy. Office of National Autism Coordination.
- 36. Kapp, Steven K. Autistic community and the neurodiversity movement: Stories from the frontline. Springer Nature, 2020.
- 37. Happé F, Frith U (2020). "Annual Research Review: Looking back to look forward changes in the concept of autism and implications for future research" (https://discovery.ucl.ac.uk/id/e print/10091945/). *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. **61** (3): 218–232. doi:10.1111/jcpp.13176 (https://doi.org/10.1111%2Fjcpp.13176). ISSN 1469-7610 (https://search.worldcat.org/issn/1469-7610). PMID 31994188 (https://pubmed.ncbi.nlm.nih. gov/31994188).
- 38. "Disorder or difference? Autism researchers face off over field's terminology" (https://www.science.org/content/article/disorder-or-difference-autism-researchers-face-over-field-s-terminology). www.science.org. Retrieved 3 May 2025.
- 39. Rodríguez Mega E (10 May 2023). "'I am not a broken version of normal' autistic people argue for a stronger voice in research" (https://www.nature.com/articles/d41586-023-01549-1). Nature. 617 (7960): 238–241. doi:10.1038/d41586-023-01549-1 (https://doi.org/10.1038/d41586-023-01549-1). PMID 37165246 (https://pubmed.ncbi.nlm.nih.gov/37165246).
- 40. ICD-11.
- 41. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. Diagnostic and Statistical Manual of Mental Disorders. Arlington County: American Psychiatric Association. 18 May 2013. doi:10.1176/APPI.BOOKS.9780890425596 (https://doi.org/10.1176%2FAPPI.BOOKS.9780890425596). ISBN 978-0-89042-554-1. OCLC 830807378 (https://search.worldcat.org/oclc/830807378). OL 27587204M (https://openlibrary.org/books/OL27587204M). Wikidata Q3064664.

- 42. Wing L (December 1997). "The autistic spectrum". *The Lancet.* **350** (9093): 1761–1766. doi:10.1016/S0140-6736(97)09218-0 (https://doi.org/10.1016%2FS0140-6736%2897%2909 218-0). PMID 9413479 (https://pubmed.ncbi.nlm.nih.gov/9413479). S2CID 7165992 (https://api.semanticscholar.org/CorpusID:7165992).
- 43. "Clinical descriptions and diagnostic requirements for ICD-11 mental, behavioural and neurodevelopmental disorders (CDDR)" (https://www.who.int/publications/i/item/9789240077263). www.who.int. Retrieved 23 January 2025.
- 44. Sturmey P, Dalfern S (1 December 2014). "The Effects of DSM5 Autism Diagnostic Criteria on Number of Individuals Diagnosed with Autism Spectrum Disorders: A Systematic Review" (https://link.springer.com/article/10.1007/s40489-014-0016-7). Review Journal of Autism and Developmental Disorders. 1 (4): 249–252. doi:10.1007/s40489-014-0016-7 (https://doi.org/10.1007%2Fs40489-014-0016-7). ISSN 2195-7185 (https://search.worldcat.org/issn/2195-7185).
- 45. Pickett D, Anderson RN (18 July 2018). Status on ICD-11: The WHO Launch (https://ncvhs. hhs.gov/wp-content/uploads/2018/08/ICD-11\_WHO-v\_7-17-2018.pdf) (PDF) (Report). CDC/NCHS. Archived (https://web.archive.org/web/20230315022814/https://ncvhs.hhs.gov/wp-content/uploads/2018/08/ICD-11\_WHO-v\_7-17-2018.pdf) (PDF) from the original on 15 March 2023. Retrieved 22 October 2021.
- 46. "ICD vs. DSM" (https://www.apa.org/monitor/2009/10/icd-dsm). *APA Monitor*. Vol. 40, no. 9. American Psychological Association. 2009. p. 63. Archived (https://web.archive.org/web/202 21229093045/https://www.apa.org/monitor/2009/10/icd-dsm) from the original on 29 December 2022. Retrieved 22 October 2021.
- 47. Mezzich JE (2002). "International surveys on the use of ICD-10 and related diagnostic systems". *Psychopathology*. **35** (2–3): 72–75. doi:10.1159/000065122 (https://doi.org/10.1159%2F000065122). PMID 12145487 (https://pubmed.ncbi.nlm.nih.gov/12145487). S2CID 35857872 (https://api.semanticscholar.org/CorpusID:35857872).
- 48. Goldberg D (January 2010). "The classification of mental disorder: a simpler system for DSM–V and ICD–11" (https://doi.org/10.1192%2Fapt.bp.109.007120). *Advances in Psychiatric Treatment*. **16** (1): 14–19. doi:10.1192/apt.bp.109.007120 (https://doi.org/10.1192%2Fapt.bp.109.007120).
- 49. "Diagnostic Criteria | Autism Spectrum Disorder (ASD) | NCBDDD | CDC" (https://www.cdc.gov/ncbddd/autism/hcp-dsm.html). 2 November 2022. Archived (https://web.archive.org/web/20190816080840/https://www.cdc.gov/ncbddd/autism/hcp-dsm.html) from the original on 16 August 2019. Retrieved 21 February 2021.
- 50. "ICD-11 for Mortality and Morbidity Statistics" (https://icd.who.int/browse11/l-m/en#/http://id.who.int/icd/entity/437815624). Archived (https://archive.today/20180801205234/https://icd.who.int/browse11/l-m/en%23/http://id.who.int/icd/entity/294762853#/http://id.who.int/icd/entity/437815624) from the original on 1 August 2018. Retrieved 6 April 2022.
- 51. Waterhouse L, Mottron L (2 May 2023). "Editorial: Is autism a biological entity?" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10185896). Frontiers in Psychiatry. 14 1180981. doi:10.3389/fpsyt.2023.1180981 (https://doi.org/10.3389%2Ffpsyt.2023.1180981). PMC 10185896 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10185896). PMID 37200904 (https://pubmed.ncbi.nlm.nih.gov/37200904).
- 52. Chawner S (2 September 2022). "Autism: A model of neurodevelopmental diversity informed by genomics" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9479184). Frontiers in Psychiatry. 13 981691. doi:10.3389/fpsyt.2022.981691 (https://doi.org/10.3389%2Ffpsyt.2022.981691). PMC 9479184 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9479184). PMID 36117659 (https://pubmed.ncbi.nlm.nih.gov/36117659).
- 53. "Second edition overview | Assessment and Diagnosis Guideline" (https://www.autismcrc.com.au/best-practice/assessment-and-diagnosis/second-edition). *Autism CRC*. Retrieved 6 May 2025.

- 54. England NH. "NHS England » Making information and the words we use accessible" (http s://www.england.nhs.uk/learning-disabilities/about/get-involved/involving-people/making-info rmation-and-the-words-we-use-accessible/). www.england.nhs.uk. Retrieved 3 May 2025.
- 55. "Autism" (https://web.archive.org/web/20250514145835/https://www.nih.gov/nih-style-guide/autism). *National Institutes of Health (NIH)*. 27 February 2025. Archived from the original (https://www.nih.gov/nih-style-guide/autism) on 14 May 2025. Retrieved 6 May 2025.
- 56. "DSM" (https://web.archive.org/web/20250822111317/https://www.psychiatry.org/psychiatrists/practice/dsm). *Psychiatry.org*. Archived from the original (https://www.psychiatry.org/psychiatrists/practice/dsm) on 22 August 2025. Retrieved 22 August 2025.
- 57. Grzadzinski R, Huerta M, Lord C (15 May 2013). "DSM-5 and autism spectrum disorders (ASDs): an opportunity for identifying ASD subtypes" (https://www.ncbi.nlm.nih.gov/pmc/artic les/PMC3671160). Molecular Autism. 4 (1): 12. doi:10.1186/2040-2392-4-12 (https://doi.org/10.1186%2F2040-2392-4-12). ISSN 2040-2392 (https://search.worldcat.org/issn/2040-2392). PMC 3671160 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3671160). PMID 23675638 (https://pubmed.ncbi.nlm.nih.gov/23675638). "Consequently, the fifth edition of the DSM (DSM-5) replaces the multi-categorical system with a single diagnostic dimension: ASD."
- 58. Lai MC, Lombardo MV, Chakrabarti B, Baron-Cohen S (23 April 2013). "Subgrouping the Autism "Spectrum": Reflections on DSM-5" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC 3635864). PLOS Biology. 11 (4) e1001544. doi:10.1371/journal.pbio.1001544 (https://doi.org/10.1371%2Fjournal.pbio.1001544). ISSN 1545-7885 (https://search.worldcat.org/issn/154 5-7885). PMC 3635864 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3635864). PMID 23630456 (https://pubmed.ncbi.nlm.nih.gov/23630456). "New in DSM-5 is the explicit recognition of the "spectrum" nature of autism, subsuming and replacing the DSM-IV Pervasive Developmental Disorder (PDD) categorical subgroups of "autistic disorder," "Asperger's disorder," "pervasive developmental disorder not otherwise specified," and "childhood disintegrative disorder" into a single umbrella term "Autism Spectrum Disorder" (ASD)."
- 59. <u>DSM-5-TR</u>, "Autism spectrum disorder encompasses disorders previously referred to as early infantile autism, childhood autism, Kanner's autism, <u>high-functioning autism</u>, <u>atypical autism</u>, pervasive developmental disorder not otherwise specified, childhood disintegrative disorder, and Asperger's disorder".
- 60. <u>DSM-5-TR</u>, "It may be helpful to note level of support needed for each of the two core psychopathological domains in Table 2 (e.g., 'requiring very substantial support for deficits in social communication and requiring substantial support for restricted, repetitive behaviors')".
- 61. Kulage KM, Smaldone AM, Cohn EG (August 2014). "How will DSM-5 affect autism diagnosis? A systematic literature review and meta-analysis". *Journal of Autism and Developmental Disorders*. **44** (8): 1918–1932. doi:10.1007/s10803-014-2065-2 (https://doi.org/10.1007%2Fs10803-014-2065-2). PMID 24531932 (https://pubmed.ncbi.nlm.nih.gov/24531932). S2CID 18865395 (https://api.semanticscholar.org/CorpusID:18865395).
- 62. "DSM-5 Diagnostic Criteria" (https://iacc.hhs.gov/about-iacc/subcommittees/resources/dsm5-diagnostic-criteria.shtml#autism-spectrum-disorder). U.S. Department of Health & Human Services Interagency Autism Coordinating Committee. Archived (https://web.archive.org/web/20170211004905/https://iacc.hhs.gov/about-iacc/subcommittees/resources/dsm5-diagnostic-criteria.shtml#autism-spectrum-disorder) from the original on 11 February 2017. Retrieved 17 May 2017.
- 63. "WHO releases new International Classification of Diseases (ICD 11)" (https://www.who.int/news/item/18-06-2018-who-releases-new-international-classification-of-diseases-(icd-11)). World Health Organization (Press Release). Archived (https://web.archive.org/web/2021122 5230744/https://www.who.int/news/item/18-06-2018-who-releases-new-international-classification-of-diseases-(icd-11)) from the original on 25 December 2021. Retrieved 29 October 2021.

- 64. "Autism: Signs and characteristics" (https://www.canada.ca/en/public-health/services/diseas es/autism-spectrum-disorder-asd/signs-characteristics.html). www.canada.ca. 12 February 2025. Archived (https://web.archive.org/web/20250430193025/https://www.canada.ca/en/public-health/services/diseases/autism-spectrum-disorder-asd/signs-characteristics.html) from the original on 30 April 2025. Retrieved 30 April 2025.
- 65. "What is Autism Spectrum Disorder?" (https://web.archive.org/web/20230921231100/https://www.cdc.gov/ncbddd/autism/facts.html). Centers for Disease Control and Prevention. 25 March 2020. Archived from the original (https://www.cdc.gov/ncbddd/autism/facts.html) on 21 September 2023. Retrieved 24 October 2021.
- 66. Autism spectrum disorder in adults: diagnosis and management (https://www.nice.org.uk/guidance/cg142), NICE, 14 June 2021, CG142, archived (https://web.archive.org/web/2023090 2193040/https://www.nice.org.uk/guidance/cg142) from the original on 2 September 2023, retrieved 24 October 2021
- 67. "About autism spectrum disorder (ASD)" (https://www.canada.ca/en/public-health/services/diseases/autism-spectrum-disorder-asd/about-autism-spectrum-disorder-asd.html).

  \*Government of Canada\*. 18 January 2016. \*Archived (https://web.archive.org/web/20230326 225043/https://www.canada.ca/en/public-health/services/diseases/autism-spectrum-disorder-asd/about-autism-spectrum-disorder-asd.html) from the original on 26 March 2023.

  \*Retrieved 4 November 2021.
- 68. "F84. Pervasive developmental disorders" (https://web.archive.org/web/20130421042448/htt p://apps.who.int/classifications/apps/icd/icd10online/?gf80.htm%20f84). *ICD-10: International Statistical Classification of Diseases and Related Health Problems: Tenth Revision*. World Health Organization. 2007. Archived from the original (http://apps.who.int/classifications/apps/icd/icd10online/?gf80.htm+f84) on 21 April 2013. Retrieved 10 October 2009.
- 69. Loukusa S (2021). "Autism Spectrum Disorder". In Cummings L (ed.). *Handbook of Pragmatic Language Disorders*. Cham, Switzerland: Springer. pp. 45–78. <a href="doi:10.1007/978-3-030-74985-9\_3">doi:10.1007/978-3-030-74985-9\_3</a>. (https://doi.org/10.1007%2F978-3-030-74985-9\_3). ISBN 978-3-030-74984-2. OCLC 1269056169 (https://search.worldcat.org/oclc/1269056169). S2CID 239160368 (https://api.semanticscholar.org/CorpusID:239160368).
- 70. Pinel JP (2011). *Biopsychology* (8th ed.). Boston, Massachusetts: Pearson. p. 235. ISBN 978-0-205-03099-6. OCLC 1085798897 (https://search.worldcat.org/oclc/1085798897).
- 71. Hollander E, Hagerman R, Fein D, eds. (2018). "Cognitive Assessment". *Autism Spectrum Disorders*. American Psychiatric Association. doi:10.1176/appi.books.9781615371921 (https://doi.org/10.1176%2Fappi.books.9781615371921). ISBN 978-1-61537-192-1.
- 72. CDC (19 July 2024). "Signs and Symptoms of Autism Spectrum Disorder" (https://web.archive.org/web/20250430193654/https://www.cdc.gov/autism/signs-symptoms/?CDC\_AAref\_Val=https://www.cdc.gov/ncbddd/autism/signs.html). *Autism Spectrum Disorder (ASD)*. Archived from the original (https://www.cdc.gov/autism/signs-symptoms/?CDC\_AAref\_Val=https://www.cdc.gov/ncbddd/autism/signs.html) on 30 April 2025. Retrieved 30 April 2025.
- 73. Henderson D (2023). *Is This Autism? A Guide for Clinicians and Everyone Else*. Sarah Wayland, Jamell White (1st ed.). Oxford: <u>Taylor & Francis</u>. p. 35. <u>ISBN</u> 978-1-032-15022-2.
- 74. El-Salahi S, Khaki Z, Vohora R (27 September 2023). "Experiences of Inclusive School Settings for Children and Young People on the Autism Spectrum in the UK: a Systematic Review" (https://doi.org/10.1007/s2Fs40489-023-00405-2). Review Journal of Autism and Developmental Disorders. doi:10.1007/s40489-023-00405-2 (https://doi.org/10.1007/s2Fs40489-023-00405-2). ISSN 2195-7185 (https://search.worldcat.org/issn/2195-7185).
- 75. Henderson D (2023). *Is This Autism? A Guide for Clinicians and Everyone Else*. Sarah Wayland, Jamell White (1st ed.). Oxford: Taylor & Francis Group. pp. 32–79. <u>ISBN</u> <u>978-1-032-15022-2</u>.

- 76. Hogeveen J, Grafman J (2021). "Alexithymia". *Disorders of Emotion in Neurologic Disease*. Handbook of Clinical Neurology. Vol. 183. <u>Elsevier</u>. pp. 47–62. <u>doi:10.1016/b978-0-12-822290-4.00004-9</u> (https://doi.org/10.1016%2Fb978-0-12-822290-4.00004-9). <u>ISBN 978-0-12-822290-4</u>. <u>PMC 8456171</u> (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8456171). PMID 34389125 (https://pubmed.ncbi.nlm.nih.gov/34389125).
- 77. Long EL, Catmur C, Bird G (9 January 2025). "The theory of mind hypothesis of autism: A critical evaluation of the status quo" (https://kclpure.kcl.ac.uk/portal/en/publications/daee9cf4-96b6-40c3-9e0d-13b10cef5f67). Psychological Review. doi:10.1037/rev0000532 (https://doi.org/10.1037%2Frev0000532). ISSN 1939-1471 (https://search.worldcat.org/issn/1939-1471). PMID 39786849 (https://pubmed.ncbi.nlm.nih.gov/39786849). Retrieved 27 April 2025.
- 78. Milton DE, Heasman B, Sheppard E (2021), "Double Empathy" (https://link.springer.com/rw e/10.1007/978-3-319-91280-6\_102273), Encyclopedia of Autism Spectrum Disorders, Springer, Cham, pp. 1509–1517, doi:10.1007/978-3-319-91280-6\_102273 (https://doi.org/10.1007%2F978-3-319-91280-6\_102273), ISBN 978-3-319-91280-6, retrieved 14 July 2025
- 79. Milton D, Gurbuz E, López B (November 2022). "The 'double empathy problem': Ten years on" (http://journals.sagepub.com/doi/10.1177/13623613221129123). Autism. 26 (8): 1901–1903. doi:10.1177/13623613221129123 (https://doi.org/10.1177%2F13623613221129123). ISSN 1362-3613 (https://search.worldcat.org/issn/1362-3613). PMID 36263746 (https://pub.med.ncbi.nlm.nih.gov/36263746). S2CID 253020669 (https://api.semanticscholar.org/CorpusID:253020669). Archived (https://web.archive.org/web/20230225135833/https://journals.sagepub.com/doi/10.1177/13623613221129123) from the original on 25 February 2023. Retrieved 25 February 2023.
- 80. Murray D (2021), "Monotropism: An Interest-Based Account of Autism" (https://link.springer.c om/referenceworkentry/10.1007/978-3-319-91280-6\_102269), in Volkmar FR (ed.), Encyclopedia of Autism Spectrum Disorders, Cham: Springer International Publishing, pp. 2954–2956, doi:10.1007/978-3-319-91280-6\_102269 (https://doi.org/10.1007%2F978-3-319-91280-6\_102269), ISBN 978-3-319-91280-6, retrieved 7 May 2025
- 81. Henderson D (2023). *Is This Autism? A Guide for Clinicians and Everyone Else*. Sarah Wayland, Jamell White (1st ed.). Oxford: Taylor & Francis Group. p. 60. <u>ISBN</u> <u>978-1-032-15022-2</u>.
- 82. "Autism: Overview" (https://www.asha.org/Practice-Portal/Clinical-Topics/Autism/). American Speech-Language-Hearing Association. Archived (https://web.archive.org/web/2019042313 4030/https://www.asha.org/Practice-Portal/Clinical-Topics/Autism/) from the original on 23 April 2019. Retrieved 17 December 2017.
- 83. "Autism Spectrum Disorder: Communication Problems in Children" (https://www.nidcd.nih.gov/health/autism-spectrum-disorder-communication-problems-children). *NIDCD*. 18 August 2015. Archived (https://web.archive.org/web/20171222090623/https://www.nidcd.nih.gov/health/autism-spectrum-disorder-communication-problems-children) from the original on 22 December 2017. Retrieved 17 December 2017.
- 84. Vicker B. "Social communication and language characteristics associated with high-functioning, verbal children and adults with autism spectrum disorder" (https://www.iidc.india\_na.edu/pages/Social-Communication-and-Language-Characteristics-Associated-with-High-Functioning-Verbal-Children-and-Adults-with-ASD). Indiana Resource Center for Autism. Archived (https://web.archive.org/web/20181214181341/https://www.iidc.indiana.edu/pages/Social-Communication-and-Language-Characteristics-Associated-with-High-Functioning-Verbal-Children-and-Adults-with-ASD) from the original on 14 December 2018. Retrieved 17 December 2017.

- 85. Fusaroli R, Lambrechts A, Bang D, Bowler DM, Gaigg SB (March 2017). "Is voice a marker for Autism spectrum disorder? A systematic review and meta-analysis" (https://pure.au.dk/ws/files/101709535/046565.full.pdf) (PDF). Autism Research. 10 (3): 384–407. doi:10.1002/aur.1678 (https://doi.org/10.1002%2Faur.1678). PMID 27501063 (https://pubmed.ncbi.nlm.nih.gov/27501063). S2CID 13772771 (https://api.semanticscholar.org/CorpusID:13772771). Archived (https://web.archive.org/web/20210320203509/https://pure.au.dk/ws/files/101709535/046565.full.pdf) (PDF) from the original on 20 March 2021. Retrieved 27 March 2020.
- 86. Watts G, Crompton C, Grainger C, Long J, Botha M, Somerville M, Cage E (3 June 2024). "'A certain magic' autistic adults' experiences of interacting with other autistic people and its relation to Quality of Life: A systematic review and thematic meta-synthesis" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC12332227). *Autism.* **29** (9) 13623613241255811. doi:10.1177/13623613241255811 (https://doi.org/10.1177%2F13623613241255811). hdl:1893/36127 (https://hdl.handle.net/1893%2F36127). ISSN 1362-3613 (https://search.worldcat.org/issn/1362-3613). PMC 12332227 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC 12332227). PMID 38829019 (https://pubmed.ncbi.nlm.nih.gov/38829019).
- 87. Maïano C, Normand CL, Salvas MC, Moullec G, Aimé A (2016). "Prevalence of School Bullying Among Youth with Autism Spectrum Disorders: A Systematic Review and Meta-Analysis". *Autism Research.* **9** (6): 601–615. <a href="doi:10.1002/aur.1568">doi:10.1002/aur.1568</a> (https://doi.org/10.1002% 2Faur.1568). ISSN 1939-3806 (https://search.worldcat.org/issn/1939-3806). PMID 26451871 (https://pubmed.ncbi.nlm.nih.gov/26451871).
- 88. Grace K, Remington A, Lloyd-Evans B, Davies J, Crane L (1 November 2022). "Loneliness in autistic adults: A systematic review" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9597 154). *Autism.* **26** (8): 2117–2135. doi:10.1177/13623613221077721 (https://doi.org/10.117 7%2F13623613221077721). ISSN 1362-3613 (https://search.worldcat.org/issn/1362-3613). PMC 9597154 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9597154). PMID 35257592 (https://pubmed.ncbi.nlm.nih.gov/35257592).
- 89. Yew RY, Samuel P, Hooley M, Mesibov GB, Stokes MA (2021). "A systematic review of romantic relationship initiation and maintenance factors in autism" (https://onlinelibrary.wiley.com/doi/abs/10.1111/pere.12397). Personal Relationships. 28 (4): 777–802. doi:10.1111/pere.12397 (https://doi.org/10.1111%2Fpere.12397). ISSN 1475-6811 (https://search.worldcat.org/issn/1475-6811).
- 90. Cook J, Hull L, Crane L, Mandy W (1 November 2021). "Camouflaging in autism: A systematic review" (https://www.sciencedirect.com/science/article/abs/pii/S02727358210012 39). Clinical Psychology Review. 89 102080. doi:10.1016/j.cpr.2021.102080 (https://doi.org/10.1016%2Fj.cpr.2021.102080). ISSN 0272-7358 (https://search.worldcat.org/issn/0272-7358). PMID 34563942 (https://pubmed.ncbi.nlm.nih.gov/34563942).
- 91. Lord C, Elsabbagh M, Baird G, Veenstra-Vanderweele J (August 2018). "Autism spectrum disorder" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7398158). The Lancet. 392 (10146): 508–520. doi:10.1016/S0140-6736(18)31129-2 (https://doi.org/10.1016%2FS0140-6736%2818%2931129-2). PMC 7398158 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC73 98158). PMID 30078460 (https://pubmed.ncbi.nlm.nih.gov/30078460). S2CID 51922565 (htt ps://api.semanticscholar.org/CorpusID:51922565).
- 92. Henderson D (2023). "Repetitive or idiosyncratic behavior". *Is This Autism? A Guide for Clinicians and Everyone Else*. Sarah Wayland, Jamell White (1st ed.). Oxford: Taylor & Francis Group. pp. 101–115. ISBN 978-1-032-15022-2.
- 93. Henderson D (2023). "Flexibility". *Is This Autism? A Guide for Clinicians and Everyone Else*. Sarah Wayland, Jamell White (1st ed.). Oxford: Taylor & Francis Group. pp. 116–133. ISBN 978-1-032-15022-2.
- 94. Henderson D (2023). "Intense or atypical interests". *Is This Autism? A Guide for Clinicians and Everyone Else*. Sarah Wayland, Jamell White (1st ed.). Oxford: Taylor & Francis Group. pp. 134–149. ISBN 978-1-032-15022-2.

- 95. <u>DSM-5-TR</u>, "Hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement)".
- 96. Lung SL, Picard È, Soulières I, Bertone A (1 September 2024). "Identifying the functions of restricted and repetitive behaviours and interests in Autism: A scoping review". Research in Autism Spectrum Disorders. 117 102458. doi:10.1016/j.rasd.2024.102458 (https://doi.org/10.1016%2Fj.rasd.2024.102458). ISSN 1750-9467 (https://search.worldcat.org/issn/1750-9467).
- 97. Henderson DA, Wayland SC, White J (2023). "Intense or atypical interests". *Is this autism? a guide for clinicians and everyone else*. New York: Routledge, Taylor & Francis Group. pp. 134–149. ISBN 978-1-003-24213-0.
- 98. Henderson DA, Wayland SC, White J (2023). *Is this autism? a guide for clinicians and everyone else*. New York: Routledge. pp. 178–179. ISBN 978-1-003-24213-0.
- 99. Johnson CP, Myers SM (November 2007). "Identification and evaluation of children with autism spectrum disorders". *Pediatrics*. **120** (5): 1183–1215. <a href="doi:10.1542/peds.2007-2361">doi:10.1542/peds.2007-2361</a> (https://doi.org/10.1542%2Fpeds.2007-2361). <a href="PMID">PMID</a> 17967920 (https://pubmed.ncbi.nlm.nih.g ov/17967920).
- 100. Tager-Flusberg H, Caronna E (June 2007). "Language disorders: autism and other pervasive developmental disorders". <u>Pediatric Clinics of North America</u>. **54** (3): 469–81, vi. doi:10.1016/j.pcl.2007.02.011 (https://doi.org/10.1016%2Fj.pcl.2007.02.011). PMID 17543905 (https://pubmed.ncbi.nlm.nih.gov/17543905). S2CID 13615727 (https://api.semanticscholar.org/CorpusID:13615727).
- 101. Byrne K, Sterrett K, Lord C (1 December 2024). "Examining the Transition from Single Words to Phrase Speech in Children with ASD: A Systematic Review" (https://doi.org/10.1007/s10567-024-00507-1). Clinical Child and Family Psychology Review. 27 (4): 1031–1053. doi:10.1007/s10567-024-00507-1 (https://doi.org/10.1007%2Fs10567-024-00507-1). ISSN 1573-2827 (https://search.worldcat.org/issn/1573-2827). PMC 11609125 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11609125). PMID 39550470 (https://pubmed.ncbi.nlm.nih.gov/39550470).
- 102. Blanchard A, Chihuri S, DiGuiseppi CG, Li G (1 October 2021). "Risk of Self-harm in Children and Adults With Autism Spectrum Disorder: A Systematic Review and Meta-analysis" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8527356). JAMA Network Open. 4 (10): e2130272. doi:10.1001/jamanetworkopen.2021.30272 (https://doi.org/10.1001%2Fjamanetworkopen.2021.30272). ISSN 2574-3805 (https://search.worldcat.org/issn/2574-3805). PMC 8527356 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8527356). PMID 34665237 (https://pubmed.ncbi.nlm.nih.gov/34665237).
- 103. Minshawi NF, Hurwitz S, Fodstad JC, Biebl S, Morriss DH, McDougle CJ (April 2014). "The association between self-injurious behaviors and autism spectrum disorders" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3990505). *Psychology Research and Behavior Management*. 7: 125–36. doi:10.2147/PRBM.S44635 (https://doi.org/10.2147%2FPRBM.S44635). PMC 3990505 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3990505). PMID 24748827 (https://pubmed.ncbi.nlm.nih.gov/24748827).
- 104. Oliver C, Richards C (October 2015). "Practitioner Review: Self-injurious behaviour in children with developmental delay" (http://pure-oai.bham.ac.uk/ws/files/26880648/Oliver\_Richards\_2015\_Self\_injurious\_behaviour\_children\_dev.\_delay\_JCPP.pdf) (PDF). *Journal of Child Psychology and Psychiatry* (Review). **56** (10): 1042–54. doi:10.1111/jcpp.12425 (https://doi.org/10.1111%2Fjcpp.12425). PMID 25916173 (https://pubmed.ncbi.nlm.nih.gov/25916173). S2CID 206034400 (https://api.semanticscholar.org/CorpusID:206034400). Archived (https://web.archive.org/web/20230812175509/http://pure-oai.bham.ac.uk/ws/files/26880648/Oliver\_Richards\_2015\_Self\_injurious\_behaviour\_children\_dev.\_delay\_JCPP.pdf) (PDF) from the original on 12 August 2023. Retrieved 25 August 2020.

- 105. Vandewalle K, Melia Y (1 March 2021). "Psychosocial and behavioural factors associated with self injurious behaviour (SIB) in individuals with autism spectrum disorders (ASD)" (https://www.sciencedirect.com/science/article/pii/S1750946720302038). Research in Autism Spectrum Disorders. 81 101713. doi:10.1016/j.rasd.2020.101713 (https://doi.org/10.1016%2 Fj.rasd.2020.101713). ISSN 1750-9467 (https://search.worldcat.org/issn/1750-9467).
- 106. Newell V, Phillips L, Jones C, Townsend E, Richards C, Cassidy S (15 March 2023). "A systematic review and meta-analysis of suicidality in autistic and possibly autistic people without co-occurring intellectual disability" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1 0018918). *Molecular Autism.* 14 (1): 12. doi:10.1186/s13229-023-00544-7 (https://doi.org/1 0.1186%2Fs13229-023-00544-7). ISSN 2040-2392 (https://search.worldcat.org/issn/2040-2 392). PMC 10018918 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10018918). PMID 36922899 (https://pubmed.ncbi.nlm.nih.gov/36922899).
- 107. Trundle G, Jones KA, Ropar D, Egan V (October 2023). "Prevalence of Victimisation in Autistic Individuals: A Systematic Review and Meta-Analysis" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10486169). Trauma, Violence & Abuse. 24 (4): 2282–2296. doi:10.1177/15248380221093689 (https://doi.org/10.1177%2F15248380221093689). ISSN 1552-8324 (https://search.worldcat.org/issn/1552-8324). PMC 10486169 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10486169). PMID 35524162 (https://pubmed.ncbi.nlm.nih.gov/35524162).
- 108. Hudson CC, Hall L, Harkness KL (2019). "Prevalence of Depressive Disorders in Individuals with Autism Spectrum Disorder: a Meta-Analysis". *Journal of Abnormal Child Psychology*. 47 (1): 165–175. doi:10.1007/s10802-018-0402-1 (https://doi.org/10.1007%2Fs10802-018-0402-1). PMID 29497980 (https://pubmed.ncbi.nlm.nih.gov/29497980).
- 109. O'Halloran L, Coey P, Wilson C (April 2022). "Suicidality in autistic youth: A systematic review and meta-analysis" (https://doi.org/10.1016%2Fj.cpr.2022.102144). Clinical Psychology Review. 93 102144. doi:10.1016/j.cpr.2022.102144 (https://doi.org/10.1016%2Fj.cpr.2022.102144). ISSN 1873-7811 (https://search.worldcat.org/issn/1873-7811). PMID 35290800 (https://pubmed.ncbi.nlm.nih.gov/35290800).
- 110. Huntjens A, Landlust A, Wissenburg S, van der Gaag M (March 2024). "The Prevalence of Suicidal Behavior in Autism Spectrum Disorder" (https://pure.rug.nl/ws/files/877687272/retrie ve\_1\_.pdf) (PDF). *Crisis*. **45** (2): 144–153. doi:10.1027/0227-5910/a000922 (https://doi.org/10.1027%2F0227-5910%2Fa000922). hdl:1871.1/2e96e0d9-7230-421a-bb77-834a9c4ae2b (https://hdl.handle.net/1871.1%2F2e96e0d9-7230-421a-bb77-834a9c4ae2b b). ISSN 2151-2396 (https://search.worldcat.org/issn/2151-2396). PMID 37668055 (https://pubmed.ncbi.nlm.nih.gov/37668055).
- 111. Santomauro DF, Hedley D, Sahin E, Brugha TS, Naghavi M, Vos T, Whiteford HA, Ferrari AJ, Stokes MA (November 2024). "The global burden of suicide mortality among people on the autism spectrum: A systematic review, meta-analysis, and extension of estimates from the Global Burden of Disease Study 2021" (https://doi.org/10.1016%2Fj.psychres.2024.116 150). Psychiatry Research. 341 116150. doi:10.1016/j.psychres.2024.116150 (https://doi.org/10.1016%2Fj.psychres.2024.116150). ISSN 1872-7123 (https://search.worldcat.org/issn/1872-7123). PMID 39197224 (https://pubmed.ncbi.nlm.nih.gov/39197224).
- 112. White SW, Siegle GJ, Kana R, Rothman EF (1 August 2023). "Pathways to Psychopathology Among Autistic Adults" (https://doi.org/10.1007/s11920-023-01429-5). Current Psychiatry Reports. 25 (8): 315–325. doi:10.1007/s11920-023-01429-5 (https://doi.org/10.1007%2Fs11920-023-01429-5). ISSN 1535-1645 (https://search.worldcat.org/issn/1535-1645). PMC 11078254 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11078254). PMID 37378790 (https://pubmed.ncbi.nlm.nih.gov/37378790).
- 113. Lai MC (2023). "Mental health challenges faced by autistic people" (https://www.nature.com/articles/s41562-023-01718-2). *Nature Human Behaviour*. **7** (10): 1620–1637. doi:10.1038/s41562-023-01718-2 (https://doi.org/10.1038%2Fs41562-023-01718-2). ISSN 2397-3374 (https://search.worldcat.org/issn/2397-3374). PMID 37864080 (https://pubmed.ncbi.nlm.nih.gov/37864080).

- 114. Jahandideh P, Seyedmirzaei H, Rasoulian P, Memari A (3 May 2025). "Low Battery Alarm; A Scoping Review of Autistic Burnout" (https://doi.org/10.1007/s10803-025-06860-6). *Journal of Autism and Developmental Disorders*. doi:10.1007/s10803-025-06860-6 (https://doi.org/10.1007%2Fs10803-025-06860-6). ISSN 1573-3432 (https://search.worldcat.org/issn/1573-3432). PMID 40317352 (https://pubmed.ncbi.nlm.nih.gov/40317352).
- 115. "Autistic fatigue and burnout | Autism Space" (https://www.leicspart.nhs.uk/autism-space/he alth-and-lifestyle/autistic-fatigue-and-burnout/). Leicestershire Partnership NHS Trust. Retrieved 27 July 2025.
- 116. "Understanding autistic meltdowns and shutdowns, Autism Space" (https://www.leicspart.nh s.uk/autism-space/health-and-lifestyle/meltdowns-and-shutdowns/). *Leicestershire* Partnership NHS Trust. Retrieved 22 January 2025.
- 117. Filipek PA, Accardo PJ, Baranek GT, Cook EH, Dawson G, Gordon B, et al. (December 1999). "The screening and diagnosis of autistic spectrum disorders". *Journal of Autism and Developmental Disorders*. **29** (6): 439–484. doi:10.1023/A:1021943802493 (https://doi.org/1 0.1023%2FA%3A1021943802493). PMID 10638459 (https://pubmed.ncbi.nlm.nih.gov/1063 8459). S2CID 145113684 (https://api.semanticscholar.org/CorpusID:145113684). This paper represents a consensus of representatives from nine professional and four parent organizations in the US.
- 118. Geschwind DH (2009). "Advances in autism" (https://www.ncbi.nlm.nih.gov/pmc/articles/PM C3645857). *Annual Review of Medicine*. **60**: 367–380. doi:10.1146/annurev.med.60.053107.121225 (https://doi.org/10.1146%2Fannurev.med.60.0 53107.121225). PMC 3645857 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3645857). PMID 19630577 (https://pubmed.ncbi.nlm.nih.gov/19630577).
- 119. Gargot T, Archambault D, Chetouani M, Cohen D, Johal W, Anzalone SM (10 January 2022). "Automatic Assessment of Motor Impairments in Autism Spectrum Disorders: A Systematic Review" (https://hal.archives-ouvertes.fr/hal-03520967/file/review\_article\_for\_C ognitive\_computations\_with\_proper\_model\_.pdf) (PDF). Cognitive Computation. 14 (2): 624–659. doi:10.1007/s12559-021-09940-8 (https://doi.org/10.1007%2Fs12559-021-09940-8). ISSN 1866-9964 (https://search.worldcat.org/issn/1866-9964). S2CID 248326222 (https://api.semanticscholar.org/CorpusID:248326222). Archived (https://web.archive.org/web/2021215184813/https://hal.archives-ouvertes.fr/hal-03520967/file/review\_article\_for\_Cognitive\_computations\_with\_proper\_model\_.pdf) (PDF) from the original on 15 December 2022. Retrieved 14 July 2022.
- 120. Fournier KA, Hass CJ, Naik SK, Lodha N, Cauraugh JH (October 2010). "Motor coordination in autism spectrum disorders: a synthesis and meta-analysis". *Journal of Autism and Developmental Disorders*. **40** (10): 1227–1240. doi:10.1007/s10803-010-0981-3 (https://doi.org/10.1007%2Fs10803-010-0981-3). PMID 20195737 (https://pubmed.ncbi.nlm.nih.gov/20195737). S2CID 3469612 (https://api.semanticscholar.org/CorpusID:3469612).
- 121. Wang LA, Petrulla V, Zampella CJ, Waller R, Schultz RT (2022). "Gross motor impairment and its relation to social skills in autism spectrum disorder: A systematic review and two meta-analyses" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9894569). Psychological Bulletin. 148 (3–4): 273–300. doi:10.1037/bul0000358 (https://doi.org/10.1037%2Fbul0000358). ISSN 1939-1455 (https://search.worldcat.org/issn/1939-1455). PMC 9894569 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9894569). PMID 35511567 (https://pubmed.ncbi.nlm.nih.gov/35511567).
- 122. Baraskewich J, von Ranson KM, McCrimmon A, McMorris CA (1 August 2021). "Feeding and eating problems in children and adolescents with autism: A scoping review" (https://doi.org/10.1177/1362361321995631). Autism. 25 (6): 1505–1519. doi:10.1177/1362361321995631 (https://doi.org/10.1177%2F1362361321995631). ISSN 1362-3613 (https://search.worldcat.org/issn/1362-3613). PMC 8323334 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8323334). PMID 33653157 (https://pubmed.ncbi.nlm.nih.gov/33653157).

- 123. Murray A, Koronczai B, Király O, Griffiths MD, Mannion A, Leader G, Demetrovics Z (2021). "Autism, Problematic Internet Use and Gaming Disorder: A Systematic Review". *Review Journal of Autism and Developmental Disorders*. **9**. Springer: 120–140. doi:10.1007/s40489-021-00243-0 (https://doi.org/10.1007%2Fs40489-021-00243-0). hdl:10379/16762 (https://hdl.handle.net/10379%2F16762).
- 124. Wilson AC (1 June 2024). "Cognitive Profile in Autism and ADHD: A Meta-Analysis of Performance on the WAIS-IV and WISC-V" (https://doi.org/10.1093/arclin/acad073). Archives of Clinical Neuropsychology. 39 (4): 498–515. doi:10.1093/arclin/acad073 (https://doi.org/10.1093%2Farclin%2Facad073). ISSN 1873-5843 (https://search.worldcat.org/issn/1873-5843). PMC 11110614 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11110614). PMID 37779387 (https://pubmed.ncbi.nlm.nih.gov/37779387).
- 125. Treffert DA (May 2009). "The savant syndrome: an extraordinary condition. A synopsis: past, present, future" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2677584). *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences.* **364** (1522): 1351–1357. doi:10.1098/rstb.2008.0326 (https://doi.org/10.1098%2Frstb.2008.0326). PMC 2677584 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2677584). PMID 19528017 (https://pubmed.ncbi.nlm.nih.gov/19528017).
- 126. Zhang Y, Han VZ (April 2018). "[Neurobiological mechanisms of autistic savant and acquired savant]" [Neurobiological mechanisms of autistic savant and acquired savant]. *Sheng Li Xue Bao* (in Chinese). **70** (2): 201–210. PMID 29691585 (https://pubmed.ncbi.nlm.nih.gov/29691585).
- 127. Plaisted Grant K, Davis G (May 2009). "Perception and apperception in autism: rejecting the inverse assumption" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2677593). Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences. 364 (1522): 1393–1398. doi:10.1098/rstb.2009.0001 (https://doi.org/10.1098%2Frstb.2009.001). PMC 2677593 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2677593). PMID 19528022 (https://pubmed.ncbi.nlm.nih.gov/19528022).
- 128. Volkmar FR, Paul R, Pelphrey KA, Rogers SJ, eds. (2014). <u>Handbook of Autism and Pervasive Developmental Disorders: Volume Two: Assessment, Interventions, and Policy (https://books.google.com/books?id=4yzqAgAAQBAJ&pg=PA301). Vol. 2 (4th ed.). Hoboken, New Jersey: John Wiley & Sons. p. 301. ISBN 978-1-118-28220-5. LCCN 2013034363 (https://lccn.loc.gov/2013034363). OCLC 946133861 (https://search.worldcat.org/oclc/946133861). Retrieved 1 March 2019.</u>
- 129. Papadopoulos C, Lodder A, Constantinou G, Randhawa G (1 April 2019). "Systematic Review of the Relationship Between Autism Stigma and Informal Caregiver Mental Health" (https://doi.org/10.1007/s10803-018-3835-z). Journal of Autism and Developmental Disorders. 49 (4): 1665–1685. doi:10.1007/s10803-018-3835-z (https://doi.org/10.1007%2F s10803-018-3835-z). ISSN 1573-3432 (https://search.worldcat.org/issn/1573-3432). PMC 6450836 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6450836). PMID 30569408 (https://pubmed.ncbi.nlm.nih.gov/30569408).
- 130. Levy SE, Mandell DS, Schultz RT (November 2009). "Autism" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2863325). *The Lancet*. **374** (9701): 1627–1638. doi:10.1016/S0140-6736(09)61376-3 (https://doi.org/10.1016%2FS0140-6736%2809%2961376-3). PMC 2863325 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2863325). PMID 19819542 (https://pubmed.ncbi.nlm.nih.gov/19819542). (Erratum: doi:10.1016/S0140-6736(11)61666-8 (https://doi.org/10.1016%2FS0140-6736%2811%2961666-8), [1] (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(11)61666-8/fulltext))
- 131. Underwood L, McCarthy J, Tsakanikos E (September 2010). "Mental health of adults with autism spectrum disorders and intellectual disability". *Current Opinion in Psychiatry*. **23** (5): 421–6. doi:10.1097/YCO.0b013e32833cfc18 (https://doi.org/10.1097%2FYCO.0b013e32833cfc18). PMID 20613532 (https://pubmed.ncbi.nlm.nih.gov/20613532). S2CID 13735841 (https://api.semanticscholar.org/CorpusID:13735841).

- 132. Helverschou SB, Bakken TL, Martinsen H (2011). "Psychiatric Disorders in People with Autism Spectrum Disorders: Phenomenology and Recognition". In Matson JL, Sturmey P (eds.). *International handbook of autism and pervasive developmental disorders*. New York: Springer. pp. 53–74. ISBN 978-1-4419-8064-9. OCLC 746203105 (https://search.worldcat.org/oclc/746203105).
- 133. White SW (2020). The Oxford Handbook of Autism and Co-Occurring Psychiatric Conditions. Oxford Library of Psychology Series. Brenna Maddox, Carla Mazefsky (1st ed.). Oxford: Oxford University Press, Incorporated. p. 8. ISBN 978-0-19-091076-1.
- 134. Lai MC, Kassee C, Besney R, Bonato S, Hull L, Mandy W, Szatmari P, Ameis SH (1 October 2019). "Prevalence of co-occurring mental health diagnoses in the autism population: a systematic review and meta-analysis" (https://www.thelancet.com/journals/lanpsy/article/PII S2215-0366(19)30289-5/abstract). The Lancet Psychiatry. 6 (10): 819–829. doi:10.1016/S2215-0366(19)30289-5 (https://doi.org/10.1016%2FS2215-0366%2819%2930 289-5). ISSN 2215-0366 (https://search.worldcat.org/issn/2215-0366). PMID 31447415 (https://pubmed.ncbi.nlm.nih.gov/31447415).
- 135. Rommelse NN, Franke B, Geurts HM, Hartman CA, Buitelaar JK (March 2010). "Shared heritability of attention-deficit/hyperactivity disorder and autism spectrum disorder" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2839489). European Child & Adolescent Psychiatry. 19 (3): 281–95. doi:10.1007/s00787-010-0092-x (https://doi.org/10.1007%2Fs00787-010-0092-x). PMC 2839489 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2839489). PMID 20148275 (https://pubmed.ncbi.nlm.nih.gov/20148275).
- 136. Liu X, Sun X, Sun C, Zou M, Chen Y, Huang J, Wu L, Chen WX (2022). "Prevalence of epilepsy in autism spectrum disorders: A systematic review and meta-analysis". *Autism: The International Journal of Research and Practice*. **26** (1): 33–50. doi:10.1177/13623613211045029 (https://doi.org/10.1177%2F13623613211045029). ISSN 1461-7005 (https://search.worldcat.org/issn/1461-7005). PMID 34510916 (https://pubmed.ncbi.nlm.nih.gov/34510916).
- 137. Spence SJ, Schneider MT (June 2009). "The role of epilepsy and epileptiform EEGs in autism spectrum disorders" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2692092). 

  Pediatric Research. 65 (6): 599–606. doi:10.1203/PDR.0b013e31819e7168 (https://doi.org/10.1203%2FPDR.0b013e31819e7168). PMC 2692092 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2692092). PMID 19454962 (https://pubmed.ncbi.nlm.nih.gov/19454962).
- 138. Sala G, Hooley M, Attwood T (2019). "Autism and Intellectual Disability: A Systematic Review of Sexuality and Relationship Education". *Sexuality and Disability*. **37** (3): 353–382. doi:10.1007/s11195-019-09577-4 (https://doi.org/10.1007%2Fs11195-019-09577-4). S2CID 255011485 (https://api.semanticscholar.org/CorpusID:255011485).
- 139. White SW, Oswald D, Ollendick T, Scahill L (April 2009). "Anxiety in children and adolescents with autism spectrum disorders" (https://www.ncbi.nlm.nih.gov/pmc/articles/PM C2692135). Clinical Psychology Review. 29 (3): 216–229. doi:10.1016/j.cpr.2009.01.003 (https://doi.org/10.1016%2Fj.cpr.2009.01.003). PMC 2692135 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2692135). PMID 19223098 (https://pubmed.ncbi.nlm.nih.gov/19223098).
- 140. Ekleberry SC (2008). "Cluster A Schizoid Personality Disorder and Substance Use Disorders" (https://books.google.com/books?id=O5HY1xcfjEcC&pg=PA31). Integrated Treatment for Co-Occurring Disorders: Personality Disorders and Addiction. Routledge. pp. 31–32. ISBN 978-0-7890-3693-3.
- 141. Yasuda Y, Matsumoto J, Miura K, Hasegawa N, Hashimoto R (2023). "Genetics of autism spectrum disorders and future direction" (https://www.nature.com/articles/s10038-022-01076-3). *Journal of Human Genetics*. **68** (3): 193–197. doi:10.1038/s10038-022-01076-3 (https://doi.org/10.1038%2Fs10038-022-01076-3). ISSN 1434-5161 (https://search.worldcat.org/issn/1434-5161). PMID 36038624 (https://pubmed.ncbi.nlm.nih.gov/36038624).

- 142. Israelyan N, Margolis KG (June 2018). "Serotonin as a link between the gut-brain-microbiome axis in autism spectrum disorders" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6368356). Pharmacological Research (Review). 132: 1–6. doi:10.1016/j.phrs.2018.03.020 (https://doi.org/10.1016%2Fj.phrs.2018.03.020). PMC 6368356 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6368356). PMID 29614380 (https://pubmed.ncbi.nlm.nih.gov/29614380).
- 143. Rao M, Gershon MD (September 2016). "The bowel and beyond: the enteric nervous system in neurological disorders" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5005185). Nature Reviews. Gastroenterology & Hepatology (Review). 13 (9): 517–528. doi:10.1038/nrgastro.2016.107 (https://doi.org/10.1038%2Fnrgastro.2016.107). PMC 5005185 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5005185). PMID 27435372 (https://pubmed.ncbi.nlm.nih.gov/27435372). "immune dysregulation, GI inflammation, malfunction of the ANS, genetic and metabolic activity of the microbiome, and dietary metabolites may contribute to brain dysfunction and neuroinflammation depending upon individual genetic vulnerability"
- 144. Richdale AL, Schreck KA (December 2009). "Sleep problems in autism spectrum disorders: prevalence, nature, & possible biopsychosocial aetiologies". <u>Sleep Medicine Reviews</u>. **13** (6): 403–411. doi:10.1016/j.smrv.2009.02.003 (https://doi.org/10.1016%2Fj.smrv.2009.02.003). PMID 19398354 (https://pubmed.ncbi.nlm.nih.gov/19398354).
- 145. Kangarani-Farahani M, Malik MA, Zwicker JG (1 May 2024). "Motor Impairments in Children with Autism Spectrum Disorder: A Systematic Review and Meta-analysis" (https://link.spring er.com/article/10.1007/s10803-023-05948-1). Journal of Autism and Developmental Disorders. 54 (5): 1977–1997. doi:10.1007/s10803-023-05948-1 (https://doi.org/10.1007%2 Fs10803-023-05948-1). ISSN 1573-3432 (https://search.worldcat.org/issn/1573-3432). PMID 36949273 (https://pubmed.ncbi.nlm.nih.gov/36949273).
- 146. Baeza-Velasco C, Vergne J, Poli M, Kalisch L, Calati R (1 August 2025). "Autism in the context of joint hypermobility, hypermobility spectrum disorders, and Ehlers–Danlos syndromes: A systematic review and prevalence meta-analyses" (https://doi.org/10.1177/13 623613251328059). Autism. 29 (8): 1939–1958. doi:10.1177/13623613251328059 (https://doi.org/10.1177%2F13623613251328059). ISSN 1362-3613 (https://search.worldcat.org/issn/1362-3613). PMID 40145613 (https://pubmed.ncbi.nlm.nih.gov/40145613).
- 147. Van Der Miesen AI, Hurley H, De Vries AL (2016). "Gender dysphoria and autism spectrum disorder: A narrative review" (https://doi.org/10.3109%2F09540261.2015.1111199). International Review of Psychiatry. 28 (1): 70–80. doi:10.3109/09540261.2015.1111199 (https://doi.org/10.3109%2F09540261.2015.1111199). PMID 26753812 (https://pubmed.ncbi.nlm.nih.gov/26753812). S2CID 20918937 (https://api.semanticscholar.org/CorpusID:20918937).
- 148. Glidden D, Bouman WP, Jones BA, Arcelus J (January 2016). "Gender Dysphoria and Autism Spectrum Disorder: A Systematic Review of the Literature" (https://dspace.lboro.ac.uk/2134/20811). Sexual Medicine Reviews. 4 (1): 3–14. doi:10.1016/j.sxmr.2015.10.003 (https://doi.org/10.1016%2Fj.sxmr.2015.10.003). PMID 27872002 (https://pubmed.ncbi.nlm.nih.gov/27872002). S2CID 3454600 (https://api.semanticscholar.org/CorpusID:3454600). Retrieved 19 June 2023.
- 149. "How to talk about autism" (https://www.autism.org.uk/what-we-do/help-and-support/how-to-talk-about-autism). *autism.org.uk*. Archived (https://web.archive.org/web/20220307130201/https://www.autism.org.uk/what-we-do/help-and-support/how-to-talk-about-autism) from the original on 7 March 2022. Retrieved 29 April 2022.
- 150. "The psychiatric management of autism in adults (CR228)" (https://www.rcpsych.ac.uk/improving-care/campaigning-for-better-mental-health-policy/college-reports/2020-college-reports/cr228). Royal College of Psychiatrists (UK). Archived (https://web.archive.org/web/2023060 2113739/https://www.rcpsych.ac.uk/improving-care/campaigning-for-better-mental-health-policy/college-reports/2020-college-reports/cr228) from the original on 2 June 2023. Retrieved 29 April 2022.

- 151. Chapman R, Bovell V (2022), Matson JL, Sturmey P (eds.), "Neurodiversity, Advocacy, Anti-Therapy" (https://link.springer.com/chapter/10.1007/978-3-030-88538-0\_67), Handbook of Autism and Pervasive Developmental Disorder: Assessment, Diagnosis, and Treatment, Cham: Springer International Publishing, pp. 1519–1536, doi:10.1007/978-3-030-88538-0\_67 (https://doi.org/10.1007%2F978-3-030-88538-0\_67), ISBN 978-3-030-88538-0, retrieved 29 April 2025
- 152. Leadbitter K, Buckle KL, Ellis C, Dekker M (12 April 2021). "Autistic Self-Advocacy and the Neurodiversity Movement: Implications for Autism Early Intervention Research and Practice" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8075160). Frontiers in Psychology. 12 635690. doi:10.3389/fpsyg.2021.635690 (https://doi.org/10.3389%2Ffpsyg.2021.635690). ISSN 1664-1078 (https://search.worldcat.org/issn/1664-1078). PMC 8075160 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8075160). PMID 33912110 (https://pubmed.ncbi.nlm.nih.gov/33912110).
- 153. Ospina MB, Krebs Seida J, Clark B, Karkhaneh M, Hartling L, Tjosvold L, et al. (2008). "Behavioural and developmental interventions for autism spectrum disorder: a clinical systematic review" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2582449). *PLOS ONE*. **3** (11) e3755. Bibcode:2008PLoSO...3.3755O (https://ui.adsabs.harvard.edu/abs/2008PLoSO...3.3755O). doi:10.1371/journal.pone.0003755 (https://doi.org/10.1371%2Fjournal.pone.0003755). PMC 2582449 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2582449). PMID 19015734 (https://pubmed.ncbi.nlm.nih.gov/19015734).
- 154. Smith T, Iadarola S (2015). "Evidence Base Update for Autism Spectrum Disorder". <u>Journal of Clinical Child and Adolescent Psychology</u>. **44** (6). Taylor & Francis: 897–922. doi:10.1080/15374416.2015.1077448 (https://doi.org/10.1080%2F15374416.2015.107744 8). ISSN 1537-4416 (https://search.worldcat.org/issn/1537-4416). PMID 26430947 (https://pubmed.ncbi.nlm.nih.gov/26430947).
- 155. "10 Facts about Autism Spectrum Disorder (ASD)" (https://acf.gov/ecd/10-facts-about-asd). Office of Early Childhood Development. 4 November 2020.
- 156. Myers SM, Johnson CP (November 2007). "Management of children with autism spectrum disorders". *Pediatrics*. **120** (5): 1162–1182. doi:10.1542/peds.2007-2362 (https://doi.org/10.1542%2Fpeds.2007-2362). PMID 17967921 (https://pubmed.ncbi.nlm.nih.gov/17967921).
- 157. Eldevik S, Hastings RP, Hughes JC, Jahr E, Eikeseth S, Cross S (May 2009). "Meta-analysis of Early Intensive Behavioral Intervention for children with autism". *Journal of Clinical Child and Adolescent Psychology.* **38** (3). Taylor & Francis: 439–450. CiteSeerX 10.1.1.607.9620 (https://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.607.9620). doi:10.1080/15374410902851739 (https://doi.org/10.1080%2F15374410902851739). PMID 19437303 (https://pubmed.ncbi.nlm.nih.gov/19437303). S2CID 205873629 (https://apii.semanticscholar.org/CorpusID:205873629).
- 158. "NIMH » Autism Spectrum Disorder" (https://www.nimh.nih.gov/health/publications/autism-spectrum-disorder). National Institute of Mental Health (US). National Institutes of Health (US). Archived (https://web.archive.org/web/20210423081752/https://www.nimh.nih.gov/health/publications/autism-spectrum-disorder/index.shtml) from the original on 23 April 2021. Retrieved 8 April 2021.
- 159. Ji N, Findling RL (March 2015). "An update on pharmacotherapy for autism spectrum disorder in children and adolescents". *Current Opinion in Psychiatry*. **28** (2): 91–101. doi:10.1097/YCO.00000000000132 (https://doi.org/10.1097%2FYCO.000000000000132). PMID 25602248 (https://pubmed.ncbi.nlm.nih.gov/25602248). S2CID 206141453 (https://api.semanticscholar.org/CorpusID:206141453).

- 160. Sandbank M, Bottema-Beutel K, LaPoint SC, Feldman JI, Barrett DJ, Caldwell N, Dunham K, Crank J, Albarran S, Woynaroski T (14 November 2023). "Autism intervention meta-analysis of early childhood studies (Project AIM): updated systematic review and secondary analysis" (https://www.bmj.com/content/383/bmj-2023-076733). BMJ. 383 e076733. doi:10.1136/bmj-2023-076733 (https://doi.org/10.1136%2Fbmj-2023-076733). ISSN 1756-1833 (https://search.worldcat.org/issn/1756-1833). PMC 10644209 (https://www.ncbi.nlm.nih.gov/37963634).
- 161. Wang X, Zhao J, Huang S, Chen S, Zhou T, Li Q, et al. (May 2021). "Cognitive Behavioral Therapy for Autism Spectrum Disorders: A Systematic Review". *Pediatrics*. **147** (5) e2020049880. American Academy of Pediatrics (AAP). doi:10.1542/peds.2020-049880 (https://doi.org/10.1542%2Fpeds.2020-049880). PMID 33888566 (https://pubmed.ncbi.nlm.nih.gov/33888566). S2CID 233370479 (https://api.semanticscholar.org/CorpusID:233370479).
- 162. Brignell A, Chenausky KV, Song H, Zhu J, Suo C, Morgan AT (November 2018).

  "Communication interventions for autism spectrum disorder in minimally verbal children" (htt ps://www.ncbi.nlm.nih.gov/pmc/articles/PMC6516977). The Cochrane Database of Systematic Reviews. 2018 (11) CD012324. doi:10.1002/14651858.CD012324.pub2 (https://doi.org/10.1002%2F14651858.CD012324.pub2). PMC 6516977 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6516977). PMID 30395694 (https://pubmed.ncbi.nlm.nih.gov/30395694).
- 163. Langh U, Perry A, Eikeseth S, Bolte S (November 2021). "Quality of early intensive behavioral intervention as a predictor of children's outcome". *Behavior Modification*. **45** (6): 911–928. doi:10.1177/0145445520923998 (https://doi.org/10.1177%2F0145445520923998). PMID 32436396 (https://pubmed.ncbi.nlm.nih.gov/32436396).
- 164. Kasari C, Shire S, Shih W, Landa R, Levato L, Smith T (June 2023). "Spoken language outcomes in limited language preschoolers with autism and global developmental delay: RCT of early intervention approaches" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1046 0274). Autism Research. 16 (6): 1236–1246. doi:10.1002/aur.2932 (https://doi.org/10.100 2%2Faur.2932). PMC 10460274 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10460274). PMID 37070270 (https://pubmed.ncbi.nlm.nih.gov/37070270).
- 165. Reichow B, Hume K, Barton EE, Boyd BA (9 May 2018). "Early intensive behavioral intervention (EIBI) for young children with autism spectrum disorders (ASD)" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6494600). The Cochrane Database of Systematic Reviews. 5 (5) CD009260. doi:10.1002/14651858.CD009260.pub3 (https://doi.org/10.1002%2F14651858.CD009260.pub3). ISSN 1469-493X (https://search.worldcat.org/issn/1469-493X). PMC 6494600 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6494600). PMID 29742275 (https://pubmed.ncbi.nlm.nih.gov/29742275).
- 166. Sandbank M, Bottema-Beutel K, LaPoint SC, Feldman JI, Barrett DJ, Caldwell N, Dunham K, Crank J, Albarran S, Woynaroski T (14 November 2023). "Autism intervention meta-analysis of early childhood studies (Project AIM): updated systematic review and secondary analysis" (https://www.bmj.com/content/383/bmj-2023-076733). BMJ. 383 e076733. doi:10.1136/bmj-2023-076733 (https://doi.org/10.1136%2Fbmj-2023-076733). ISSN 1756-1833 (https://search.worldcat.org/issn/1756-1833). PMC 10644209 (https://www.ncbi.nlm.nih.gov/97963634).
- 167. Sandoval-Norton AH, Shkedy G, Shkedy D (1 January 2019). Rushby JA (ed.). "How much compliance is too much compliance: Is long-term ABA therapy abuse?" (https://doi.org/10.1080%2F23311908.2019.1641258). Cogent Psychology. 6 (1) 1641258. doi:10.1080/23311908.2019.1641258 (https://doi.org/10.1080%2F23311908.2019.1641258). ISSN 2331-1908 (https://search.worldcat.org/issn/2331-1908).

- 168. Shkedy G, Shkedy D, Sandoval-Norton AH (June 2021). "Long-term ABA Therapy Is Abusive: A Response to Gorycki, Ruppel, and Zane" (https://doi.org/10.1007%2Fs41252-02 1-00201-1). Advances in Neurodevelopmental Disorders. **5** (2): 126–134. doi:10.1007/s41252-021-00201-1 (https://doi.org/10.1007%2Fs41252-021-00201-1). ISSN 2366-7532 (https://search.worldcat.org/issn/2366-7532).
- 169. Anderson LK (April 2023). "Autistic experiences of applied behavior analysis" (http://journal s.sagepub.com/doi/10.1177/13623613221118216). Autism. 27 (3): 737–750. doi:10.1177/13623613221118216 (https://doi.org/10.1177%2F13623613221118216). ISSN 1362-3613 (https://search.worldcat.org/issn/1362-3613). PMID 35999706 (https://pubmed.ncbi.nlm.nih.gov/35999706). S2CID 251766661 (https://api.semanticscholar.org/CorpusID:251766661). Archived (https://web.archive.org/web/20230909183256/https://journals.sagepub.com/doi/10.1177/13623613221118216) from the original on 9 September 2023. Retrieved 6 March 2024.
- 170. Kirkham P (1 April 2017). "'The line between intervention and abuse' autism and applied behaviour analysis" (https://journals.sagepub.com/doi/10.1177/0952695117702571). History of the Human Sciences. **30** (2): 107–126. doi:10.1177/0952695117702571 (https://doi.org/10.1177%2F0952695117702571). ISSN 0952-6951 (https://search.worldcat.org/issn/0952-6951).
- 171. Bottema-Beutel K, Crowley S, Sandbank M, Woynaroski TG (2021). "Research Review: Conflicts of Interest (COIs) in autism early intervention research a meta-analysis of COI influences on intervention effects" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7606324). *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. **62** (1): 5–15. doi:10.1111/jcpp.13249 (https://doi.org/10.1111%2Fjcpp.13249). ISSN 1469-7610 (https://search.worldcat.org/issn/1469-7610). PMC 7606324 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7606324). PMID 32353179 (https://pubmed.ncbi.nlm.nih.gov/32353179).
- 172. Gorycki KA, Ruppel PR, Zane T (31 December 2020). Navalta CP (ed.). "Is long-term ABA therapy abusive: A response to Sandoval-Norton and Shkedy" (https://www.tandfonline.com/doi/full/10.1080/23311908.2020.1823615). Cogent Psychology. 7 (1) 1823615. doi:10.1080/23311908.2020.1823615 (https://doi.org/10.1080%2F23311908.2020.1823615). hdl:1808/31691 (https://hdl.handle.net/1808%2F31691). ISSN 2331-1908 (https://search.worldcat.org/issn/2331-1908). Archived (https://web.archive.org/web/20230429165526/https://www.tandfonline.com/doi/full/10.1080/23311908.2020.1823615) from the original on 29 April 2023. Retrieved 6 March 2024.
- 173. Harrop C (August 2015). "Evidence-based, parent-mediated interventions for young children with autism spectrum disorder: The case of restricted and repetitive behaviors". *Autism.* 19 (6): 662–72. doi:10.1177/1362361314545685 (https://doi.org/10.1177%2F1362361314545685). PMID 25186943 (https://pubmed.ncbi.nlm.nih.gov/25186943). S2CID 32326472 (https://api.semanticscholar.org/CorpusID:32326472).
- 174. Ducarre LM (10 July 2024). "Redefining the Right to Quality Education for Autistic Children Through a Neurodiverse Perspective" (https://sjdr.se/articles/10.16993/sjdr.1043). Scandinavian Journal of Disability Research. 26 (1): 366–379. doi:10.16993/sjdr.1043 (https://doi.org/10.16993%2Fsjdr.1043). hdl:11250/3154312 (https://hdl.handle.net/11250%2F3154312). ISSN 1745-3011 (https://search.worldcat.org/issn/1745-3011).
- 175. Prosser R, Birchwood J (1 July 2024). "A systematic review identifying factors associated with emotionally based school non-attendance in autistic children and young people" (https://explore.bps.org.uk/content/bpsecp/41/1/31). *Educational and Child Psychology*. **41** (1): 31–54. doi:10.53841/bpsecp.2024.41.1.31 (https://doi.org/10.53841%2Fbpsecp.2024.41.1.31). ISSN 0267-1611 (https://search.worldcat.org/issn/0267-1611).
- 176. Mitchell F (14 December 2023). "Promoting inclusive practice for autistic learners: Universal design for learning" (https://kairaranga.ac.nz/index.php/k/article/view/355). *Kairaranga.* **24** (2): 30–51. doi:10.54322/j7wy5s57 (https://doi.org/10.54322%2Fj7wy5s57). ISSN 1175-9232 (https://search.worldcat.org/issn/1175-9232).

- 177. McVey AJ, Jones DR, Waisman TC, Raymaker DM, Nicolaidis C, Maddox BB (31 August 2023). "Mindshift in autism: a call to professionals in research, clinical, and educational settings" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10500440). Frontiers in Psychiatry. 14 1251058. doi:10.3389/fpsyt.2023.1251058 (https://doi.org/10.3389%2Ffpsyt.2023.1251058). ISSN 1664-0640 (https://search.worldcat.org/issn/1664-0640). PMC 10500440 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10500440). PMID 37720894 (https://pubmed.ncbi.nlm.nih.gov/37720894).
- 178. Clouder L, Karakus M, Cinotti A, Ferreyra MV, Fierros GA, Rojo P (1 October 2020).

  "Neurodiversity in higher education: a narrative synthesis" (https://link.springer.com/article/1 0.1007/s10734-020-00513-6). Higher Education. 80 (4): 757–778. doi:10.1007/s10734-020-00513-6 (https://doi.org/10.1007%2Fs10734-020-00513-6). ISSN 1573-174X (https://search.worldcat.org/issn/1573-174X).
- 179. Whelpley CE, May CP (1 April 2023). "Seeing is Disliking: Evidence of Bias Against Individuals with Autism Spectrum Disorder in Traditional Job Interviews" (https://link.springer.com/article/10.1007/s10803-022-05432-2). Journal of Autism and Developmental Disorders. 53 (4): 1363–1374. doi:10.1007/s10803-022-05432-2 (https://doi.org/10.1007%2Fs10803-022-05432-2). ISSN 1573-3432 (https://search.worldcat.org/issn/1573-3432). PMID 35294714 (https://pubmed.ncbi.nlm.nih.gov/35294714).
- 180. Smith T (2021). Kirby A (ed.). *Neurodiversity at work: drive innovation, performance and productivity with a neurodiverse workforce*. London, United Kingdom New York, NY New Delhi: Kogan Page. ISBN 978-1-3986-0026-3.
- 181. Goldfarb Y, Gal E, Golan O (1 January 2022). "Implications of Employment Changes Caused by COVID-19 on Mental Health and Work-Related Psychological Need Satisfaction of Autistic Employees: A Mixed-Methods Longitudinal Study" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7908957). Journal of Autism and Developmental Disorders. 52 (1): 89–102. doi:10.1007/s10803-021-04902-3 (https://doi.org/10.1007%2Fs10803-021-04902-3). ISSN 1573-3432 (https://search.worldcat.org/issn/1573-3432). PMC 7908957 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7908957). PMID 33635422 (https://pubmed.ncbi.nlm.nih.gov/33635422).
- 182. Tomczak MT, Mpofu E, Hutson N (2 September 2022). "Remote Work Support Needs of Employees with Autism Spectrum Disorder in Poland: Perspectives of Individuals with Autism and Their Coworkers" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9518488). International Journal of Environmental Research and Public Health. 19 (17) 10982. doi:10.3390/ijerph191710982 (https://doi.org/10.3390%2Fijerph191710982). ISSN 1660-4601 (https://search.worldcat.org/issn/1660-4601). PMC 9518488 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9518488). PMID 36078696 (https://pubmed.ncbi.nlm.nih.gov/36078696).
- 183. Dunne M (2024). The Neurodiversity Edge: The Essential Guide to Embracing Autism, ADHD, Dyslexia, and Other Neurological Differences for Any Organization (1st ed.). Newark: John Wiley & Sons. ISBN 978-1-394-19928-0.
- 184. Sanchack KE, Thomas CA (December 2016). "Autism Spectrum Disorder: Primary Care Principles". *American Family Physician*. **94** (12): 972–979. PMID 28075089 (https://pubmed.ncbi.nlm.nih.gov/28075089).
- 185. Iffland M, Livingstone N, Jorgensen M, Hazell P, Gillies D (9 October 2023). Cochrane Developmental, Psychosocial and Learning Problems Group (ed.). "Pharmacological intervention for irritability, aggression, and self-injury in autism spectrum disorder (ASD)" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10561353). *The Cochrane Database of Systematic Reviews.* 2023 (10) CD011769. doi:10.1002/14651858.CD011769.pub2 (https://doi.org/10.1002%2F14651858.CD011769.pub2). PMC 10561353 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10561353). PMID 37811711 (https://pubmed.ncbi.nlm.nih.gov/37811711).

- 186. Siafis S, Çıray O, Wu H, Schneider-Thoma J, Bighelli I, Krause M, Rodolico A, Ceraso A, Deste G, Huhn M, Fraguas D, San José Cáceres A, Mavridis D, Charman T, Murphy DG, Parellada M, Arango C, Leucht S (2022). "Pharmacological and dietary-supplement treatments for autism spectrum disorder: a systematic review and network meta-analysis" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8896153). Molecular Autism. 13 (1) 10. doi:10.1186/s13229-022-00488-4 (https://doi.org/10.1186%2Fs13229-022-00488-4). PMC 8896153 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8896153). PMID 35246237 (https://pubmed.ncbi.nlm.nih.gov/35246237).
- 187. Doyle CA, McDougle CJ (September 2012). "Pharmacologic treatments for the behavioral symptoms associated with autism spectrum disorders across the lifespan" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3513681). Dialogues in Clinical Neuroscience. 14 (3): 263–279. doi:10.31887/DCNS.2012.14.3/cdoyle (https://doi.org/10.31887%2FDCNS.2012.14.3%2Fcdoyle). PMC 3513681 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3513681). PMID 23226952 (https://pubmed.ncbi.nlm.nih.gov/23226952).
- 188. Leskovec TJ, Rowles BM, Findling RL (2008). "Pharmacological treatment options for autism spectrum disorders in children and adolescents". *Harvard Review of Psychiatry*. **16** (2): 97–112. <a href="mailto:doi:10.1080/10673220802075852">doi:10.1080/10673220802075852</a> (https://doi.org/10.1080%2F10673220802075852). <a href="mailto:PMID">PMID</a> 18415882 (https://pubmed.ncbi.nlm.nih.gov/18415882). <a href="mailto:S2CID">S2CID</a> 26112061 (https://api.semanticscholar.org/CorpusID:26112061).
- 189. England NH. "NHS England » Stopping over medication of people with a learning disability and autistic people (STOMP) and supporting treatment and appropriate medication in paediatrics (STAMP)" (https://www.england.nhs.uk/learning-disabilities/improving-health/stomp-stamp/). www.england.nhs.uk. Retrieved 29 April 2025.
- 190. Ameis SH, Kassee C, Corbett-Dick P, Cole L, Dadhwal S, Lai MC, et al. (November 2018). "Systematic review and guide to management of core and psychiatric symptoms in youth with autism". *Acta Psychiatrica Scandinavica*. **138** (5): 379–400. <a href="doi:10.1111/acps.12918">doi:10.1111/acps.12918</a> (https://doi.org/10.1111%2Facps.12918). PMID 29904907 (https://pubmed.ncbi.nlm.nih.gov/29904907). S2CID 49209337 (https://api.semanticscholar.org/CorpusID:49209337).
- 191. Yu Y, Chaulagain A, Pedersen SA, Lydersen S, Leventhal BL, Szatmari P, Aleksic B, Ozaki N, Skokauskas N (12 March 2020). "Pharmacotherapy of restricted/repetitive behavior in autism spectrum disorder: a systematic review and meta-analysis" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7068977). BMC Psychiatry. 20 (1): 121. doi:10.1186/s12888-020-2477-9 (https://doi.org/10.1186%2Fs12888-020-2477-9). ISSN 1471-244X (https://search.worldcat.org/issn/1471-244X). PMC 7068977 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC 7068977). PMID 32164636 (https://pubmed.ncbi.nlm.nih.gov/32164636).
- 192. King BH, Rynkiewicz A, Janas-Kozik M, Tyszkiewicz-Nwafor M (2020). "Medications to Treat Co-Occurring Psychiatric Conditions in Autism Spectrum Disorder". In White SW, Maddox BB, Mazefsky CA (eds.). *The Oxford handbook of autism and co-occurring psychiatric conditions*. Oxford library of psychology. New York, NY: Oxford University Press. pp. 371–387. ISBN 978-0-19-091076-1.
- 193. James S, Stevenson SW, Silove N, Williams K (May 2015). James S (ed.). "Chelation for autism spectrum disorder (ASD)". *The Cochrane Database of Systematic Reviews* (Review) (5) CD010766. doi:10.1002/14651858.CD010766 (https://doi.org/10.1002%2F14651858.CD 010766). PMID 26106752 (https://pubmed.ncbi.nlm.nih.gov/26106752).
- 194. Levy SE, Hyman SL (October 2008). "Complementary and alternative medicine treatments for children with autism spectrum disorders" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC 2597185). Child and Adolescent Psychiatric Clinics of North America (Review). 17 (4): 803–20, ix. doi:10.1016/j.chc.2008.06.004 (https://doi.org/10.1016%2Fj.chc.2008.06.004). PMC 2597185 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2597185). PMID 18775371 (https://pubmed.ncbi.nlm.nih.gov/18775371).

- 195. Brown MJ, Willis T, Omalu B, Leiker R (August 2006). "Deaths resulting from hypocalcemia after administration of edetate disodium: 2003-2005" (https://web.archive.org/web/20090727 080307/http://pediatrics.aappublications.org/cgi/content/full/118/2/e534). Pediatrics. 118 (2): e534 e536. doi:10.1542/peds.2006-0858 (https://doi.org/10.1542%2Fpeds.2006-0858). PMID 16882789 (https://pubmed.ncbi.nlm.nih.gov/16882789). S2CID 28656831 (https://api.semanticscholar.org/CorpusID:28656831). Archived from the original (http://pediatrics.aappublications.org/cgi/content/full/118/2/e534) on 27 July 2009.
- 196. Commissioner Oo (24 March 2020). <u>"FDA warns consumers about the dangerous and potentially life threatening side effects of Miracle Mineral Solution" (https://web.archive.org/web/20190819172207/https://www.fda.gov/news-events/press-announcements/fda-warns-consumers-about-dangerous-and-potentially-life-threatening-side-effects-miracle-mineral). *FDA*. Archived from the original (https://www.fda.gov/news-events/press-announcements/fda-warns-consumers-about-dangerous-and-potentially-life-threatening-side-effects-miracle-mineral) on 19 August 2019. Retrieved 29 April 2025.</u>
- 197. "Treatments that are not recommended for autism" (https://www.nhs.uk/conditions/autism/autism-and-everyday-life/treatments-that-are-not-recommended-for-autism/). nhs.uk. 8 March 2023. Retrieved 25 July 2025.
- 198. Sakulchit T, Ladish C, Goldman RD (June 2017). "Hyperbaric oxygen therapy for children with autism spectrum disorder" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5471082). Canadian Family Physician. **63** (6): 446–448. ISSN 1715-5258 (https://search.worldcat.org/issn/1715-5258). PMC 5471082 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5471082). PMID 28615394 (https://pubmed.ncbi.nlm.nih.gov/28615394).
- 199. Gogou M, Kolios G (June 2018). "Are therapeutic diets an emerging additional choice in autism spectrum disorder management?". *World Journal of Pediatrics* (Review). 14 (3): 215–223. doi:10.1007/s12519-018-0164-4 (https://doi.org/10.1007%2Fs12519-018-0164-4). PMID 29846886 (https://pubmed.ncbi.nlm.nih.gov/29846886). S2CID 44155118 (https://api.semanticscholar.org/CorpusID:44155118). "Current literature knowledge provides evidence that ketogenic and casein/gluten-free diet may have their own place in our reserve for the therapeutic management of specific subsets of children with autism. ... More clinical studies about the effect of gluten/caseinfree diet in these patients are available. However, available data arise from studies with small sample size and are still controversial. In general, despite encouraging data, no definite proof still exists. Under this view, the use of therapeutic diets in children with autism should be restricted to specific subgroups, such as children with autism and epilepsy or specific inborn errors of metabolism (*ketogenic diet*), children with known food intolerance/allergy or even children with food intolerance markers (*gluten- and casein-free diet*). Their implementation should always be guided by health care practitioners."
- 200. Marí-Bauset S, Zazpe I, Mari-Sanchis A, Llopis-González A, Morales-Suárez-Varela M (December 2014). "Evidence of the gluten-free and casein-free diet in autism spectrum disorders: a systematic review". *Journal of Child Neurology*. **29** (12): 1718–1727. doi:10.1177/0883073814531330 (https://doi.org/10.1177%2F0883073814531330). hdl:10171/37087 (https://hdl.handle.net/10171%2F37087). PMID 24789114 (https://pubme\_d.ncbi.nlm.nih.gov/24789114). S2CID 19874518 (https://api.semanticscholar.org/CorpusID:19874518).
- 201. Millward C, Ferriter M, Calver S, Connell-Jones G (April 2008). Ferriter M (ed.). "Gluten- and casein-free diets for autistic spectrum disorder" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4164915). The Cochrane Database of Systematic Reviews (2) CD003498. doi:10.1002/14651858.CD003498.pub3 (https://doi.org/10.1002%2F14651858.CD003498.pub3). PMC 4164915 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4164915). PMID 18425890 (https://pubmed.ncbi.nlm.nih.gov/18425890). "Knivsberg 2002 "monitoring of the compliance with diet was not carried out" ... "several reports of children 'sneaking food' from siblings or classmates""

- 202. Tye C, Runicles AK, Whitehouse AJ, Alvares GA (2019). "Characterizing the Interplay Between Autism Spectrum Disorder and Comorbid Medical Conditions: An Integrative Review" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6354568). Frontiers in Psychiatry (Review). 9 751. doi:10.3389/fpsyt.2018.00751 (https://doi.org/10.3389%2Ffpsyt.2018.00751). PMC 6354568 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6354568). PMID 30733689 (https://pubmed.ncbi.nlm.nih.gov/30733689).
- 203. Benevides TW, Shore SM, Andresen ML, Caplan R, Cook B, Gassner DL, et al. (August 2020). "Interventions to address health outcomes among autistic adults: A systematic review" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7787674). Autism. 24 (6): 1345—1359. doi:10.1177/1362361320913664 (https://doi.org/10.1177%2F1362361320913664). PMC 7787674 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7787674). PMID 32390461 (https://pubmed.ncbi.nlm.nih.gov/32390461).
- 204. Geretsegger M, Fusar-Poli L, Elefant C, Mössler KA, Vitale G, Gold C (May 2022). "Music therapy for autistic people" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9082683). The Cochrane Database of Systematic Reviews. 2022 (5) CD004381. doi:10.1002/14651858.CD004381.pub4 (https://doi.org/10.1002%2F14651858.CD004381.pub4). PMC 9082683 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9082683). PMID 35532041 (https://pubmed.ncbi.nlm.nih.gov/35532041).
- 205. Xiao N, Bagayi V, Yang D, Huang X, Zhong L, Kiselev S, Bolkov MA, Tuzankina IA, Chereshnev VA (2024). "Effectiveness of animal-assisted activities and therapies for autism spectrum disorder: a systematic review and meta-analysis" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11184216). Frontiers in Veterinary Science. 11 1403527. doi:10.3389/fvets.2024.1403527 (https://doi.org/10.3389%2Ffvets.2024.1403527). ISSN 2297-1769 (https://search.worldcat.org/issn/2297-1769). PMC 11184216 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11184216). PMID 38895710 (https://pubmed.ncbi.nlm.nih.gov/38895710).
- 206. Woodbury-Smith MR, Volkmar FR (June 2008). "Asperger syndrome" (https://hal.science/ha l-00478064). *European Child & Adolescent Psychiatry*. **18** (1): 2–11. doi:10.1007/s00787-008-0701-0 (https://doi.org/10.1007%2Fs00787-008-0701-0). PMID 18563474 (https://pubmed.ncbi.nlm.nih.gov/18563474). S2CID 12808995 (https://api.semanticscholar.org/CorpusID: 12808995). Retrieved 21 September 2018.
- 207. Kapp SK, Ne'eman A (2020), Kapp SK (ed.), "Lobbying Autism's Diagnostic Revision in the DSM-5", *Autistic Community and the Neurodiversity Movement: Stories from the Frontline*, Singapore: Springer, pp. 167–194, doi:10.1007/978-981-13-8437-0\_13 (https://doi.org/10.10 07%2F978-981-13-8437-0\_13), ISBN 978-981-13-8437-0
- 208. Karst JS, Van Hecke AV (September 2012). "Parent and family impact of autism spectrum disorders: a review and proposed model for intervention evaluation". *Clinical Child and Family Psychology Review.* **15** (3): 247–77. doi:10.1007/s10567-012-0119-6 (https://doi.org/10.1007%2Fs10567-012-0119-6). PMID 22869324 (https://pubmed.ncbi.nlm.nih.gov/22869324). S2CID 19170894 (https://api.semanticscholar.org/CorpusID:19170894).
- 209. Tidmarsh L, Volkmar FR (September 2003). "Diagnosis and epidemiology of autism spectrum disorders" (https://doi.org/10.1177%2F070674370304800803). Canadian Journal of Psychiatry. 48 (8): 517–525. doi:10.1177/070674370304800803 (https://doi.org/10.1177%2F070674370304800803). PMID 14574827 (https://pubmed.ncbi.nlm.nih.gov/14574827). S2CID 38070709 (https://api.semanticscholar.org/CorpusID:38070709).
- 210. Matson JL, Sturmey P, eds. (2022). *Handbook of autism and pervasive developmental disorder: assessment, diagnosis, and treatment*. Autism and Child Psychopathology Series. Cham: Springer Nature. p. 18. doi:10.1007/978-3-030-88538-0 (https://doi.org/10.1007%2F 978-3-030-88538-0). ISBN 978-3-030-88538-0. OCLC 1341298051 (https://search.worldcat.org/oclc/1341298051). S2CID 251520573 (https://api.semanticscholar.org/CorpusID:251520573). "To date no one genetic feature or environmental cause has proven etiological in explaining most cases autism or has been able to account for rising rates of autism."

- 211. Sauer AK, Stanton JE, Hans S, Grabrucker AM (2021). "Autism Spectrum Disorders: Etiology and Pathology". Written at Brisbane, Australia. In Grabrucker AM (ed.). Autism spectrum disorders. Andreas M. Grabrucker. Brisbane: Exon Publications (published 20 August 2021). pp. 1–16. doi:10.36255/exonpublications.autismspectrumdisorders.2021.etiology (https://doi.org/10.36 255%2Fexonpublications.autismspectrumdisorders.2021.etiology). ISBN 978-0-6450017-8-5. OCLC 1280592589 (https://search.worldcat.org/oclc/1280592589). PMID 34495611 (https://pubmed.ncbi.nlm.nih.gov/34495611). "The cause of ASD is unknown, but several genetic and non-genetic risk factors have been characterized that, alone or in combination, are implicated in the development of ASD."
- 212. Kałużna-Czaplińska J, Żurawicz E, Jóźwik-Pruska J (2018). "Focus on the Social Aspect of Autism" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5889772). Journal of Autism and Developmental Disorders. 48 (5). Springer Nature (published 29 November 2017): 1861–1867. doi:10.1007/s10803-017-3407-7 (https://doi.org/10.1007%2Fs10803-017-3407-7). ISSN 1573-3432 (https://search.worldcat.org/issn/1573-3432). PMC 5889772 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5889772). PMID 29188587 (https://pubmed.ncbi.nlm.nih.gov/29188587). "Despite extensive ASD research lasting more than 60 years, its causes are still unknown."
- 213. Medavarapu S, Marella LL, Sangem A, Kairam R (2019). "Where is the Evidence? A Narrative Literature Review of the Treatment Modalities for Autism Spectrum Disorders" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6424545). Cureus. 11 (1) e3901. Springer Nature (published 16 January 2019). doi:10.7759/cureus.3901 (https://doi.org/10.7759%2Fc ureus.3901). ISSN 2168-8184 (https://search.worldcat.org/issn/2168-8184). PMC 6424545 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6424545). PMID 30911457 (https://pubmed.ncbi.nlm.nih.gov/30911457). "It is important to realize that the etiology of autism is unknown and at present, there is no cure, although there are interventions that may be effective in alleviating some symptoms and improving skills that may help autistic persons lead more productive lives."
- 214. Happé F, Ronald A (December 2008). "The 'fractionable autism triad': a review of evidence from behavioural, genetic, cognitive and neural research". *Neuropsychology Review.* **18** (4): 287–304. doi:10.1007/s11065-008-9076-8 (https://doi.org/10.1007%2Fs11065-008-9076-8). PMID 18956240 (https://pubmed.ncbi.nlm.nih.gov/18956240). S2CID 13928876 (https://api.semanticscholar.org/CorpusID:13928876).
- 215. Happé F, Ronald A, Plomin R (October 2006). "Time to give up on a single explanation for autism". *Nature Neuroscience*. **9** (10): 1218–1220. <a href="doi:10.1038/nn1770">doi:10.1038/nn1770</a> (https://doi.org/10.10 38%2Fnn1770). PMID 17001340 (https://pubmed.ncbi.nlm.nih.gov/17001340).
- 216. Modabbernia A, Velthorst E, Reichenberg A (17 March 2017). "Environmental risk factors for autism: an evidence-based review of systematic reviews and meta-analyses" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5356236). Molecular Autism. 8 (1): 13. doi:10.1186/s13229-017-0121-4 (https://doi.org/10.1186%2Fs13229-017-0121-4). ISSN 2040-2392 (https://search.worldcat.org/issn/2040-2392). PMC 5356236 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5356236). PMID 28331572 (https://pubmed.ncbi.nlm.nih.gov/28331572).
- 217. Tager-Flusberg H (2010). "The origins of social impairments in autism spectrum disorder: studies of infants at risk" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2956843). *Neural Networks*. **23** (8–9): 1072–6. doi:10.1016/j.neunet.2010.07.008 (https://doi.org/10.1016%2Fj.neunet.2010.07.008). PMC 2956843 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2956843). PMID 20800990 (https://pubmed.ncbi.nlm.nih.gov/20800990).

- 218. Altevogt BM, Hanson SL, Leshner AI (June 2008). "Autism and the environment: challenges and opportunities for research" (https://web.archive.org/web/20100115140620/http://pediatrics.aappublications.org/cgi/content/full/121/6/1225). Pediatrics. 121 (6): 1225–1229. doi:10.1542/peds.2007-3000 (https://doi.org/10.1542%2Fpeds.2007-3000). PMID 18519493 (https://pubmed.ncbi.nlm.nih.gov/18519493). S2CID 24595814 (https://api.semanticscholar.org/CorpusID:24595814). Archived from the original (http://pediatrics.aappublications.org/cgi/content/full/121/6/1225) on 15 January 2010.
- 219. Abrahams BS, Geschwind DH (May 2008). "Advances in autism genetics: on the threshold of a new neurobiology" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2756414). Nature Reviews. Genetics. 9 (5): 341–355. doi:10.1038/nrg2346 (https://doi.org/10.1038%2Fnrg2346). PMC 2756414 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2756414). PMID 18414403 (https://pubmed.ncbi.nlm.nih.gov/18414403).
- 220. Buxbaum JD (2009). "Multiple rare variants in the etiology of autism spectrum disorders" (htt ps://www.ncbi.nlm.nih.gov/pmc/articles/PMC3181906). *Dialogues in Clinical Neuroscience*. 11 (1): 35–43. doi:10.31887/DCNS.2009.11.1/jdbuxbaum (https://doi.org/10.31887%2FDCN S.2009.11.1%2Fjdbuxbaum). PMC 3181906 (https://www.ncbi.nlm.nih.gov/pmc/articles/PM C3181906). PMID 19432386 (https://pubmed.ncbi.nlm.nih.gov/19432386).
- 221. Persico AM, Napolioni V (August 2013). "Autism genetics". *Behavioural Brain Research*.

  251: 95–112. doi:10.1016/j.bbr.2013.06.012 (https://doi.org/10.1016%2Fj.bbr.2013.06.012). hdl:11380/1250884 (https://hdl.handle.net/11380%2F1250884). PMID 23769996 (https://pubmed.ncbi.nlm.nih.gov/23769996). S2CID 15721666 (https://api.semanticscholar.org/CorpusID:15721666).
- 222. Goh S, Thiyagarajan L, Dudding-Byth T, Pinese M, Kirk EP (1 January 2025). "A systematic review and pooled analysis of penetrance estimates of copy-number variants associated with neurodevelopment" (https://www.sciencedirect.com/science/article/pii/S1098360024001 618). Genetics in Medicine. 27 (1) 101227. doi:10.1016/j.gim.2024.101227 (https://doi.org/10.1016%2Fj.gim.2024.101227). ISSN 1098-3600 (https://search.worldcat.org/issn/1098-360 0). PMID 39092588 (https://pubmed.ncbi.nlm.nih.gov/39092588).
- 223. Rapin I, Tuchman RF (October 2008). "Autism: definition, neurobiology, screening, diagnosis". *Pediatric Clinics of North America*. **55** (5): 1129–46, viii. doi:10.1016/j.pcl.2008.07.005 (https://doi.org/10.1016%2Fj.pcl.2008.07.005). PMID 18929056 (https://pubmed.ncbi.nlm.nih.gov/18929056).
- 224. Fernandez BA, Scherer SW (2017). "Syndromic autism spectrum disorders: moving from a clinically defined to a molecularly defined approach" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5789213). Dialogues in Clinical Neuroscience. 19 (4): 353–371. doi:10.31887/DCNS.2017.19.4/sscherer (https://doi.org/10.31887%2FDCNS.2017.19.4%2Fsscherer). ISSN 1958-5969 (https://search.worldcat.org/issn/1958-5969). PMC 5789213 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5789213). PMID 29398931 (https://pubmed.ncbi.nlm.nih.gov/29398931).
- 225. Wiśniowiecka-Kowalnik B, Nowakowska BA (1 February 2019). "Genetics and epigenetics of autism spectrum disorder—current evidence in the field" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6373410). *Journal of Applied Genetics*. **60** (1): 37–47. doi:10.1007/s13353-018-00480-w (https://doi.org/10.1007%2Fs13353-018-00480-w). ISSN 2190-3883 (https://search.worldcat.org/issn/2190-3883). PMC 6373410 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6373410). PMID 30627967 (https://pubmed.ncbi.nlm.nih.gov/30627967).
- 226. Woodbury-Smith M, Scherer SW (2018). "Progress in the genetics of autism spectrum disorder" (https://onlinelibrary.wiley.com/doi/abs/10.1111/dmcn.13717). Developmental Medicine & Child Neurology. 60 (5): 445–451. doi:10.1111/dmcn.13717 (https://doi.org/10.1 111%2Fdmcn.13717). ISSN 1469-8749 (https://search.worldcat.org/issn/1469-8749). PMID 29574884 (https://pubmed.ncbi.nlm.nih.gov/29574884).

- 227. Zafeiriou DI, Ververi A, Vargiami E (June 2007). "Childhood autism and associated comorbidities". *Brain & Development*. **29** (5): 257–272. doi:10.1016/j.braindev.2006.09.003 (https://doi.org/10.1016%2Fj.braindev.2006.09.003). PMID 17084999 (https://pubmed.ncbi.nlm.nih.gov/17084999). S2CID 16386209 (https://api.semanticscholar.org/CorpusID:16386209).
- 228. Holder Jr JL, Hamdan FF, Michaud JL (2019). "SYNGAP1-Related Intellectual Disability" (htt ps://www.ncbi.nlm.nih.gov/books/NBK537721/). *Gene Reviews* (Review). PMID 30789692 (https://pubmed.ncbi.nlm.nih.gov/30789692). Archived (https://web.archive.org/web/202104 02192137/https://www.ncbi.nlm.nih.gov/books/NBK537721/) from the original on 2 April 2021. Retrieved 25 July 2020.
- 229. Chen JA, Peñagarikano O, Belgard TG, Swarup V, Geschwind DH (2015). "The emerging picture of autism spectrum disorder: genetics and pathology". <u>Annual Review of Pathology:</u> <u>Mechanisms of Disease</u> (Review). **10**: 111–44. <u>doi:10.1146/annurev-pathol-012414-040405</u> (https://doi.org/10.1146%2Fannurev-pathol-012414-040405). PMID 25621659 (https://pubmed.ncbi.nlm.nih.gov/25621659).
- 230. Baron-Cohen S (10 November 2020). *The pattern seekers: how autism drives human invention*. Basic Books. ISBN 978-1-5416-4713-8. OCLC 1204602315 (https://search.worldc at.org/oclc/1204602315).
- 231. Cook EH, Scherer SW (October 2008). "Copy-number variations associated with neuropsychiatric conditions". *Nature*. **455** (7215): 919–923. Bibcode: 2008Natur.455..919C (https://ui.adsabs.harvard.edu/abs/2008Natur.455..919C). doi:10.1038/nature07458 (https://doi.org/10.1038%2Fnature07458). PMID 18923514 (https://pubmed.ncbi.nlm.nih.gov/18923514). S2CID 4377899 (https://api.semanticscholar.org/CorpusID:4377899).
- 232. Beaudet AL (May 2007). "Autism: highly heritable but not inherited". *Nature Medicine*. **13** (5): 534–536. doi:10.1038/nm0507-534 (https://doi.org/10.1038%2Fnm0507-534). PMID 17479094 (https://pubmed.ncbi.nlm.nih.gov/17479094). S2CID 11673879 (https://api.semanticscholar.org/CorpusID:11673879).
- 233. Geschwind DH (31 October 2008). "Autism: Many Genes, Common Pathways?" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2756410). *Cell.* **135** (3): 391–395. doi:10.1016/j.cell.2008.10.016 (https://doi.org/10.1016%2Fj.cell.2008.10.016). ISSN 0092-8674 (https://search.worldcat.org/issn/0092-8674). PMC 2756410 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2756410). PMID 18984147 (https://pubmed.ncbi.nlm.nih.gov/18984147).
- 234. Spikins P (6 March 2013). "The Stone Age Origins of Autism". In Fitzgerald M (ed.). Recent Advances in Autism Spectrum Disorders. Vol. II.
- 235. Nesse RM (June 2023). "Evolutionary psychiatry: foundations, progress and challenges" (htt ps://www.ncbi.nlm.nih.gov/pmc/articles/PMC10168175). World Psychiatry. 22 (2): 177–202. doi:10.1002/wps.21072 (https://doi.org/10.1002%2Fwps.21072). ISSN 1723-8617 (https://search.worldcat.org/issn/1723-8617). PMC 10168175 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10168175). PMID 37159362 (https://pubmed.ncbi.nlm.nih.gov/37159362).
- 236. Markram K, Markram H (21 December 2010). "The Intense World Theory A Unifying Theory of the Neurobiology of Autism" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3010 743). Frontiers in Human Neuroscience. 4: 224. doi:10.3389/fnhum.2010.00224 (https://doi.org/10.3389%2Ffnhum.2010.00224). ISSN 1662-5161 (https://search.worldcat.org/issn/166 2-5161). PMC 3010743 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3010743). PMID 21191475 (https://pubmed.ncbi.nlm.nih.gov/21191475).
- 237. Fletcher-Watson S, Happé F (2019). *Autism: A New Introduction to Psychological Theory and Current Debate* (2nd ed.). Milton: Taylor & Francis Group. ISBN 978-1-138-10612-3.

- 238. Wang C, Geng H, Liu W, Zhang G (2017). "Prenatal, perinatal, and postnatal factors associated with autism: A meta-analysis" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC54 19910). Medicine. 96 (18) e6696. Lippincott Williams & Wilkins. doi:10.1097/MD.000000000006696 (https://doi.org/10.1097%2FMD.000000000006696). PMC 5419910 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5419910). PMID 28471964 (https://pubmed.ncbi.nlm.nih.gov/28471964).
- 239. Gardener H, Spiegelman D, Buka SL (August 2011). "Perinatal and neonatal risk factors for autism: a comprehensive meta-analysis" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC33 87855). Pediatrics. 128 (2): 344–55. doi:10.1542/peds.2010-1036 (https://doi.org/10.1542% 2Fpeds.2010-1036). PMC 3387855 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC338785 5). PMID 21746727 (https://pubmed.ncbi.nlm.nih.gov/21746727).
- 240. Sandin S, Hultman CM, Kolevzon A, Gross R, MacCabe JH, Reichenberg A (2012). "Advancing Maternal Age Is Associated With Increasing Risk for Autism: A Review and Meta-Analysis". *Journal of the American Academy of Child & Adolescent Psychiatry*. **51** (5). Elsevier: 477–486.e1. doi:10.1016/j.jaac.2012.02.018 (https://doi.org/10.1016%2Fj.jaac.2012.02.018). PMID 22525954 (https://pubmed.ncbi.nlm.nih.gov/22525954).
- 241. de Kluiver H, Buizer-Voskamp JE, Dolan CV, Boomsma DI (2017). "Paternal age and psychiatric disorders: A review" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5412832). 

  American Journal of Medical Genetics. 174 (3). Wiley-Blackwell: 202–213. 
  doi:10.1002/ajmg.b.32508 (https://doi.org/10.1002%2Fajmg.b.32508). PMC 5412832 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5412832). PMID 27770494 (https://pubmed.ncbi.nlm.nih.gov/27770494).
- 242. Vohr BR, Poggi Davis E, Wanke CA, Krebs NF (April 2017). "Neurodevelopment: The Impact of Nutrition and Inflammation During Preconception and Pregnancy in Low-Resource Settings". *Pediatrics* (Review). **139** (Suppl 1): S38 S49. doi:10.1542/peds.2016-2828F (htt ps://doi.org/10.1542%2Fpeds.2016-2828F). PMID 28562247 (https://pubmed.ncbi.nlm.nih.g ov/28562247). S2CID 28637473 (https://api.semanticscholar.org/CorpusID:28637473).
- 243. Lam J, Sutton P, Kalkbrenner A, Windham G, Halladay A, Koustas E, et al. (2016). "A Systematic Review and Meta-Analysis of Multiple Airborne Pollutants and Autism Spectrum Disorder" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5031428). PLOS ONE. 11 (9) e0161851. Bibcode:2016PLoSO..1161851L (https://ui.adsabs.harvard.edu/abs/2016PLoSO..1161851L). doi:10.1371/journal.pone.0161851 (https://doi.org/10.1371%2Fjournal.pone.0 161851). PMC 5031428 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5031428). PMID 27653281 (https://pubmed.ncbi.nlm.nih.gov/27653281).
- 244. Amaral DG (2017). "Examining the Causes of Autism" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5501015). Cerebrum: The Dana Forum on Brain Science. 2017: cer=01=17. ISSN 1524-6205 (https://search.worldcat.org/issn/1524-6205). PMC 5501015 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5501015). PMID 28698772 (https://pubmed.ncbi.nlm.nih.gov/28698772).
- 245. Gyawali S, Patra BN (February 2019). "Trends in concept and nosology of autism spectrum disorder: A review" (https://linkinghub.elsevier.com/retrieve/pii/S1876201818311626). Asian Journal of Psychiatry. 40: 92–99. doi:10.1016/j.ajp.2019.01.021 (https://doi.org/10.1016%2Fj.ajp.2019.01.021). PMID 30776666 (https://pubmed.ncbi.nlm.nih.gov/30776666).
- 246. *In a Different Key: The Story of Autism*, John Joseph Donvan, Caren Brenda Zucker, Penguin Random House, 2016, pages 89-91 (https://books.google.com/books?id=QB6-DQ AAQBAJ&q=%22It+was+confounding.++If+Kanner+now+blamed+parents%2C+that+repres ented+a+significant+about-face+on+his+part.%22&pg=PA90).

- 247. Waltz MM (1 April 2015). "Mothers and Autism: The Evolution of a Discourse of Blame" (https://journalofethics.ama-assn.org/article/mothers-and-autism-evolution-discourse-blame/2015-04). AMA Journal of Ethics. 17 (4): 353–358. doi:10.1001/journalofethics.2015.17.4.mhst1-1504 (https://doi.org/10.1001%2Fjournalofethics.2015.17.4.mhst1-1504). hdl:1871.1/30a6ed23-a4eb-485b-9007-50246fc33e27 (https://hdl.handle.net/1871.1%2F30a6ed23-a4eb-485b-9007-50246fc33e27). ISSN 2376-6980 (https://search.worldcat.org/issn/2376-6980). PMID 25901704 (https://pubmed.ncbi.nlm.nih.gov/25901704).
- 248. Cleary M, West S, Mclean L (1 September 2022). "From 'Refrigerator Mothers' to Empowered Advocates: The Evolution of the Autism Parent". *Issues in Mental Health Nursing.* **44** (1): 64–70. doi:10.1080/01612840.2022.2115594 (https://doi.org/10.1080%2F0 1612840.2022.2115594). ISSN 1096-4673 (https://search.worldcat.org/issn/1096-4673). PMID 36049183 (https://pubmed.ncbi.nlm.nih.gov/36049183).
- 249. Gerber JS, Offit PA (February 2009). "Vaccines and autism: a tale of shifting hypotheses" (ht tps://www.ncbi.nlm.nih.gov/pmc/articles/PMC2908388). Clinical Infectious Diseases. 48 (4): 456–461. doi:10.1086/596476 (https://doi.org/10.1086%2F596476). PMC 2908388 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2908388). PMID 19128068 (https://pubmed.ncbi.nlm.nih.gov/19128068).
- 250. Deer B (8 February 2009). "MMR doctor Andrew Wakefield fixed data on autism" (https://www.thetimes.co.uk/article/mmr-doctor-andrew-wakefield-fixed-data-on-autism-mgj82qsk50g). The Sunday Times. Archived (https://web.archive.org/web/20170320003216/http://www.thesundaytimes.co.uk/sto/public/news/article148992.ece) from the original on 20 March 2017. Retrieved 19 January 2019.
- 251. Boseley S (2 February 2010). "Lancet retracts 'utterly false' MMR paper" (https://www.theguardian.com/society/2010/feb/02/lancet-retracts-mmr-paper). *The Guardian*. Archived (https://web.archive.org/web/20210117232206/https://www.theguardian.com/society/2010/feb/02/lancet-retracts-mmr-paper) from the original on 17 January 2021. Retrieved 19 January 2019.
- 252. Stratton K, Ford A, Rusch E, Clayton EW, eds. (August 2011). "Influenza Vaccine" (https://n ap.nationalacademies.org/read/13164/chapter/8). Adverse Effects of Vaccines: Evidence and Causality (https://www.nap.edu/read/13164/). Committee to Review Adverse Effects of Vaccines, Board on Population Health and Public Health Practice. Washington, D.C.: Institute of Medicine/National Academies Press. doi:10.17226/13164 (https://doi.org/10.17226%2F13164). ISBN 978-0-309-21435-3. PMID 24624471 (https://pubmed.ncbi.nlm.nih.gov/24624471). Archived (https://web.archive.org/web/20210827234139/https://www.nap.edu/read/13164/chapter/1) from the original on 27 August 2021. Retrieved 19 January 2019.
- 253. Flaherty DK (October 2011). "The vaccine-autism connection: a public health crisis caused by unethical medical practices and fraudulent science". *The Annals of Pharmacotherapy*. **45** (10): 1302–1304. doi:10.1345/aph.1Q318 (https://doi.org/10.1345%2Faph.1Q318). PMID 21917556 (https://pubmed.ncbi.nlm.nih.gov/21917556). S2CID 39479569 (https://api.semanticscholar.org/CorpusID:39479569).
- 254. Godlee F, Smith J, Marcovitch H (January 2011). "Wakefield's article linking MMR vaccine and autism was fraudulent". *British Medical Journal.* **342** c7452. doi:10.1136/bmj.c7452 (https://doi.org/10.1136%2Fbmj.c7452). PMID 21209060 (https://pubmed.ncbi.nlm.nih.gov/21209060). S2CID 43640126 (https://api.semanticscholar.org/CorpusID:43640126).
- 255. McKee M (4 March 2004). "Controversial MMR and autism study retracted" (https://web.arch ive.org/web/20070813055100/http://www.newscientist.com/article.ns?id=dn4743). *New Scientist*. Archived from the original (https://www.newscientist.com/article/dn4743-controvers ial-mmr-and-autism-study-retracted/) on 13 August 2007. Retrieved 21 October 2015.
- 256. "General Medical Council, Fitness to Practise Panel Hearing, 24 May 2010, Andrew Wakefield, Determination of Serious Professional Misconduct" (https://web.archive.org/web/20110809092833/http://www.gmc-uk.org/Wakefield\_SPM\_and\_SANCTION.pdf\_32595267.pdf) (PDF). General Medical Council. Archived from the original (http://www.gmc-uk.org/Wakefield\_SPM\_and\_SANCTION.pdf\_32595267.pdf) (PDF) on 9 August 2011. Retrieved 18 September 2011.

- 257. "Understanding Vaccines, Mercury and Thimerosal" (https://web.archive.org/web/20230506 050839/https://www.fda.gov/media/83535/download). Food and Drug Administration. Archived from the original (https://www.fda.gov/media/83535/download) on 6 May 2023. Retrieved 6 July 2023.
- 258. Dona A (2006). "Immunizations and Autism: A Review of the Literature" (https://www.cambridge.org/core/services/aop-cambridge-core/content/view/16B999364BFFD9F0DA3B09F25C 1DE28C/S031716710000528Xa.pdf/immunizations-and-autism-a-review-of-the-literature.pd f) (PDF). Canadian Journal of Neurological Sciences. 33 (4): 341–346. doi:10.1017/S031716710000528X (https://doi.org/10.1017%2FS031716710000528X). PMID 17168158 (https://pubmed.ncbi.nlm.nih.gov/17168158). S2CID 4670282 (https://api.semanticscholar.org/CorpusID:4670282). Archived (https://web.archive.org/web/2023070717 1814/https://www.cambridge.org/core/services/aop-cambridge-core/content/view/16B99936 4BFFD9F0DA3B09F25C1DE28C/S031716710000528Xa.pdf/immunizations-and-autism-a-review-of-the-literature.pdf) (PDF) from the original on 7 July 2023. Retrieved 6 July 2023.
- 259. "Thimerosal questions and answers" (https://web.archive.org/web/20230418195953/https://www.fda.gov/vaccines-blood-biologics/vaccines/thimerosal-vaccines-questions-and-answers). *US FDA*. 18 February 2021. Archived from the original (https://www.fda.gov/vaccines-blood-biologics/vaccines/thimerosal-vaccines-questions-and-answers) on 18 April 2023. Retrieved 6 July 2023.
- 260. Waterhouse L (December 2008). "Autism overflows: increasing prevalence and proliferating theories". *Neuropsychology Review.* **18** (4): 273–286. doi:10.1007/s11065-008-9074-x (https://doi.org/10.1007%2Fs11065-008-9074-x). PMID 19015994 (https://pubmed.ncbi.nlm.nih.gov/19015994). S2CID 8863638 (https://api.semanticscholar.org/CorpusID:8863638).
- 261. "87% of Flu Vaccine Doses have Reduced or "no" (only trace amounts of) Thimerosal" (https://www.cdc.gov/flu/prevent/vaxsupply.htm). Centers for Disease Control and Prevention. 16 September 2022. Archived (https://web.archive.org/web/20230707162416/https://www.cdc.gov/flu/prevent/vaxsupply.htm) from the original on 7 July 2023. Retrieved 6 July 2023.
- 262. "Frequently Asked Questions about Thimerosal" (https://www.cdc.gov/vaccinesafety/concern\_s/thimerosal/faqs.html). Centers for Disease Control and Prevention. Archived (https://web.a\_rchive.org/web/20190507032946/https://www.cdc.gov/vaccinesafety/concerns/thimerosal/faqs.html) from the original on 7 May 2019. Retrieved 21 February 2017.
- 263. Taylor LE, Swerdfeger AL, Eslick GD (June 2014). "Vaccines are not associated with autism: an evidence-based meta-analysis of case-control and cohort studies". *Vaccine*. **32** (29): 3623–3629. doi:10.1016/j.vaccine.2014.04.085 (https://doi.org/10.1016%2Fj.vaccine.2014.04.085). PMID 24814559 (https://pubmed.ncbi.nlm.nih.gov/24814559).

## 264. Vaccines and autism:

- Doja A, Roberts W (November 2006). "Immunizations and autism: a review of the literature" (https://doi.org/10.1017%2Fs031716710000528x). The Canadian Journal of Neurological Sciences. Le Journal Canadien des Sciences Neurologiques. 33 (4): 341–346. doi:10.1017/s031716710000528x (https://doi.org/10.1017%2Fs031716710000528x). PMID 17168158 (https://pubmed.ncbi.nlm.nih.gov/17168158).
- Gerber JS, Offit PA (February 2009). "Vaccines and autism: a tale of shifting hypotheses" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2908388). Clinical Infectious Diseases.
   48 (4): 456–461. doi:10.1086/596476 (https://doi.org/10.1086%2F596476). PMC 2908388 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2908388). PMID 19128068 (https://pubmed.ncbi.nlm.nih.gov/19128068).
- Gross L (May 2009). "A broken trust: lessons from the vaccine--autism wars" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2682483). PLOS Biology. 7 (5) e1000114. doi:10.1371/journal.pbio.1000114 (https://doi.org/10.1371%2Fjournal.pbio.1000114). PMC 2682483 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2682483). PMID 19478850 (https://pubmed.ncbi.nlm.nih.gov/19478850).
- Paul R (June 2009). "Parents ask: Am I risking autism if I vaccinate my children?". Journal of Autism and Developmental Disorders. 39 (6): 962–963. doi:10.1007/s10803-009-0739-y (https://doi.org/10.1007%2Fs10803-009-0739-y). PMID 19363650 (https://pubmed.ncbi.nlm.nih.gov/19363650). S2CID 34467853 (https://api.semanticscholar.org/CorpusID:34467853).
- Poland GA, Jacobson RM (January 2011). "The age-old struggle against the antivaccinationists". New England Journal of Medicine. 364 (2): 97–99. doi:10.1056/NEJMp1010594 (https://doi.org/10.1056%2FNEJMp1010594). PMID 21226573 (https://pubmed.ncbi.nlm.nih.gov/21226573).
- 265. McBrien J, Murphy J, Gill D, Cronin M, O'Donovan C, Cafferkey MT (July 2003). "Measles outbreak in Dublin, 2000". *The Pediatric Infectious Disease Journal.* **22** (7): 580–584. doi:10.1097/00006454-200307000-00002 (https://doi.org/10.1097%2F00006454-200307000-00002). PMID 12867830 (https://pubmed.ncbi.nlm.nih.gov/12867830).
- 266. Swenson A, Neergaard L (22 September 2025). "Trump makes unfounded claims about Tylenol and repeats discredited link between vaccines and autism" (https://apnews.com/article/tylenol-cause-autism-trump-kennedy-0847ee76eedecbd5e9baa6888b567d66).

  Associated Press. Retrieved 27 September 2025.
- 267. Wright-Piersanti T (23 September 2025). "A Fact-Check on Trump's Claims About Tylenol, Vaccines and Autism" (https://www.nytimes.com/2025/09/23/us/trump-tylenol-autism-vaccines-fact-check.html). New York Times. Retrieved 27 September 2025.
- 268. "FDA Responds to Evidence of Possible Association Between Autism and Acetaminophen Use During Pregnancy" (https://www.fda.gov/news-events/press-announcements/fda-responds-evidence-possible-association-between-autism-and-acetaminophen-use-during-pregnancy). FDA. 22 September 2025. Retrieved 23 September 2025.
- 269. "Trump's Rambling Press Conference About Tylenol and Autism: What Happened" (https://n ymag.com/intelligencer/article/trump-rfk-jr-tylenol-acetaminophen-linked-autism-announcem ent-live-updates.html). *New York*. 22 September 2025. Retrieved 27 September 2025.
- 270. McDonald J, Robertson L, Farley R (23 September 2025). "Repeated Falsehoods at Autism Press Conference" (https://www.factcheck.org/2025/09/repeated-falsehoods-at-autism-press -conference/). FactCheck.org. Retrieved 27 September 2025.
- 271. Brown B, Yee C, Sampson P, Clark N, Cormier B. <u>"Trump promotes unproven ties between Tylenol, vaccines and autism without new evidence" (https://apnews.com/live/donald-trump-news-updates-9-22-2025)</u>. *Associated Press*. Retrieved 27 September 2025.
- 272. "WHO statement on autism-related issues" (https://www.who.int/news/item/24-09-2025-who-statement-on-autism-related-issues). www.who.int. Retrieved 25 September 2025.

- 273. "Use of paracetamol during pregnancy unchanged in the EU | European Medicines Agency (EMA)" (https://www.ema.europa.eu/en/news/use-paracetamol-during-pregnancy-unchange d-eu). www.ema.europa.eu. 23 September 2025. Retrieved 23 September 2025.
- 274. "Paracetamol and pregnancy reminder that taking paracetamol during pregnancy remains safe" (https://www.gov.uk/drug-safety-update/paracetamol-and-pregnancy-reminder-that-taking-paracetamol-during-pregnancy-remains-safe). *GOV.UK*. Retrieved 23 September 2025.
- 275. "SOGC Position Statement on the use of Acetaminophen for Analgesia and Fever in Pregnancy" (https://sogc.org/common/Uploaded%20files/Position%20Statements/SOGC%2 OPosition%20Statement%20Acetamenophin EN 20250911.pdf) (PDF).
- 276. Brown B, Yee C, Sampson P, Clark N, Cormier B. <u>"Trump promotes unproven ties between Tylenol, vaccines and autism without new evidence" (https://apnews.com/live/donald-trump-news-updates-9-22-2025)</u>. *AP News*. Retrieved 27 September 2025.
- 277. Ahlqvist VH, Sjöqvist H, Dalman C, Karlsson H, Stephansson O, Johansson S, Magnusson C, Gardner RM, Lee BK (April 2024). "Acetaminophen Use During Pregnancy and Children's Risk of Autism, ADHD, and Intellectual Disability" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11004836). *JAMA*. **331** (14): 1205–1214. doi:10.1001/jama.2024.3172 (https://doi.org/10.1001%2Fjama.2024.3172). PMC 11004836 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11004836). PMID 38592388 (https://pubmed.ncbi.nlm.nih.gov/38592388).
- 279. Okubo Y, Hayakawa I, Sugitate R, Nariai H. "Maternal Acetaminophen Use and Offspring's Neurodevelopmental Outcome: A Nationwide Birth Cohort Study" (https://onlinelibrary.wiley.com/doi/abs/10.1111/ppe.70071). Paediatric and Perinatal Epidemiology. n/a (n/a). doi:10.1111/ppe.70071 (https://doi.org/10.1111%2Fppe.70071). ISSN 1365-3016 (https://search.worldcat.org/issn/1365-3016).
- 280. Bertoglio K, Hendren RL (March 2009). "New developments in autism". <u>Psychiatric Clinics of North America</u>. **32** (1): 1–14. doi:10.1016/j.psc.2008.10.004 (https://doi.org/10.1016%2Fj.psc.2008.10.004). PMID 19248913 (https://pubmed.ncbi.nlm.nih.gov/19248913).
- 281. Graham Holmes L, Ames JL, Massolo ML, Nunez DM, Croen LA (1 April 2022). "Improving the Sexual and Reproductive Health and Health Care of Autistic People" (https://publications.aap.org/pediatrics/article/149/Supplement%204/e2020049437J/185641/Improving-the-Sexual-and-Reproductive-Health-and?autologincheck=redirected). Pediatrics. 149 (Supplement 4): e2020049437J. doi:10.1542/peds.2020-049437J (https://doi.org/10.1542%2Fpeds.2020-049437J). ISSN 0031-4005 (https://search.worldcat.org/issn/0031-4005). PMID 35363286 (https://pubmed.ncbi.nlm.nih.gov/35363286).
- 282. Caldwell-Harris C, Murphy CF, Velazquez T, McNamara P (2011). "Religious Belief Systems of Persons with High Functioning Autism" (https://escholarship.org/uc/item/6zh3j3pr). Proceedings of the Annual Meeting of the Cognitive Science Society. **33** (33).
- 283. Fombonne E (June 2009). "Epidemiology of pervasive developmental disorders" (https://doi.org/10.1203%2FPDR.0b013e31819e7203). *Pediatric Research*. **65** (6): 591–598. doi:10.1203/PDR.0b013e31819e7203 (https://doi.org/10.1203%2FPDR.0b013e31819e7203). PMID 19218885 (https://pubmed.ncbi.nlm.nih.gov/19218885).
- 284. Wing L, Potter D (2002). "The epidemiology of autistic spectrum disorders: is the prevalence rising?". *Developmental Disabilities Research Reviews*. **8** (3): 151–161. doi:10.1002/mrdd.10029 (https://doi.org/10.1002%2Fmrdd.10029). PMID 12216059 (https://pubmed.ncbi.nlm.nih.gov/12216059).

- 285. Gernsbacher MA, Dawson M, Goldsmith HH (April 2005). "Three Reasons Not to Believe in an Autism Epidemic" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4232964). Current Directions in Psychological Science. 14 (2): 55–58. doi:10.1111/j.0963-7214.2005.00334.x (https://doi.org/10.1111%2Fj.0963-7214.2005.00334.x). PMC 4232964 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4232964). PMID 25404790 (https://pubmed.ncbi.nlm.nih.gov/25404790).
- 286. Fletcher-Watson S, Happé F (2019). *Autism: A New Introduction to Psychological Theory and Current Debate* (2nd ed.). Milton: Taylor & Francis Group. p. 42. ISBN 978-1-138-10612-3.
- 287. Rutter M (January 2005). "Incidence of autism spectrum disorders: changes over time and their meaning". *Acta Paediatrica*. **94** (1): 2–15. doi:10.1111/j.1651-2227.2005.tb01779.x (htt ps://doi.org/10.1111%2Fj.1651-2227.2005.tb01779.x). PMID 15858952 (https://pubmed.ncbi.nlm.nih.gov/15858952). S2CID 79259285 (https://api.semanticscholar.org/CorpusID:79259285).
- 288. Chaste P, Leboyer M (September 2012). "Autism risk factors: genes, environment, and gene-environment interactions" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3513682). Dialogues in Clinical Neuroscience. 14 (3): 281–292. doi:10.31887/DCNS.2012.14.3/pchaste (https://doi.org/10.31887%2FDCNS.2012.14.3%2Fpchaste). PMC 3513682 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3513682). PMID 23226953 (https://pubmed.ncbi.nlm.nih.gov/23226953).
- 289. <u>ICD-11</u>, "Females diagnosed with autism spectrum disorder are more frequently diagnosed with co-occurring disorders of intellectual development, suggesting that less severe presentations may go undetected as compared to males".
- 290. Lockwood Estrin G, Milner V, Spain D, Happé F, Colvert E (1 December 2021). "Barriers to Autism Spectrum Disorder Diagnosis for Young Women and Girls: a Systematic Review" (htt ps://doi.org/10.1007/s40489-020-00225-8). Review Journal of Autism and Developmental Disorders. 8 (4): 454–470. doi:10.1007/s40489-020-00225-8 (https://doi.org/10.1007%2Fs40489-020-00225-8). ISSN 2195-7185 (https://search.worldcat.org/issn/2195-7185). PMC 8604819 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8604819). PMID 34868805 (https://pubmed.ncbi.nlm.nih.gov/34868805).
- 291. CDC (18 April 2025). "Data and Statistics on Autism Spectrum Disorder" (https://www.cdc.gov/autism/data-research/index.html). Autism Spectrum Disorder (ASD). Retrieved 25 April 2025.
- 292. Newschaffer CJ, Croen LA, Daniels J, Giarelli E, Grether JK, Levy SE, et al. (2007). "The epidemiology of autism spectrum disorders". *Annual Review of Public Health*. **28**: 235–58. doi:10.1146/annurev.publhealth.28.021406.144007 (https://doi.org/10.1146%2Fannurev.publhealth.28.021406.144007). PMID 17367287 (https://pubmed.ncbi.nlm.nih.gov/17367287).
- 293. Evans B (2013). "How Autism became Autism" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3757918). History of the Human Sciences. **26** (3): 3–31. doi:10.1177/0952695113484320 (https://doi.org/10.1177%2F0952695113484320). ISSN 0952-6951 (https://search.worldcat.org/issn/0952-6951). PMC 3757918 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3757918). PMID 24014081 (https://pubmed.ncbi.nlm.nih.gov/24014081).
- 294. "Autism | Definition, Symptoms, Neuropathology, & Diagnosis | Britannica" (https://www.britannica.com/science/autism). www.britannica.com. 21 June 2025. Retrieved 4 July 2025. "The term autism (from the Greek autos, meaning "self") was coined in 1911 by Swiss psychiatrist Eugen Bleuler, who used it to describe withdrawal into one's inner world, a phenomenon he observed in individuals with schizophrenia."
- 295. Vicedo M (17 January 2024). "Moving beyond the search for the first discoverer of autism" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10827938). Frontiers in Psychiatry. 15 1266486: 02. doi:10.3389/fpsyt.2024.1266486 (https://doi.org/10.3389%2Ffpsyt.2024.1266486). PMC 10827938 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10827938). PMID 38299189 (https://pubmed.ncbi.nlm.nih.gov/38299189).

- 296. Sher DA, Gibson JL (1 March 2023). "Pioneering, prodigious and perspicacious: Grunya Efimovna Sukhareva's life and contribution to conceptualising autism and schizophrenia" (ht tps://doi.org/10.1007/s00787-021-01875-7). European Child & Adolescent Psychiatry. 32 (3): 475–490. doi:10.1007/s00787-021-01875-7 (https://doi.org/10.1007%2Fs00787-021-01875-7). ISSN 1435-165X (https://search.worldcat.org/issn/1435-165X). PMC 10038965 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10038965). PMID 34562153 (https://pubmed.ncbi.nlm.nih.gov/34562153).
- 297. Simmonds C (2019). *G. E. Sukhareva's place in the history of autism research: Context, reception, translation* (http://researcharchive.vuw.ac.nz/handle/10063/8266) (Thesis).
- 298. Hattenstone S, Fischer H (25 September 2021). "Greta Thunberg: 'I really see the value of friendship. Apart from the climate, almost nothing else matters' " (https://web.archive.org/web/20250406060618/https://www.theguardian.com/environment/ng-interactive/2021/sep/25/greta-thunberg-i-really-see-the-value-of-friendship-apart-from-the-climate-almost-nothing-else-matters). The Guardian. Archived from the original (https://www.theguardian.com/environment/ng-interactive/2021/sep/25/greta-thunberg-i-really-see-the-value-of-friendship-apart-from-the-climate-almost-nothing-else-matters) on 6 April 2025. Retrieved 16 June 2024.
- 299. Shapiro J (26 June 2006). "Autism Movement Seeks Acceptance, Not Cures" (https://www.npr.org/templates/story/story.php?storyId=5488463). NPR. Archived (https://web.archive.org/web/20190510154818/https://www.npr.org/templates/story/story.php?storyId=5488463) from the original on 10 May 2019. Retrieved 10 November 2015.
- 300. Trivedi B. "Autistic and proud of it" (https://www.newscientist.com/article/mg18625041-500-a utistic-and-proud-of-it/). *New Scientist*. Reed Elsevier. ISSN 0262-4079 (https://search.world cat.org/issn/0262-4079). Archived (https://web.archive.org/web/20190423120053/https://www.newscientist.com/article/mg18625041-500-autistic-and-proud-of-it/) from the original on 23 April 2019. Retrieved 10 November 2015.
- 301. Solomon A (25 May 2008). "The autism rights movement" (https://nymag.com/news/feature s/47225/). *New York Magazine*. ISSN 0028-7369 (https://search.worldcat.org/issn/0028-7369). Archived (https://web.archive.org/web/20080527025140/http://nymag.com/news/feature s/47225/) from the original on 27 May 2008. Retrieved 27 May 2008.
- 302. The Economic World. New York city: Chronicle Publishing Company. 1917. p. 366.
- 303. Silverman C (2008). "Fieldwork on another planet: social science perspectives on the autism spectrum" (https://doi.org/10.1017%2FS1745855208006236). *BioSocieties.* **3** (3): 325–341. doi:10.1017/S1745855208006236 (https://doi.org/10.1017%2FS1745855208006236). S2CID 145379758 (https://api.semanticscholar.org/CorpusID:145379758).
- 304. "Results and Analysis of the Autistic Not Weird 2022 Autism Survey Autistic Not Weird" (https://autisticnotweird.com/autismsurvey/). 23 March 2022. Archived (https://web.archive.org/web/20230608144053/https://autisticnotweird.com/autismsurvey/) from the original on 8 June 2023. Retrieved 29 April 2022.
- 305. "World Autism Awareness Day, 2 April" (https://www.un.org/en/events/autismday/). United Nations. Archived (https://web.archive.org/web/20180331054119/https://www.un.org/en/events/autismday/) from the original on 31 March 2018. Retrieved 17 November 2015.
- 306. Bascom J (18 June 2015). "Autistic Pride Day 2015: A Message to the Autistic Community" (http://autisticadvocacy.org/2015/06/autistic-pride-day-2015-a-message-to-the-autistic-community/). Archived (https://web.archive.org/web/20151119190817/http://autisticadvocacy.org/2015/06/autistic-pride-day-2015-a-message-to-the-autistic-community/) from the original on 19 November 2015. Retrieved 18 November 2015.
- 307. "Autism Sunday Home" (https://web.archive.org/web/20100303043146/http://www.autisms\_unday.co.uk/). *Autism Sunday*. 2010. Archived from the original (http://www.autismsunday.co.uk/) on 3 March 2010. Retrieved 17 November 2015.
- 308. "About Autreat" (http://www.autreat.com/autreat.html). Autreat.com. 2013. Archived (https://web.archive.org/web/20151201181250/http://www.autreat.com/autreat.html) from the original on 1 December 2015. Retrieved 17 November 2015.

- 309. Silberman S (6 May 2019). "Greta Thunberg became a climate activist not in spite of her autism, but because of it" (https://www.vox.com/first-person/2019/5/6/18531551/greta-thunb erg-autism-aspergers). Vox. Retrieved 16 June 2024.
- 310. Ryan M (12 April 2024). <u>"These 12 Celebrities With Autism Are Opening Up About Life on the Spectrum"</u> (https://www.sheknows.com/health-and-wellness/slideshow/2992980/celebrities-with-autism/). *SheKnows*. Retrieved 16 June 2024.
- 311. Gates B (25 January 2025). "Essay | Exclusive | Bill Gates: I Coded While I Hiked as a Teenager. Was I on the Spectrum? Probably" (https://www.wsj.com/arts-culture/bill-gates-me moir-410d7ff5). WSJ. Retrieved 5 July 2025.
- 312. "Översyn av körkortskrav vid autism och adhd" (https://www.autism.se/aktuellt/oversyn-av-k orkortskrav-vid-autism-och-adhd/). *Autism Sverige* (in Swedish). Retrieved 13 August 2025.
- 313. Rowsell J (6 December 2023). "Police officer rejected from firearms training because of autism diagnosis was discriminated against, tribunal rules" (https://www.peoplemanagemen t.co.uk/article/1850180?utm\_source=website&utm\_medium=social). www.peoplemanagement.co.uk. Retrieved 13 August 2025.
- 314. "Personer med ADHD och autism nekades möjlighet att prövas för militärtjänst" (https://www.do.se/rattsfall-beslut-lagar-stodmaterial/tvister-domar-tillsynsbeslut/ovrigt/personer-med-adhd-och-autism-nekades-mojlighet-att-provas-for-militartjanst). www.do.se (in Swedish). Retrieved 13 August 2025.
- 315. Cleary M, West S, Kornhaber R, Hungerford C (2 September 2023). "Autism, Discrimination and Masking: Disrupting a Recipe for Trauma" (https://doi.org/10.1080%2F01612840.2023.2 239916). Issues in Mental Health Nursing. 44 (9): 799–808. doi:10.1080/01612840.2023.2239916 (https://doi.org/10.1080%2F01612840.2023.223991 6). ISSN 0161-2840 (https://search.worldcat.org/issn/0161-2840). PMID 37616302 (https://pubmed.ncbi.nlm.nih.gov/37616302).
- 316. Pellicano E, den Houting J (April 2022). "Annual Research Review: Shifting from 'normal science' to neurodiversity in autism science" (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC 9298391). Journal of Child Psychology and Psychiatry, and Allied Disciplines. 63 (4): 381–396. doi:10.1111/jcpp.13534 (https://doi.org/10.1111%2Fjcpp.13534). eISSN 1469-7610 (htt ps://search.worldcat.org/issn/1469-7610). ISSN 0021-9630 (https://search.worldcat.org/issn/0021-9630). OCLC 01307942 (https://search.worldcat.org/oclc/01307942). PMC 9298391 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9298391). PMID 34730840 (https://pubmed.ncbi.nlm.nih.gov/34730840). S2CID 241118562 (https://api.semanticscholar.org/CorpusID:241118562).
- 317. Clarke J, van Amerom G (2007). "'Surplus suffering': differences between organizational understandings of Asperger's syndrome and those people who claim the 'disorder' ".

  <u>Disability & Society</u>. **22** (7): 761–76. doi:10.1080/09687590701659618 (https://doi.org/10.1080/09687590701659618). S2CID 145736625 (https://api.semanticscholar.org/CorpusID: 145736625).
- 318. Baron-Cohen S (2002). "Is Asperger syndrome necessarily viewed as a disability?". *Focus Autism Other Dev Disabl.* **17** (3): 186–91. doi:10.1177/10883576020170030801 (https://doi.org/10.1177%2F10883576020170030801). S2CID 145629311 (https://api.semanticscholar.org/CorpusID:145629311). A preliminary, freely readable draft, with slightly different wording in the quoted text, is in: Baron-Cohen S (2002). "Is Asperger's syndrome necessarily a disability?" (https://web.archive.org/web/20081217140628/http://autismresearchcentre.com/docs/papers/2002\_BC\_ASDisability.pdf) (PDF). Cambridge: Autism Research Centre. Archived from the original (http://autismresearchcentre.com/docs/papers/2002\_BC\_ASDisability.pdf) (PDF) on 17 December 2008. Retrieved 2 December 2008.
- 319. Morgan J (1 October 2016). "Autism spectrum disorder: difference or disability?" (https://www.thelancet.com/journals/laneur/article/PIIS1474-4422(16)30002-3/abstract). *The Lancet Neurology.* **15** (11): 1126. doi:10.1016/S1474-4422(16)30002-3 (https://doi.org/10.1016%2FS1474-4422%2816%2930002-3). ISSN 1474-4422 (https://search.worldcat.org/issn/1474-4422). S2CID 54341655 (https://api.semanticscholar.org/CorpusID:54341655).

- 320. "A medical condition or just a difference? The question roils autism community" (https://www.washingtonpost.com/national/health-science/a-medical-condition-or-just-a-difference-the-question-roils-autism-community/2019/05/03/87e26f7e-6845-11e9-8985-4cf30147bdca\_story. html). The Washington Post. ISSN 0190-8286 (https://search.worldcat.org/issn/0190-8286). Retrieved 15 October 2021.
- 321. Jaarsma P, Welin S (1 March 2012). "Autism as a Natural Human Variation: Reflections on the Claims of the Neurodiversity Movement" (http://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-72172). Health Care Analysis. 20 (1): 20–30. doi:10.1007/s10728-011-0169-9 (https://doi.org/10.1007%2Fs10728-011-0169-9). ISSN 1573-3394 (https://search.worldcat.org/issn/1573-3394). PMID 21311979 (https://pubmed.ncbi.nlm.nih.gov/21311979). S2CID 18618887 (https://api.semanticscholar.org/CorpusID:18618887).
- 322. Hill A (31 July 2023). "Autism could be seen as part of personality for some diagnosed, experts say" (https://www.theguardian.com/society/2023/jul/31/autism-could-be-seen-as-part-of-personality-for-some-diagnosed-experts-say). *The Guardian*. Archived (https://web.archive.org/web/20230801022836/https://www.theguardian.com/society/2023/jul/31/autism-could-be-seen-as-part-of-personality-for-some-diagnosed-experts-say) from the original on 1 August 2023. Retrieved 1 August 2023.
- 323. Ratner P (10 July 2016). "Should Autism Be Cured or Is "Curing" Offensive?" (https://bigthin k.com/paul-ratner/should-autism-be-cured-or-is-curing-offfensive). Big Think. Retrieved 16 June 2019.
- 324. McGee M (August 2012). "Neurodiversity" (https://doi.org/10.1177%2F1536504212456175). *Contexts.* **11** (3): 12–13. doi:10.1177/1536504212456175 (https://doi.org/10.1177%2F15365 04212456175). S2CID 220720495 (https://api.semanticscholar.org/CorpusID:220720495).
- 325. Sarrett J (April 2016). "Biocertification and Neurodiversity the Role and Implications of Self-Diagnosis in Autistic Communities" (https://www.doi.org/10.1007/s12152-016-9247-x). Neuroethics. 9: 23–36. doi:10.1007/s12152-016-9247-x (https://doi.org/10.1007%2Fs12152-016-9247-x). Retrieved 6 March 2022.

## Sources

- "Neurodevelopmental Disorders". <u>Diagnostic and Statistical Manual of Mental Disorders</u>, <u>Fifth Edition</u>, <u>Text Revision (DSM-5-TR)</u>. Washington, DC: American Psychiatric Association. 18 March 2022. <u>ISBN 978-0-89042-577-0</u>. <u>LCCN 2021051782</u> (https://lccn.loc.gov/2021051782).
- "6A02 Autism spectrum disorder" (https://archive.today/20180801205234/https://icd.who.int/browse11/l-m/en%23/http://id.who.int/icd/entity/294762853#/http://id.who.int/icd/entity/437815624). International Classification of Diseases 11th Revision (ICD-11). World Health Organization. February 2022 [adopted in 2019]. 6A02 (https://icd.who.int/browse/latest-release/mms/en#437815624). Archived from the original (https://icd.who.int/browse11/l-m/en#/http://id.who.int/icd/entity/437815624) on 1 August 2018. Retrieved 14 May 2022.

## **Further reading**

- Grandin T (2013). *The Autistic Brain: Thinking Across the Spectrum*. Mariner Books. ISBN 9780544227736.
- Silberman S (2015). *NeuroTribes: The Legacy of Autism and the Future of Neurodiversity*. Avery. ISBN 9781583334676.
- Prizant BM, Fields-Meyer T (2015). *Uniquely Human: A Different Way of Seeing Autism*. Simon & Schuster. ISBN 9781476776248.
- Baron-Cohen S (2020). *The Pattern Seekers: How Autism Drives Human Invention*. Basic Books. ISBN 9781541647138.

- Higashida N (2013). *The Reason I Jump: The Inner Voice of a Thirteen-Year-Old Boy with Autism*. Random House. ISBN 9780812985153.
- Grandin T (2006). Thinking in Pictures: My Life with Autism. Vintage. ISBN 9780307275653.
- Robison JE (2007). Look Me in the Eye: My Life with Asperger's. Crown. ISBN 9780307396181.
- Shore SM, Rastelli LG, Grandin T (2006). Understanding Autism For Dummies. For Dummies. ISBN 9780764525476.
- Price D (2022). *Unmasking Autism: Discovering the New Faces of Neurodiversity*. Harmony. ISBN 9780593235232.
- Garcia E (2021). We're Not Broken: Changing the Autism Conversation. Mariner Books. ISBN 9780358697145.
- Ballou EP (2021). Sincerely, Your Autistic Child: What People on the Autism Spectrum Wish Their Parents Knew About Growing Up, Acceptance, and Identity. Beacon Press. ISBN 9780807025680.
- Pang C (2020). Explaining Humans: What Science Can Teach Us About Life, Love and Relationships. Penguin Books. ISBN 9780241409602.

## **External links**

World Health Organization fact sheet on autism (https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders)

Retrieved from "https://en.wikipedia.org/w/index.php?title=Autism&oldid=1313772630"