

A diagnosis of autism is made on the basis of observed behaviour. There are no blood tests, no single defining symptom and no physical characteristics that are unique to autism, so clinicians must use careful observation of behaviours to determine whether a child's difficulties are related to autism, or are better described by another condition.

In order to make behaviourally based diagnoses, the American Psychiatric Association works with experts in the field to develop consensus descriptors of a range of conditions, including depression, anxiety disorders, language impairment and, of course, autism. Each condition is described in terms of the behaviours that are observed, along with which behaviours, or which combination of behaviours need to be observed to make a diagnosis. These descriptors make up the *Diagnostic and Statistical Manuals (DSM)*. The previous edition of the manual (DSM-IV-TR) had been in place since 2000. Diagnostic criteria for autism in this manual included behaviours across the well-known 'Triad of Impairments': social interaction, communication and restricted interests/repetitive behaviours (RIRB). A feature of the DSM-IV-TR was that it described and defined three separate diagnoses within the autism spectrum – Autistic Disorder, Asperger Syndrome and Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS).

The fifth edition of the manual, DSM-5, was released in May 2013. There are wide ranging changes throughout the manual, many of which have been controversial and have received media attention. Autism is one of the conditions which has undergone significant changes. There are therefore, impacts on the way autism spectrum disorders are described and understood.

The changes in brief

- The three separate diagnoses (Autistic Disorder, Asperger syndrome and PDD-NOS) have been merged into a single diagnosis, known as Autism Spectrum Disorder.
- There are now two domains, rather than three. The new domains are Social Communication and Restricted and Repetitive Patterns of Behaviour Interests and Activities
- The behaviours in each domain may be present currently or on history given by parents and other relevant people
- DSM-5 requires that a severity rating be applied for both domains of impairment, ranging from Level 1 - Requiring Support to Level 3 – Requiring Very Substantial Support
- In addition, clinicians will be able to add clinical specifiers (e.g. with or without intellectual disability) and co-morbidities (such as ADHD, anxiety disorder, specific language disorder) to allow for a more comprehensive description of an individual's presentation
- There is a greater acknowledgement of role of social demands in that DSM-5 states that *"symptoms must be present in early childhood (but may not become fully manifest until social demands exceed limited capacities)"*
- Sensory behaviours are recognised under the Restricted and Repetitive Patterns of Behaviour Interests and Activities domain

Rationale

The evidence around diagnosis has shown that clinicians are able to reliably differentiate between ASD and typical development. However, there is less reliability in differentiating between autistic disorder, Asperger syndrome and PDD-NOS. Distinctions among these three disorders have been found to be inconsistent over time, variable across sites and often associated with severity, language level or intelligence rather than features of each

disorder. Research also indicates that when cognitive abilities are similar, there are no clinical differences between those diagnosed with high functioning autism and those with a diagnosis of Asperger syndrome.

Therefore, because autism is defined by a common set of behaviours, it is best represented as a single diagnostic category that is adapted to the individual's clinical presentation by inclusion of clinical specifiers (e.g., severity, verbal abilities and others) and associated features (e.g., known genetic disorders, epilepsy, intellectual disability and others).

In addition, moving from three domains to two (Social Communication and Repetitive and Restricted Behaviours), with criteria required from each domain, is likely to have improved specificity of the diagnosis. It will also better reflect the nature of the communication difficulties seen in people on the spectrum (i.e., the communication difficulties are not simple language delay which may co-occur in some people on the spectrum; rather the communication impairment is related to the social use of language).

What are the issues?

The primary controversies about the changing criteria are the loss of the specific diagnostic category of Asperger syndrome, and the fear that the DSM-5 narrows the criteria such that some people who would currently receive a diagnosis will no longer do so under DSM-5. A study by McPartland, Reichow & Volkmar (2012) found that the new criteria did improve the specificity of the diagnostic criteria, but that there was potential to exclude a number of cognitively able individuals and some of those who would currently be diagnosed with Asperger syndrome and PDD-NOS. Similarly, exploratory work by Aspect's Diagnostic Assessment Service (Gibbs et al., 2012), found some individuals who met criteria for an autism spectrum disorder under DSM-IV-TR would no longer meet criteria under DSM-5, the majority of whom would have met criteria for a current diagnosis of PDD-NOS. A new category of "Social Communication Disorder" has been included for those who experience social and communication difficulties similar to those seen in autism, but who do not experience the same restricted interests and repetitive behaviours. It is likely that some individuals who may have met DSM-IV criteria for PDD-NOS but who do not meet DSM-5 criteria fit well into this category.

In addition, there are issues with the way the final version of DSM-5 has been worded (Frances, 2013). While drafts of DSM-5 specified that all three items on Criterion A (Social Communication) needed to be present, the final version does not specify how many of the three need to be present, leading to potential confusion.

What about previous diagnoses?

DSM-5 states that "*Individuals with a well-established DSM-IV diagnosis of autistic disorder, Asperger's disorder or pervasive developmental disorder not otherwise specified should be given the diagnosis of autism spectrum disorder.*" This means that people diagnosed with any of the three autism spectrum disorders described under DSM-IV criteria should receive a diagnosis under DSM-5, ameliorating many people's fears that the new manual would mean a loss of a diagnosis for those previously diagnosed, particularly with Asperger Syndrome or PDD-NOS.

References

American Psychiatric Association. (2012). Proposed Revisions - Autism Spectrum Disorder. Retrieved June 2012, from: www.dsm5.org/proposedrevision/pages/proposedrevision.aspx?rid=94.

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Frances, A. (2013). DSM-5 Writing Mistakes Will Cause Great Confusion. Retrieved July 11, 2013, from: www.huffingtonpost.com/allen-frances/dsm5-writing-mistakes-wil_b_3419747.html#TID=TData=

Gibbs, V., Aldidge, F., Chandler, F., Witzlsperger, E. & Smith, K. (2012). Brief Report: An Exploratory Study Comparing Diagnostic Outcomes for Autism Spectrum Disorders Under DSM-IV-TR with the Proposed DSM-5 Revision. *Journal of Autism and Developmental Disabilities*, DOI 10.1007/s10803-012-1560-6.

McPartland, J.C., Reichow, B. & Volkmar, F.R. (2012). Sensitivity and Specificity of Proposed DSM-5 Diagnostic Criteria for Autism Spectrum Disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51(4), 368-383.

DSM-5 criteria for Autism Spectrum Disorder

Must meet criteria A, B, C, and D:

A. Persistent deficits in social communication & social interaction across contexts, as manifested by the following, currently or by history:

1. Deficits in social-emotional reciprocity; Ranging, for example, from abnormal social approach & failure of normal back & forth conversation to reduced sharing of interests, emotions, and affect; to failure to initiate or respond to social interactions
2. Deficits in non-verbal communicative behaviours used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication
3. Deficits in developing, maintaining and understanding relationships, ranging, for example, from difficulties adjusting behaviours to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.

B. Restricted repetitive patterns of behaviour, interests or activities as manifested by at least two of the following, currently or by history:

1. Stereotyped or repetitive motor movements, use of objects or speech (e.g. simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases)
2. Insistence on sameness, inflexible adherence to routines, or ritualised patterns of verbal or nonverbal behaviour (e.g. extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat the same food every day.
3. Highly restricted, fixated interests that are abnormal in intensity of focus (e.g. strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests) H
4. Hyper- or hypo- reactivity 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 movements:

C. Symptoms must be present in early childhood (but may not become fully manifest until social demands exceed limited capacities)

D. Symptoms together limit and impair everyday functioning.

A new addition to DSM-5 is a table of severity descriptors for both the Social Communication domain and the RIRB domain:

Severity Level for ASD	Social Communication	Restricted interests & repetitive behaviours
Level 3 - 'Requiring very substantial support'	Severe deficits in verbal and nonverbal social communication skills cause severe impairments in functioning; very limited initiation of social interactions and minimal response to social overtures from others.	Preoccupations, fixated rituals and/or repetitive behaviours markedly interfere with functioning in all spheres. Marked distress when rituals or routines are interrupted; very difficult to redirect from fixated interest or returns to it quickly.
Level 2 - 'Requiring substantial support'	Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions and reduced or abnormal response to social overtures from others.	RRBs and/or preoccupations or fixated interests appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts. Distress or frustration is apparent when RRB's are interrupted; difficult to redirect from fixated interest.
Level 1 - 'Requiring support'	Without supports in place, deficits in social communication cause noticeable impairments. Has difficulty initiating social interactions and demonstrates clear examples of atypical or unsuccessful responses to social overtures of others. May appear to have decreased interest in social interactions.	Rituals and repetitive behaviours (RRB's) cause significant interference with functioning in one or more contexts. Resists attempts by others to interrupt RRB's or to be redirected from fixated interest.

DSM-IV-TR criteria

Autistic Disorder
A. A total of six (or more) items from (1), (2), and (3), with at least two from (1), and one each from (2) and (3):
(1) qualitative impairment in social interaction, as manifested by at least two of the following: <ul style="list-style-type: none"> a) marked impairment in the use of multiple nonverbal behaviours such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction b) failure to develop peer relationships appropriate to developmental level c) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest) d) lack of social or emotional reciprocity
(2) qualitative impairments in communication as manifested by at least one of the following: <ul style="list-style-type: none"> a) delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime) b) in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others c) stereotyped and repetitive use of language or idiosyncratic language d) lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level
(3) restricted repetitive and stereotyped patterns of behaviour, interests, and activities, as manifested by at least one of the following: <ul style="list-style-type: none"> a) encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus b) apparently inflexible adherence to specific, non-functional routines or rituals c) stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole body movements) d) persistent preoccupation with parts of objects
B. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years: (1) social interaction, (2) language as used in social communication, or (3) symbolic or imaginative play.
C. The disturbance is not better accounted for by Rett's Disorder or Childhood Disintegrative Disorder.

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