



Week 5: Mental Capacity Act and Autism

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Autism Spectrum Disorder

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Definition of Autism

According to the National Institute of Mental Health (NIMH, 2022) Autism spectrum disorder (ASD) is a developmental disorder that affects communication and behaviour.

Although autism can be diagnosed at any age, it is said to be a “developmental disorder” because symptoms generally appear in the first two years of life.



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Common Features



- (a) an onset that is invariably during infancy or childhood;
- (b) an impairment or delay in the development of functions that are strongly related to biological maturation of the central nervous system; and
- (c) a steady course that does not involve the remissions and relapses that tend to be characteristic of many mental disorders.

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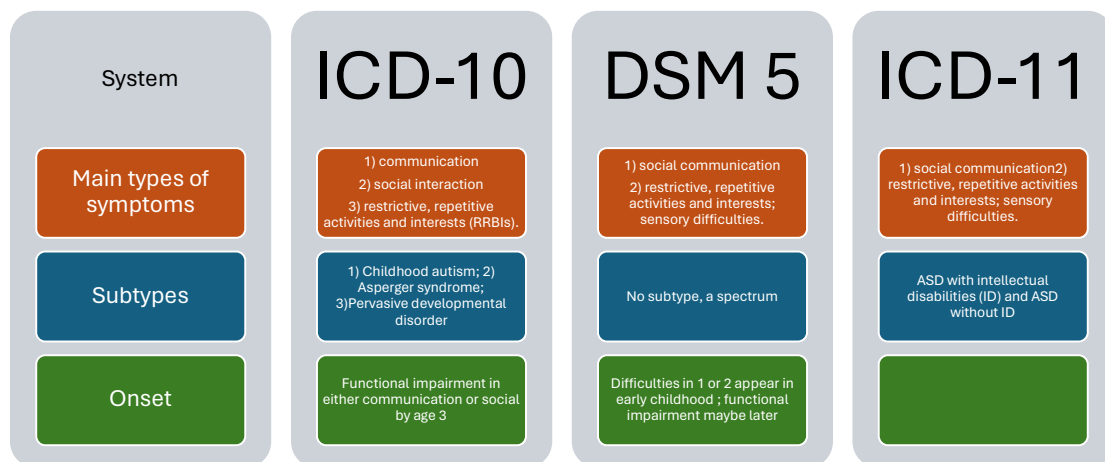


ICD-10 Classification

- F84 Pervasive developmental disorders
 - F84.0 Childhood autism
 - F84.1 Atypical autism
 - F84.2 Rett's syndrome
 - F84.3 Other childhood disintegrative disorder
 - F84.4 Overactive disorder associated with mental retardation and stereotyped movements
 - F84.5 Asperger's syndrome
 - F84.8 Other pervasive developmental disorders
 - F84.9 Pervasive developmental disorder, unspecified

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Comparison(Open University, n.d.)



Understanding autism: Week 3: 2.2 | OpenLearn - Open University

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Challenges experienced - Autism

- Communication impairment/limitation
- Limited theory of mind
- **Hypersensitivity/hyposensitivity – sensory stimulus (sounds, touch)**
- Changes in terms of social interaction
- Limited eye contact
- Routine and rigidity in daily functioning

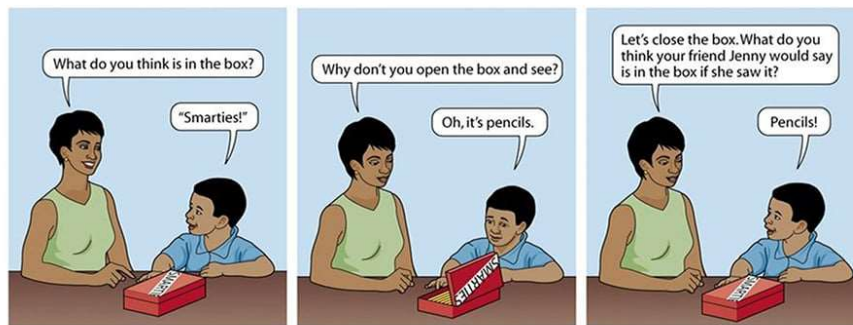
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Theory of mind

A False-Belief Problem: The “Smarties” Task



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Theory of mind
(Baron-Cohen et al., 1985)



<https://www.youtube.com/watch?v=41jSdOQQpv0>

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Signs of Autism - Children

- Lack of eye contact
- Limited response to sensory cues
- May not respond to name
- Repetitive behaviors or actions: Flapping, repeating same terms
- Limited interactions with other children
- Limited emotional responses such as smiling

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<https://www.youtube.com/watch?v=QjkTQtggLH4>

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Signs of Autism - Adults

- Difficulties in understanding and interpreting social cues
- Difficulties in understanding emotions of other individuals
- Prefers primarily solitary
- Challenges in terms of expressing emotions
- Information may be perceived literally
- Rigidity in terms of routine

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JC1

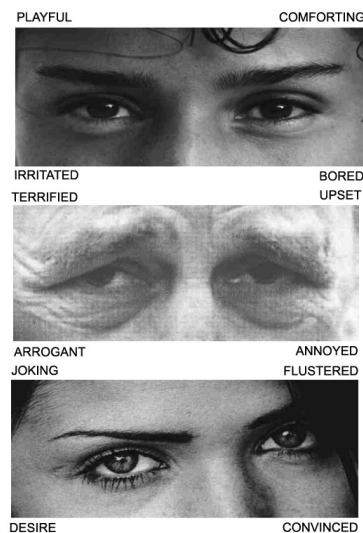
RTMIE task

Both verbal and non-verbal

Affective ToM

Some studies measure brainwaves during the task

Age effect in some adults as processing in emotion display affected (to be covered in later session)



Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, I. (2001). The "Reading the Mind in the Eyes" Test revised version: a study with normal adults, and adults with Asperger syndrome or high-functioning autism. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 42(2), 241-251.

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ToM beyond 4-5: Mind in the eyes task

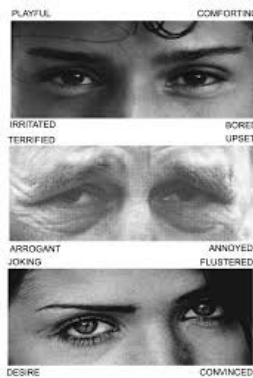
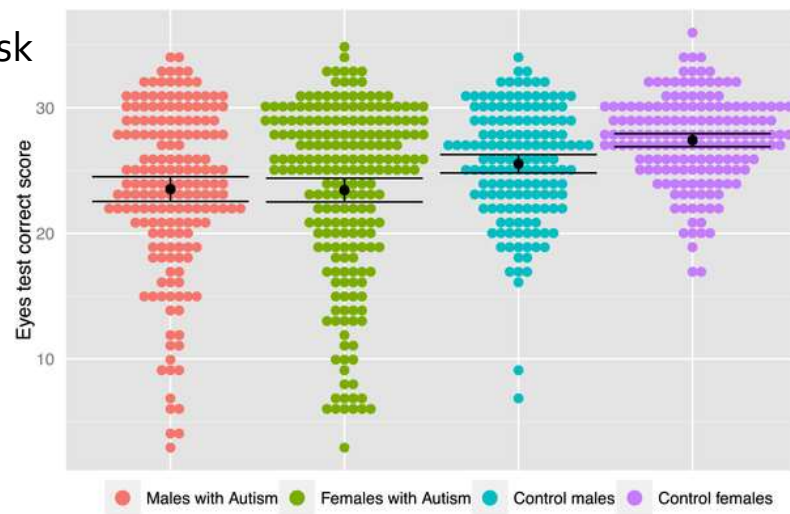


Fig 1. Performance accuracy on the Eyes test by group.

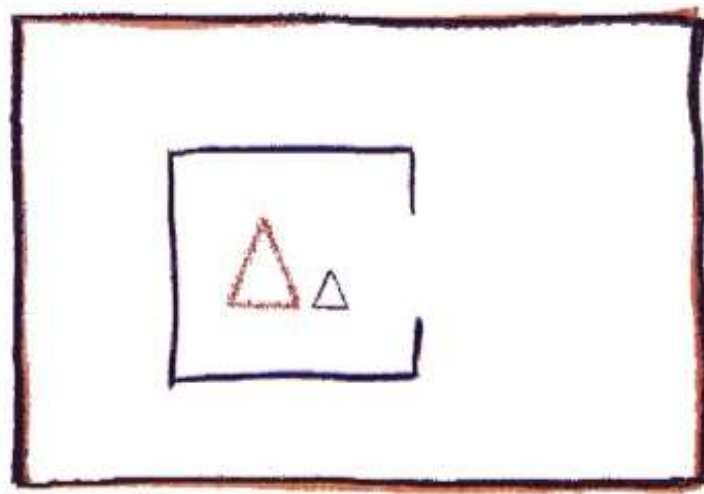


Baron-Cohen S, Bowen DC, Holt RJ, Allison C, Auyeung B, et al. (2015) The "Reading the Mind in the Eyes" Test: Complete Absence of Typical Sex Difference in ~400 Men and Women with Autism. PLOS ONE 10(8): e0136521. <https://doi.org/10.1371/journal.pone.0136521>



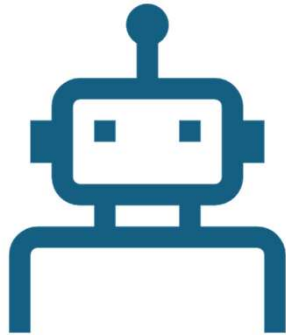
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Theory of mind animations



Abell et al (2000), White et al (2011), Frith & Happé

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Have a go

- Mental State Stories
- Simon is a big liar. Simon's brother Jim knows this, he knows that Simon never tells the truth! Now yesterday Simon stole Jim's ping-pong paddle, and Jim knows Simon has hidden it somewhere, though he can't find it. He's very cross. So he finds Simon and he says, "Where is my ping-pong paddle? You must have hidden it either in the cupboard or under your bed, because I've looked everywhere else. Where is it, in the cupboard or under your bed"? Simon tells him the paddle is under his bed.
- Q: Why will Jim look in the cupboard for the paddle?

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Strange Stories (White et al., 2009)

- Q: Why will Jim look in the cupboard for the paddle?
- 2 points—reference to Jim knowing Simon lies
- 1 point—reference to facts (that's where it really is, Simon's a big liar) or Simon hiding it without reference to implications of lying
- 0 points—reference to general nonspecific information (because he looked everywhere else)
- Strange stories (White et al., 2009): traditionally verbal and tap into cog ToM with contrast between physical and mental state. Now in video/short films (Murray et al., 2017)

White, S., Hill, E., Happé, F. and Frith, U. (2009), Revisiting the Strange Stories: Revealing Mentalizing Impairments in Autism. *Child Development*, 80: 1097-1117. doi:[10.1111/j.1467-8624.2009.01319.x](https://doi.org/10.1111/j.1467-8624.2009.01319.x)

Murray, K., Johnston, K., Cunnane, H., Kerr, C., Spain, D., Gillan, N., ... & Happé, F. (2017). A new test of advanced theory of mind: The "Strange Stories Film Task" captures social processing differences in adults with autism spectrum disorders. *Autism Research*, 10(6), 1120-1132.

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Making diagnosis: Autism Team

- Paediatrician
- Psychologist (appropriate based on age)
- Educational Psychologist
- Clinical Psychologist
- Occupational Therapist

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Diagnosis Tools of ASD

See Moodle for how to complete
Week 5 Forum activity

ADOS
ARI
DISCO



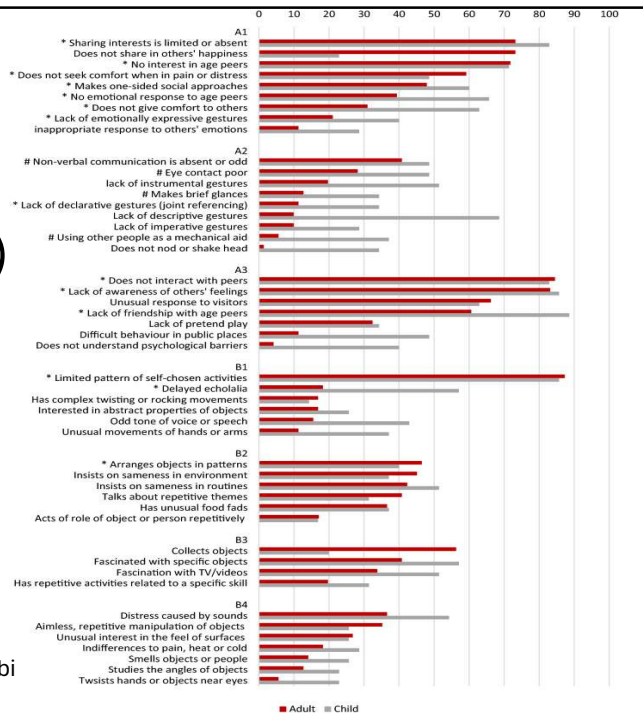
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The Diagnostic Interview for Social and Communication Disorders: DISCO (Leekam et al., 2002)

Graph from (Carrington et al., 2020)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6841916/bin/10803_2019_4214_Fig3_HTML.jpg



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Interventions

- Interventions maybe helpful in managing symptoms/distress experienced
 - CBT
 - Behavioral Interventions
 - Early interventions

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Treatment options include:

- **Behaviour and communication therapies** – address the range of social, language and behavioural difficulties e.g. Applied Behaviour Analysis (ABA).
- **Family therapies** – Parents and other family members can learn how to play and interact with their children in a way that promotes social interaction skills and manages problem behaviours.

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Treatments

Autism is where your brain develops differently to non-autistic people. It is not an illness and there is no cure.

If you're autistic, a GP or local autism team may suggest approaches that can help you to:

- develop daily living skills
- develop communication skills
- manage other physical or mental health conditions, such as pain or anxiety
- manage harmful behaviours

But there are also treatments and approaches that are not recommended because either:

- they're fake
- there's evidence that they're harmful
- the research and evidence show no benefit to autistic people – or there's no good research into them



www.nhs.co.uk

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Treatments

Treatments for autism that are fake or can be harmful

Some products or services, claiming to be cures or treatments for autism, are fake or can be harmful.

Examples of these include:

- GcMAF – an unlicensed injection made from blood cells
- bleaching – also called chlorine dioxide (CD) or Mineral Miracle Solution (MMS)
- CEASE, which discourages vaccinations and recommends potentially dangerous levels of nutritional supplements
- chelation – removing heavy metal toxins from the blood
- secretin – a hormone found in the body
- some vitamins, minerals and dietary supplements
- raw camel's milk

Do not use any of these to treat autism.

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Applied Behaviour Analysis (ABA)

5.1 Applied behavioural analysis

Lovaas' approach evolved to become **Applied Behavioural Analysis (ABA)**, an intervention for autism in which operant conditioning principles are used to reinforce 'desirable' behaviours (e.g. more speech and communication) and reduce 'undesirable' behaviours (e.g. aggressive or repetitive behaviours that may be injurious or considered antisocial, such as head banging, destruction of objects or taking clothes off in public).

In ABA the child's behaviour is analysed into components that are tackled one at a time. If the target behaviour is one that it is identified for the child to learn, for instance uttering a word or phrase, the reinforcement needs to be a positive outcome for the child, such as a favourite snack or some non-edible reward. If the behaviour is something that it is thought should be discouraged, for instance a tantrum, then withholding reinforcement (e.g. by ignoring the behaviour, saying 'no' loudly and firmly, removing the child from the context or reinforcing alternative behaviour) should eventually result in the behaviour disappearing.

The first stages of ABA may focus on teaching self-help and receptive language skills (i.e. language understanding), non-verbal and verbal imitation, and the foundations of appropriate play. The second stage emphasises the teaching of expressive language and interactive play with peers. Advanced stages involve the learning of early academic tasks, socialisation skills, cause and effect relationships, and learning by observation. The intervention might seem particularly relevant for young children who are lacking basic communication skills and everyday capabilities. However, children with higher initial intellectual ability and less pronounced autism are also said to make good progress, especially following early behavioural intervention. ABA is also used with some autistic adults.

If at all possible parents are trained to carry out ABA at home, albeit supported by trained therapists and consultants. Classic ABA approaches stipulate that 40 hours per week should be spent on 'shaping' the child, making it expensive for parents or local service providers to employ trainers. The commitment for parents is also substantial.

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(OpenLearn)

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Applied Behaviour Analysis (ABA)

Attitudes to ABA among families and professionals are sharply divided. Proponents of the approach argue that it is one of the few really effective treatments, which can make dramatic improvements including the potential to develop language skills in non-verbal children. An early intervention based on ABA principles, known as **Early Intensive Behavioural Intervention (EIBI)**, has been evaluated as particularly effective (Peters-Scheffer et al., 2011). One criticism of ABA claims that it is a simplistic tool, which changes 'surface' behaviour rather than underlying thought processes. The fact that parents and therapists decide what behaviour should be shaped has led to the further criticism that ABA is '**adult-directed**', taking away the child's autonomy, choice and dignity (Devita-Raeburn, 2016). ABA also requires a level of dedication and expense that makes it inaccessible to some families.

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Pre-school Autism Communication (PACT)

7.1 Pre-school Autism Communication Therapy (PACT)

The **PACT** approach trains parents to work on enhancing the communication and language development skills of their own children, commencing as early as possible after diagnosis (Green et al., 2010). Parents view video footage of their interactions with their child and are taught to adapt their own communications in order to respond with enhanced sensitivity and responsiveness, for instance using eye gaze, sharing, showing and giving to increase shared attention. Parents learn to tailor their language use to the child's level of understanding and to facilitate child communication and participation, for instance through sequences of actions, repeated verbal scripts and the use of elaborations, pauses, and playful teasing.

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Child and young people with Autism in school

- More likely to be placed in mainstream schools
- Provisions within mainstream schools inconsistent (Watkins, 2019)
 - Bullying
 - Anxiety
 - Isolation

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“And then eventually I started getting really distressed, and erm, XXXX went up to the teacher again and offered to take me outside of the classroom and the teacher just said “She's fine.” XXXX replied with “She's banging her head against the table, she's not fine.” And erm, then the teacher didn't, erm, like try to actually address the situation herself, she didn't ask me why I was upset, she didn't ask me if I wanted to go to, if I, wanted to go outside of the classroom, she just completely ignored what was going on and that's why I think she should at least go through a training course that will inform her about special needs, like erm, like autism, and all that, because obviously she doesn't know.” (lines 707-725) (Watkins, 2019. pp. 138-139)

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Did Hope feel
she was listened
to in school on
the last slide?



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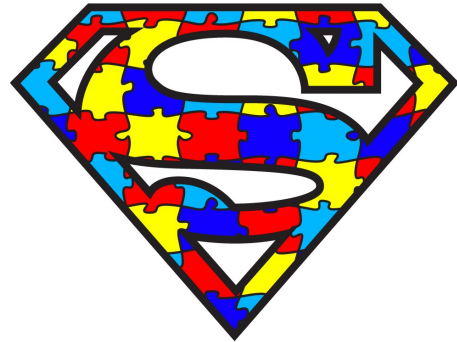
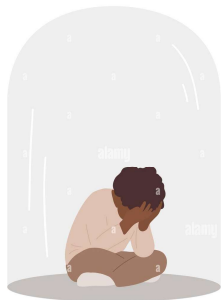
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Application



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The changing discourse of ASD



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Individuals with Autism in mental hospital

- [Watch Locked Away: Our Autism Scandal - Dispatches | Stream free on Channel 4](#)
- [Number of autistic people in mental health hospitals \(autism.org.uk\)](https://autism.org.uk)

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