

# Autistic Spectrum Disorder

- ► Leo Kanner 1943
- ► Hans Asperger 1944
- Wing and Gould 1979
- ▶ Wing 1988

#### Leo Kanner 1943

▶ Leo Kanner was born in Austria, educated in Berlin and moved to America. Worked as a psychiatrist and physician and is best known for his work related to autism. Kanner's work formed the foundation of child and adolescent psychiatry in the U.S. and worldwide.

Leo Kanner 1894 – 1981

Terms: Kanner's autism/Classic autism

## Hans Asperger 1944

Hans Asperger was an Austrian pediatrician, medical theorist, and medical professor. He is best known for his early studies on mental disorders, especially in children.

Hans Asperger 1906 – 1980

Term: Asperger's syndrome

# Lorna Wing and Judith Gould (1979) Camberwell Study

Difference wing trained as a medical doctor was allare in psychiatry

Dr Judith Gould - Chartered Consultant Clinical Psychologist

In 1978 Lorna Wing and Judy Gould undertook the Camberwell study; following their paper published a year later the so called 'Triad of Impairments' was introduced, and has since been the 'backbone' of diagnostic criteria for autism.

## Wing 1988

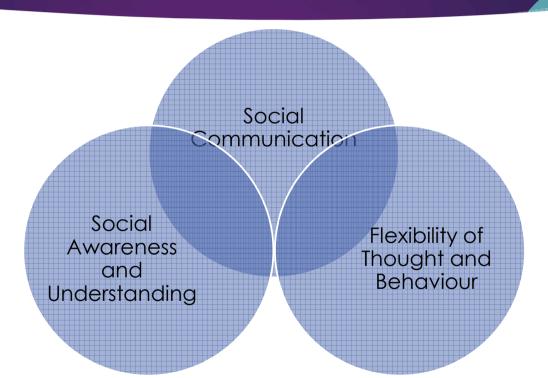
Lorna Wing had a daughter with severe autism

Wing continued her study of autism and in 1988 introduced the term Autistic Spectrum Disorder

# Diagnostic Instruments

- DSM –Diagnostic and Statistical Manual
- ▶ ICD International Classification of Diseases

# Triad of Impairment



#### Social Communication

- May not understand the purpose of communication
- May initiate very little communication with others
- May not show or share an interest with others
- May be delayed in learning to speak or speech may not develop at all
- May make limited or inappropriate use of gesture, eye contact, facial expression and body language
- May have a good vocabulary and speak fluently but not communicate effectively
- May talk at, rather than with, the person
- May have problems in the social timing of conversation

Jones, 2002:4

#### Social Awareness and Understanding

- May actively avoid other people
- May show more interest in object than people
- ▶ Is less likely to share the interests of other people
- ls less likely to refer to others in play
- May make physical contact with others but on his/her own terms
- May find turn taking difficult
- May fail to read and understand others' feelings and needs

## Flexibility of Thought and Behaviour

- May engage in repetitive activity with or without materials
- May have a special interest which occupies much time and energy
- May play in an unconventional way and have limited pretend play
- May resist changes to familiar routines and plans
- May pursue his/her won agenda and exclude the suggestions of others
- Will prefer to be in control and stay in control of what happens

# Dyad of impairment

Social interaction and communication

Restricted, repetitive and stereotyped patterns of behaviour

## Level 3

Severity level	Social communication	Restricted, 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. For example, a person with few words of intelligible speech who rarely initiates interaction and, when he or she does, makes unusual approaches to meet needs only and responds to only very direct social approaches	Inflexibility of behaviour, extreme difficulty coping with change, or other restricted/repetitive behaviours markedly interfere with functioning in all spheres. Great distress/difficulty changing focus or action.

# Level 2

Severity level	Social communication	Restricted, repetitive behaviours
Level 2	Marked deficit in verbal and non-verbal social	Inflexibility of behaviour, difficulty coping with change,
Requiring substantial support	communication skills cause severe impairments in functioning, very limited initiation of social interactions And minimal responses to social overtures from others. For example, a person with few words of intelligible speech who rarely initiates interactions and when he or she does, makes unusual approaches to meet needs only and responds to only very direct social approaches	or other restricted/repetitive behaviours appear frequently enough to be obvious to the casual observer ad interfere with functioning in a variety of contexts. Distress and/or difficulty changing focus or action.

# Level 1

Severity level	Social communication	Restricted, repetitive behaviours
Level 1	Without support in place, deficits in social	Inflexibility of behaviour causes significant interference
Requiring support	communication cause noticeable impairment. Difficulty initiating social interactions, and clear examples of atypical or unsuccessful response to social overtures of others. May appear to have decreased interest in social interactions. For example, a person who is able to speak in full sentences and engages in communication but whose to-and-fro conversation with others fails, and whose attempts to make friends are odd and typically unsuccessful.	with functioning in one or more contexts. Difficulty switching between activities. Problems of organisation and planning hamper independence.

# Psychological theories

- ▶ Theory of Mind sequencing, empathy, mind reading
- ▶ Executive Function organisation, impulses, past experience
- Central Coherence bigger picture and past experience

## Theory of Mind 1

- Mindblindness
- Sequencing events (including daily events)
- Visualising new events and places
- Mind reading
- Everyone has their own thoughts and feelings
- Empathy

## Theory of Mind 2

- because they all require what Astington (1998:48) refers to as "the ability to talk about one's own and other people's thoughts ... [in other words] students require an appropriate metacognitive language for social maturity" (Dunleavy-Lavin, 2013). The importance of theory of mind in social interaction is emphasised by Abbeduto et al. (2004:151) who cite Nini & Snow (1996) to write that "the ability to tailor one's linguistic contributions to the informational needs of the listener demands a sophisticated theory of mind".
- refers to a person's ability to understand "thoughts, beliefs, desires and intentions of other people in order to make sense of their behaviour and predict what they are going to do next" (Attwood, 2007:112).

#### Executive Function 1

- Attwood (2007:234) suggests that executive function impacts on a person's ability in the following areas:
- organisational and planning abilities
- working memory
- inhibition and impulse control
- self-regulation and self-monitoring
- time management and prioritizing
- understanding complex or abstract concepts
- using new strategies.

#### Executive Function 2

- ▶ Hill (2004:26) refers to as executive dysfunction that she describes as being "an umbrella term for functions such as planning, working memory, impulse control, inhibition and mental flexibility, as well as for the initiation and monitoring of action ...".
- Although weak executive function does create difficulties for people with autism, Frith (2003:177) points out that "executive abilities are not needed for routine actions, for instance, well-practiced skills such as walking and eating. They are needed, however, when a change of plan occurs, and more generally, whenever routine behaviour no longer suffices". It is executive abilities that help us to multitask and are essential for higher-order thinking that is needed to "resolve conflicting responses, for overriding automatic behaviour, and for inhibiting inappropriate impulsive actions" (Dunleavy-Lavin, 2013).

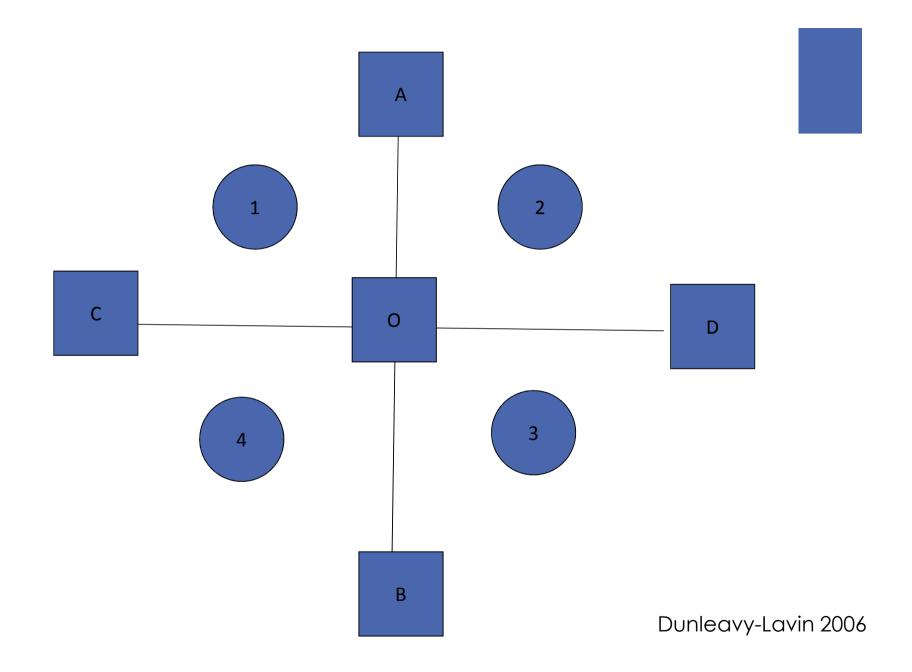
#### Central Coherence 1

- People with Autism process information about the world in a piecemeal fashion and so miss meaning in a whole range of contexts
- No underlying motivation to make sense of information coming in
- Sees things in its component parts e.g. lines in drawings rather than picture of completed item

This can explain good artistic skills or demand for sameness in e.g. the way furniture of a room is laid out

#### Central Coherence 2

- Frith (1999:154) describes weak central coherence as an inability to use context to aid meaning and writes that "in the extreme, weak central coherence means not seeing the wood for the trees".
- ▶ (Baron-Cohen and Swettenham (1997:19) describe central coherence as "the normal drive to integrate information into context, gist, gestalt, and meaning". They go on to write that weak central coherence may explain "the non-holistic, piecemeal perceptual style characteristic of autism; and the unusual cognitive profile seen in this condition (including the islets of ability)". Weak central coherence also has the effect of "disabling individuals with autism from making full use of context" (p19).



#### An Eclectic Approach

This is a Report by the Inspectorate of the Department of Education & Science, 2006) and it states: There is no single method that should be used exclusively to meet the varied needs of children and young people with ASDs ..." (p. 21)

▶ There is no definitive evidence that supports <u>one</u> approach as being better than others for all children with Autistic Spectrum Disorders or supports a <u>single</u> approach for all aspects of development; nor is there any evidence by which children could be matched to particular approaches" (.2001:117)

# Perceptual Modality Concept

- Based on premise that we all learn in a different way.
- Must take into account child's style of learning/perceptual strengths/weaknesses
- ► Three main learning styles:
- Auditory listening
- Visual looking
- Kinaesthetic/Tactile touching/actions/doing

# Auditory perception

- Ability to recognise and interpret sounds
- Phonological awareness
- Auditory discrimination
- Auditory memory
- Auditory sequencing
- Auditory blending

### Visual Perception

- Identification, organisation and interpretation of sensory data received through the eyes:
- Visual discrimination
- > Figure-Ground Discrimination
- Visual Closure
- Letter Recognition
- Visual Perception and Reversals

## Tactile Kinaesthetic perception

- ► Tactile perception gained through touch recognising an object through touch
- Kinaesthetic perception gained through body movement and muscle feeling – awareness of body position and awareness of muscle movement – tension/relaxation