



# Supporting Students With Asperger Syndrome

# Autism

- A neurodevelopmental disorder where genetic factors have the prominent role in the aetiology (the cause)
- Prevalence studies indicate that boys are more likely to be affected than girls with a ratio of 4:1
- The incidence is thought to be 6 per 10, 000
- It affects children across the ability range, but 85% have some learning difficulty
- First described by Leo Kanner in 1943

# Kanner's Defining Features

- A profound autistic withdrawal
- An obsessive desire for the preservation of sameness
- A good rote memory
- An intelligent and pensive expression
- Mutism or language without real communication intent
- Over-sensitive to stimuli
- A skilful relationship to objects

# The Triad Of Impairments

## Wing & Gould (1979)

- Impairment of social interaction – impaired, deviant and extremely delayed social development – especially interpersonal development. The variation may be from ‘autistic aloofness’ to ‘active but odd’ characteristics
- Impairment of social communication – impaired and deviant language and communication – verbal and non-verbal. Deviant semantic (the social use of language) and pragmatic (the social use of language) aspects of language
- Impairment of social imagination, flexible thinking and imaginative play-rigidity of thought and behaviour and impoverished social imagination. Ritualistic behaviour, reliance on routines, extreme delay or absence of ‘pretend play’

# The Triad Of Impairments; Social Interaction

- Socially isolated (but not worried about it)
- Social demands of others cause anxiety
- Finds social cues difficult to 'read'
- May behave in a socially inappropriate way
- In adolescence, may want friends, but lack the strategies to establish and maintain friendships

# The Triad Of Impairments; Social Communication

- May have superficially perfect spoken language which seems formal and pedantic
- May lack voice expression
- Fails to understand the implication of different tones of voice
- May have difficulty using and understanding non-verbal communication
- May understand others in a literal way
- Fails to understand implied meanings

# The Triad Of Impairments; Rigidity Of Thought

- Often has all-absorbing unusual interests
- May insist that certain routines are adhered to
- Limited in the ability to play and think creatively
- Has problems transferring skills from one setting to another

# Spectrum Of Autism (Wing 1991)

## SOCIAL INTERACTION

Aloof and  
different

Approaches for physical  
needs only

Passively accepts  
approaches

Bizarre one  
sided approaches

## LANGUAGE

No language

Limited language,  
mostly echolalic  
(repeating the last few  
words of what has been  
said)

Incorrect  
idiosyncratic,  
odd

Long-winded,  
repetitive, literal

## RIGIDITY

Repetitive  
actions

Simple repetitive  
routines

Complex  
repetitive routines

Verbal routines



# Asperger Syndrome

- Asperger Syndrome is a condition which is thought to fall within the spectrum of autism – with enough distinct features to warrant its own label
- First described by Hans Asperger in 1944, whose work was published in English in 1981
- The incidence is thought to be 30 / 10, 000
- Boys are more likely to be affected than girls, with a probable ratio of 10:1
- It affects people in the average to above average ability range

# Asperger Syndrome

- Diagnostic criteria (Wing 1981) based on the work by Hans Asperger (1944):
  - ❖ Speech – no delay, but content odd, pedantic, stereotyped
  - ❖ Non-verbal communication – little facial expression, monotone voice, inappropriate gesture(s)
  - ❖ Social interactions – not reciprocal, lacking in empathy
  - ❖ Resistance to change – enjoys repetitive activities
  - ❖ Motor co-ordination – gait and posture odd, gross movements clumsy, sometimes stereotypies
  - ❖ Skills and interests – good rote memory, circumscribed special interests

# Asperger Syndrome

- Wing's modifications to Asperger's criteria:
  - Language delay – not all develop language at the normal age
  - Early development – first three years of life, the child may be thought to be 'odd' e.g. no joint attention
  - Creativity – lacks creativity e.g. do not show true pretend play, lack original thought

# Anxiety

- With low levels, relaxation, achievement and distraction are preferred options
- With increased anxiety, start an activity that requires exertion
- Provide islands of solitude during the day
- Prolonged periods of severe anxiety can lead to secondary psychiatric conditions e.g. Obsessive Compulsive Disorder

# Depression And Asperger Syndrome

- High incidence
- Increases at adolescence
- May be a biological predisposition
- Due to limited expression of emotion, may be difficult to diagnose
- Odd ways of dealing with grief (mania and laughter)

# Psychological Theories On The Nature Of Autism

- Theoretical constraints that help us make sense of observable behaviour:
  - Theory of mind
  - Central coherence deficit
  - Executive function deficit

# Theory Of Mind

- Proposes a cognitive deficit in autism linking possibly multiple neurological abnormalities to multiple behavioural manifestations
- Is predominantly a social tool, affecting the way the child understands and interacts with others
- Is the ability to understand the mental states of oneself and others

# Implications

- Difficulty in predicting behaviour of others
- Difficulty in reading the intentions of others and understanding the motives behind their behaviour
- Difficulty explaining their own behaviour
- Difficulty in understanding 'pretend' and differentiating fact from fiction
- Lack of understanding of social interaction – inappropriate use of eye contact, poor topic maintenance
- No sharing of attention leading to idiosyncratic reference
- Inability to anticipate what others might think of one's actions
- Inappropriate language use in interactions with others



# Central Coherence Deficit

‘the inability to experience wholes without full attention to the constituent parts’,

Kanner (1943)

- Conclusions are based on the superior performance of children with autism on an embedded figures test and Block Design test
- Other research provides contrasting findings, suggesting that children with autism have a ‘wholistic’ cognitive style
- Cognitive processing style in relation to language processing is also considered to make a strong case for holistic processing based on the delayed echolalia (the repetition of the last few words that have been spoken to him) displayed by autistic children

# Implications Of Central Coherence Deficit

- Idiosyncratic focus of attention
- Imposition of own perspective
- Preference for the known
- Inattentiveness to new tasks
- Difficulty in choosing and prioritising
- Difficulty in organising self and material
- Difficulty in seeing connections and generalising skills
- Lack of compliance
- Inability to use the context / environmental clues

# Executive Function

- A cognitive construct for behaviours that are mediated by the frontal lobes
- ‘The ability to maintain an appropriate problem solving set the attainment of a future goal’ (Luria 1966)
- It includes – planning and organising, impulse control, inhibition of irrelevant / inappropriate responses, integrating information from the senses, attentional flexibility, focussed attention, working memory, organised search and flexibility of thought and action
- It also involves the ability to disengage from control by the external context and guide behaviour by internal representations

# Implications Of Executive Function Deficit

- Difficulty completing multi-step tasks
- Difficulty organising equipment in lessons and for the day
- Difficulty estimating how much time is left to complete a task, working within time limits and meeting deadlines
- Difficulty holding information in short term memory while performing tasks
- Difficulty maintaining attention to a task and being distracted by competing interests
- Difficulty in being adaptable to changing conditions
- Difficulty revising plans when given new information
- Difficulty thinking before acting

‘To see the world from an autistic perspective is as unnatural for the non-autistic as it is for those with autism to understand the ‘normal’ social world. It requires suspension of the assumptions upon which we normally operate’

Powell (2000)

# Effective Intervention

- Key words for intervention are routine, clarity and consistency
- Areas to consider for intervention are physical environment, language and communication environment, social environment, curricular environment
- In addition, specific interventions can be built in to develop skills in the areas of social interaction, social communication and social imagination. Students may also need focussed support and intervention to develop self-help skills and address aspects of behaviour

# The Physical Environment

- Organisation and structure of the classroom – collaborative group work, sharing of equipment, listening as a group to instructions, space to work individually, designated seating
- Additional structure to aid curriculum access – visual scaffolding, work systems (how much will I have to do, what work will I have to do, when will I have finished, what happens when I have finished)
- Consider aspects of the environment that may cause anxiety: noise, proximity to other students, displays, windows, movement of other students

# The Language And Communication Environment

- Good language skills often mask difficulties using language in communication. This is particularly so in the social use of language (pragmatics) and the ability to convey and understand meaning (semantics)
- Create an environment that will: help the child develop communicative intent (verbal, non-verbal), develop the students' ability to initiate and maintain conversation, enhance the students' understanding of meaning
- It may be helpful or necessary to use specific intervention programmes e.g. Social Use Of Language (Secondary)



# The Social Environment

- Intervention needs to start at the child's level of social interaction whatever his level of academic performance
- Staff need to have an awareness of the social difficulties arising from Asperger Syndrome and agreed allowances should be made
- Teach the student how to respond to unwanted approaches
- Provide pastoral support – an adult the student can turn to when upset
- Provide support at times of anxiety – e.g. a quiet area / room to retreat to
- Consider using Buddies / Circle of friends approach to support social inclusion
- Provide opportunities to develop a positive sense of self
- Identify areas of social interaction where the child struggles and teach the skills
- Provide opportunities for social interaction – working with a partner (clear roles), board games, team games

‘Teaching, in a word, is inevitably based on notions about the nature of the learner’s mind. Beliefs and assumptions about teaching, whether in a School or any other context, are a reflection of the beliefs and assumptions the teacher holds about the learner’

Bruner (1996)

# The Curricular Environment

- The Asperger learning style is composed of the following characteristics:
  - ✓ Motivation
  - ✓ Pace and timing
  - ✓ Attention / concentration
  - ✓ Imitation
  - ✓ Perception
  - ✓ Memory
  - ✓ Sequencing
  - ✓ Problem solving

# Non-Curricular Areas

- For many students with Asperger Syndrome, it is not the curriculum that causes the difficulties but rather the non-curricular areas:

- Assembly
- Break
- Lunchtime
- Moving around School
- Asking for help
- Working with others

# Asking For Help

- Asking for help:
  - Have an awareness of which tasks cause difficulty
  - With task interpretation difficulties, work alongside and model, reduce input until the student can work independently
  - When the task is completed, encourage the student to reflect on their own learning, talking through what they did and how they did it
  - Teach the student to recognise when they are 'stuck' and how to ask for help