Edexcel Psychology A-level

Option: Child Psychology

Notes

Edexcel Child Psychology

Part 1: Bowlby's Monotropic Theory of Attachment

This is the evolutionary theory of attachment. It states that attachments are innate, i.e you are born with it. The acronym, ASCMI (like 'ask me'), summarises the theory.

A = Adaptive – attachments are an advantage, or beneficial to survival as it ensures a child is kept safe, warm and fed

S = Social releasers – e.g. a cute face on a baby. These unlock the innate tendency for adults to care for a child because they activate the mammalian attachment system.

C = Critical period – This is the time in which an attachment can form i.e. up to 2.5 to 3 years old. Bowby suggested that if an attachment is not formed in this time, it never will. If an attachment does not form, you will be socially, emotionally, intellecturally and physically stunted. Bowlby demonstrated this in his 44 juvenile thieves study, where maternal deprivation was associated with affectionless psychopathy and mental retardation.

M = Monotropy – means 'one carer'. Bowlby suggested that you can only form one special intense attachment (this is typically but not always with the mother). This attachment is unique, stronger and different to others. Maternal deprivation, which is characterised by a lack of a mother figure during the critical period for attachment formation, results in emotional and intellectual developmental deficits i.e. affection less psychopathy and mental retardation.

I = Internal working model – This is an area in the brain, a mental schema for relationships where information that allows you to know how to behave around people is stored. Internal working models are our perception of the attachment we have with our primary attachment figure. Therefore, this explains similarities in attachment patterns across families. Those who have a dysfunctional internal working model will seek out dysfunctional relationships and behave dysfunctionally within them.

+ There is supporting evidence for the importance of internal working models, as presented by Bailey et al. Through the observation of 99 mothers and the recording of their children's attachment type using the Strange Situation, the researchers found that poor, insecure attachments coincided with the mothers themselves reporting poor attachments with their own parents. Therefore, this suggests that internal working models are likely to be formed during this first, initial attachment and that this has a significant impact upon the ability of children to become parents themselves later on in life.

— Monotropy is an example of socially sensitive research. Despite Bowlby not specifying that the primary attachment figure must be the mother, it often is (in 65% of cases). Therefore, this puts pressure on working mothers to delay their return to work in an effort to ensure that their child develops a secure attachment. Any developmental abnormalities in terms of attachment are therefore blamed on the mother by default. This suggests that the idea of monotropy may stigmatise 'poor mothers' and pressure them to take responsibility.

— Monotropy may not be evident in all children. For example, Schaffer and Emerson found that a small minority of children were able to form multiple attachments from the outset. This idea is also supported by van Izjendoorn and Kronenberg, who found that monotropy is scarce in collectivist cultures where the whole family is involved in raising and looking after the child. This means that monotropy is unlikely to be a universal feature of infant-caregiver attachments, as believed by Bowlby, and so is a strictly limited explanation of some cases of attachments.

Part 2: Ainsworth's 'Strange Situation'

Mary Ainsworth designed a study called 'the strange situation' as a procedure to assess how securely attached a child was to its caregiver, and if it is insecurely attached, to assess which type

of insecure attachment it has. This was a controlled observation conducted through a two-way mirror.

There were seven stages which each lasted 3 minutes.

1. The caregiver enters a room, places the child on the floor and sits on a chair. The caregiver does not interact with the child unless the infant seeks attention.
2. A stranger enters the room, talks to the caregiver and then approaches the child with a toy.
3. The caregiver exits the room. If the infant plays the stranger observes without interruption. If the child is passive, the stranger attempts to interest them in the toy. If they show distress the stranger attempts to comfort them.
4. The caregiver returns while the stranger then leaves.
5. Once the infant begins to play again, the caregiver may leave the room, leaving the child alone briefly.
6. The stranger enters the room again and repeats behaviour mentioned in step 3 (observing, engaging, comforting as needed)
7. The stranger leaves and the caregiver returns.
   The “strange situation” places the child in a mildly stressful situation in order to observe 4 different types of behaviour which are separation anxiety, stranger anxiety, willingness to explore and reunion behaviour with the caregiver.

Using this procedure, Ainsworth was able to identify 3 types of attachments:

- Secure = this was the most popular attachment type (with both types of insecure attachments being equally as common). This was found when the infant showed some separation anxiety when the parent/caregiver leaves the room but can be easily soothed when the parent/caregiver returns. A securely attached infant is also able to play independently but used their parent/caregiver as a safe base to explore a new environment. This usually accounts for 65% of children.
- Insecure resistant = this is when the infant becomes very distressed and tries to follow them when the parent/caregiver leaves, but when they return, the infant repeatedly switches from seeking and rejecting social interaction and intimacy with them. They are also less inclined to explore new environments. This usually accounts for 3% of children, and so is the least common attachment type.
- Insecure avoidant = this is when the infant shows no separation anxiety when their carer leaves the room and shows no stranger anxiety when a stranger enters the room. They may show anger and frustration towards their carer and actively avoid social interaction and intimacy with them. They are able to explore and play independently easily, no matter who is present. This

accounts for around 20% of children.

Evaluation

P = It only measured the relationship type with one attachment figure

E = They only used mothers and their child in the study

E = This can mean that the wrong attachment type for a child can be identified, as although they may not be so strongly attached to the mother, they may be securely attached with their father or an extended family member. The study wrongly assumes that the child will be closer to the mother than any other adult figure. Therefore, the study lacks internal validity, as it does not always correctly measure a child's attachment type with their primary caregiver.

P = There are ethical issues involved.

E = 20% of children cried desperately at one point.

E = This highlights how it is ethically inappropriate, as a large proportion of the participants could have experienced psychological harm. This is unethical as it could cause long term emotional damage to the child, for the sake of a simple study.

L = Despite ethical issues not detracting from the quality of the research (i.e. in terms of validity and reliability), it is important to conduct a cost-benefit analysis to assess whether the ethical costs are smaller than the benefits of an improved knowledge within this subject field.

P = The study lacks population validity.

E = It was primarily based on Western culture almost all of the studies were carried out in America.

E = It therefore suffers from cultural bias, so we are less able to generalise the findings and criteria to other cultures. This is particularly the case due to the individualist-collectivist divide between Western and Eastern countries, alongside cultural differences in upbringing and the experiences which the child is exposed to.

L = This suggests that the findings are culture bound and also lack ecological validity, because the results can only be generalised to the research settings within which they were found.

P = The study also lacks ecological validity.

E = It was conducted in a lab setting, so all the variables were highly controlled.

E = Despite the strict control over confounding and extraneous variables increasing the confidence that can be placed in drawing a 'cause and effect' relationship between the two outcomes. This is not representative of real life so it lacks mundane realism and cannot be generalised to reality.

E = However, the high control of variables means it is easily replicable so the findings are highly reliable. This increases confidence in the idea that the findings were not simply a 'one-off' but were statistically significant.

Part 3: Bowlby's Theory of Maternal Deprivation

This is the theory that an attachment is essential for healthy psychological and emotional development. It states that there will be many negative consequences of maternal deprivation (being deprived/separated from a mother-like figure), such as:

- An inability to form attachments in the future (see the Internal Working Model)
- Affectionless psychopathy (being unable to feel remorse)
- Delinquency (behavioural problems in the child's teenage years)
- Problems with cognitive (brain) development

Attachments are commonly disrupted in situations when a child is put in day care, has prolonged stays in hospital care or were put in institutional care to be separated from abusive/neglectful or unintentionally absent parents. This can have temporary effects on the child, or permanent but fairly mild harm. Privation is when a child fails to form any attachments at all. This has been said to be more harmful to a child. One of the most common causes of privation has been institutional care.

In order to assess the effects of maternal deprivation, Bowbly conducted his 44 juvenile thieves study. He found that out of 44 thieves, 14 displayed signs of affectionless psychopathy and 12 of these had suffered from maternal deprivation during the critical period of attachment formation i.e. the first 30 months of life. This was compared to only 5 affectionless psychopaths in the remaining 30 thieves. Therefore, on this basis, Bowlby believed that early maternal deprivation caused affectionless psychopathy and consequently, criminality!

— Lewis et al disagreed with Bowlby's conclusion that affectionless psychopathy and maternal deprivation caused criminality. Through collecting qualitative data from interviews conducted with 500 juveniles, the researchers found no link between maternal deprivation and a difficulty in forming relationships in later life. This suggests that Bowlby may have made incorrect causal conclusions.
— Bowlby's 44 juvenile thieves study suffers from several methodological limitations. One of these includes researcher bias - Bowlby was aware of what he wanted to find and so may have phrased the interview questions in a way which influenced the respondents to reply in a certain way i.e. leading questions. Secondly, Bowlby also based his theory of maternal deprivation from interviews collected from war-orphans. This does not control for the confounding variable of poor quality care in orphanages or post-traumatic stress disorder, which may have had a larger influence on the children's development rather than simply maternal deprivation.
— The effects of the critical period may not be as concrete as Bowlby originally believed. For example, the case of two twins locked away in cupboards in Czechoslovakia for the first 7 years of their lives was reported by Koluchova. Despite the obvious trauma and maternal deprivation which occurred for an extended period of time, even exceeding the critical period, the researchers found that with appropriate fostering, the twins made a full psychological recovery. Therefore, the effects of maternal deprivation are not always so clear-cut.

Part 4: Effects of Institutionalisation

Children in institutional care are very likely to experience privation.
A number of such studies into children in care all show that young children admitted to institutional care usually respond with acute distress. An example of a study is by Hodges and Tizard.

Hodges and Tizard, 1989

Aim	To observe the effects of institutionalisation on how infants form attachments and the quality of attachments they form

Procedure	• They followed a group of 65 British children from early life to adolescence. • The children has been placed in one institution when they were less than four months old. • At this age children have not yet formed attachments. • There was an explicit policy in the institution against the 'caretakers' forming attachments with the children. • An early study of the children found that 70% were described as not able 'to care deeply about anyone'. • Thus we can conclude that most, if not all, of these children had experience early emotional privation (a lack of attachment rather than simply a disruption of attachments).
Findings	• The children were assessed at regular intervals up to the age of 16. • Some of the children remained in the institution, but most had left it (where 'ex-institutional'), and had either been adopted or restored to their original families. • The 'restored' children were less likely to have formed attachments with their mothers, but the adopted children were as closely attached to their parents as both groups of ex-institutional children had problems with peers. • They were less likely to have a special friend and less likely by other children. • They were also more quarrelsome and more likely to be bullies, and also sought more attention from adults (a sign of disinhibited attachment).
Conclusion	• These findings suggests that early privation had a negative effect on the ability to form relationships even when given good subsequent emotional care. • This supports Bowlby's view that the failure to form attachments during the sensitive period of development has an irreversible effect on emotional development. • The children cope well at home, when the other person in the relationship was working hard on their behalf, but the same was not true for peer relationships

Part 5: Cultural Variations in Attachment - Van Izjendoorn

	Percentage of each attachment type		
Country (number of studies)	Secure	Avoidant	Resistant
USA (18)	65	21	14
UK (1)	75	22	3
Holland (4)	67	26	7
Germany (3)	57	35	8
Japan (2)	68	5	27
China (1)	50	25	25
Israel (2)	64	7	29
Sweden (1)	74	22	4

•Van Izjendoorn and Kronenberg (1988) conducted a meta-analysis of 32 studies using 8 countries, all investigating the patterns of attachment across a variety of cultures. The findings are displayed to the right.
• Several other studies have also been conducted into the distribution of attachment patterns across various cultures. For example, Simonella et al demonstrated that the proportion of securely attached

children in Italy was only 50%, which was lower than expected and lower than the predictions formed across a variety of different cultures. The researchers suggested that these changes may be due to changing cultural and social expectations of mothers - more mothers are working and are choosing to use professional childcare to enable them to do so, thus decreasing the likelihood that their children will be able to form a secure attachment with a consistent primary caregiver.

- Similarly, Jin et al (2012) found that when the Strange Situation was used to assess 87 Korean infants aged 6 months old, the vast majority of insecurely attached children were actually classed as insecure resistant, as opposed to insecure avoidant. Therefore, since this pattern is similar to that of Japan, this suggests that similarities in child-rearing practices are influential in establishing patterns of attachment.

— The study may lack ecological validity i.e. it did not measure what it intended to measure. The study attempted to measure cultural variations in attachment through studying different countries. However, multiple different cultures can exist within the same country, and this cultural variation was unlikely to be acknowledged. For example, Sagi and van Izjendoorn found that rural areas had an overrepresentation of insecure-resistant individuals, whereas urban areas had similar attachment patterns to the Western world. This therefore suggests that van Izjendoorn and Kronenberg did not account for such differences and so are more likely to be studying differences between countries of attachment patterns, rather than culture.

— The Strange Situation has been criticised as being culture-bound, in that the sample was biased (only used American children) and so the findings are unlikely to be generalised to other cultures, such as collectivist cultures. This is an example of imposed etic because Ainsworth assumed that the stages of attachment she developed could be universally applied to all children across all cultures, whereas this is unlikely to be the case.

+ The findings of van Izjendoorn and Kronenberg can be considered reliable due to the significantly large samples that they used i.e. 1990 children. This replicability increases the validity and faith in the conclusions drawn because it decreases the likelihood that the observed results were simply due to chance or a ‘one-off’.

Part 6: The Role of Amygdala Dysfunction in Autism

- [1]Research has suggested that amygdala dysfunction may be responsible for several characteristics of autism, such as abnormal eye contact, difficulties associated with face processing and also a lack of mental understanding. Therefore, consideration of autism in terms of a self-relevance detection system may be more appropriate. This theory is based on Baron-Cohen et al’s research into the Eyes Task, where adults and adolescents with both autism and Asperger’s Syndrome, were unable to identify the emotions displayed by an individual whose eyes were only visible, which also corresponded to reduced amygdala activity, as measured through an fMRI scan.
- More recent research has refuted the idea that the amygdala is the main area of the brain regulating emotional behaviours within the limbic system, as suggested by Prather et al (2011), who found that abnormal fear behaviours were displayed by primates who’d undergone surgical lesioning of the amygdala. Disruption of the laterobasal nuclei group of the amygdala is particularly linked with autism, due to such an area processing sense-related information (i.e. visual, auditory and olfactory), as suggested by Bzdok et al (2012). Despite such areas being key in primates, the connection between the amygdala and the anterior cingulate cortex in humans is particularly associated with autistic/atypical behavioural patterns.

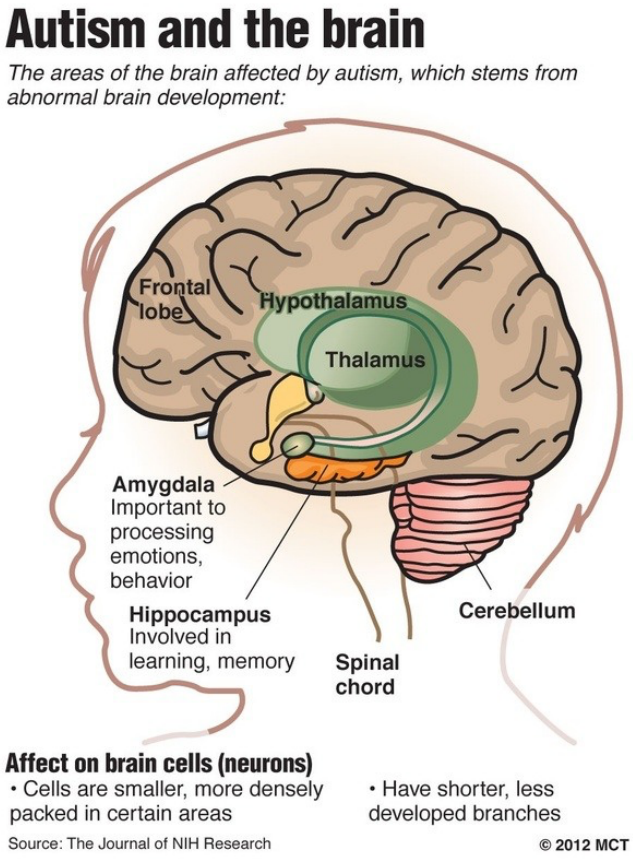
[1] Zalla, T. And Sperduti, M., The amygdala and the relevance detection theory of autism: an evolutionary perspective. *Frontiers of Human Neuroscience*, 2013, 7: 894

- Duerden et al, concluded that [2]"clear maturational differences exist in social cognition and limbic processing regions only in children/adolescents and not in adults with ASD, and may underlie the emotional regulation that improves with age in this population", on the basis that ASD sufferers had a smaller grey matter volume in their medial prefrontal cortices.

— The amygdala does not work in isolation, but rather forms a priority map of self-relevant events through continuous interactions with the ventromedial prefrontal cortex. Therefore, this suggests that it is inappropriate and reductionist to assume that amygdala dysfunction alone can be responsible for autism, but rather that this disorder is better explained through a holistic theory of brain function (and not localised!).

— There are issues with the early basis of the amygdala dysfunction theory, where recent was primarily conducted on animals who, arguably, have a smaller range of emotions compared to humans (and a lower intensity), as well as having different amygdala systems and emotional regulation mechanisms. This means that such a theory may have low ecological validity.

+ However, there has been some evidence supporting the role of amygdala dysfunction in humans, and particularly the research conducted by Duerden et al, which demonstrated that individuals with ASD have neurological differences compared to neurotypical individuals, which may coincide with differences in amygdala functioning also. This supporting evidence increases the validity of the theory as an explanation for autism.



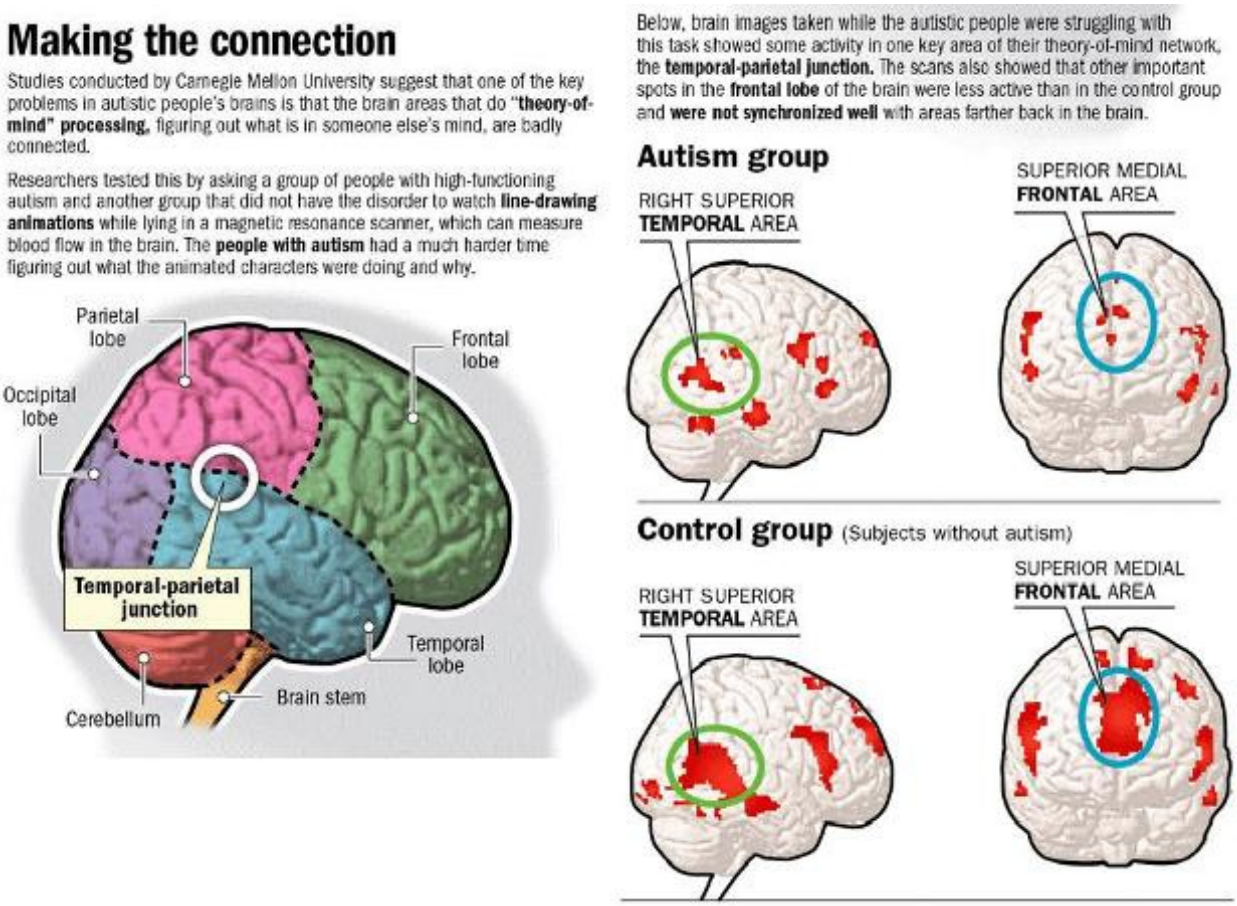
Part 7: The Role of Theory of Mind in Autism

- Theory of Mind (ToM) can be described as the ability to understand/identify what other people are thinking and feeling, through a 'mind-reading'-like process.
- Those with autism may have a deficit of ToM, meaning that they cannot understand the emotions of others, or even comprehend that individuals can have emotions different to their own. Such misunderstandings may explain why those with autism have impairments in empathy, social communication and social imagination.
- Other social deficits caused by ToM impairments include a lack of understanding that behaviour impacts how others think and/or feel, alongside problems differentiating fact from fiction, as characterised by poor performance on 'false-belief' tasks, such as the Sally-Anne task.
- In this case, where the participants were asked to identify where Sally would look for her marble after it had been moved without her knowledge, 85% of the control group (14 with Down's Syndrome and 27 neurotypical children) correctly answered, compared to 20% of the autistic group. This supports the idea that a ToM deficit is responsible for autistic children being unable to understand that people can believe something that is not true. This lack of understanding of others' viewpoints and emotions may also explain another characteristic trait of autism: difficulties predicting the behaviour or emotional states of others.
- ToM can also be assessed specifically in children below the age of 2 years old, as suggested by Meltzoff (1988), using intentional reasoning tasks. In such tasks, Meltzoff found that 18 month olds, after observing an adult struggling to place beads into a jar, dropped no beads and so imitated the intention of the adult, as opposed to the actual action (which is what would have

[2] Duerden, E.G., Mark-Fan, K.M., Taylor, M.J. and Roberts, S.W., Regional differences in grey and white matter in children and adults with autism spectrum disorders: an activation likelihood estimate (ALE) meta-analysis, *Autism Research*, 2012, 5(1):49-66.

been predicted by social learning theory). Therefore, this we can assume that children as young as one and a half years old can understand and imitate intention, on the basis of observable behaviour, and so appear to have at least some understanding of ToM.

- Since adults with Asperger's Syndrome can easily perform on false belief tasks, they appear to perform less successfully on 'The Eyes Task', which involves identifying the emotion displayed by a character whose eyes can only be seen. Baron-Cohen et al concluded that since adults with AS continued to perform poorly on such tasks, that they still suffered from ToM deficits, but these deficits simply had to be assessed in another way. This is in line with the original ToM theory and its link with autism!



— Previous research, such as that carried out by Baron-Cohen et al (1985) using the Sally-Anne tasks, has focused on the link between ToM and the cognitive impairments suffered by those with AS. Although this does serve as a comprehensive explanation, ToM deficits cannot explain the desirable characteristics which belong to AS sufferers, such as advanced numerical and logical reasoning. This means that ToM is a limited, and not universal, explanation for autism.

— ToM has close links with perspective-taking, as both involve understanding another person's thoughts and emotions, and thus allowing the observer to take on the perspective of another. However, this also makes drawing the distinction between the two increasingly difficult. For example, Meltzoff's intentional reasoning tasks can be explained in terms of the child taking on the perspective and thus intention of the adult (perspective-taking) as well as understanding the struggles and aims experienced by the adult (ToM). Therefore, this means that it is difficult to differentiate between the mechanisms of ToM and perspective-taking, limiting the theoretical value of both explanations.

— The Eyes Task can be said to have low mundane realism, because the procedure does not represent everyday life where we are usually able to look at the entire person's face and facial expressions, in order to assess their emotions. Verbal cues, such as the tone of their voice, as well as language provide us with essential information about their feelings. Therefore, such studies may produce findings with little ecological validity, because they cannot be generalised beyond the original, specific research settings.

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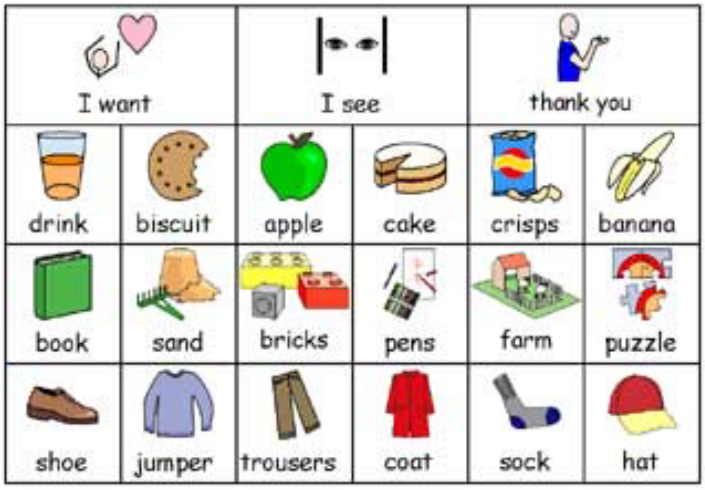
Part 8: Picture Exchange Communication System (PECS)



- [3]Research has shown that PECS systems can be successfully used to increase the number of words spoken by autistic children, and specifically more complex words, as well as reducing the frequency of non-verbal vocalisations used by young children, thus building a stable platform for future effective social communication skills.
- The system works through children making associations between giving someone a card with a picture on it, and receiving an item in return for this card i.e. positive reinforcement in operant conditioning terms. This means that requests made by young autistic patients are clear to both them and the recipient. Such a system can be used at home and in educational settings.
- [4]There are 6 phases used by the PECS: Learning how to communicate, appreciating the importance of distance and persistence, recognising picture discrimination, constructing appropriate sentence structures, learning how to answer questions and give suitable comments on such answers.

\+ There is evidence to support the effectiveness of PECS systems. For example, Charlop-Christy et al (2002) found that [5]"all 3 children met the learning criterion for PECS and showed concomitant increases in verbal speech. Ancillary gains were associated with increases in social-communicative behaviours and decreases in problem behaviours". This suggests that the use of PECS has a proven practical application!

— However, evidence has also suggested that there may be problems with [6]maintenance and generalisation, as suggested by Flipping et al (2010). This means that PECS may not be as effective as portrayed, with the possibility of children quickly forgetting how to use the system if not applied consistently, or generalising the cards to other items which are not featured.

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[3] Ganz, J.B. and Simpson, R.L., Effects on Communicative Requesting and Speech Development of the Picture Exchange Communication System in Children with Characteristics of Autism, Journal of Autism and Developmental Disorders, 2004, 34(4), pp. 395-409.

[4] The Picture Exchange Communication System, *National Autism Resources*, Accessed on 24.08.17, Accessed through https://www.nationalautismresources.com/the-picture-exchange-communication-system-pecs/

[5] Charlop-Christy, M. H., Carpenter, M., Le, L., LeBlanc, L. A. and Kellet, K. (2002), USING THE PICTURE EXCHANGE COMMUNICATION SYSTEM (PECS) WITH CHILDREN WITH AUTISM: ASSESSMENT OF PECS ACQUISITION, SPEECH, SOCIAL-COMMUNICATIVE BEHAVIOR, AND PROBLEM BEHAVIOR. *Journal of Applied Behavior Analysis*, 35: 213–231. doi:10.1901/jaba.2002.35-213

[6] Flippin, M., Reszka, S., and Watson, L.R. Effectiveness of the Picture Exchange Communication System on Communication and Speech for Children With Autism Spectrum Disorders: A Meta-Analysis, *American Journal of Speech-Language Pathology,* 2010, 19(1), pp.178-195.

— According to the [7]Research Autism group, there are several issues with the research supporting PECS. These include the issue of generalisability because most of the studies are small-scale with few participants, meaning that the findings are unlikely to be applied to the general autistic population. Secondly, the frequent lack of control groups within these trials means that statistical analyses or baseline comparisons with the autistic group are not possible, so we do not know whether the use of PECS has a significant impact. Thirdly, some of the participants have disabilities other than autism, which makes it difficult to evaluate whether the apparent improvements in communication are due to the alleviation of autistic symptoms, or of the symptoms of the other learning disabilities which participants may have, and so this acts as a confounding variable.

Part 9: Introduction to A Contemporary Study

- Li et al (2013) - Timing of High-Quality Child Care and Cognitive, Language and Preacademic Development
- The researchers used data from the National Institute of Child Health and Human Development Study of Early Child Care and used such data to gather propensity scores from the participants in an attempt to control individual differences.
- The researchers concluded that [8]"cognitive, language, and pre academic skills prior to school entry were highest among children who experienced high-quality care in both the infant-toddler and preschool periods, somewhat lower among children who experienced high-quality child care during only one of these periods, and lowest among children who experienced low-quality care during both periods".

+ This research has a real-life practical application associated with an increased understanding of the importance of high-quality care in preschools. This may change a parent's choice to send their children to one school as opposed to another, but also emphasises the preschool time period as being critical for later academic development.

-- The researchers used data from the NICHD Study of Early Child Care which may not be entirely representative, due to lacking temporal validity i.e. data was only collected from children who entered preschool in 1991 and has yet to be replicated or repeated. This limits the validity of the conclusions drawn from such studies!

— The conclusions drawn were mainly based on observations. This means that such observations could be affected by researcher bias or selection bias, where the observers are more likely to record the features which they know they are looking for, as opposed to the actual frequency of the behaviour displayed. Therefore, this further reduces the reliability of the findings.

— Children from a variety of socio-economical backgrounds should be studied in an attempt to increase the generalisability of the findings, especially to those children who need it the most. Therefore, further emphasis should be placed on such replication to increase the utility of the findings/conclusions drawn.

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[7] Picture Exchange Communication System and Autism, Research Autism - *Improving the Quality of Life*, Accessed on 24.08.17, Accessed through http://www.researchautism.net/interventions/36/picture-exchange-communication-system-and-autism/Current%20Research

[8] Li, W., Farkas, G., Duncan, G.J., Burchinal, M.R. and Lowe Vandell, D. Timing of High-Quality Child Care and Cognitive, Language, and Preacademic Development, *Developmental Psychology*, 2013, 49(8): 1440-1451.