

Reciprocity: When an infant responds to the actions of another person in a form of turn-taking.

Research: Feldman (2007) found reciprocity increases as infant and caregiver pay increasing attention to each other's verbal and facial communication.

Interactional Synchrony: when infants mirror the actions/emotions of another person, for example, their facial expressions.

Research: Meltzoff and Moore (1977) found an association between infant and adult behaviour when the infant observed facial expressions from the adult, even in 3-day-old infants.

Stage of Attachment (Schaffer)

Asocial (0-2mths): similar responses to people/objects

Indiscriminate attachments (2-6mths): preference for human company. Comforted indiscriminately. No stranger anxiety.

Specific attachment (7-12mths): preference for one caregiver. Stranger and separation anxiety.

Multiple attachments: +1yr: attachment behaviours displayed to several people (e.g. siblings and grandparents).

Role of the Father

Some claim that men are not equipped to form an attachment. E.g. biological evidence suggests oestrogen underlies caring behaviour in women and the lack of oestrogen in men is why they are unable to form a close attachment. Others argue fathers take on a play role rather than a caregiver role.

Evaluating Reciprocity and Interactional Synchrony

- Infants move their mouths and arms constantly so we cannot be certain the infants were engaging in interactional synchrony or reciprocity.
- **Koepke et al. (1983)** failed to replicate the findings of Meltzoff and Moore.
- **Isabella et al. (1989)** found that the more securely attached the infant, the greater the level of interactional synchrony.

Evaluating Stages of Attachment

Research support from Schaffer: 60 babies from working-class families in Glasgow aged between 5–23 weeks were visited at home for 12 months, then again at 18 months. Children were observed and mothers were interviewed. Results support the stages of attachment. For example, at 25–32 weeks, 50% of children showed separation anxiety as expected of the discriminate stage.

The study has low population validity but high external validity (natural behaviour was more likely since they were observed at home).

Evaluating the role of the Father

- **Geiger (1996)** found that fathers' play is more exciting, but mothers' play is more affectionate and nurturing.
- **Hrdy (1999)** found fathers were less able to detect low levels of infant distress, in comparison to mothers, supporting biological differences.
- **Belsky et al. (2009)** found males who reported higher levels of marital intimacy also displayed secure father–infant attachment.

Lorenz

Aim: To examine imprinting in non-human animals

Method: Lorenz divided greylag goose eggs into two batches. One hatched by the mother, and the second was placed in an incubator, with Lorenz as the first large moving object that the goslings saw after hatching.

The goslings were then placed under an upside-down box and their behaviour was recorded when it was removed.

Results: When the box was taken away, the naturally-hatched goslings moved immediately towards their mother, while the incubator-hatched goslings followed Lorenz. This imprinting only occurred within a critical period of 4–25 hours after hatching.

Harlow

Aim: To examine if contact comfort or food influences attachment in rhesus monkeys.

Method: Harlow constructed two surrogate mothers: one harsh 'wire mother' who fed the monkey, and a second soft 'cloth mother' with no food. Time spent with each mother was recorded. Also, the monkeys were startled by a loud noise and their responses recorded.

Results: Preference was for the soft 'cloth mother'. When startled, they would cling to the soft 'cloth mother'. Harlow concluded that baby rhesus monkeys appear to have an innate drive to seek contact comfort rather than food.

Both studies can be criticised on ethical grounds since there are concerns about the welfare and long-term damage to the animals in the research.

Evaluation

- Lorenz: we cannot generalise the results to humans. Attachment formation in mammals is different from that of bird species.
- Lorenz: **Guiton et al. (1966)** found that chickens would imprint on yellow washing-up gloves if that was the largest moving object they first saw after birth and that, in turn, they would then try to mate with that object in adulthood. They state this is not as permanent as Lorenz suggests.
- Harlow: **Howe (1998)** claims that Harlow's research has helped social workers understand risk factors in neglect and abuse cases with human children.
- Harlow: there are practical applications that are used in the care of captive wild monkeys in zoos or breeding programs to ensure that they have adequate attachment figures as part of their care.
- Harlow: Although the participants of Harlow's research were baby rhesus monkeys which are non-human, it could be argued that they are far more like humans than the geese that Lorenz studied.

*The research **tells us** that attachment is crucial for development. Harlow's monkeys who were maternally deprived suffered long-term damage to physical and psychological development.*

Learning Theory of Attachment

- Attachment is learned through operant and classical conditioning
- **Classical conditioning:** the primary caregiver being associated with food.
 - Food (UCS) produces a reflex (UCR) - relief from hunger/pleasure.
 - Before conditioning, the caregiver is a neutral stimulus
 - During conditioning, the child associates the caregiver who feeds them, with the food. She becomes a conditioned stimulus, associated with the pleasure of feeding.
- **Operant Conditioning:** when an infant feels hunger, it has the **drive** to reduce it so cries to receive comfort. Feeding reduces the unpleasant feeling of hunger, negatively reinforcing the attachment.

Bowlby's Theory of Attachment

- Attachment is an innate, evolutionary behaviour that aids survival
- During the critical period (up to 3 years old) infants must make a monotropic attachment.
- They attract caregivers with social releasers (innate traits).
- This relationship helps to shape an internal working model, a template for all future relationships.

Evaluating the Learning Theory of Attachment

- The theory is challenged by Harlow's monkey study, which found that food was not the most important factor in attachment.
- Schaffer and Emerson found that infants formed attachments to their mothers despite often being fed by other carers.
- The theory is challenged by Lorenz who showed that imprinting and attachment formation is innate rather than learned.
- The theory is based on animal research (e.g. Pavlov's Dogs) therefore it is difficult to generalise animal findings to humans with confidence that they would behave in the same way.

Evaluating Bowlby's Theory of Attachment

- The theory is supported by Lorenz who agrees with Bowlby's idea of a critical period and demonstrates that geese are born with behaviours that help them to survive.
- Hazan and Shaver support the importance of an internal working model. They found a positive correlation between early attachment types and later adult relationships.
- Schaffer and Emerson (1964) refute the idea of monotropy, claiming that multiple attachments are crucial, and some children benefit from having multiple attachments.

The strange situation is an observational method for testing attachment types and has been used cross-culturally.

Methodology of the Strange Situation

- Infants aged between 9–18 months were placed in an unfamiliar room
- They are left alone, left with a stranger, and reunited with their caregiver. They were observed covertly for 21 minutes.
- Observations of separation anxiety, reunion behaviour, exploration behaviour, and strange anxiety were recorded.

Results of Ainsworth's Strange Situation Study

66% secure attachment: moderate stranger anxiety, moderate separation anxiety, joy on reunion.

22% insecure-avoidant attachment: low separation anxiety, low stranger anxiety, the child avoids intimacy at reunion.

12% insecure resistant attachment: the infant is clingy, has high separation anxiety, high stranger anxiety, infant resists comfort at reunion.

Evaluation of Ainsworth's Strange Situation

- It lacks validity due to being highly controlled and unrepresentative of real separation. Also, despite being a covert observation of children, the caregivers were aware that they were being observed.
- Ainsworth's classification system of attachment types may be incomplete. **Main and Solomon (1986)** identified a Type D: insecure–disorganised.
- Culture bias: it views attachment from a Western perspective only.

Cross Cultural Research: van Ijzendoorn & Kroonenberg (1988)

Method: A meta-analysis of 32 strange situation studies from 8 different countries was conducted.

Results:

- Secure attachment was the most common in all cultures (China was lowest, Great Britain was highest).
- Japan and Israel showed higher levels of insecure–resistant attachment.
- Germany showed higher levels of insecure-avoidant attachment.
- The differences within cultures are as large as or larger than differences between cultures.

Evaluation of van Ijzendoorn & Kroonenberg (1988)

- They may have been comparing countries and not cultures, so childrearing differences are not accounted for. Also, it lacks population validity. 27/32 of the studies in the meta-analysis were carried out in individualistic cultures.
- The strange situation method may be culturally biased since it is more suitable for use with Western cultures. There may be imposed etic when using it cross-culturally, leading to miscategorising attachments.
- High rates of avoidance in Germany suggest problematic attachments. However, the study neglects what secure attachment looks like in Germany (e.g. independence).

Maternal Deprivation

- Occurs if there is no consistent attachment between infant and primary caregiver during the critical period.
- Can lead to consequences, such as:
 - Developmental dwarfism
 - Affectionless psychopathy (lack of remorse/shame/guilt)
 - Language and intelligence development difficulties
 - Social development difficulties

Evaluating Maternal Deprivation

- Bowlby's 44 thieves study investigated separations and attachments. 14 of the 44 thieves were affectionless psychopaths. 86% of these experienced early deprivation, suggesting a link between antisocial behaviour and deprivation.
- Rutter claims material deprivation can lead to the same consequences as maternal deprivation, and that the reason for maternal deprivation perhaps matters more.
- Lewis (1944) replicated the 44 thieves study but did not find that early deprivation predicted a greater likelihood of criminal behaviour in the youths.

Romanian Orphans and Institutions

During the 1990s in Romania, dictatorship meant abortion was banned and couples were required to birth large numbers of children in a bid to boost the population.

The effects of being institutionalised during the critical period are expected to be irreversible, including disinhibited attachment, social and intelligence difficulties, and inability to form attachments.

Evaluating Romanian Orphans and Institutions

- Rutter et al. (1998) studied 111 Romanian orphans adopted before 2 yrs and found that the sooner children were adopted, the faster their developmental progresses.
- Rutter (2007) assessed children reared in institutions in Romania and adopted into UK families. Institutionally deprived adoptees were compared at 11 yrs with children who had not experienced institutional deprivation and who had been adopted within the UK before the age of 6 months. Disinhibited attachment was strongly associated with institutional rearing. In contrast, only mild disinhibited attachment was more frequent in non-institutionalised adopted children.
- Chugani et al. (2001) administered PET scans to a sample of 10 children adopted from Romanian orphanages and compared them with 17 normal adults and a group of 7 children. Assessments showed mild neurocognitive impairment, impulsivity, and attention and social deficits. Specifically, the Romanian orphans showed significantly decreased activity in the orbital frontal gyrus.

The **internal working model**: a template of expectations about how to relate to others, formed by early experiences with the primary caregiver and the type of attachment formed. An adult with a healthy IWM will have a secure relationship. An infant who has poor early experiences in forming an attachment is more likely to behave inappropriately in future relationships or struggle to form any at all.

Research on childhood

Kerns (1994) found that securely attached infants are more inclined to have good quality peer relationships during childhood. Infants with insecure attachment are likely to have difficulties with making or maintaining friendships.

Sroufe et al. (2005) found infants who were rated high in social competence during childhood were more empathetic, popular, and felt less isolated during childhood. The IWM provides the ideal platform for interacting with others during childhood.

Determinism

The view that childhood and adulthood is influenced by our early experiences leaves no room for free will or alternative paths.

Research on adulthood

Hazen and Shaver (1987) found a positive correlation between early attachment type and experiences in love with those reporting secure attachments in childhood (on the Love Quiz) being the most likely to have loving and lasting romantic relationships. Therefore, internal working models do influence our adult relationships.

Bailey et al. (2007) looked at the attachment type of 100 mothers and infants (assessed in the strange situation) with the relationships they had with their own mothers (established in an interview). It was found that a vast proportion of the women had the same attachment type to their infant as to their own mother, supporting the concept of the internal working model influencing parenting style.

Issues with the research

A lot of research into the influence of early attachments on childhood and adulthood is based on correlations. Fraley et al. (2002) found that the correlations were not always strong positive ones either, with correlation coefficients ranging from $+0.10$ to $+0.50$. Therefore, cause and effect is not established.