3.1.3 Attachment Specification

• Caregiver-infant interactions in humans: reciprocity and interactional synchrony. Stages of attachment identified by Schaffer. Multiple attachments and the role of the father.

• Animal studies of attachment: Lorenz and Harlow.

• Explanations of attachment: learning theory and Bowlby’s monotropic theory. The concepts of a critical period and an internal working model.

• Ainsworth’s ‘Strange Situation’. Types of attachment: secure, insecure-avoidant and insecure resistant.

• Cultural variations in attachment, including van Ijzendoorn.

• Bowlby’s theory of maternal deprivation.

• Romanian orphan studies: effects of institutionalisation.

• The influence of early attachment on childhood and adult relationships, including the role of an internal working model.
CAREGIVER-INFANT INTERACTION
Jaffer et al (1973) demonstrated that infants coordinated their actions with caregivers in a kind of conversation.

From birth babies move in rhythm when interacting with an adult, almost like taking turns in a conversation—One person leans forward and speaks and then it's the other person's turn. This is reciprocity.

Brazelton (1979) suggested that this basic rhythm was a precursor for later communications.

The regularity of an infant's signals allows a caregiver to anticipate their behaviour and then respond appropriately.

This sensitivity lays the foundations for later attachment between caregiver and infant.
A slightly different kind of interaction between infants and caregivers has been described (called interactional synchrony).

Meltzoff and Moore (1977) conducted research on interactional synchrony and found that infants as young as 2 to 3 weeks old imitated specific facial and hand gestures.

The study used an adult model who displayed one of three facial expressions or hand movements.

A dummy was placed in the infant’s mouth during the initial display to prevent any response.

Following this display, the dummy was removed, and the child’s expression was filmed.

They found that there was an association between the infant behaviour and that of the adult model.

A later study (1983) demonstrated the same synchrony with infants only 3 days old.

As children as young as this were displaying the behaviour would appear to rule out the possibility that the imitation behaviours are learned (i.e., the behavioural response must be innate).
REAL OR PSEUDO-IMITATION

• Meltzoff and Moore proposed that this imitation is intentional

• However, Piaget (1962) believed that true imitations only developed towards the end of the first year and anything before this was a kind of ‘response training’ – infant repeating a behaviour that was rewarded (operant conditioning)
  – E.g. baby sticks tongue out, care giver smiles which is rewarding and encourages the infant to repeat this
  – In Piaget’s view the infant had not consciously translated what they see into a matching movement (pseudo-imitation)
REAL OR PSEUDO-IMITATION

• Meltzoff and Moore’s view was presented in a study by Murray and Trevarthen (1985)
  – Two-month-old infants first interacted via a video monitor with their mother in real time
  – When the monitor played a recording (mother not interacting with infant) the infant showed acute distress (as they tried to get the mother’s attention and gained no response, they turned away)
  – This shows that the infant is actively provoking a response rather than displaying a response that has been rewarded
  – Therefore, the infant is an active and intentional partner in the mother-infant interaction
  – Which supports the notion that such behaviours are innate not learned
CAREGIVER-INFANT INTERACTION EVALUATION
PROBLEMS WITH TESTING INFANT BEHAVIOUR

• There are difficulties in reliably testing infant behaviour

• **It is difficult to distinguish between general activity and specific imitated behaviours**
  – Due to their mouths being in fairly constant motion and the expressions that are tested occur frequently (e.g. sticking tongue out, smiling, yawning, etc)

• Meltzoff and Moore measured infant responses by filming them and then asking an observer to judge the infant’s behaviour from the video
  – **The observer had no idea what behaviour was being imitated**
  – This increased the internal validity of the data
FAILURE TO REPLICATE

- Koepke et al (1983) failed to replicate Meltzoff and Moore’s findings
  - They counter-argued that the research by Koepke et al failed as it was less carefully controlled
- Marian et al (1996) replicated the study by Murray and Trevarthen and found that infants couldn’t distinguish live from videotaped interactions with their mother
  - Suggesting that the infants are not actually responding to the adult
  - However, Marian et al acknowledge that the problem may lie with the procedure rather than the ability of infants to imitate their caregivers
IS THE BEHAVIOUR INTENTIONAL?

• Another method used to test the intentionality of infant behaviour is to observe how they respond to inanimate objects (objects that are not living).

• Abravanel and DeYong (1991) observed infant behaviour when “interacting” with two objects (one simulating tongue movements and the other mouth opening/closing).

• They found that infants of a median age of 5 and 12 weeks made little response to the objects.

  – They concluded that this shows that infants do not just imitate anything they see – it is a specific social response to other humans.
INDIVIDUAL DIFFERENCES

• There are some variations between infants

• Isabella et al (1989) found that more strongly attached infant-caregiver pairs showed greater interactional synchrony
  – Basically suggests a relationship between closeness of synchrony and strength of attachment

• Heimann (1989) showed that infants who demonstrate a lot of imitation from birth onwards have been found to have a better quality of relationship at three months
  – However, it isn’t clear whether the imitation is a cause or an effect of this early synchrony
THE VALUE OF THE RESEARCH

- Imitative behaviour forms the basis of social development
- Meltzoff (2005) proposes that:
  - First, there is the connection between what the infant sees and their imitation of this
  - Second, infants associate their own acts and their own underlying mental states
  - Third, infants project their own internal experiences onto others performing similar acts
  - As a result, infants begin to acquire an understanding of what other people are thinking and feeling
  - Such an understanding relates to what is called a Theory of Mind (understanding mental states of others)

- THIS IS FUNDAMENTAL FOR CONDUCTING SOCIAL RELATIONSHIPS

- So a strength of this research is that it explains how children begin to understand what others think and feel, and so are able to conduct relationships
THE DEVELOPMENT OF ATTACHMENT
STAGES OF ATTACHMENT

- Schaffer and Emerson (1964) conducted a landmark study on attachment.
- They used findings from this study to construct a description of how attachment develops.
STAGE 1: INDISCRIMINATE ATTACHMENTS

• From birth to about two months, infants produce similar responses to all objects (animate or inanimate)

• Near the end of this period, infants are beginning to show a greater preference for social stimuli (like a smiling face) and to be more content when they are with people

• During this period of time, reciprocity and interactional synchrony play a role in establishing the infant’s relationships with others
STAGE 2: BEGINNINGS OF ATTACHMENTS

• At about 4 months, infants become more social
• They prefer human company to inanimate objects and can tell the difference between familiar and unfamiliar people
• However, they are relatively easily comforted by anyone, and do not yet show anxiety with strangers (stranger anxiety)
• The most distinctive feature of this phase is their general sociability (enjoy being with people)
STAGE 3: DISCRIMINATE ATTACHMENT

• By 7 months most infants begin to show different sort of protest when one particular person puts them down (separation anxiety)

• They also show exceptional joy at reunion with that person and are most comforted by that person
  – They are said to have formed a specific attachment to one person (their primary attachment figure)
• Around the same time, the infant also begins to display stranger anxiety (another sign of specific attachment having formed)

• Schaffer and Emerson found that primary attachments were not always formed with the person who spent the most time with the child

  – They observed that intensely attached infants had mothers who responded quick and sensitively to their “signals”
  – Infants who were poorly attached had mothers who failed to interact
  – So the quality of the relationship, not quantity, mattered most in the formation of attachment

  – In 65% of the children, the first attachment was with the mother and in a further 30% the mother was the first object of attachment (95% in total)
  – Fathers were rarely the first sole object of attachment (3%), but 27% of them were the joint first object
STAGE 4: MULTIPLE ATTACHMENTS

• Very soon after forming the first attachment, the infant develops multiple attachments depending on how many consistent relationships that they have

• Schaffer and Emerson found that, within one month of first becoming attached, 28% of the infants had multiple attachments to someone else (other parent, grandparent, etc)
  – This are called secondary attachments
  – Infants also display separation anxiety in these relationships

• Within 6 months this had risen to 78%
  – So the majority of infants had developed multiple attachments by the age of about one year
  – With one-third of the infants having formed 5 or more secondary attachments (e.g. father, older sibling, etc)
DEVELOPMENT OF ATTACHMENT EVALUATION
UNRELIABLE DATA

• Data from Schaffer and Emerson was based on mothers’ reports of their infants – may be unreliable

• Some mothers may not have been as sensitive to their infants’ protests and so less likely to report them

– This would challenge the validity of the data
BIASED SAMPLE

• Working-class population was used = findings cannot apply to any other social group

• Sample was from the 1960s = parent care changed since then (more women go out to work so many children are cared for outside the home/by father)
  – The number of fathers who choose to stay at home to care for their children has quadrupled in the past 25 years

**IF A SIMILAR STUDY TO SCHAFFFER AND EMERSON WAS CONDUCTED TODAY, THE FINDINGS MIGHT BE DIFFERENT**
ARE MULTIPLE ATTACHMENTS EQUIVALENT?

• Are all attachments equivalent or do one or two have some special significance?

Bowlby’s = infant forms
one special emotional relationship (monotropy)

Many other secondary attachments also form which are important too

• However, Rutter (1995) argued that all attachment figures are equivalent
CULTURAL VARIATIONS

• Individualist cultures focus on the individual (e.g. UK and US)
  – Each person is concerned with their own needs or the needs of their immediate family

• Collectivist cultures focus on the needs of the rest of the group rather than the individuals (e.g. China and Japan)
  – People share possessions and child care (where multiple attachments are more common)

• Closeness of attachment with mothers was nearly twice as common in family-based arrangements than in communal environments (Sagi et al, 1994)

THIS SUGGESTS THAT THE STAGES OF ATTACHMENT MODEL APPLIES SPECIFICALLY TO INDIVIDUALIST CULTURES
STAGE THEORIES

- Stage theories describe how children’s behaviour changes as they age
  - One problem with this is that they suggest development is inflexible

- Stage theory suggests that normally, single attachments must come before multiple attachments

HOWEVER

- In some situations and cultures, multiple attachments may come first
  - The issue is that this becomes a standard by which families are judged and may be classed as abnormal
ROLE OF THE FATHER

PRIMARY ATTACHMENT FIGURES

• Schaffer and Emerson found that fathers are less likely to be primary attachment figures than mothers (due to less time spent with their infants)

• Lamb (1997) = little relationship between accessibility (amount of time) and infant-father attachment

• Men not psychologically equipped to form intense attachment = may be due to biological or social factors
  – Female hormone, oestrogen, underlies caring behaviour

• Fathers less sensitive to cues than mothers (Heermann et al, 1994)
  – HOWEVER Frodi et al (1978) found no difference in physiological responses of men and women

• However, men do form secure attachments with their children

• Frank et al (1997) found that in two-parent families where the father is the primary caregiver, both parents often share the role of the primary attachment figure
ROLE OF THE FATHER

SECONDARY ATTACHMENTS

• Fathers have a role to play as important secondary attachment figures

• Fathers are more playful, physically active, and generally better at providing challenging situations for their children

• It may be that a lack of sensitivity from fathers can be seen as positive as it fosters problem-solving by making greater communicative and cognitive demands on children (White and Woollett, 1992)
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LORENZ (1935)

• **Procedure**
  – A clutch of goslings were divided into two groups (one with their natural mother and the others were paced in an incubator)
  – When the eggs in the incubator hatched, the first living (moving) thing they saw was Lorenz and they started to follow him around
  – To test this effect of **imprinting**, Lorenz marked the two groups to distinguish them and placed them together
  – Both Lorenz and their natural mother were present

• **Findings**
  – One group of goslings followed Lorenz, the other followed their natural mother
  – Lorenz’s gosling showed no recognition of their natural mother
  – Lorenz stated that this process of imprinting is restricted to a very definite period of the young animal’s life, called a **critical period**
  – If a young animal is not exposed to a moving object during this period, they will not imprint
  – Imprinting is a process similar to attachment in that it binds a young animal to a caregiver in a special relationship
  – Lorenz did observe that imprinting to humans does not occur in some animals (e.g. curlews)
LORENZ (1935)

• **Long-lasting Effects**
  – Lorenz (1952) noted that imprinting is irreversible and long-lasting
  – One of his geese used to sleep on his bed every night
  – Early imprinting had an effect on later mate preference, called sexual imprinting
  – Animals (especially birds) will choose to mate with the same kind of object upon which they imprinted
HARLOW (1959)

• **Procedure**
  – Harlow created two wire mothers with different heads, one was additionally wrapped in cloth
  – 8 infant rhesus monkeys were studied for 165 days
  – 4 monkeys had the milk on the cloth mother and the other 4 had it on the wire mother
  – Duration of time spent with the two different mothers’ was measured
  – Observations were also made of the monkeys response when frightened

• **Findings**
  – All 8 monkeys spent most of their time with the cloth mother irrespective of whether it had the milk or not
  – Monkeys who fed from the wire mother only spent a short time to get the milk before returning to the cloth mother
  – When frightened, the monkeys clung/went to the cloth mother
  – When playing with new objects the monkeys often kept one foot on the cloth mother (possibly for reassurance)
  – These findings suggest that infants do not develop an attachment to the person who feeds them, but to the person offering contact comfort
HARLOW (1959)

- **Long-lasting Effects**
  - Harlow found that these monkeys (even those with contact comfort) developed abnormally
    - They were socially abnormal (froze or fled when approached by other monkeys)
    - They were sexually abnormal (did not show normal mating behaviour or cradle their own babies)
  - Harlow also found that there was a **critical period** for these effects
  - If the motherless monkeys spent time with their monkey “peers” they seemed to recover but only if this happened before they were 3 months old
  - Having more than 6 months with only a wire mother was something they did not appear able to recover from
ANIMAL STUDIES OF ATTACHMENT EVALUATION
• **Guiton (1966)** – leghorn chicks imprinted on yellow rubber gloves (when they were fed with them during the first few weeks)
  – Supports that animals are **not born** with a predisposition to imprint on a specific object but any moving object during the **critical** window
  – **Male chicks also tried to mate with gloves** (shows early imprinting linked to later reproductive behaviour)
CRITICISMS OF IMPRINTING - LORENZ

• The accepted view of imprinting = this is stamped irreversibly on the nervous system

• Guiton (1966) found that he could reverse the imprinting in chickens who tried to mate with the rubber gloves
  – They were able to engage in normal sexual behaviour after spending time with their own species
  – THEREFORE, IMPRINTING MAY BE VERY SIMILAR TO ANY OTHER KIND OF LEARNING
CONFOUNDING VARIABLE - HARLOW

• Confounding Variable = A Variable under study that is not the IV but which varies systematically with the IV. Changes in the DV may be due to this and not the IV

• The two stimulus object varied in more ways than being cloth-covered or not
  – Their heads were different which could have acted as a confounding variable (i.e. the monkeys may have preferred the cloth-mother due to the head being more attractive)

  – THEREFORE, CONCLUSIONS OF THIS STUDY LACK INTERNAL VALIDITY
GENERALISING ANIMAL STUDIES TO HUMAN BEHAVIOUR - HARLOW

• Can animal studies be used to generalise the conclusions to humans?
  – ANTHROPOMORPHISM

• Humans differ in important ways
  – Behaviour is governed by conscious decisions

• Although, studies have found animal attachment behaviour are mirrored in studies of humans
  – E.g. Schaffer and Emerson found that infants were not most attracted to the person who fed them

• ANIMAL STUDIES CAN BE USED TO UNDERSTAND HUMAN BEHAVIOUR BUT SHOULD ALWAYS SEEK CONFIRMATION BY LOOKING AT RESEARCH WITH HUMANS
ETHICS - HARLOW

• Harlow’s study could not be done on humans
  – So should it have been done on animals?
    • Monkeys later found it difficult to form relationships with their peers

• But it can be justified on using animals as it has enabled us to understand the processes if attachment and research from Harlow has been used to offer better care for human infants

• SO TO COULD BE ARGUED THAT THE BENEFITS OUTWEIGH THE COSTS TO THE ANIMALS INVOLVED IN THE STUDY
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LEARNING THEORY

• This says that all behaviours are learned rather than innate
• Children are born as “blank slates” and everything that they become can be explained through their experiences
• Behaviourists suggest that all behaviour (including attachment) is learned through classical conditioning or operant conditioning
CONDITIONING

Before Conditioning
Food (UCS) → Pleasure (UCR)
Mother (NS) → No Response

During Conditioning
Mother (NS) and Food (UCS) are paired

After Conditioning
Mother (CS) → Pleasure (CR)
CLASSICAL CONDITIONING

- This begins with an innate stimulus-response (with attachment the stimulus is food and the unlearned response is pleasure)
  - So food is the *unconditioned stimulus (UCS)* and the pleasure is an *unconditioned response (UCR)*
  - “Unconditioned” means not learned

- In the first few weeks/months the infant associates things that are present when they are fed (e.g. mother, sounds, etc)
  - All of these are called *neutral stimuli (NS)*

- If any NS are regular then they take on the role of the UCS and will produce the same response
  - So the NS becomes a *conditioned stimulus (CS)* and produces a *conditioned response (CR)*
  - Here the person who feeds the infant moves from being a NS to a CS
    - Just seeing the person gives the infant a feeling of pleasure (a CR)

- Learning theorists called this newly formed stimulus-response “mother-love”
Donald and Miller (1950) offered an explanation of attachment based on operant conditioning and drive reduction theory. A “drive” motivates behaviour. If an animal is uncomfortable this creates a drive to reduce that discomfort. In the case of a hungry infant, there is a drive to reduce the accompanying discomfort. When the infant is fed, the drive is reduced and this produces a feeling of pleasure. The baby receives negative reinforcement (the baby’s hunger (negative stimulus) is removed when they are fed). The adult receives negative reinforcement (by feeding the baby, the negative stimulus i.e. crying is removed).
OPERANT CONDITIONING

• The behaviour that led to being fed is more likely to be repeated in the future as it was rewarding
  – Food becomes a primary reinforcer as it supplies the reward (i.e. it reinforces the behaviour that avoided discomfort)

• Through the process of classical conditioning, the person who supplies the food is associated with avoiding discomfort and becomes a secondary reinforcer, and a source of reward in his/her right

• ATTACHMENT OCCURS BECAUSE THE CHILD SEEKS THE PERSON WHO CAN SUPPLY THE REWARD
SOCIAL LEARNING THEORY

• Hay and Vespo (1988) suggested that modelling could be used to explain attachment behaviours
• They proposed that children observe their parents’ affectionate behaviour and imitate this
• Parents would also deliberately instruct their children about how to behave in relationships and reward appropriate attachment behaviours such as giving kisses and hugs
EXPLANATIONS OF ATTACHMENT: LEARNING THEORY EVALUATION
LEARNING THEORY IS BASED ON RESEARCH WITH ANIMALS

- This is based on studies with non-human animals.
- Behaviourists believe that humans are actually no different from other animals in terms of how they learn.
- **Our behaviour patterns are made from the same building blocks of stimulus and response and so it is reasonable to generalise from animal studies to human behaviour.**
- Some aspects of human behaviour can be explained by conditioning, but not complex behaviours like attachment.
- Non-behaviourists argue that attachment involves innate tendencies and mental activity that could be explained in terms of conditioning.
- **Behaviourists explanations may lack validity as they present an oversimplified version of human behaviour.**
CONTACT COMFORT IS MORE IMPORTANT THAN FOOD

• The main limitation of learning theory as an explanation for attachment is that it suggests that food is the key element in the formation of attachment

• There is strong evidence to show that feeding has nothing to do with attachment
  – Harlow (1959) showed that *rhesus monkeys were most “attached” to the wire mother that provided contact comfort, not food*
  – Although this study is with animals, it is supported by Shaffer and Emerson’s research (infants attached more to mothers who interacted with them more and were sensitive to the child’s “signals”)

LEARNING THEORY HAS SOME EXPLANATORY POWER

• Infants do learn through association and reinforcement, but food may not be the main reinforcer.

• It may be that attention and responsiveness from a caregiver are important rewards that assist in the formation of attachment.
  – Such reinforcers were not part of the learning theory account.

• It may also be that responsiveness is something that infants imitate and so learn about how to conduct relationships.
DRIVE REDUCTION THEORY IS LARGELY IGNORED TODAY

• This was popular in the 1940s but is no longer used by psychologists

• Reasons why this has been rejected are:
  – It can only explain a limited number of behaviours (there are many things that people do that have nothing to do with reducing discomfort; some people increase discomfort, e.g. bungee jumping)
  – The theory does not adequately explain how secondary reinforcers work (they do not directly reduce discomfort, yet they are reinforcing)
    • E.g. money is a secondary reinforcer that does not reduce discomfort but it is reinforcing (i.e. we are motivated to do things when offered money)
AN ALTERNATIVE EXPLANATION

• One of the main reasons for learning theory to be rejected as an account of attachment is that a better theory appeared (i.e. Bowlby’s theory)

• Bowlby’s theory has many advantages over the learning theory
  – It can explain why attachments form (whereas learning theory only explains how they might form)
  – It also offers an explanation of the advantages of attachment (including protection from harm and so attachment evolved as a behaviour which would enhance survival)
  – Bowlby’s theory also offers a better explanation of the facts (e.g. it can explain Schaffer and Emerson’s findings that infants are not always most strongly attached to the person who feeds them)
EXPLANATIONS OF ATTACHMENT: BOWLBY’S THEORY
BOWLBY’S MONOTROPIC ATTACHMENT THEORY (1969)

• Attachment behaviour evolved as it serves an important survival function
  – A child needs to be close to an adult for protection

• Attachments are formed in two directions
  1. Child attaching to parent (for survival)
  2. Parent attaching to child (to ensure that the child is cared for and survive)

    • This means that the parents who look after their offspring that are likely to produce subsequent generations
HOW ATTACHMENTS FORM

**CRITICAL PERIOD**

- Babies have an innate drive to become attached
- Innate (biological) behaviours usually have a special time period (a **critical period**) for development
- The critical period for attachment is around 3-6 months
- Infants who do not have an opportunity to form an attachment during this time seem to have difficulty forming attachments later on
- For learning theorists, food was the most important factor
- **Bowlby proposed that attachment is determined by sensitivity**
- His views were influenced by Ainsworth whose observations of mothers led her to suggest that the infants who seemed most strongly attached were the ones whose mothers were more responsive, more cooperative and more accessible than less closely attached infants
- This is significant when considering the importance of reciprocity and interactional synchrony
HOW ATTACHMENTS FORM

SOCIAL RELEASERS

• These are important during the critical period to ensure that attachments develop from parent to infant.

• Bowlby suggested one important mechanism in this process are social releasers, such as smiling and having a “babyface”, all of which stimulate caregiving.

• These social releasers are innate mechanisms that explain how attachments to infants are formed.
HOW ATTACHMENTS FORM

MONOTROPY

• Bowlby proposed that infants have one special emotional bond (**monotropy**) – the primary attachment relationship

• This individual is often the infant’s biological mother but not always

• Infants also form many secondary attachments that provide an important emotional safety net and are important for healthy psychological and social development
CONSEQUENCES OFATTACHMENT

• The importance of monotropy is that an infant has one special relationship and forms a mental representation of this relationship called an INTERNAL WORKING MODEL

A mental model of the world which enables individuals to predict and control their environment

• This model has several consequences:

1. In the short-term it gives the child an insight into the caregiver’s behaviour and enables the child to influence the caregiver’s behaviour, so that a true partnership can be formed

2. In the long-term it acts as a template for all future relationships as it generates expectations about what intimate, loving relationships are like
CONSEQUENCES OF ATTACHMENT

CONTINUITY HYPOTHESIS

• This proposes that infants who are strongly attached will continue to be socially and emotionally competent as an adult.

• Whereas infants who are not strongly attached have more socially and emotionally difficulties in childhood and adulthood.

• THEREFORE, THERE IS A CONTINUITY FROM INFANCY TO ADULTHOOD IN TERMS OF EMOTIONAL TYPE.
KEY TERMS

- **Continuity Hypothesis** – The idea that emotionally secure infants go on to be emotionally secure, trusting and socially confident adults.

- **Critical Period** – A biologically determined period of time, during which certain characteristics can develop. Outside of this time window such development will not be possible.

- **Internal Working Model** – A mental model of the world which enables individuals to predict and control their environment. In the case of attachment, the model relates to a person’s expectations about relationships.
KEY TERMS

- **Monotropy (monotropic)** – The idea that the one relationship that the infant has with his/her primary attachment figure is of special significance in emotional development.

- **Social Releaser** – A social behaviour or characteristic that elicits caregiving and leads to attachment.
EXPLANATIONS OF ATTACHMENT: BOWLBY’S THEORY EVALUATION
IS ATTACHMENT ADAPTIVE?

- Attachment is clearly important in emotional development, but it may be less critical for survival.
- Bowlby suggested that attachments develop when the infant is older than three months (this is very late as a mechanism to protect infants).
- In our distant ancestors it would have been vital for infants to become attached as soon as they were born (young monkeys cling to their mothers fur).
- The age of attachment is linked to features of a species’ life (human infants do not need to cling on as the mothers can carry their babies).
- However, when human infants start crawling (from around 6 months) attachment is vital and that is when attachments develop in humans, supporting the view that it is adaptive.
A SENSITIVE PERIOD RATHER THAN A “CRITICAL”

- Psychologists have studied children who fail to form attachments during the important critical period between 3-6 months.
- According to Bowlby, it should not be possible to form attachments beyond this point.
- Evidence from Rutter et al. (2010) shows that this is true to an extent.
  - It appears less likely that attachments will form after this period but it is not impossible.
  - For this reason, researchers now prefer to use the term “sensitive period.”
MULTIPLE ATTACHMENT VS MONOTOPY

• With the multiple attachment model there are no primary and secondary attachments (the view of monotropy), but all attachments are simply integrated into one single internal working model

• However, this may not be so very different from what Bowlby intended

• Secondary attachments, in his theory, do contribute to social development but healthy development requires one central person “higher” than all the others in a hierarchy

• Research on infant-father attachment, for example, suggests a key role for fathers as secondary attachments and in social development (Grossmann and Grossmann, 1991)

• Prior and Glaser (2006) conclude, from a review of research, that the evidence still points to the hierarchical model as suggested by Bowlby’s concept of monotropy
According to Bowlby’s theory, one outcome of attachment is the effect it has on subsequent relationships. This has been tested by the Minnesota parent-child study (Sroufe et al, 2005).

- This followed participants from infancy to late adolescence and found continuity between early attachment and later emotional/social behaviour.
- Individuals who were classified as securely attached in infancy were highest rated for social competence later in childhood, were less isolated and more popular, and more empathetic.
- This supports the continuity hypothesis because there is a link between early and later attachments.
AN ALTERNATIVE EXPLANATION

• The temperament hypothesis (Kagen, 1984) proposes that an infant’s innate emotional personality (temperament) may explain attachment behaviour.

• Infants who have an “easy” temperament are more likely to become strongly attached as it is easier to interact with them compared to those who are “difficult” (who tended to be insecurely attached).

• There is research support for this (Belsky and Rovine, 1987)
  – They found that infants between 1-3 days old who had signs of behavioural instability (i.e. were “difficult”) were later judged to be more likely to have developed an insecure attachment.
AN ALTERNATIVE EXPLANATION

• Bowlby’s theory suggested that attachment type is due to the primary attachment figure’s sensitivity whereas Kagen’s view is that attachment can be explained in terms of infant behaviours.

• Belsky and Rovine propose that there is an interaction between the two
  – This is supported by Spangler (1990) who found that mothers’ perceptions of their infant’s temperament influenced the mother’s responsiveness.
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- Romanian orphan studies: effects of institutionalisation.
- The influence of early attachment on childhood and adult relationships, including the role of an internal working model.
THE STRANGE SITUATION

• Ainsworth et al (1971, 1978) devised the \textit{strange situation} to test the nature of attachment
• The aim was to see how infants (between 9-18 months) behave under conditions of mild stress and also novelty
PROCEDURE

• The research room is a novel (new) environment (9 x 9 foot space)
• The procedure consisted of 8 episodes, each designed to highlight certain behaviours (see next slide)
• The key feature of these episodes is that the caregiver and stranger alternately stay with the infant or leave
• This enables observation of the infant’s response to:
  – Separation from the caregiver (separation anxiety)
  – Reunion with the caregiver (reunion behaviour)
  – Response to a stranger (stranger anxiety)
  – The novel environment (encourages exploration and so tests the secure base concept)
### PROCEDURE

<table>
<thead>
<tr>
<th>EPISODES (about 3 mins in duration)</th>
<th>BEHAVIOUR ASSESSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Parent and infant play</td>
</tr>
<tr>
<td>2</td>
<td>Parent sits while infant plays</td>
</tr>
<tr>
<td>3</td>
<td>Stranger enters and talks to parent</td>
</tr>
<tr>
<td>4</td>
<td>Parent leaves, infant plays, stranger offers comfort if needed</td>
</tr>
<tr>
<td>5</td>
<td>Parent returns, greets infant, offers comfort if needed; stranger leaves</td>
</tr>
<tr>
<td>6</td>
<td>Parent leaves, infant alone</td>
</tr>
<tr>
<td>7</td>
<td>Stranger enters and offers comfort</td>
</tr>
<tr>
<td>8</td>
<td>Parent returns, greets infant, offers comfort</td>
</tr>
</tbody>
</table>
PROCEDURE

• Data is usually collected by a group of observers using a video recorder or one-way mirror

• They may record what the infant is doing every 15 second using the following behavioural categories:

1. Proximity and contact-seeking behaviours
2. Contact-maintaining behaviours
3. Proximity and interaction-avoiding behaviours
4. Contact and interaction-resisting behaviours
5. Search behaviours

• Each item is also scored for intensity on a scale of 1 to 7
FINDINGS

• Data was combined from several studies to make a total of 106 middle-class infants observed in the Strange Situation

• Similarities and differences in the way the infants behaved were noted
  – Similarities = exploratory behaviours declined in all infants from episode 2 onwards; whereas the amount of crying increased
  – Differences = 3 main patterns of behaviour was observed in the infants; which led to 3 qualitative different types of attachment

• The characteristics of the main attachment types, linked to the Strange Situation, highlighted below and described on subsequent slides:
  – The **secure attachment** (Type B)
  – The **insecure-avoidant** (Type A)
  – The **insecure-resistant** (Type C)
FINDINGS

SECURE ATTACHMENT (TYPE B)

• These people have harmonious and cooperative interactions with their caregiver
• They are not likely to cry if the caregiver leaves the room and shows some distress when left with the stranger
• When feeling anxious they seek close bodily contact with their caregiver and are easily soothed, but may be reluctant to leave their caregiver’s side prematurely
• They seek and are comfortable with social interactions and intimacy
• They use the caregiver as a secure base from which to explore and so is able to function independently
FINDINGS

INSECURE-AVOIDANT (TYPE A)

• Children tend to **avoid** social interaction and intimacy with others

• In the Strange Situation, such children show little response to separation and do not seek the proximity of their caregiver in reunion

• If the infant is picked up they show little or no tendency to cling or resist being put down

• These children are happy to explore with or without the presence of their caregiver

• They are also characterised by high levels of anxiousness
INSECURE-RESISTENT (TYPE C)

- These children both seek an resist intimacy and social interaction
- These children respond to separation from their caregiver with immediate and intense distress, and behave similarly towards strangers
- On reunion, these children display conflicting desires for and against contact; they may angrily resist being picked up while trying other means to maintain proximity
## FINDINGS

<table>
<thead>
<tr>
<th></th>
<th>SECURE ATTACHMENT (TYPE B)</th>
<th>INSECURE-AVOIDANT (TYPE A)</th>
<th>INSECURE-RESISTENT (TYPE C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willingness to explore</td>
<td>High</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Stranger Anxiety</td>
<td>Moderate</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Separation Anxiety</td>
<td>Some easy to sooth</td>
<td>Indifferent</td>
<td>Distressed</td>
</tr>
<tr>
<td>Behaviour at reunion</td>
<td>Enthusiastic</td>
<td>Avoids contact</td>
<td>Seeks and rejects</td>
</tr>
<tr>
<td>Percentage of infants</td>
<td>66%</td>
<td>22%</td>
<td>12%</td>
</tr>
<tr>
<td>in this category</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
AINSWORDTH’S STRANGE SITUATION EVALUATION
OTHER TYPES OF ATTACHMENT

• Ainsworth et al’s analysis overlooked a 4th type of attachment

• Main and Solomon (1986) analysed over 200 Strange Situation videotapes and proposed the insecure-disorganised type D, which is characterised by a lack of consistent patterns of social behaviour
  
  – In other words, some infants don’t have a consistent type of attachment
  
  – Such infants lack a coherent strategy for dealing with the stress of separation
    
    • E.g. they show very strong attachment behaviour which is suddenly followed by avoidance or looking fearful towards their caregiver

• Van IJzendoorn et al (1999) further supported this with a meta-analysis of nearly 80 studies in the US
  
  – They found 62% secure, 15% insecure-avoidance, 9% insecure-resistant and 15% insecure-disorganised
OBSERVATIONS HAD HIGH RELIABILITY

• The reliability of observations is important

• The measurements are confirmed as meaningful if there is an agreement amongst observers (inter-observer reliability), which is determined by comparing the ratings made by a panel of experienced judges

• Ainsworth et al (1978) found almost perfect agreement when rating exploratory behaviour
  – They found .94 agreement between raters (1.00 would be perfect)

• This means that the observations can be accepted as being reliable
REAL-WORLD APPLICATION

• In situations where disordered patterns of attachment develop between infant and caregiver, intervention strategies can be developed
  – E.g. the Circle of Security Project (Cooper et al, 2005) teaches caregivers to better understand their infants’ signals of distress and to increase their understanding of what it feels like to feel anxious
  – The project showed a decrease in the number of caregivers classified as disordered (from 60% to 15%) and an increase in infants classed as securely attached (from 32% to 40%)
  – This supports the research on attachment types because such research can be used to improve children’s lives
LOW INTERNAL VALIDITY

• This concerns the extent to which we are measuring what we intended to measure
• The Strange Situation aims to measure the attachment type of a child
• However, does it really measure this or does it merely measure the quality of one particular relationship?
• Main and Weston (1981) found that children behaved differently depending on which parent they were with
  – This suggests that the classification of attachment type may not be valid as what we are measuring is one relationship rather than a personal characteristic lodged to the individual
LOW INTERNAL VALIDITY

• However, according to Bowlby’s view of monotropy, the fact that an infant responds differently with someone other than their primary attachment figure tells us something about that relationship, but the attachment type is largely related to the one special relationship.

• Main (1999) tested a group of children and re-assessed them at age 9 using the AAI (adult attachment interview), finding that attachment type seemed to be chiefly influenced by the mother.
  – Supporting Bowlby’s concept of monotropy and the internal validity of the Strange Situation
• Ainsworth suggested that secure attachment was linked to maternal sensitivity
  – However, some studies (e.g. Raval et al, 2001) have found rather low correlations between measures of maternal sensitivity and the strength of attachment
• Slade et al (2005) found a greater role for maternal reflective functioning
  – “Reflective functioning” is the ability to understand what someone else is thinking and feeling
  – They suggest that maternal reflective thinking rather than sensitivity may be the central mechanism in establishing attachment type
3.1.3 Attachment Specification

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CULTURAL VARIATIONS

• The ways that different groups of people vary in terms of their social practices, and the effects these practices have on development and behaviour
They completed a meta-analysis of the findings from 32 studies of attachment behaviour (over 2,000 Strange Situation classifications in 8 different countries)

They wanted to see if there would be evidence that there were:

- *Inter*-cultural differences (i.e. differences between different cultures)
- *Intra*-cultural differences (i.e. differences in the findings from studies conducted *within* the same culture)
VAN IJZENDOORN AND KROONENBERG (1988)

**FINDINGS**

Bar chart to show results of Van Ijzendoorn & Kroonenberg's meta-analysis of the Strange Situation in 8 cultures.

- % of children in attachment type
- Cultures: Germany, Great Britain, Netherlands, Sweden, Israel, Japan, China, USA

- Secure (B)
- Insecure Avoidant (A)
- Insecure Resistant (C)
VAN IJZENDOORN AND KROONENBERG (1988)

FINDINGS

• They found that differences between cultures/countries were small.
• Secure attachment was the most common classification in every country.
• Insecure-avoidant attachment was the next most common in every country except Israel and Japan (both classified as collectivist countries at the time of the study).
• Variation within cultures was 1½ times greater than variation between cultures.
• The conclusion could be that the global pattern across cultures appears to be similar to that found in the US.
• Secure attachment is the “norm”
  – This supports the idea that secure attachment is “best” for healthy social and emotional development.
• These cultural similarities support the view that attachment is an innate and biological process.
CULTURAL SIMILARITIES

- Tronick et al (1992) supports this study with their work on an African tribe in Zaire, who lived in extended family groups.
- The infants were looked after and even breastfed by different women, but usually slept with their own mother at night.
- Despite such differences in childrearing practices, the infants, at six months, still showed one primary attachment.
CULTURAL DIFFERENCES

• Grossmann and Grossmann (1991) found that German infants tended to be classified as insecurely rather than securely attached
  – This may be due to childrearing practices

• German culture keeps some interpersonal distance between parents and children
  – So infants do not engage in proximity-seeking behaviours in the Strange Situation and so appear to be insecurely attached
CULTURAL DIFFERENCES

• Takahashi (1990) used the Strange Situation to study 60 middle-class Japanese infants and their mothers and found similar rates of secure attachment to those found by Ainsworth et al
  – However, the Japanese infants showed no evidence of insecure-avoidant attachment and high rates of insecure-resistant attachment (32%)
• Japanese infants were particularly distressed when left alone (the study had to be stopped for 90% of infants)
• This cultural variation might be accounted for due to different child care practices
  – In Japan infants rarely experience separation from their mothers, which would explain why they were more distressed in the Strange Situation than American studies
  – This would make them *appear* to be insecurely attached
CONCLUSION

• These studies suggest that, despite the fact that there are cultural variations in infant care arrangements, the strongest attachments are still formed with the infant’s mother.

• Research also shows, however, that there are differences in the patterns of attachment that can be related to differences in cultural attitudes and practices.
CULTURAL VARIATIONS EVALUATION
According to Bowlby’s theory of attachment, the reason for universal similarities in how attachments form is because attachment is an innate mechanism, unchanged by culture.

Van IJzendoorn and Kroonenberg suggest that at least some cultural similarities might be explained by the effects of mass media (e.g. TV), which spread ideas about parenting.

As a result, children all over the world are exposed to similar influences.

This means that cultural similarities may not be due to innate biological influences but are because of our increasingly global culture.
NATION RATHER THAN CULTURE

• Van IJzendoorn and Kroonenberg drew conclusions about cultural differences but they were actually comparing countries, not cultures
  – They compared Japan with the US and within each country there are many different subcultures, each of which may have different childcare practices

• One study of attachment in Tokyo (an urban setting) found similar distributions of attachment types to the Western studies, whereas a more rural sample found an over-representation of insecure-resistant individuals (Van IJzendoorn and Sagi, 2001)

• Van IJzendoorn and Kroonenberg found more variation within cultures than between cultures
CROSS-CULTURAL RESEARCH

• An issue for research conducted in different countries is the “tools” that are used
  – Psychologists measure behaviour using intelligence tests or observational methods
  – These tools or techniques are related to the cultural assumptions of the test/technique “designer”

• In the case of the Strange Situation (designed by an American) it is assumed that willingness to explore is a sign of secure attachment
  – However, in some cultures this is not the case
  – In traditional Japanese culture, dependence rather than independence would be the sign of secure attachment
• **Imposed etic** is the use of a technique designed in one culture but imposed on another
  – The result of this is that Japanese children may appear to be insecurely attached according to Western criteria, whereas they are securely attached by Japanese standards

• **This means that research using the Strange Situation may lack validity!**
CULTURE BIAS

• Rothbaum et al (2000) argued that it isn’t just the methods used in attachment research that are not relevant to other cultures, but also the theory because it is so rooted in American culture
  – They looked in particular at the contrasts between American (Western) and Japanese culture
  – For example, the continuity hypothesis does not have the same meaning in both cultures

• Bowlby and Ainsworth proposed that infants who are more securely attached go on to develop into more socially and emotionally competent children and adults
  – However, this competence is defined in terms of individuation (being able to explore, being independent and able to regulate one’s own emotions)
  – In Japan the opposite is true; competence is represented by the inhibition of emotional expression (not showing feelings) and being group-oriented rather than self-oriented
INDIGENOUS THEORIES OF ATTACHMENT

• Rothbaum et al suggest that the benefit of research on cultural variations is that psychologists should be able to produce a set of indigenous theories (explanations of attachment rooted in individual cultures)
  – There may be a small set of universal principles, such as the need for protection, but in general, childcare practices will be related to cultural values

• Posada and Jacobs (2001) note that there is actually a lot of evidence that supports the universality of attachment from many different countries: China, Colombia, Germany, Israel, Japan and Norway
  – They point out that the issue is not whether sensitivity leads to independence, but simply that sensitivity is linked to secure attachment however secure attachment is manifested

• Prior and Glaser (2006) conclude that expressions of maternal sensitivity and manifestations of secure-base behaviour may vary across cultures but the core concepts are universal
3.1.3 Attachment Specification

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• Romanian orphan studies: effects of institutionalisation.
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What do you consider “deprivation” to mean?

It is used when you lose something.

In child development, deprivation refers to “the loss of emotional care that is normally provided by a primary caregiver.”

Bowlby proposed that prolonged emotional deprivation would have long-term consequences in terms of emotional development.
VALUE OF MATERNAL CARE

• **Findings from research** (including Bowlby’s 44 thieves study) *demonstrated the long-term importance of the effects separation has on infants and children*

• It was assumed that a good standard of food and physical care was the key importance of good care
  
  – If children were separated from their caregivers then all that was needed was to maintain this standard
VALUE OF MATERNAL CARE

• However, from this research Bowlby believed that it wasn’t enough to make sure that a child was well-fed and kept safe and warm.

• He believed that infants and children needed “warm, intimate and continuous relationship” with a mother (or permanent substitute) to ensure normal mental health.
  – “Mother love in infancy and childhood is as important for mental health as are vitamins and proteins for physical health” (Bowlby, 1953)
CRITICAL PERIOD

• Bowlby believed that a young child who is denied such care because of frequent and/or prolonged separations may become emotionally disturbed
  – This only applies to a critical period in development
    • Separation will only have this effect *if* this happens before the age of 2½ and *if* there is no substitute mother-person available

• Potential damage can be avoided if suitable substitute emotional care is provided by a mother-substitute (male or female)

• So, separation doesn’t need to result in deprivation, and it is deprivation that has the potential to cause long-term harm
LONG-TERM CONSEQUENCES

• Bowlby suggested that the long-term consequence of deprivation was emotional maladjustment/instability or even mental health problems like depression.
KEY STUDY: 44 JUVENILE THIEVES

PROCEDURE

• Bowlby (1944) analysed the case histories of a number of his patients in the Child Guidance Clinic in London
• All the children attending the clinic were emotionally unstable
• He studied 88 children
  – Half had been caught stealing (44 “thieves”) and the other half were a control group
• Bowlby suggested that some of the “thieves” (14) were affectionless psychopaths (lacked normal signs of affection, shame or sense of responsibility)
  – These characteristics enabled them to be “thieves”
    • They could steal from others as it didn’t matter to them
KEY STUDY: 44 JUVENILE THIEVES

FINDINGS

• Bowlby found that those **individuals diagnosed as affectionless thieves had experienced frequent early separations from their mothers**

• 86% of the affectionless thieves (12 out of 14) experienced frequent separation compared with 17% (5 out of 30) of the other thieves

• Almost none of the control participants experienced early separations whereas 39% of all the thieves had experienced early separations
  – These early separations often consisted of continual or repeated stays in foster homes or hospital, when the children were scarcely visited by their families
KEY STUDY: 44 JUVENILE THIEVES

FINDINGS

• These findings suggest that early separations are linked to affectionless psychopathy.

• In other words, lack of continuous care may well cause emotional instability or even mental disorder.
## KEY STUDY: 44 JUVENILE THIEVES

### FINDINGS

<table>
<thead>
<tr>
<th></th>
<th>Frequent</th>
<th>None</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affectionless</td>
<td>12 (86%)</td>
<td>2 (14%)</td>
<td>14</td>
</tr>
<tr>
<td>Other thieves</td>
<td>5 (17%)</td>
<td>25 (83%)</td>
<td>30</td>
</tr>
<tr>
<td>All thieves</td>
<td>17 (39%)</td>
<td>27 (61%)</td>
<td>44</td>
</tr>
<tr>
<td>Control group</td>
<td>2 (4%)</td>
<td>42 (96%)</td>
<td>44</td>
</tr>
</tbody>
</table>
BOWLBY’S THEORY OF MATERNAL DEPRIVATION EVALUATION
PHYSICAL AND EMOTIONAL SEPARATION

- Deprivation does not just have to be physical, it can also be related to psychological separation
  - A mother who may be depressed can be physically present, but unable to provide suitable emotional care, thus depriving her child of that care
- Radke-Yarrow et al (1985) found that 55% children with mothers who were severely depressed were insecurely attached (compared to 29% in the non-depressed group)
- This shows that psychological separation can also lead to deprivation
SUPPORT FOR LONG-TERM EFFECTS

• Experiencing early maternal deprivation does not always result in negative outcomes
  – But what it appears to do is to create an increased likelihood that this will happen (i.e. making them more vulnerable)
• This was shown by Bifulco et al (1992)
  – She studied women who had experienced maternal separation due to death or temporary separation of more than a year
  – They found that about 25% later experienced depression or an anxiety disorder, compared to 15% who had no experience of separation
  – Mental health problems were much greater in those whose separation was before the age of 6
    • SUPPORTING BOWLBY’S NOTION OF A CRITICAL PERIOD
REAL-WORLD APPLICATION

• Bowlby’s study and theory had a massive impact on post-war thinking about childrearing and how they are looked after in hospital

• **Before his research children were separated from parents when they spent time in hospital**
  – Visiting was discouraged or even forbidden

• Robertson (1952) filmed a two-year-old girl called Laura during the 8-day period she was in hospital
  – She is seen to be frequently distressed and begs to go home
  – [https://www.youtube.com/watch?v=s14Q-_Bxc_U](https://www.youtube.com/watch?v=s14Q-_Bxc_U)

• **Bowlby and Robertson’s work led to major social change in the way that children were cared for in hospital**
INDIVIDUAL DIFFERENCES

• Not all children are affected by emotional disruption in the same way
  – Barret (1997) reviewed various studies on separation and concluded that **securely attached children may sometimes cope reasonably well, whereas insecurely attached children become especially distressed**

• A similar conclusion was made by Bowlby et al (1956) of 60 children under 4 who had TB (tuberculosis)
  – Treatment of TB involves a prolonged stay in hospital, where children were only visited once a week
  – So nurses provided maternal care and the children probably experienced early disruption of attachment
INDIVIDUAL DIFFERENCES

• Bowlby et al found that when these children were assessed in adolescence:
  – Some in the TB group were more maladjusted/unstable than the “normal” children
  – **No significant differences** between them and their “normal” peers **in terms of intellectual development**

• Bowlby et al suggest that **those children who coped better may have been more securely attached and so more resilient**
DEPRIVATION VS PRIVATION

• Rutter criticised Bowlby’s view of deprivation as it did not make it clear if the child’s attachment bond had been formed but then been broken, or if it had never been formed in the first place

• Rutter’s view of deprivation was that the lack of an attachment bond (PRIVATION – failure to develop an attachment bond) would have potentially far more severe consequences for the child than the loss of an attachment bond (DEPRIVATION – bond does develop, but is disrupted or lost)

• THEREFORE, NOT DEVELOPING AN ATTACHMENT (PRIVATION) IS WORSE THAN LOSING AN ATTACHMENT (DEPRIVATION)
3.1.3 Attachment Specification

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INSTITUTIONALISATION

• This is the effect of institutional care

• The term can be applied widely to the effects of an institution but we are focusing on how much time spent in an institute (e.g. an orphanage) can affect the development of children

• The possible effects include social, mental and physical underdevelopment

• Some of these effects may be irreversible
ROMANIAN ORPHANS - BACKGROUND

• In 1966 the Romanian government tried to boost the population of Romania by encouraging parents to have large families and banning abortion

• This led to many babies not being able to be cared for by their families

• In 1989 the Western world became aware of the issues surrounding Romanian orphans in institutional care
  – More than 100,000 orphans in 600 state-run orphanages
  – Children spent their days alone in cribs with very little stimulation (cognitive or emotional)
  – They were malnourished and uncared for
  – Many were adopted by Western families
The study was known as English and Romanian Adoptees (ERA)

The study includes 165 Romanian children who spent their early lives in Romanian institutions and so suffered from the effects of institutionalisation

111 of these were adopted before the age of 2 and a further 54 adopted by the age of 4

The adoptees were tested at regular intervals (ages 4, 6, 11 and 15) to assess their physical, cognitive and social development

Information was gathered in interviews with parents and teachers

Their progress was compared to a control group of 52 British children adopted in the UK before the age of 6 months
KEY STUDY: RUTTER AND SONGUA-BARKE (2010)

FINDINGS

• At the time of adoption the Romanian orphans were behind the British orphans in terms of physical, social and cognitive development

• They were smaller, weighed less and were classified as mentally retarded

• By the age of 4, some of the Romanian orphans had caught up the British orphans
  – This was true for nearly all of the Romanian orphans adopted before the age of 6 months
FINDINGS

• Many of the orphans adopted after the age of 6 months showed disinhibited attachments (where a child actively approaches and interacts with unfamiliar adults) and had problems with peer relationships.

• This suggests that long-term consequences may be less severe than was once thought if children have the opportunity to form attachments.

• However, when children do not form attachments (i.e. continuing failure of attachment), then the consequences are likely to be severe.
OTHER STUDIES OF ROMANIAN ORPHANS

• Romanian orphans were also adopted in other parts of the world

• **Le Mare and Audet’s (2006)** longitudinal study of 36 Romanian orphans adopted to families in Canada
  – Adopted orphans were physically smaller than a matched control group at the age of 4½, but this difference had disappeared by 10½
  – This was also the case for physical health
  – **This suggests that recovery is possible from the effects of institutionalisation on physical development**
OTHER STUDIES OF ROMANIAN ORPHANS

- **Zeanah et al (2005)** compared 136 Romanian children who had spent an average of 90% of their lives in an institution, to a control group of Romanian children who had never been in an institution.

- Children were aged 12-31 months and were assessed in the Strange Situation.
  - The institutionalised children showed signs of disinhibition attachment.
EFFECTS OF INSTITUTIONALISATION

• There are a number of well-documented effects of institutionalisation, including:
  – **Physical Underdevelopment** – Children in institutional care are usually physically small
    • Research has shown that lack of emotional care rather than poor nourishment is the cause of what has been called deprivation dwarfism
  – **Intellectual Underfunctioning** – Cognitive development is also affected by emotional deprivation
  – **Disinhibited Attachment** – A form of insecure attachment where children do not discriminate between people they choose as attachment figures
    • These children will treat near-strangers with inappropriate familiarity (overfriendliness) and may be attention seeking
EFFECTS OF INSTITUTIONALISATION

– Poor Parenting – Quinton et al (1984) who compared a group of 50 women who had been reared in institutions (children’s homes) with a control group of 50 women reared at home

• When the women were in their 20s it was found that the ex-institutional women were experiencing extreme difficulties acting as parents

• E.g. more of the ex-institutional women had children who had spent time in care
EFFECTS OF INSTITUTIONALISATION EVALUATION
INDIVIDUAL DIFFERENCES

• Some research suggests that individuals who do not form a primary attachment within that early sensitive period are unable to recover
  – However, this is not true of all children who experience institutionalisation
  – In all of the studies some children are not as strongly affected as others, i.e. there are individual differences

• Rutter has suggested that it might be that some of the children did receive special attention in the institution, maybe because they smiled more, and this would mean they did have some early attachment experiences

• Bowlby et al’s study of children hospitalised with TB showed that there were individual differences in the way children cope
REAL-LIFE APPLICATION

• The outcome of research into institutionalisation is to apply our understanding to improving the lives of children placed in such care.

• The early research by Bowlby and Robertson on the effects of hospital care changed the way that children were looked after so that much more focus was given when children were hospitalised.

• The current research with Romanian orphans points specifically to the importance of early adoption.
  – In the past, mothers who were going to give their baby up for adoption were encouraged to nurse the baby for a significant period of time.
  – By the time the baby was adopted the sensitive period for attachment formation may have passed, making it difficult to form secure attachments.

• Today most babies are adopted within the first week of birth and research shows that adoptive mothers and children are just as securely attached as non-adoptive families (Singer et al, 1985).
VALUE OF LONGITUDINAL STUDIES

- The importance of these studies is that they followed the lives of children over many years.
- These studies take a lot of time which means a lot of planning and waiting for results, but the benefits are large.
- Without these studies we may mistakenly conclude that there are major effects due to early institutional care, whereas some of these studies show that the effects may disappear after sufficient time and with suitable high-quality care.
DEPRIVATION IS ONLY ONE FACTOR

• The Romanian orphans were faced with much more than emotional deprivation. The physical conditions were appalling, which impacted their health.

• The lack of cognitive stimulation would also affect their development.

• It is more likely that damage only occurs when there are multiple risk factors.

• It is also the case that, for many institutionalised children, poor care in infancy is followed by poor subsequent care, like living in poverty, experiencing parental conflict, etc (Turner and Lloyd, 1995)
INSTITUTIONALISATION MAY JUST BE SLOW DEVELOPMENT

- One of the findings from the Romanian study was that the last assessment, at age 11, a lower number of children had disinhibited attachment.

- **It may be that the effects of institutionalisation do disappear over time if children have good-quality emotional care.**

- It may be that ex-institutional children need more time than normal to mature sufficiently and learn how to cope with relationships.
  - This is a criticism of the research because it implies that their effects may be irreversible, whereas this may not be true.

- This is further supported by Le Mare and Audet’s finding that physical underdevelopment had improved by age 11, **suggesting that development does continue in these children, so they simply may not have reached their full potential in the studies so far.**
3.1.3 Attachment Specification

- Caregiver-infant interactions in humans: reciprocity and interactional synchrony. Stages of attachment identified by Schaffer. Multiple attachments and the role of the father.
- Animal studies of attachment: Lorenz and Harlow.
- Explanations of attachment: learning theory and Bowlby’s monotropic theory. The concepts of a critical period and an internal working model.
- Ainsworth’s ‘Strange Situation’. Types of attachment: secure, insecure-avoidant and insecure resistant.
- Cultural variations in attachment, including van Ijzendoorn.
- Bowlby’s theory of maternal deprivation.
- Romanian orphan studies: effects of institutionalisation.
- The influence of early attachment on childhood and adult relationships, including the role of an internal working model.
ROLE OF THE INTERNAL WORKING MODEL

- INTERNAL WORKING MODEL = a mental model of the world which enables individuals to predict and control their environment. In the case of attachment the model relates to a person’s expectations about relationships.

- The concept of the internal working model is similar to schema (a cognitive framework that helps us to interpret and organise information in the brain – it helps us to make sense of new information).
The internal working model is like this:

- **An infant learns about a relationship from experience** (what they are and how partners behave towards each other in a relationship)
- It is an “operable” or workable model of self and attachment partner, based on their joint attachment history (Bretherton and Mulholland, 1999)
- It is “operable” because it is used to predict the behaviour of other people in the future
KEY STUDY: HAZAN AND SHAVER (1987)

• In pairs, summarise the study above in no more than 5 sentences on your whiteboards/paper (including information on procedures and findings)
KEY STUDY: HAZAN AND SHAVER (1987)

PROCEDURE

• They placed a “Love Quiz” in the Rocky Mountain News (American small-town publication)

• It asked questions about current attachment experiences and about attachment history to identify current and childhood attachment types

• It also asked questions about attitudes towards love (an assessment of the internal working model)

• They analysed 620 responses, 205 from men and 415 from women, from a fair cross-section of the population
KEY STUDY: HAZAN AND SHAVER (1987)

FINDINGS

• When analysing self-report of attachment history they found that the attachment styles was similar to that found in infancy (56% were secure, 25% avoidant and 19% resistant)

• They also found a positive correlation between attachment type and love experience
  – Securely attached adults described their love experiences as happy, friendly and trusting and emphasised being able to accept and support their partner despite faults
  – These relationships were more enduring (10 years on average; compared to 6 for avoidant and 5 for resistant)
KEY STUDY: HAZAN AND SHAVER (1987)

FINDINGS

• They also found a relationship between the conception of love (the internal working model) and attachment type
  – Securely attached individuals tended to have a positive internal working model
BEHAVIOURS INFLUENCED BY THE INTERNAL WORKING MODEL

CHILDHOOD FRIENDSHIPS

• The Minnesota child-parent study found continuity between early attachment and later emotional/social behaviour (supporting the continuity hypothesis)

• Individuals classified as securely attached in infancy were highest rated for social competence later in childhood, were less isolated and more popular, and more empathetic

• This can be explained in terms of the internal working model as securely attached infants have higher expectations that others are friendly and trusting, and this would enable easier relationships with others
BEHAVIOURS INFLUENCED BY THE INTERNAL WORKING MODEL

POOR PARENTING

• Harlow’s research with monkeys also demonstrated a link between poor attachment and later parenting difficulties.
• Quinton et al showed that the same is true in humans.
  – The lack of an internal working model means that individuals lack a reference point to subsequently form relationships with their own children.
BEHAVIOURS INFLUENCED BY THE INTERNAL WORKING MODEL

ROMANTIC RELATIONSHIPS

- Hazan and Shaver demonstrated a link between early attachment type and later relationships.
- **Individuals who were securely attached had longer-lasting romantic relationships.**
BEHAVIOURS INFLUENCED BY THE INTERNAL WORKING MODEL

MENTAL HEALTH

- The lack of an attachment during the critical period in development would result in a lack of an internal working model.
- Children with attachment disorder have no preferred attachment figure, an inability to interact and relate to others that is evident before the age of 5, and experience of severe neglect or frequent change in caregivers.
- The condition called attachment disorder has been recognised but it has recently been classed as a distinct psychiatric condition and included in the DSM.
The kind of head-over-heels love depicted in novels and movies doesn’t exist

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Intense romantic love is common at the beginning of a relationship but rarely lasts forever

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Romantic feelings wax and wane over the course of a relationship, but at times they can be as intense as they were at the start of a relationship

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In some relationships, romantic love really lasts, it doesn’t fade with time

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Most of us could love many different people equally well; there is no “one true love” which is “meant to be”

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It’s easy to fall in love. I feel myself beginning to fall in love often

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It’s rare to find someone you can fall in love with

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INFLUENCE OF EARLY ATTACHMENT EVALUATION
RESEARCH IS CORRELATIONAL

- Research linking the IWM/early attachment with later relationship experiences is correlational rather than experimental (tested) and so we cannot claim the relationship between early relationship and later love styles is one of cause and effect.
- Attachment style and later love styles could be caused by temperament.
  - As an infant’s temperament affects the way a parent responds and so may determine infant attachment type.
  - The individual’s temperament may explain their issues with later relationships (so temperament is an intervening variable).
RETROSPECTIVE CLASSIFICATION

- **Most studies** (e.g. Hazan and Shaver) **rely on retrospective classification** (asking adults questions about their early lives to assess infant attachment)
  - **These are likely to be flawed as our memories of the past are not always accurate**

- **However**, an ongoing longitudinal study (Simpson et al, 2007) assessed infant attachment type at one year of age
  - They found that participants who were securely attached at infants were rated as having higher social competence as children, closer to their friends at age 16 and were more expressive and emotionally attached to their romantic partners in early adulthood

- **This supports the view that attachment type does predict relationships in adult life**
• Research suggests that very early experiences have a fixed effect on later adult relationships and so children who are insecurely attached at one year of age are doomed to experience emotionally unsatisfactory relationships as adults.

• This is not the case as researchers have found evidence where participants experienced happy adult relationships despite not having been securely attached as an infant.
LOW CORRELATIONS

• Not all research has found a strong positive correlation between attachment and later relationships
• Fraley (2002) reviewed 27 samples where infants were assessed in infancy and later reassessed (one to 20 months later)
• There were correlations ranging from 0.50 to as low as 0.10
• These correlations do not suggest that attachment type is very stable
• One reason for low correlations may be due to insecure-anxious attachment being more unstable
  – Therefore pulling down the overall correlations
AN ALTERNATIVE EXPLANATION

• Feeney (1999) argues that adult attachment patterns may be properties of the relationship rather than the individual

• The argument is that early relationships cause later attachment types and that is why securely attached infants go on to have long-lasting, more positive relationships

• An alternative explanation is that adult relationships are guided by a self-verification process (the tendency to seek others who confirm your expectations of relationships)

• Therefore it is the adult secure relationship that is causing the adult attachment type, rather than the other way around