EXPLANATIONS OF ATTACHMENT

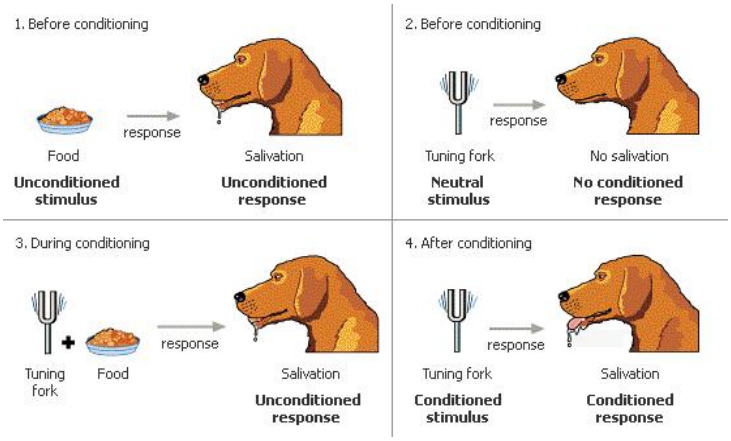
Introduction

Several explanations (or **theories**) of why attachments are formed have been proposed. In this section, two of these will be described and evaluated. These are **Learning Theory** and **Bowlby's Theory**.

How does Learning Theory explain the formation of attachments?

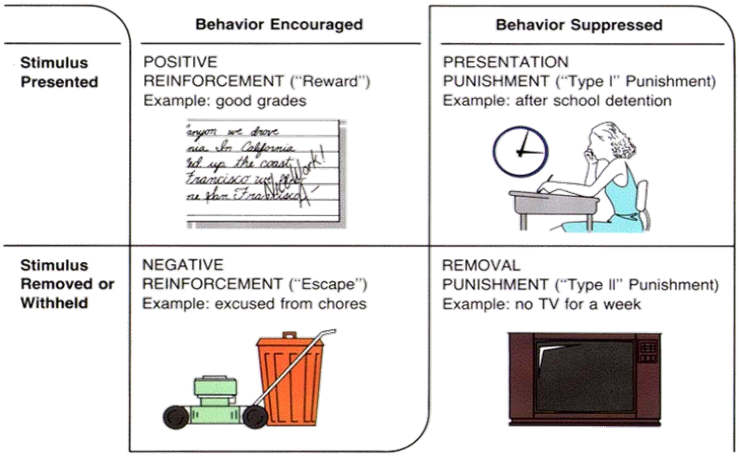
Learning theory derives from the work of the Russian physiologist I.P. Pavlov. He discovered that dogs were capable of learning through *repeated association*, and he called this **classical conditioning**. In his original experiments, Pavlov showed that it was possible to train a dog to salivate whenever a bell sounded, something which dogs do not normally do. The training starts by finding a stimulus that a dog will *reflexively* produce a salivation response to. Food is such a stimulus. The food is called an **unconditioned stimulus** (**UCS**) and the salivation an **unconditioned response** (**UCR**). The stimulus we want the animal to learn to salivate to is called the **conditioned stimulus** (**CS**).

What Pavlov did was to sound the bell and then show the dog some food. Initially, the dog salivates because it sees the food. However, if the bell and the food are repeatedly paired together, the dog eventually learns that the bell *reliably precedes* him seeing food, and so it salivates in anticipation. This is called the **conditioned response** (**CR**).



Some years later, an American psychologist called B.F. Skinner showed that another way in which learning can occur is through a behaviour's *consequences*, and he called this **operant** (or **instrumental**) **conditioning**. If a behaviour has a *pleasurable consequence*, then it is likely to be

repeated in the future (i.e. we learn to reproduce the behaviour because we learn that something pleasurable is likely to follow it). However, if a behaviour has an *unpleasurable consequence*, then it is likely to be *suppressed* in the future (i.e. we learn not to reproduce the behaviour because we learn that something unpleasurable is likely to follow it). Anything that makes a behaviour *more likely* is called a *reinforcer*. Anything that makes a behaviour *less likely* is called a *punisher*.



Learning theory sees attachment formation as a result of both classical and operant conditioning. 'Caring behaviour' can be considered a UCS which produces the UCR of 'contentment'. The mother acts as the CS, who is repeatedly paired with the UCS of caring behaviour. After repeated pairings the mother takes on the properties of the caring behaviour, and comes to produce the CR of contentment, and **classical conditioning** has occurred as shown below:

NS => No particular response
Mother

UCS => UCR
Caring behaviour Contentment

CS + UCS => UCR
Mother Caring behaviour Contentment

CS => CR
Mother Contentment

Once the baby has learnt this association, it produces behaviours which encourage the mother's presence, such as smiling or crying. These

behaviours are **reinforced** by, for example, food, and the infant is encouraged to produce these behaviours in order to be reinforced. This is **operant conditioning**.

Food is what is called a **primary drive** (it needs to be satisfied), and the infant learns to approach the caregiver (the **secondary drive**) to satisfy this need. However, as far as learning theory is concerned, infants only form attachments because they learn that their primary caregiver is a reliable provider of food. This isn't 'real love' between the infant and its caregiver, but is the same as the 'affection' your pet dog shows because it learns that you are a reliable provider of food. Psychologists call this 'cupboard love'.

How can Learning Theory be evaluated?

This learning theory approach to attachment is untrue. There are many reasons why, but the most powerful comes from studies first conducted in the 1950s by **Harry Harlow**.

Harlow separated new-born **rhesus monkey** infants from their mothers. The infants were raised in cages on their own, with each cage containing a 'baby blanket'. The monkeys became extremely distressed when the blanket was taken away to be cleaned (just as infant monkeys do when separated from their mother). This led Harlow to question whether attachment was really to satisfy the need for food.

Harlow placed an infant monkey in a cage which had two **'surrogate mothers'**. One of these mothers was made of wire and had a baby bottle attached to it. The other was covered in cloth, but did not have a baby bottle attached to it.

An infant rhesus monkey with a cloth covered surrogate 'mother'

Harlow recorded how long each infant spent with the 'wire mother' and the 'cloth mother'. The monkeys spent significantly longer with the 'cloth mother', even though it provided no nutrition.

Harlow's famous experiment

Harlow concluded that monkeys have an inborn, unlearned, need for **contact comfort**, and that this was as important or more important than the need for food.

Harlow believed that when infant rhesus monkeys were frightened, they would prefer to seek comfort with the cloth mother rather than the wire mother. He tested this by placing a mechanical toy that made a loud noise into the cage:

The toy bear makes a loud noise which frightens the infant

Harlow found that the infants behaved exactly as he had thought they would. In fact, when Harlow removed the cloth mother from the cage and frightened the infants, they preferred to be on their own rather than seek comfort with the wire covered mother.

Infants went to the cloth mother when they were afraid

Harlow also found that the monkeys raised by the surrogate mothers did not develop normally. They were extremely aggressive, rarely interacted with others, and were difficult if not impossible to breed. This led Harlow to conclude that monkey need **contact comfort**, **interaction with other monkeys in the first 6 months of life** and a **responsive caregiver** for normal development to occur.

Although Harlow's research casts doubt on Learning Theory, it was carried out on monkeys rather than humans. It is possible that the results do not **generalise** from monkeys to humans. However, **Schaffer & Emerson (1964)** disproved Learning Theory in their study of over sixty infants in Glasgow. For example, they found that in 39% of children, the person who usually fed, bathed and changed the infant was **not** its primary attachment figure. They also found that the intensity of attachment depended on caregiver **responsiveness** and **total amount of stimulation**, rather than satisfying the infant's needs.

For Schaffer (1971) learning theory has got it the wrong way round: babies don't 'live to eat', but they 'eat to live'. They are active seekers of stimulation, not passive recipients of nutrition.

How does Bowlby's Theory explain the formation of attachments?

John Bowlby was strongly influenced by Darwin's **theory of evolution**, and the idea that **adaptive behaviours ensure survival**. Bowlby argued that forming an attachment to a caregiver is adaptive, and that babies are **genetically programmed** to behave towards their mothers. These

behaviours are called **social releasers**, and include things like smiling, vocalising, crying, looking, clinging, and following. These are adaptive behaviours because they attract attention, maintain attention, and gain or maintain physical closeness.

We do not have to learning to smile. Smiling is an important adaptive behaviour

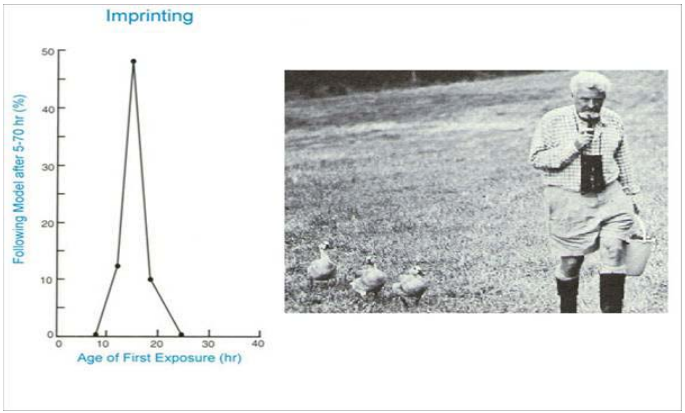
In the earliest months of life, these behaviours are triggered by a wide range of people. However, during the first year, they become focussed on the primary caregiver, and when that primary caregiver is absent infants experience **separation anxiety**. So, the biological function of attachment is *survival*, and the psychological function is to *gain security*. But this would only work if the mother responded to these social releasers. Therefore, mothers must also inherit a **genetic blueprint** which programs her to respond to the infant's social releasers.

KONRAD LORENZ AND ETHOLOGY – ANOTHER INFLUENCE ON BOWLBY

Bowlby was also influenced by Konrad Lorenz's research. Lorenz found that **precocial** (but not **altricial**) non-humans form a strong bond with the first moving object they encounter (which is typically the mother). He called this **imprinting**. One characteristic of imprinting is that the animal **follows** the moving object.

If it is a parent, this is called **familial imprinting**. The object acts as a **sign stimulus**, and the behaviour of following it is called a **fixed action pattern**. The fact that attachment comes *before* feeding means that it is not a by-product of it, and this is another reason why the learning theory of attachment is wrong.

Lorenz believed that there was a **critical period** for imprinting, and that if this was missed, then an attachment would never be formed.



However, subsequent research suggests Lorenz was wrong, and that it is better to talk about there being a **sensitive period** for imprinting rather than a critical period. Lorenz also believed that imprinting was **irreversible**. Again, he was wrong. However, his belief that imprinting has **lasting consequences** and **influences adult behaviour** is correct. For example, if Zebra finches are reared by Bengalese finches, they prefer to mate with their foster species rather than their own species (**sexual imprinting**).

Bowlby called the 'interplay' mother and infant '**synchrony**'. Like Lorenz, Bowlby believed there was a **critical period** for synchrony in which the infant forms an **attachment** with the mother, whilst the mother forms a **bond** with the infant. Bowlby argued that synchrony must take place within the **first year** of life for most infants, and within the first **three years** of life for all infants. Bowlby believed that if the critical period was missed, then attachment would never occur and the infant would suffer behavioural problems later on.

The innate tendency to form an attachment with (typically) one adult female is called the **monotropy hypothesis**. For Bowlby, the mother/infant relationship provides the infant with an **internal working model** for all future relationships and for the development of self-image (this is called the **continuity hypothesis**). According to Bowlby (1951): *"Mother love in infancy is as important for mental health as are vitamins and proteins for physical health."*

How can Bowlby's theory be evaluated?

Schaffer & Emerson's (1964) study of infants in Glasgow was the first to challenge Bowlby's theory. They showed that multiple attachments are the rule rather than the exception to the rule (as Bowlby's theory would

predict). For example, by 7 months, 29% of infants had already formed several attachments, whilst by 18 months, 87% had formed several attachments. Also, in 17% of babies, there was equal attachment to both parents.

Bowlby also claimed that fathers are of no direct emotional significance to infants. However, according to Schaffer and Emerson, Bowlby's view that fathers are important only as economic and emotional support for mothers is untrue. According to Schaffer and Emerson: "Fathers make their own unique contribution to the care and development of infants".

Despite Schaffer and Emerson's criticisms, there is lots of support for Bowlby's **continuity hypothesis** (i.e. the idea that your attachment type in infancy strongly influences the attachments you form in adulthood. For example, the Minnesota Longitudinal Study (1999) found that children rated as securely attached in infancy were later in life rated as being more popular and higher in social competence, self-confidence, and self-esteem. McCarthy (1999) found that women classified as insecure avoidant in infancy are more likely to have romantic problems, whereas women classified as insecure resistant are more likely to have friendship problems.