• **Real-life application** – The outcome of such research can be applied to improving the lives of children in institutional care. For example, it points to the importance of early adoption so that children have a greater chance to develop normally.

• **Confounding variable** – Children who are adopted the earliest were the healthiest, by looks and were sociable. The sample studied did not represent the most severe cases.

• **Negative effects of longitudinal studies** – There can be a high attrition rate (which means participants drop out), which can create a biased sample.

• **Cultural bias** – Not all of the orphans were from the same orphanage.

• High ecological validity, but it cannot be replicated.

**The influence of early attachment on later relationships:**

**The internal working model**

Bowlby’s concept of the internal working model is similar to a schema. A schema is basically a concept, and a bit more.

An infant learns about a relationship from experience; the infant learns what relationships are and how partners in a relationship behave towards each other. It is “an ‘operable’ model of self and attachment, based on their joint attachment history”.

**Behaviours influenced by the internal working model:**

**Childhood friendships**

The Minnesota child-parent study found continuity between early attachment and later emotional/social behaviour. Individuals who were classified as securely attached in infancy were rated the highest for social competence later in childhood, were less isolated and more popular, and more empathetic.

**Poor parenting**

Harlow's research also demonstrated a link between poor attachment and later difficulties with parenting. A study by 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.

**Romantic relationships**

The study by Hazan and Shaver demonstrated a link between early attachment type and later relationships. Individuals who were securely attached had longer-lasting romantic relationships.

**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 disorders 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 of
caregivers. For some time, a condition called attachment disorder has been recognised but it has recently been classed as a distinct psychiatric condition.

**Hazan and Shaver's supportive evidence:**

Cindy Hazan and Philip Shaver (1987) designed a study to test the internal working model.

They placed a ‘love quiz’ in the Rocky Mountain News (an American small-town publication). The quiz asked questions about current attachment experiences and about attachment history to identify current and childhood attachment types. The questionnaire 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.

When analysing a self-report of attachment history, they found that the prevalence of attachment styles were similar to that found in infancy: 56% were classified as secure, 25% as avoidant and 19% were resistant. They also found a positive correlation between attachment types and love experiences. Securely attached adults described their love experiences as happy, friendly and trusting; they emphasised being able to accept and support their partner despite their faults.

These relationships are more enduring – 10 years on average, compared to 5 or 6 years for people who are resistant, or avoidant. They found a relationship between the conception of love (the internal working model) and attachment types: securely attached individuals tended to have a positive internal working model.

**Further research**

In a study of attachment and both romantic relationships and friendships, Gerard McCarthy (1999) studied 40 adult women who had been assessed when they were infants, to establish their early attachment type. Those who were assessed as securely attached had the best adult friendships and romantic relationships. Adults classed as insecure-resistant as infants had particular problems with maintaining friendships whilst those classed as insecure-avoidant struggled with intimacy in romantic relationships.

**Evaluation**

- *Alternative explanation* – Feeney (1999) argues that adult attachment patterns may be properties of the relationship rather than the individual. Another explanation is that adult relationships are guided by a self-verification process: the tendency to seek other who confirm your expectations of relationships. Therefore it is the adult secure relationship that is causing the adult attachment type, rather than vice versa.

<table>
<thead>
<tr>
<th></th>
<th>Secure adults</th>
<th>Resistant adults</th>
<th>Avoidant adults</th>
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<tbody>
<tr>
<td><strong>Different love experiences</strong></td>
<td>Relationships are positive</td>
<td>Preoccupied by love</td>
<td>Fearful of closeness</td>
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