

Harlow's monkeys

Harry Harlow conducted a series of controversial experiments in the 1950s and 1960s on Rhesus monkeys. His experiments involved separating the monkeys from their mothers soon after birth and subjecting them to various conditions to test the effects of maternal deprivation and isolation on their development.

Cupboard love

Infant monkeys (and human babies) become attached to their mothers. Is this because their mother is the source of food, or because their mother is the source of contact comfort?

In a number of studies, Harlow separated newborn Rhesus monkeys from their mothers and placed them in cages with two artificial surrogate mothers. One surrogate was made of wire and the other was made of soft cloth.

Monkeys spent up to 165 days in a cage with one cloth and one wire 'mother'.

- Condition A: milk available from cloth mother only.
- Condition B: milk available from wire mother only.

Harlow found that the monkeys spent significantly more time with the soft cloth mother, even when the wire mother was the only source of food.

Harlow suggested that contact comfort, not food, was vitally important in the development of an attachment.



Wire mother

Cloth mother

Exploration

The monkeys were placed in a novel environment containing novel objects.

- Condition A: cloth mother was present. The young monkeys clung to her before venturing off to explore.
- Condition B: cloth mother was not present. The young monkeys would be paralysed with fear, unable to explore and showing self-comforting behaviours.

Fear

A fearful stimulus resembling a creature that made loud noises and had flashing lights was presented to the monkeys.

- Condition A: cloth mother was present. The young monkeys would run to the cloth mother in fear before gradually beginning to shriek back and sometimes attack the fearful stimulus.
- Condition B: cloth mother was not present. The young monkeys cowered in fear and avoided the stimulus.

Isolation

Harlow placed infant monkeys in isolation chambers for varying periods, ranging from a few hours to months. The young monkeys were kept in complete isolation and had no contact with other monkeys or humans.

Harlow found that the monkeys in prolonged isolation showed signs of extreme distress, self-mutilation and social incompetence.

He concluded that isolation during infancy had a profound impact on their social and emotional development.

Parenting

The female monkeys who were isolated during their infancy were also more likely to display aggression towards their own offspring in later life.

This is behaviour not typically observed in wild adult female Rhesus monkeys.

Sexual behaviour

Monkeys deprived of maternal care during their infancy showed abnormal sexual behaviour as adults. They were less interested in mating, less successful in mating and more likely to display aggressive sexual behaviour.

Overall

Harlow's research contradicted the prevailing view that attachment was about food, and demonstrated the importance of social and emotional contact in healthy development.

However, his methods have also been widely criticised in terms of ethics, for example the severe and long-term harm he caused the young monkeys in pursuit of these findings.

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