

## **Harry Harlow's Nature of Love (1958)**

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In Harold Harlow's 1958 address of the American Psychological Association, he hoped to tackle a concept he felt was too often avoided by the psychologists of his time, the nature of love. His work on the behavior of macaques when reared without their mothers makes a compelling argument about the limits of viewing psychology (and by extension development) as simply the reduction of "primary drives" like hunger, thirst and avoidance of pain.

These now infamous studies boiled down to a simple question. Is there a difference in how baby macaques behave when reared without their mothers and instead provided with two different mother surrogates? One, a macaque mother shaped out of wire-mesh and another covered in soft terry cloth. Baby macaques would spend substantially more time clinging to the cloth mother even when only the wire mother would provide milk. Moreover, macaques raised only with a wire-mesh mother appeared more stressed than their cloth mother counterparts even though they were receiving all of the necessary biological nutrition. These initial studies provide support that comfort from body contact was a strong motivation among these infant macaques.

Follow-up studies demonstrated that the differences between the wire-mesh and cloth mothers continued beyond the first weeks of life. This was accomplished by placing the young macaques in a large and novel environment with either the wire-mesh mother or the cloth mother and sometimes no mother surrogate at all. Even two month old macaques preferred cloth mothers

when put in a strange situation. Moreover, the infants engaged in more exploration of their environment when the cloth mother was present even when the surrogate was encased in a Plexiglas box such that they had no actual physical contact. In a later experiment, infant macaques were presented with a fearful stimulus, often a noise-making teddy bear dubbed the “fear test”. Without the mother, the infants cowered and avoided the object. When the surrogate mother was present, however, the infant did not show great fearful responses and often contacted the device—exploring and/or attacking it. Even then, the cloth mother was highly preferred over the wire one.

Finally, later experiments with older macaques on a diet of solid food that had never lived in the presence of a mother surrogate examined what effect it would have when these different types of mother surrogates were introduced. After an initial adjustment period, these older macaques would preferentially cling to the cloth mother in contrast to the wire-mesh mother even if they had never been fed by either. This last experiment solidified the idea that the macaques derived some physical comfort from the cloth mothers that the wire-mesh mothers could not provide. In sum, these studies illustrate that a critical affectional component of the mother/child relationship is completely separate from the strictly biological needs that is satisfied nutritionally.

These studies made a compelling case for the importance of the bond between a mother and child. This notion contrasted a strict behaviorist approach (popularized by B.F. Skinner) which downplayed the importance of emotions in the role of that parents would play in child development. There’s some evidence that at the time a prevailing suggestion to parents was that they should minimize the amount of physical contact they had with their children so as to not spoil them.

One final implication that Harlow drew from these findings is that in the end, there is no biological advantage that mothers have over fathers in the potential of rearing infants. He went so far as to argue against the notion that mothers of young infants should remain out of the workforce because of the biological demands of breastfeeding. He extolled the notion that his findings with baby macaques suggest that fathers and by extension other caregivers could provide for the emotional needs of young children.

In conclusion, Harlow believed that these studies provided a crucial clue to the nature of love. These studies demonstrate that there is a fundamental component of the parent/child relationship beyond simply addressing biological drives, specifically the need for food. Further, these findings provided a jumping off point to other research in the area of attachment including the notion of secure base, emotional regulation and the importance of socialization, among others.

#### References

Harlow, H. F. (1958). The nature of love. *American psychologist*, 13(12), 673.