

## PSYCHOLOGY

# Study Mother Love

**Physical contact, warmth, tenderness and patience seem to be more important influences on an infant's love for its mother than is the food she gives.**

► THE LOVE of a tiny baby for the mother to whom he clings is based more on the comfort of contact than on the fact that the mother gives him food.

The baby has a need for the comfort of affectionate contact with a mother or mother substitute, Dr. Harry F. Harlow of the University of Wisconsin told the American Psychological Association meeting in Washington, in his presidential address.

That contact comfort is of overwhelming importance in developing the baby's affection, while the giving of milk is of negligible importance, is shown by experiments conducted with tiny baby monkeys.

The macaque infant, Dr. Harlow explained, differs from the human baby in that the monkey is more mature at birth and grows more rapidly, but the basic responses relating to affection, including nursing, contact, clinging, and even visual and auditory exploration, are not fundamentally different in the two animals.

Dr. Harlow built a mother surrogate or substitute for his monkey experiments on infant love. It was made from a block of wood, covered with sponge rubber and sheathed in tan cotton terry cloth. A light bulb behind it radiated heat.

"The result," said Dr. Harlow, "was a mother soft, warm and tender, a mother

with infinite patience, a mother available 24 hours a day, a mother that never scolded its infant and never struck or bit its baby in anger."

Then he built another surrogate mother with less capability for contact comfort. This second "mother" was made of wire screen. This "mother" was adequate to support the baby and it was warmed by radiant heat. But it was not cuddly.

Even when it was arranged for the wire mother to give the baby milk while the cuddly mother did not, the baby monkey spent more time with the cuddly mother. And as the baby monkeys grew older they were more and more responsive to the non-lactating cloth mother and paid less and less attention to the wire mother.

This finding is contrary to the interpretation that a baby's love for mother is dependent upon her satisfying his hunger and thirst, Dr. Harlow concluded.

In fact, he said, the American father is physically endowed with all the really essential equipment to compete with the American mother in one essential activity, the rearing of infants.

## Brain Operation Damage

► A FOLLOW-UP test of mental patients

who had undergone the operation of topectomy for removal of tissue from specific circumscribed areas of the brain eight years before was reported to the Psychological Association.

Marked loss was shown on eight out of the 14 psychological measures used, Drs. Aaron Smith and Elaine F. Kinder of Rockland State Hospital, New York, reported.

This finding is in contrast to conclusions arrived at four months after the operation that no "permanent" loss in intellectual function resulted from the operation.

Only a single group of patients failed to show intellectual loss on successive tests after the operation. These were younger persons who had had a portion of the lower part of the forebrain removed.

The exact site of the operation was found to be important to the amount of intellectual impairment resulting, the report indicated. While topectomies in both upper and lower parts of the forebrain result in losses, the younger patients with operations on the lower areas were the least affected.

For this reason the scientists said, it is improper to lump brain operations together under such classifications as "frontal lobe cases." The findings do not, however, imply localization of function in the brain, but do indicate that the destruction of the same amount of tissue to two different sites of the forebrain produce different effects eight years later.

The findings are in harmony with independent findings of increasing neurological degeneration after the topectomy, the scientists reported.

## Scientists Approved

► THE SCIENTIST is looked on by the public as a pretty good fellow.

This is shown by a nationwide survey of a sample of 1,919 adults in the United States. The survey was conducted by the survey research center of the University of Michigan, sponsored by the National Association of Science Writers and supported by the Rockefeller Foundation. Results of the survey were reported to the Psychological Association by Dr. Robert C. Davis of the survey research center.

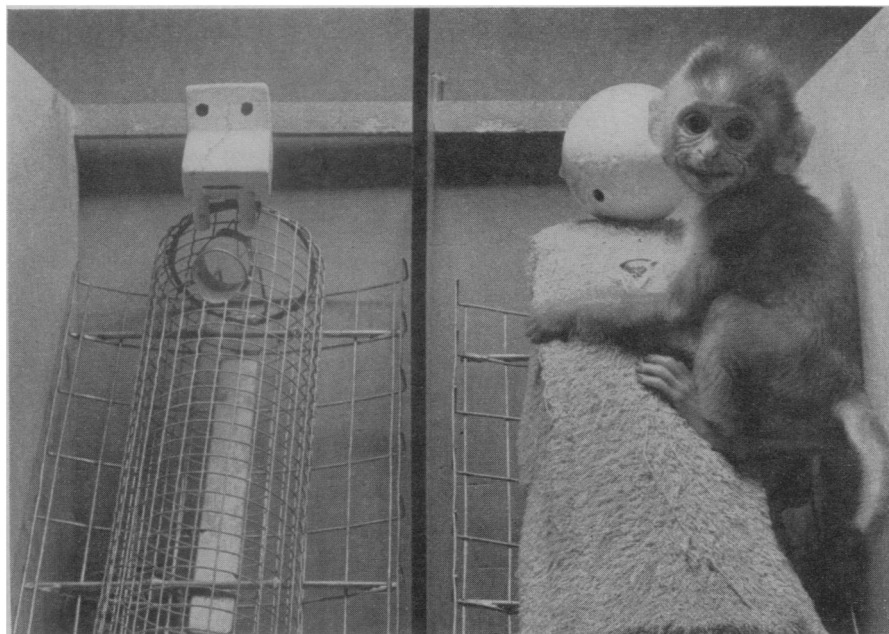
When asked to describe the scientist, many persons (37%) called him intelligent and the next most frequent description mentioned his education. Only 3% mentioned mild eccentricity and 4% stressed his "overdedication to work." Ideological peculiarities were hardly mentioned at all.

A total of 83% said without qualification, that they believe that the world is better off because of science. Only 2% believe it is worse off.

Most persons, (53%) feel that possible conflict with religion should not inhibit science, Dr. Davis reported.

And most persons, (54%) feel that scientists should be free to work on non-practical research.

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**MONKEY AND MOTHERS**—An infant macaque monkey clings to one mother substitute, a soft, cuddly one, while a second "mother" made of wire screen appears at the left. Even when it gave the infant milk, the wire mother was less acceptable to the baby.