

Rhesus macaque moms 'go gaga' for baby, too

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The intense exchanges that human mothers share with their newborn infants may have some pretty deep roots, suggests a study of rhesus macaques reported online on October 8th in *Current Biology*.

The new findings show that mother macaques and their infants have interactions in the first month of life that the researchers say look a lot like what humans tend to do.

"What does a mother or father do when looking at their own baby?" asked Pier Francesco Ferrari of the Università di Parma in Italy. "They smile at them and exaggerate their gestures, modify their voice pitch—the so-called "motherese"—and kiss them. What we found in mother macaques is very similar: they exaggerate their gestures, "kiss"

their baby, and have sustained mutual gaze."

In humans, those communicative interactions go both ways, research in the last three decades has shown. [Newborns](#) are sensitive to their mother's expressions, movements, and voice, and they also mutually engage their mothers and are capable of emotional exchange.

"For years, these capacities were considered to be basically unique to humans," the researchers said, "although perhaps shared to some extent with [chimpanzees](#)." The new findings extend those social skills to macaques, suggesting that the infant [monkeys](#) may "have a rich internal world" that we are only now beginning to see.

The researchers closely observed 14 mother-infant pairs for the first two months of the infants' lives. They found that mother macaques and their babies spent more time gazing at each other than at other monkeys. Mothers also more often smacked their lips at their infants, a [gesture](#) that the infants often imitated back to their mothers.

The researchers also saw mothers holding their infant and actively searching for the infant's gaze, sometimes holding the infant's head and gently pulling it towards her face. In other instances, when infants were physically separated from their mothers, the parent moved her face very close to that of the infant, sometimes lowering her head and bouncing it in front of the youngster. Interestingly, those exchanges virtually disappeared when infants turned about one month old.

Why so soon, you might ask?

"It's quite puzzling," Ferrari said, "but we should consider that macaque development is much faster than that of humans. Motor competences of a two-week-old macaque could be compared to an eight- to twelve-month-old human infant. Thus, independence from the mother occurs very early...

what happens next in the first and second month of life is that infants become more interested in interacting with their same-age peers."

The findings offer new insight into the origins of such mother-infant behavior. "Our results demonstrate that humans are not unique in showing emotional communication between mother and infant," the researchers wrote. "Instead, we can trace the evolutionary foundation of those behaviors, which are considered crucial for the establishment of social exchange with others, to macaques. Mutual gaze, neonatal imitation, infant gestures, and exaggerated facial gesturing by mothers are distinctive signs in macaques, as well as in humans, of interpersonal communication and perhaps even a mutual appreciation of others' intentions and emotions."

Source: Cell Press ([news](#) : [web](#))

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