In nonhuman primates, mothers visually monitor their infants when they are away in order to detect potential threats to their infants. If a threat is detected, mothers retrieve their infants. I recorded the maternal visual monitoring of infants (infant monitoring), retrieval of infants, and infant distress calls in a free-ranging group of Japanese macaques at Katsuyama, Japan: 16 mothers and their 7- to 18-week-old infants were observed. Mothers monitored their infants less frequently when they were engaged in feeding or grooming, which are behaviors important to survive, than when they were engaged in other activities such as resting or self-directed behavior. However, even in the case of the former, the mothers increased infant monitoring when they detected potential risks of conspecific harassment. These findings indicate that mothers may attempt to optimize infant monitoring according to their own behavioral state at the given time and the level of risk to their infant. The frequency of infant distress calls and maternal responsiveness indicated by infant monitoring to infant distress calls did not vary with infant age in weeks, whereas maternal responsiveness indicated by infant retrieval decreased with infant age in weeks and was lower when mothers were engaged in feeding or grooming than when they were engaged in other activities. These findings indicate that mothers decided whether or not to retrieve their infant by a visual assessment of the situation. Japanese macaque mothers initiate allocation of investment in infant protection when infants are 7–18 weeks old.

Keywords: maternal monitoring of infants, maternal responsiveness, infant distress calls, maternal investment in infant protection