

ABSTRACT

Object permanence is a cognitive ability to perceive the continuous existence of objects, even if they cannot be directly observed, respectively perceived by other senses (Piaget 1954). In humans object permanence develops in 6 qualitatively different stages. By using a comparative approach, it was found that the last stage 6 of this ability also occurs in great apes, gibbons and some New World monkeys (capuchin, marmoset and tamarin). In this study, we conducted a study with a series of invisible displacements of an object, in which we investigated whether two rhesus macaques (*Macaca mulatta*) have fully developed the ability of object permanence and don't rely on simple alternative cognitive strategies, while solving the different tasks. With one test subject, we confirmed that he solved the tasks with stage 6 object permanence abilities. Although the second individual reached significant performance in some sessions, the overall results are ambiguous, because during the testing he had a tendency to use simple alternative strategies. Our study concludes that under certain circumstances macaques have the cognitive capacity for a fully developed ability of object permanence.

Key words: Object permanence, rhesus macaque, invisible displacement, cognitive functions