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Companion and Wild Animals

Tool-use behavior of Capuchin Monkeys (*Sapajus libidinosus*) is associated with the body size.

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Adaptive requirement in some animals, especially primates, to develop sophisticated skills, such as making and tools use to process their food. This ability contributed to improving the nutritional standards of different species, contributing to long-term evolutionary success, especially in resource-poor environments. The ability of capuchin monkeys (*Sapajus libidinosus*) to tools use in their habitat is notable, which allows the expansion of the range of opportunities, fundamental for their establishment in the Caatinga, a biome that, at some times of the year, there is a scarcity of resources. Based on this, the present research aimed to evaluate the effect of the body size of monkeys, kept in captivity, on the ability to tools use to obtain resources. The study was conducted with a population of 12 capuchin monkeys, composed by eight males and four females (five young and seven adults), in State Park Dois Irmãos, Recife-PE. During the experimental period, of 20 days, with one hour of daily observation, immediately before the meal. To evaluate the ability to tools use, stones of different sizes were supplied and, to encourage their use, macaíba fruit (*Acrocomia aculeata*) and oil palm fruit (*Elaeis guineensis*) were fed. The observations revealed that the animals had the skill to use stone tools to obtain difficult-to-reach parts of the items offered, however it was identified that the size of the animals was a relevant factor in the ability in use the stone tools. Regardless of size, it was possible to observe that the animals showed a standard behavior of selecting the larger stones to support the fruits, and the smaller ones of stone hammer. The smaller animals demonstrated limited skill to handle the stones, when they did not give up. However, animals with medium height were more agile in handling the stones, which resulted in greater success, although, like smaller animals, the delivery of the blow was associated with jumping, enhancing the impact. As for the larger ones, skill and efficiency were observed in handling the stones, spending less time to success. Therefore, the present experiment demonstrated that body size influences the skill of stone.

Keywords: Primates, skills, hierarchy, behavior, feeding, diet.

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