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Is female mating preference contingent upon male resource-control? An experimental approach in wild tufted capuchin monkeys

Most research on sexual selection has produced little evidence for female mate choice in primates. Tufted capuchin monkeys (*Sapajus nigritus*), however, seem to represent one of the few exceptions, as females in this species have been argued to show strong female mate choice due to females' active solicitation in mating interactions, and the lack of any obvious male coercion to mate. By doing so, tufted capuchin females actively bias male mating success towards the dominant male in their group. One proposed benefit for explaining such a high preference is increased access to food resources. In this context, females have been suggested to preferentially mate with the dominant male, as he can efficiently monopolize access to contestable foods during periods of scarcity. This ability in turn allows the dominant male to offer females important benefits to increment their fecundity, and thus influence them to mate with him. However, due to the difficulty in measuring and manipulating food distribution and contestability in natural settings, no study has tested this hypothesis in a wild population. We conducted provisioning experiments to manipulate the abilities of males to control access to food in two groups of tufted capuchins in Iguazú National Park, Argentina. When examining whether female preferences towards the dominant male changed according to his ability to monopolize food, results showed no significant variation in female preference between clumped and dispersed conditions. Our findings will be discussed by considering other possible explanations, including phylogenetic constraints and the occurrence of indirect benefits for females.