

COMPARING THE MANIPULATIVE ABILITIES OF CEBUS APELLA AND CEBUS CAPUCINUS : INSIGHTS INTO THEIR COGNITIVE SKILLS ?

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Many studies on capuchins describe *Cebus apella* as being particularly 'technical' while they characterize *Cebus capucinus* as being essentially 'social'. Does this dichotomy between these two closely phylogenetically related species reflect different cognitive abilities or result from punctual adaptations to diets and habitat? Alike tool-use, object combined manipulations require complex manipulative skills and are thought to open a window on users' cognitive abilities. Hence, we investigated whether the two species really differed in their spontaneous manipulative skills when they had access to unknown items. We worked with one group of semi-free ranging capuchins of each species that we tested under similar conditions. They were first introduced to neutral items (wooden cubes) for eight hours, then to food items (ears of corn) for eight hours and eventually to both items for another eight hours. On average, *C. apella* manipulated both items longer and more frequently than *C. capucinus*. They also spontaneously combined objects in a more complex fashion faster and more often than *C. capucinus* did. These results seemed to corroborate the fact that one species seemed to be more technical than the other. However, it is to note that *C. apella* privileged manipulations on the ground while *C. capucinus* preferred higher and less appropriate surfaces to hold their items. Furthermore, more detailed analyses revealed that *C. capucinus*, given enough time, were eventually manipulating objects as often as *C. apella*. It is to wonder whether some sensitivity to unknown items/situations may condition the emergence of complex behaviours.

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