

MEMORY AWARENESS IN TUFTED CAPUCHIN MONKEYS

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Although previous studies have suggested that nonhuman primates are able to monitor strength of their memory trace, whether they could monitor detailed contents of the memory trace is still in question. My previous study (Fujita, 2009) showed that tufted capuchin monkeys performed a delayed matching-to-sample task using geometric figures with higher accuracies when they chose to do so than when they were forced to do so, thus showing successful monitoring of the memory strength of the sample. However when the monkeys were allowed to choose either a texture matching task or a shape matching task, their matching accuracies were comparable without regard to whether they chose or were forced to solve the task. Thus there was no evidence for their monitoring detailed contents of their memory trace. In the present report, the same monkeys were tested using meaningful social stimuli, i.e., human faces. The monkeys matched photos of 3 familiar persons with 3 orientations: left 3/4 profile, head-on, and right 3/4 profile. In the first experiment, in which they were allowed to choose whether to go for a delayed matching-to-sample task or to avoid it, they tended to show higher accuracies when they chose the matching task, as in the case of geometric figures in the previous experiment. The test for their monitoring the contents of memory trace for these social stimuli is now ongoing and the results will be reported at the symposium.

Keywords: metamemory, metacognition, delayed matching to sample, tufted capuchin monkeys