

Abstract

This work is focused on numerical competence in primates specifically focusing on relative numerosity, one of the many aspects of these cognitive abilities. Relative numerosity is an ability to discriminate a larger quantity from a smaller amount or smaller quantity from a larger amount and could be classified as one of the easiest numerical competence.

In this work I have summarized the present knowledge of numerical competences in primates, which have been so far studied only in a few species of primates, most of them was rhesus macaque (*Macaca mulatta*) and chimpanzee (*Pan troglodytes*).

In the experimental part I focused on the research of relative numerosity in rhesus macaque (*Macaca mulatta*). The goal of my work was to find out whether macaques are able to solve the problem of relative abundance with different types of stimuli. Another goal was to find out whether they are able to generalize information about relative abundance and whether they can apply it for new design of the task.

The results confirm that macaques possess the ability of relative numerosity and are able to abstract stimuli that are differing in their character. This proves that they are not learning to recognize a particular stimuli, but are able to use this numerical skill on any type of stimuli. I also found out that macaques are able to understand a completely new quantitatively different task where monkeys have been able to discriminate and collect quantities not only between two but also between three stimuli.

Key words: Relative numerosity, numerical competence, primate, rhesus macaque, stimuli, experiment, Weber's law