ABSTRACT

Reptiles are a neglected group in the study of cognitive abilities of Amniota. Due to their phylogenetic relationship with birds and mammals, knowledge about reptile brains and cognition is important to understanding their evolution in other amniote groups. In this thesis, I summarized the literature on cognitive abilities in reptiles, which focuses on spatial orientation, such as orientation based on visual cues or compass navigation, associative learning, mainly visual discrimination and operant conditioning, and social learning. It has been shown that some reptilian species are capable of flexible behaviour and, given the right methodology, can successfully solve a number of cognitive tasks. I also briefly treated the size and structure of reptile brains, providing the neural substrate for these abilities.

Keywords: reptile, cognitive abilities, brain size, brain structure, spatial orientation, associative learning, social learning