

ABSTRACT

The cognitive abilities of "reptiles" have long been a neglected topic compared to research on cognition in two other groups of tetrapods – mammals and birds. Recently, however, studies testing selected aspects of various cognitive abilities in "reptiles" have become quite abundant. In this thesis, the different types of cognitive tasks studied were determined (focusing on numerical abilities, spatial learning, reversal learning, visual discrimination, social learning, "problem-solving" or operant conditioning) and then the methods of testing them in "reptiles" were discussed in detail. Subsequently, within the paraphyletic group "reptiles", the given cognitive abilities for each family (and specific species) were mapped with respect to their phylogeny. A general problem in some studies was the smaller number of subjects tested (minimum 1, maximum 559, median 15) relative to the often great number of factors studied (minimum 1, maximum 14, median 4) and the wide interindividual variability in cognitive performance. Although the amount of work on the cognitive abilities of "reptiles" has been rising over the last decade, qualitative analysis suggests the presence of simpler types of cognition. A quantitative or phylogenetic analysis of "reptilian" cognitive abilities has so far been precluded by low taxonomic coverage and non-uniform methodology. There are now only 13 papers comparing one or more families of "reptiles".