

The Evolution of Aversion: Why Even Children are Fearful of Snakes

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Some of the oldest tales and wisest mythology allude to the snake as a mischievous seducer, dangerous foe or powerful iconoclast; however, the legend surrounding this proverbial predator may not be based solely on fantasy. As scientists from the University of Virginia recently discovered, the common fear of snakes is most likely intrinsic.

Evolutionarily speaking, early humans who were capable of surviving the dangers of an uncivilized society adapted accordingly. And the same can be said of the common fear of certain animals, such as spiders and snakes: The ancestors of modern humans were either abnormally lucky or extraordinarily capable of detecting and deterring the threat of, for example, a poisonous snake.

Psychologists Vanessa LoBue and Judy DeLoache were able to show this phenomenon by examining the ability of adults and children to pinpoint snakes among other nonthreatening objects in pictures.

“We wanted to know whether preschool children, who have much less experience with natural threats than adults, would detect the presence of snakes as quickly as their parents,” LoBue explained. “If there is an evolved tendency in humans for the rapid detection of snakes, it should appear in young children as well as their elders.”

Preschool children and their parents were shown nine color photographs on a computer screen and were asked to find either the single snake among eight flowers, frogs or caterpillars, or the single nonthreatening item among eight snakes. As the study surprisingly shows, parents and their children identified snakes more rapidly than they detected the other stimuli, despite the gap in age and experience.

The results, which appear in the March 2008 issue of *Psychological Science*, a journal of the Association for Psychological Science, may provide the first evidence of an adapted, visually-stimulated fear mechanism in humans.