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**Novel problem-solving and exploratory behaviors, regarding human socialization in the family Canidae****Abigail Reid**

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Canids or animals in the Canidae family use sensory behaviors to interact with and gain information about their environment. In captivity, canids are housed in facilities from zoos to conservation centers and are exposed to various degrees of human interaction, which may impact learned behaviors. As habitat destruction leaves many species endangered, it is relevant to better understand captive management practices and their effects on the animals. This research examined the relationship between problem-solving behaviors towards a novel stimulus and human socialization. We presented a puzzle-box to canine subjects across the genera *Canis*, *Vulpes* and *Chrysocyon*, while recording exhibited exploratory behaviors with an ethogram. Chi-squared tests determined the significance of the observed results. Corticosterone concentrations were measured from fecal collections before and after the trials to analyze the benefits of the apparatus as cognitive and sensory enrichment. The results suggest a correlation between a canid's likeliness to approach the puzzle-box and their level of human socialization. Foxes (*Vulpes*) exhibited more exploratory behaviors towards the apparatuses and were more successful completing the task regardless of their human socialization. The genera exhibited exploratory behaviors in different frequencies, reflecting different innate scavenging behaviors. Corticosterone concentrations increased during the testing period, associated with greater activity, suggesting the puzzle box is a good stressor and a beneficial type of enrichment. Therefore, there is a relationship between a canid's approach to a novel problem in their environment and the amount of human interaction received, which should be considered in captive management practices, including enrichment implementation.

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