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Domestic dogs' understanding of spatial temporal priority

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Abstract

Dogs are recognized for their social reasoning and skillful interactions with humans, but their understanding of causal relationships and the underlying principles (e.g., temporal priority) are under-explored. To address this gap, we adapted a task used with children to investigate how pet dogs use temporal sequences of events. Dogs (N=22) watched an experimenter perform a sequence of two actions on a puzzle box: i) one action before a treat was dispensed from the box (causal action) and ii) the other action after the treat appeared (non-causal action). Each action was temporally equidistant from the treat. After observing the sequence, dogs interacted with the box. Preliminary results indicate that over the course of five trials dogs preferred interacting with the causal action and were more likely to investigate it first, compared to the non-causal action on trial one. Results will be discussed in a comparative context of observational and experiential learning.