

Dogs interpret human emotions in a two-way choice situation

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Abstract

The ability to read human emotions is among the most popular beliefs about dogs. Previous studies showed that dogs are able to obtain some information from human emotional expressions, however, only a few studies addressed whether and how these information affect and guide the behaviour of dogs. In our study 80 pet dogs could choose between two uniform plastic bottles and fetch one of them to the owner after viewing their owners' emotional reaction (happy, neutral, or disgust) to each of them. The emotions of happiness and disgust were expressed by facial, verbal and body gestures, whereas the neutral emotion was expressed only by a blank facial expression. The dogs were assigned to three experimental groups: Happy-Neutral, Happy-Disgust, Neutral-Disgust. We also included a control group where both objects were neutral.

Dogs in all experimental groups preferred to fetch the bottle marked with the more positive emotion to the owner. However, their first approach suggests that they found the happy and disgust expression equally appealing. The performance in the first trial showed the same pattern, the dogs approached the bottles randomly but they fetched the bottle marked with the more positive emotion above chance level. The control dogs' performance was completely random regarding both variables. According to our results, dogs recognize the valence of human happiness and disgust, and get their own interest (what they first approach) over by fetching the owner's preferred item.