## Dogs detect human emotions in a two-way choice situation

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## Abstract

The ability to detect human emotions is among the most popular beliefs about dogs. Studies showed that dogs are able to obtain some information from human emotional expressions, however, only a few studies addressed how these information affect the dogs' behaviour. In our study 80 dogs could choose between two uniform plastic bottles and fetch one of them to the owner after observing their owners' emotional reaction (happy, disgust or no particular emotion: 'neutral') to each of them. The happiness and disgust were expressed by facial, verbal and body gestures, whereas the neutral was expressed only by a blank facial expression. The dogs were assigned to four groups according to the emotion-pair they received: happy-neutral, happy-disgust, neutral-disgust and neutral-neutral (control). Dogs in the control group performed on chance level, whereas dogs in the other groups preferred to fetch the bottle marked with the more positive emotion to the owner. However, their first approach to the targets suggests that they found the happy and disgust expressions equally attractive. According to our results, dogs recognize the valence of human happiness and disgust, and revise their own interest (what they first approach) by fetching the owner's preferred item.