



## The relationship between nonverbal sensitivity, dog-ownership and knack for dogs

Meyer, Iben Helene Coakley; Kristensen, Helle Halkjær

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Poster-21

SAZ Poster Presentation Session #4

Thursday, October 22, 2009 4:20pm - 5:30pm

## THE RELATIONSHIP BETWEEN NONVERBAL SENSITIVITY, DOG-OWNERSHIP AND KNACK FOR DOGS

**Authors:** I Meyer, University of Copenhagen, Faculty of Life Sciences; H Kristensen, University of Copenhagen, Faculty of Life Sciences

**Presenter:** Mrs. Iben Meyer

**Introduction:** When interacting with dogs, communication relies almost solely on nonverbal signals. We therefore hypothesized that a general ability to detect nonverbal signals could be associated with having a knack for dogs, but also that being around dogs might affect a person's nonverbal sensitivity.

**Methods:** In a pilot study we tested 76 veterinary students on their ability to recognize facial emotion in humans using the Micro-Expression Training Tool (METT)<sup>®</sup>, developed by Ekman (2003), as a measure of nonverbal sensitivity. In a multiple choice test, the students were tested on 28 faces showing the following seven emotions four times each: sadness, anger, surprise, fear, disgust, contempt and happiness. The faces were shown for 3 seconds each, and the students were asked to identify which one of the seven emotions they had just seen. The METT score was calculated as number of correct responses. Information about dog ownership (owning or having owned a dog) and knack for dogs (self reported) was collected by questionnaire.

**Results:** There was a significant interaction between dog ownership and knack for dogs (Fishers Exact,  $X^2=7.27$ ,  $df=1$ ,  $p=0.02$ ) with a larger proportion of the 53 dog owners reporting a knack for dogs (90.5%) compared to the 23 non dog owners (65.2%). Dog owners had lower METT scores (mean=23.9,  $SD=2.64$ ,  $q1=22$ ,  $q3=26$ ) than non dog owners (mean=24.9,  $SD=2.92$ ,  $q1=24$ ,  $q3=27$ ), Kruskal Wallis ( $X^2=3.53$ ,  $df=1$ ,  $p=0.06$ ). Within dog owners, those with a knack for dogs,  $n=48$ , had significantly higher METT scores (mean=24.2,  $SD=2.52$ ,  $q1=22$ ,  $q3=26$ ) than those without a knack for dogs,  $n=5$ , (mean=21.6,  $SD=2.97$ ,  $q1=21$ ,  $q3=23$ ), Kruskal Wallis ( $X^2=3.87$ ,  $df=1$ ,  $p=0.05$ ).

**Conclusions:** Owning or having owned a dog seems to improve one's feeling of a knack for dogs. Dog ownership does not necessarily increase a person's nonverbal sensitivity however. On the contrary this pilot study may suggest that dog owners are inferior to non dog owners in recognizing human facial emotion. Within the group of dog owners, those with a low nonverbal sensitivity reported to lack a knack for dogs. This result could suggest that a general nonverbal sensitivity, different from what is learned through dog ownership, affects the feeling of a knack for dogs.