Does looking time predict choice in domestic dogs? Examining visual attention in mans best friend

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Abstract

Dogs live in an environment built around humans dominant sense of sight. Despite millenia of co-habitation, little is known about how dogs visually evaluate objects when making perceptual decisions, and whether they do this in a human-like manner. To explore this question, we analyzed visual attention patterns of pet dogs (N=39) in a 2-object choice task. Two foods of unequal reward value (hotdogs and dried corn) were presented over ten trials in four experimental conditions: i) in open palms; ii) on plates; iii) in cups; and iv) in filled jars. Dogs chose one food item per trial. We coded visual attention measures of total looking time at each item and frequency of looks to each item from video and compared them with dogs subsequent item choice strategies. We discuss gazing and choice behaviour in a comparative context of perceptual decision making.