

Title: Experimental Study of Human-to-Dog Emotional Contagion Under Visually Occluded

Conditions: The Interspecific Contagion of Fear

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Dogs have been coexisting with humans for a long time. Through that prolonged process of domestication, dogs have evolved many social skills that make the intimate relationship with humans possible. In this study, we aim to investigate the full potential of emotional contagion by limiting dogs of any visual information from their owners and through solely auditory and olfactory cues. The conditions were horror and relaxation through virtual reality stimuli. If emotional contagion was possible without visual cues, we predicted that the dogs' stress-related behaviors, categorized as self-calming, active coping, communicative stress behavior, will increase in horror conditions. As a result, all self-calming behaviors and communicative stress behaviors did not show any significant differences in both conditions. In addition, active coping behaviors differed significantly by condition, but the direction was not as anticipated. We assumed the reason for the undisplay of stress-related behaviors was due to flaws in experiment design and the unexpected effect of separation anxiety. Although we were unable to demonstrate human-to-dog emotional contagion without the use of visual cues in our study, we believe the study of emotional contagion is crucial to forming a better relationship with our pets, as understanding the effects our negative emotions have on our dogs, who we share our most vulnerable moments with, leads to creating a healthier living environment for them.