

FINAL REPORT



Evaluating the Effect of Touch in Human-Horse Interactions

Katrina Merkies, PhD, University of Guelph, Canada, D22EQ-516

RESULTS: Study provides physiological and behavioral data on responses to human touch interactions in equine-assisted programs for horses.

SUMMARY: Morris Animal Foundation-funded researchers at the University of Guelph, Canada studied how horses that participate in assisted therapy programs respond to human touch, as well as learning more about the responses of human participants.

THE PROBLEM: People with trauma frequently are drawn to animal-assisted interactions as part of their health and recovery process, providing opportunities to experience safe touch and connection with another being. Studies show stroking and petting companion animals helps mitigate signs of stress, depression, pain and anxiety in humans. However, little is known about the effects of these hands-on programs on the welfare of the animals participating in these therapy sessions.

THE PROJECT: Researchers were interested in understanding the horse's point of view in how they perceive human touch interactions. The team was especially interested in horses that were given the choice whether to interact with humans or not, and how these interactions affected the horses' behavior and wellbeing.

To study this, researchers observed 49 people interacting with horses in forced (tethered horses) and non-forced (horses loose in round pens) tests. All the horses involved were part of an equine-assisted service program for humans experiencing grief and were accustomed to being touched.

During one session, the horse was tethered to the fence and the human participant was instructed to touch the horse continuously for five minutes. In the second session, the same horse was loose in the pen and the human participant could only touch the horse if the horse came within arm's reach. Each participant interacted one-on-one with four different horses in both tethered and untethered sessions.

Data collected included behavioral and physiological responses, including heart rate monitoring, in both horses and humans. Each human participant completed surveys reporting their perceived feelings during the different sessions. The team also evaluated if horses preferred a certain type of touch (for example scratching versus patting) and to be touched in certain locations (for example on the neck versus the hindquarters).

PROJECT FINDINGS: When given a choice, untethered horses spent less than half their time in proximity to the human. This was not influenced by the human's experience level with horse, or how or where they touched the horse. When not given a choice – the horse was tethered and forced to interact with the human – horses showed more stress-related behaviors even though researchers recorded no difference in the horses' heart rate variability whether the horses were tethered or not tethered.

FINAL REPORT



Conversely, human heart rate was higher when the horse was tethered. However, human heart rate variability was not impacted by either type of session. Per the surveys, humans who were less experienced with horses enjoyed the experience more although they reported feeling less safe and relaxed compared to humans with horse experience.

POTENTIAL IMPACT: This research will help inform guidelines for equine-assisted service programs. Horses deliver subtle messages through their body language, and educating those who work with horses will not only improve the welfare of horses but also enhance the working relationship between horses and humans, including those participating in animal-assisted therapy programs.

Although more studies are needed, it appears that the type or location where a human touches a horse is not especially important, but horses prefer the autonomy to choose whether to physically interact with a human or not.

The team is taking lessons learned from this study to conduct similar research in dogs that participate in therapy programs.

Thanks to the generous sponsors of this study!