Equine behavior: How horses perceive us

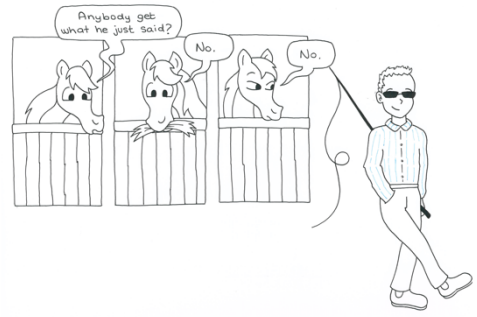
Dr Valentina Vitale, DVM, PhD, Dipl. ECEIM, Department of Veterinary Sciences, University of Pisa

Abstract

Statement of the Problem: Accidents with horses are quite common and can range from very mild injuries up to the death of the operators involved. To understand equine behavior may help to avoid these problems.

Methodology & Theoretical Orientation: First of all, it is important to understand the equine's five sense and which importance they have for this species. Secondly, through a review of the literature, we have to identify how to communicate in a correct way to horses in order to gain their confidence. Several studies highlight the importance of the interaction human-horse and vice versa on the equine's perception of human beings and the deleterious effect that a nervous person can have on a horse. To understand equine behavior is important also in clinical settings to better understand and manage painful conditions, indeed discomfort and stress can make the perception of the same painful *stimulus* much more unbearable

Conclusion & Significance: Each horse has its own personal experience with humans and only spending time with them will allow us to better understand their behavior. Horses can generalize their experience and apply what they learnt in different situations. To get stressed due to the fear of an undesirable reaction from a horse will only make that reaction more likely to happen.



1. Feh C., de Mazieres J. ,1993. Grooming at a preferred site reduces heart rates in horses. Animal Behavior 46, 1191-1194.
2. Keeling, L.J., Blomberg, A., Ladewig, J., 1999. Horse-riding accidents: when the human–animal relationship goes wrong! In: Proceedings of the 33rd International Congress of the International Society of Applied Ethology, Lillehammer, Norway, p. 86.
3. McGreevy P.D., Oddie C., Burton F.L., McLean A.N., 2009. The horse-human dyad: can we align horse training and handling activities with the equid social ethogram? Vet J 181, 12-18.
4. De Boyer Des Roches A. et al., 2008. Laterality and emotions: visual laterality in the domestic horse (*Equus caballus*) differs with objects emotional value. Physiol Behavior 94, 487-490.
5. Keeling L., Jonare L., Lanneborn L., 2009. Investigating horse-human interactions: the effect of a nervous human. Vet J 181, 70-71.
6. Hausberger M., Roche H., Henry S., Visser E.K., 2008. A review of the human-horse relationship. Appl Anim Behaviour Sci 109, 1-24.
7. Smith A.M., Proops L., Grounds K., Wathan J., McComb K., 2016. Functionally relevant responses to human facial expressions of emotion in the domestic horse (*Equus caballus*) Anim Behaviour 12, 1-4.
8. Baragli P., Vitale V., Paoletti E., Sighieri C., Reddon A.R., 2011. Detour behaviour in horses (*Equus caballus*). J Ethol, 29, 227-234.
9. Miller P.E., Murphy C.J., 2005. Equine vision: normal and abnormal. In: Gilger B.C., Equine Ophtalomoly, p. 371-408.
10. Stone S.M., 2010. Human facial discrimination in horses: can they tell us apart? Anim Cogn, 13, 51-61.
11. Hanggi E.B., Ingersoll J.F., 2012. Lateral vision in horses: a behavioral investigation. Behav Proc 91, 70-76.
12. Wathan J., Burrows A.M., Waller B.M., McComb K., 2015. EquiFACS: the equine facial action coding system. PLOSone 5, 1-35.
13. Sankey C. et al., 2010. reinforcement as a mediator of the perception of humans by horses (*Equus caballus*). Anim Cogn 13, 753-764.
14. Hawson L.A., McLean A.N., McGreevy P.D. 2010. The roles of equine ethology and applied learning theory in horse-related human injuries. J Vet Behav 5, 324-338.
15. Saslow C.A., 2002. Understanding the perceptual world of horses. Appl Anim Behav Sci, 78, 209-224.

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Biography

Dr Vitale graduated in 2007 at the University of Pisa where she also performed a PhD in equine physiology and behavior. In 2013 she completed an internship in equine medicine and surgery at the University of Barcelona. Subsequently she worked in an equine private practice in Italy and as long-term volunteer for a UK charity society based in The Gambia. Between 2015 and 2018 she completed a residency in equine internal medicine at the University of Barcelona and obtained the diplome of the European College of Equine Internal Medicine in 2020. After two years working at the Camden Equine Centre of the University of Sydney, she came back to the University of Pisa where she actually works.

Email: v.vitale_vet@yahoo.es