

Can Horses Recognize People and Voices?

By Christa Lesté-Lasserre • May 09, 2013 • Article #31849



Photo: Photos.com

Are horses really capable of recognizing their owners and their voices? Study results from a team of British behavior researchers suggest that horses really do appear to be capable of matching voices to faces when it comes to the humans they know.

“We already know that horses can discriminate between different human faces and between familiar and unfamiliar people, but this is the first time we have shown that they can associate the right voices with the right people,” said Leanne Proops, PhD, of the Mammal Vocal Communication and Cognition Research group at the University of Sussex, in the United Kingdom.

In her two-part study, Proops evaluated 72 horses that each heard one of two recorded voices saying the horse’s name over a loud speaker. The two people who had recorded the voices would stand in front of the horse, a few feet apart from each other. In the first

part of the study, one person was someone the horse knew while the other was a stranger. In the second part, both people were familiar to the horse. Proops and colleague Karen McComb, PhD, watched to see which way the horse looked when he heard his name spoken over the loud speaker, and how long he looked in that direction.

The team found that when the voice on the speaker belonged to someone the horse knew, the animal would almost always look quickly toward that human, Proops said. And usually, the horse continued to look at that person for a relatively long time. By contrast, if the voice belonged to the unfamiliar person, the horse took a longer time to look at that person and did not look at him or her for very long.

When the horse had to choose between two familiar people in the second part of the study, the horse generally responded quickly by looking at the correct person for a relatively long time, Proops said.

Interestingly, mares performed the recognition task better than geldings, she added.

However, laterality (“sidedness”) was an issue for both genders, Proops said. Horses responded much more accurately when the correct person was standing on the right side of the horse, so the horse could see that person with his right eye. The horse's right brain hemisphere controls the left side of the body while the left hemisphere controls the right side of the body; apparently the horse's left hemisphere manages “cross-modal” (the seeing/hearing matching task) processing better than the right hemisphere, Proops said

Also in Proops' study, if the horses heard their owners' voices over the loud speaker and the owner was not present, the horses tended to look either way, with no real preference to direction, she said. Based on her previous research, while the cross-modal function appeared to work in the left hemisphere, the visual and auditory cues seemed to spur a right-hemisphere brain reaction, Proops said.

Proops' research is ongoing.

The study, "**Cross-modal individual recognition in domestic horses (*Equus caballus*) extends to familiar humans**," appeared in the *Proceedings of the Royal Society B: Biological Sciences*.