



## **Effect of training method on response of horses to a human approach test**

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The human-horse relationship forms an essential component in the diversity of today's use of horses. The reactions of horses to interactions with humans are mostly the result of interplay between their own temperament; the temperament and skills of the human and their previous experience - with humans. Moreover, the understanding of the human-horse relationship may improve the welfare of horses and humans. Nowadays, 'sympathetic' training methods are gaining tremendous attention of horse owners. In the 'sympathetic' training method the focus lies on the use of body language in human-horse communication, as well as respecting the horse's natural needs. With 28 horses the effect of a 'sympathetic' training method versus a conventional training method on the horse's response on a human-approach test was studied. Fourteen horses of 3.5 years of age were subjected to a five week training period with a conventional training method, the other fourteen horses were subjected to a 'sympathetic' training method. The overall frequency of snorting during the human approach tests decreased on average from 4.4 ( $\pm 1.1$ ) before the training period to 3.1 ( $\pm 0.9$ ) after the training period (both groups). However, there was a significant ( $p=0.006$ ) difference between training methods: the horses trained in the 'sympathetic' method decreased snorting by 4.3 ( $\pm 1.1$ ) while the horses trained in the conventional method increased with 1.5 ( $\pm 0.9$ ). While horses trained in the conventional method whinnied less in the second human approach test, horses trained in the 'sympathetic' method whinnied more after the period of training. This difference was found to be significant ( $p=0.006$ ). Defecating decreased over time, but was not different between training methods. The frequency of touching the unfamiliar handler increased over time for both training methods. The horses trained in a conventional method increased from 1.5 to 2.5 and for the sympathetic trained horses from 1.9 to 3.7. This increase was not significantly different for the training methods. Heart rate showed a minor decrease between the human approach tests (before training period 85.3 bpm, after training period 74.3 bpm) but there were no significant differences between training methods. Similarly, there was a slight increase in heart rate variability (rmsd: from 37.0 to 45.2), but no significant differences between training methods. Overall it was concluded that horses trained with this 'sympathetic' method tended to be more trustful and less stressful in the presence of an (unfamiliar) human compared to horses trained with a conventional method. This may have been due to reduced stress during horse-human contact in the 'sympathetic' training method used. The long term effects on the welfare of the horses, still needs to be investigated.

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