

Food discovery: Behavioural differences between young and aged horses.

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Introduction

At what age the horse learns and remembers new tasks from human interaction is likely to influence handling, training and therefore performance. Previous research found adult horses are highly skilled at reading subtle human cues, whereas younger horses only possess this ability in a predator context (Murphy *et al.*, 2009). This study aimed to investigate cognitive ability and apprehension of both, young and old horses in response to a novel object (Bulens *et al.*, 2015).

Materials and Methods

Six Haflinger mares were chosen using stratified sampling and split into 2 groups based on age: horses (n=3) were 2 years and under (G1); horses (n=3) were 14-15 years (G2). All horses were led into an outdoor arena (20 x 40m) by a familiar handler and then were asked to stand while another familiar handler placed a scoop of feed into a blue trough and hid it from view with a grey cloth. The horse was then released and its task was to remove this cloth from the trough to access the food similar to Lovrovich *et al.* (2015). Subjects took part in the experiment once each in order to test their first response only. All subjects were habituated to eat a scoop of feed from the trough as a pre-training task. Behaviours were recorded by a familiar handler using a continuous scan sampling method, for 60 seconds supported by an ethogram.

Results

In the experiment 83.33% of subjects successfully completed the task with one G1 participant not engaging at all during the experiment. There were no significant differences between G1 and G2 in their behavioural diversity (BD). Although not significant G1 successfully removed the grey cloth quicker (35 ± 25.17 vs. 36.67 ± 22.55 seconds) than G2. Time taken to reach the feed trough was significantly less for G2 (7.98 ± 2.68 vs. 30.31 ± 13.57 seconds, $P = 0.04$) than G1.

Conclusion

Results suggest that there is no difference between behavioural diversity in older and younger horses, however there was a significant difference in the time taken to reach the trough between the two groups. Older horses are possibly more accustomed to human cues and therefore will remember the location of the food hidden by the handler more readily than the younger horses. Further research is needed to investigate the indicated behavioural latency in horses of different ages.

References:

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