Improving Equine Welfare: Development of an Online Behaviour Rating and Training Tool to Enhance Veterinary Students' Knowledge of Equine Behaviour.

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The majority of first year veterinary students have little to no prior experience interacting with horses which may negatively impact student safety and teaching horse welfare. The ability to correctly identify and interpret equine behaviour is a cornerstone to improving safety and welfare when working with horses. By recognizing an escalation in undesirable behaviours, students can modify their interaction with the horse before dangerous scenarios arise. Our goal is to create an online tool that will enhance knowledge of equine behaviour in first year veterinary students. The programming portion of the online tool was produced by computer science students at UPEI while the computational portion of the tool was completed by one author (AM). Videos showing horses exhibiting various behaviours were obtained by recording teaching horses in common environments, including in pastures, paddocks, and teaching laboratories. A series of 22 short videos, each containing at least three distinct observable behaviours, were uploaded into the tool. A list of eight behaviours and four interpretations were composed for use in a multiple-choice list to accompany videos. In the validation phase of the study, volunteers with advanced equine knowledge were asked to identify the correct behaviours and interpretation for each video. The data was analyzed by calculating the consistency of the rater's selection of the correct behaviours for each video using the Cramer's V coefficient. The Cramer's V value between raters overall was 0.68, considered moderate to good, with a range of 0.52 to 0.89. Future improvement of the tool will include analysis of individual videos and behaviours to find common sources of inconsistency among the raters.

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