Evaluating a natural horsemanship program in relation to the ISES first principles of horse training

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the regular procedures taking place at foal shows may be a suitable, time-efficient method to evaluate certain aspects of personality without the need for a specialized temperament test. **Key words:** personality; human-horse interaction; foal; breeding shows

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**Relationship between rideability and tactile sensitivity assessed via algometer and von-frey filaments**

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The aim of the present study was to assess horses' tactile sensitivity as a potential indicator of some aspects of rideability. For this purpose, 66 warmblood riding horses were evaluated by a professional rider, using grades from 0 (absence of trait) to 10 (excellent performance), with regard to laterality and individual aspects generally included in the compound trait rideability. In addition, horses were tested with an algometer for the minimum pressure required to elicit a reaction as well as the intensity of reaction (scored 0-4) to three different von-Frey filaments each applied once at the girth, flank and back on both left and right sides. Reactions to stimulation by the von-Frey filaments varied considerably between horses, and reaction intensity to the different von-Frey filaments at the same or different body parts correlated highly with each other ($r_{66} = 0.46-0.95$, $P < 0.05$). Minimum pressure required to elicit a reaction likewise correlated between different body parts ($r_{66} = 0.32-0.88$; all $P < 0.05$) as well as reactions to the 3 von-Frey filaments (e.g. $r_{66} = 0.56 - 0.66$ for means of all measurement sites; all $P < 0.05$), indicating that reactions to touch of various intensities constitute a distinct behavior trait. However, there were no significant relationships between any of the rideability aspects and any of the measures of tactile sensitivity (all $P > 0.1$). In conclusion, sensitivity to light or medium touch did not relate to different aspects of rideability. However, sensitivity to touch differs considerably between horses, suggesting that pressures acceptable to one horse may cause discomfort to another horse. **Key words:** tactile sensitivity; rideability; pressure; personality

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The ISES training principles provide an excellent starting point for professionals and horse owners. Currently, there does not seem to be an accepted protocol for evaluating horse training programs against the ISES principles. We suggest an approach to this, using Parelli Natural Horsemanship as our subject for evaluation. This initial pilot study (single-subject, $n = 1$), trials two analytical methods, as applied to the current, video-based teaching materials from Parelli (latest 2015 DVD set). The two methods used were: (i) ethology-based video observation/logging and (ii) discourse analysis of the language used to teach. The ethology-based approach logged observed frequencies of the ISES principles. Inter Observer Reliability was assessed using ICC (Intra Class Correlation). Discourse analysis considered both the context and meaning of training language, to both the speaker and audience. Ethology-based results found all ISES principles present (1-10) with high frequency counts for principles 2 & 10 and low counts for principles 5 and 7. Inter Observer Reliability (2 observers) was in the ‘excellent’ range (ICC = 0.79). The high ICC value suggests that a minimal amount of measurement error was introduced by the independent observers, and therefore statistical power is not substantially reduced. At this stage (without an ICC value closer to 1.0 or further calibrating observers), increasing the evidence against random effects would require more extensive trials ($P > 0.05$). The interim results from the discourse analysis show consistent congruence between the Parelli materials and the ISES principles, particularly in principles 1, 2, 7, 9 and 10. **Key words:** discourse analysis; ethogram; ethology; ISES training principles; Parelli

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**Reaching equestrians through an on-line academy to implement a new thought process for humane bitting using applied physics**

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The Academy by Neue Schule was instituted to promote thought through awareness in regards to bitting. The Academy puts to rest common myths surrounding bits and encourages new thought processes among riders who acquire a thorough understanding of the various mechanical actions and applied forces of bits. The curriculum is informed by a thorough unbiased search of the scientific literature and novel studies undertaken by Neue Schule scientists. For example, tension meters inserted into a single rein and cheek piece of a bridle were used to determine the forces placed upon the horse by bits of different classes. The results of these studies, and application of physics principles, are the foundation of knowledge used to educate riders. The Foundation course provides a global overview of the history of bitting, materials, anatomy, and action of bits. The Intermediate course delves deeper into the latter principles by quantifying how forces distribute between lips and tongue in various situations and, the extent to which bits rotate upon rein tension. Using these principles students learn which features of the bit press onto the tongue and of the following surprising result: the flat plate of a Dr Bristol forms an angle of only 8° to the tongue and is nearly parallel to it whereas that of a French link sits at 123°, pressing its thin edge into the tongue. The results of these analyses and other studies are the foundation of knowledge used to educate riders of all levels participating in The Academy. **Key words:** education; equine; physics; bitting; forces

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**Taking the reins: Communication strategies to prompt change in riders’ training practices**

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