

term with 'Gewichtshilfen' ('weight aids') in 2012, although it is unclear whether this term leads to improved understanding. Based on the most plausible explanations in the investigated literature, the term 'Kreuz' originates from the French word for kidneys and, essentially refers to the lumbar region of the back which plays a key role in facilitating the rider's stability and suppleness. 'Kreuzanspannen' refers to the action of tilting the pelvis, such that the pubis is moved forward-upwards and the structures of the 'Kreuz' are tensed, with the purpose of cueing the horse. Ultimately, creation of an international glossary would be desirable, facilitating faster and easier communication.

Keywords: back; bracing; language; equestrian; literature

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Practitioners' understanding of the german terms 'kreuz' resp. 'kreuzanspannen' ('back' resp. 'bracing the back') commonly used in equestrian parlance

S. SOLERO^{1,*}, P. SIMON², U. KÖNIG V. BORSTEL³

¹Johannes Gutenberg University, Mainz, Germany

²Department of Sports Medicine, Rehabilitation and Disease Prevention, Faculty of Social Science, Media and Sport, Johannes Gutenberg-University, Mainz, Germany

³University of Gießen, Gießen, Germany

*Corresponding author: susasolero@gmx.de



The aim of the study was to assess practitioners' understanding of the terms 'Kreuz/Kreuzanspannen' ('back/bracing the back'). An online questionnaire with 25 questions assessing participants' definition of the terms and anatomical relationships was distributed. There were 597 respondents of which 319 were dressage riders (data reported). They included 35 professional riders (PR) of all skill levels up to Grand Prix, amateur riders participating (AC, n=144) or not participating in competitions (A n=140). Chi-square tests were used to assess differences in proportion of correct responses between PR, AC and A. Responses revealed that practitioners' definitions of the two terms varied widely. For example, posture and cues were frequently confused. Professional riders did not necessarily give anatomically more correct definitions, compared to AC and A (proportion of correct responses, χ^2 : $P < 0.05$). Even though all professional riders were familiar with the term 'Kreuz', all parts of the body except for the arms were included in their responses. Of the A riders, 100 of 140 were able to correctly identify the anatomical areas for 'Kreuz' and 73 were additionally able to assign the corresponding muscles. With the AC riders, 110 out of 142 correctly identified both the anatomical areas as well as the corresponding muscles. In conclusion, general uncertainty about the term 'Kreuz/

Kreuzanspannen' prevails. Besides a gain in theoretical knowledge, anatomically correct definitions of the terms would improve rider's understanding and therefore reducing miscommunication between rider and horse.

Keywords: language; communication; back; aids; anatomy

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Adaptive management as an approach to supporting change in equestrian training practices

H. RANDLE^{1,*}, A. ABBEY², S. WASSENS³

¹School of Animal and Veterinary Science, Charles Sturt University, Wagga Wagga, 2678, NSW, Australia

²Duchy College, Stoke Climsland, Callington, Cornwall, PL17 8PB, UK

³Institute for Land, Water and Society, Charles Sturt University, Albury-Wodonga, 2640, NSW, Australia

*Corresponding author: hrandle@csu.edu.au



Adaptive Management (AM) is a structured, iterative process of rigorous monitoring and robust decision-making which aims to reduce uncertainty over time that has produced positive outcomes when used in the training custodians of land and animals. It is becoming widely recognized that substantial changes to horse management and training are needed if contemporary welfare requirements are to be met. Much of this change involves moving away from established, often traditional, practice that has largely been unquestioned. Uncertainty is an unavoidable aspect of change and it is reasonable to expect any trainer, however proficient, to experience doubt about implementing new methods, and to tend to revert to the familiar even though the outcomes are known not to be preferable. It is likely that practitioners beginning to change their training methods to those encompassing the principles of learning will experience uncertainty. As a structured process for learning, reflection and refinement, AM is proposed as a useful tool to support these practitioners, especially to appraise the success of their training actions (the application of stimuli) and subsequent reactions (responses) in relation to desired outcome and comparison with past behavior, and ultimately to evaluate its impact on welfare. As successes become more frequent practitioners' confidence will increase and application of Stimulus-Response-Reinforcement continue to improve, becoming more welfare-friendly in their training. The use of AM at the individual horse level by multiple practitioners will drive large-scale evidence-based adaptation of practice and result in global improvements to the welfare of horses used in equestrianism.

Keywords: equine; training; welfare; change; adaptive management; monitoring