

# Focus Review on Sport Horse Welfare

**Flavia Bochiş, Ludovic Toma Czişter**

*University of Life Sciences "King Mihai I" from Timişoara, Calea Aradului, 119, 300645 Romania  
Faculty of Bioengineering of Animal Resources*

---

## **Abstract**

As an overall, horse welfare refers to the well-being and the quality of life of horses. This includes ensuring that horses are provided with proper nutrition, stable, veterinary care, training, and social intra and inter specific interaction. It involves protecting horses from harm, abuse, neglect, and ensuring their physical and emotional needs are met. Horse welfare is essential for promoting health, happiness, and longevity of horses, as well as fostering positive relationships between humans and horses. Welfare in the equestrian activities mirroring the ethical and responsible treatment of horses during mainly in all aspects of training activities. This includes ensuring that horses are provided with proper equipment that fits well and does not cause discomfort or injury, using appropriate training methods that prioritize the horse's physical and mental well-being, and monitoring the horse's health and fitness levels to prevent overexertion or injury. Sport horse welfare involves creating a positive and respectful relationship between the rider and the horse, as well as promoting a safe and supportive environment for both the horse and the rider. Prioritizing welfare in equestrians is essential for the health, happiness, and longevity of the horse, as well as for the enjoyment and safety of the rider.

**Keywords:** equestrian activities, sport horse, welfare.

---

## **1. Introduction**

Almost all over the world and in a large majority of cases, the horses are in the immediately presence of the human being. The welfare of these animals owned as pets, working, sporting for leisure even breeding has a great rising interest over the last century. Especially the equestrianism for any level is under the pressure of the public view and the reports on abuse seems to be rising (see the dressage animal cruelty report cases in 2024). And tragic accidents can always happen, just remember the well-known cases of Hickstead (2011), Isabella (2023) and Chromatic (2024) only in showjumping. Accusations of animal abuse at the Tokyo Olympics (2020) helped lead in drop riding that being the biggest change for the modern pentathlon in more than a century. Competitive Equine Sport is important to society in terms of spectator enjoyment, benefits to human

mental and physical health and economic impact [1,2]. However, it is so true that the equine sport exposes animals to possible physical and psychological harms. A large number of animals are involved, in sports including horse racing, showjumping, eventing, dressage, polo, endurance, reining, showing and carriage driving [3,4], vaulting, working equitation, archery or others.

## **2. Rules, theories, practice and research**

The specific national and the international bodies are responsible for establish and apply the regulations and to protect the welfare of all the competing and non-competing horses. National federations (NF) administer the sport at the national level and the International Equestrian Federation (FEI) administers affairs at the international level. Committees formulate the rules and regulations and look after the interests of the various disciplines.

The FEI is the sole authority for all international

---

\* Corresponding author: [flavia25cai@gmail.com](mailto:flavia25cai@gmail.com)

events in dressage, show-jumping, three-day event, driving, endurance riding and vaulting. The FEI was founded in 1921 by the national equestrian federations of Belgium, Denmark, France, Italy, Japan, Norway, Sweden and the United States of America, and has since grown to the current total of 136 full affiliated national federations throughout the world (2024). Romania is part of the FEI body since 1930. The FEI secretariat is based in Lausanne, Switzerland.

The vast majority of competition horses are looked after well and do not create a welfare concern. However, a minority of people abuse horses - physically, through medication, or by other means - in an attempt to gain an unfair advantage. The regulators of the sport can never be complacent. The root metaphor must be the symbiotic unity of man and horse, mutually interdependent, rising to heights which neither could achieve alone [1].

A Code of Conduct [3] was introduced by FEI since 1990 and has subsequently been updated. This Code must be published in schedules of all international events. The FEI also recommends that the Code to be published in the programs of events and that it receives the widest possible publicity. The text of the Code in the moment of born was an ensemble as follows:

- In all equestrian sports the horse must be considered paramount.
- The well-being of the horse shall be above the demands of breeders, trainers, riders, owners, dealers, organizers, sponsors or officials.
- All handling and veterinary treatment must ensure the health and welfare of the horse. The highest standards of nutrition, health, sanitation and safety shall be encouraged and maintained at all times.
- Adequate provision must be made for ventilation, feeding, watering and maintaining a healthy environment during transportation.
- Emphasis should be placed on increasing education in training and equestrian practices and on promoting scientific studies in equine health. In the interests of the horse, the fitness and competence of the rider shall be regarded as essential. All riding and training methods must take account of the horse as a living entity and must not include any technique considered by the FEI to be abusive.
- National Federations should establish adequate controls in order that all persons and bodies under

their jurisdiction respect the welfare of the horse. The national and international Rules and Regulations in equestrian sport regarding the health and welfare of the horse must be adhered to not only during national and international events, but also in training.

- Competition Rules and Regulations shall be continually reviewed to ensure such welfare.

How we think about the welfare of the competition horses is a topic addressed theme and pointed from various points of view [4]. In 2014 a paper in Equine Veterinary Education, [5] reviewed approaches to assessing equine welfare. The authors focused particularly on the use of the "Five Freedoms" framework, basically developed for use in farm animals and originated from an old welfare British report dated in 1965 [6], developed and adapted as an advice for horse owners and referenced in the Great Britain National Equine Welfare Council's Code of Practice [7]. The five freedoms taken into consideration were:

- Freedom from hunger and thirst
- Freedom from discomfort
- Freedom from pain, injury and disease
- Freedom to express normal behaviour
- Freedom from fear and distress

The Five Freedoms Theory is useful as an accessible and easily adopted framework for analysing equine management systems, and encourage improvements in equine welfare. But it is insufficient as a framework for focusing on the welfare of equine athletes, due to its failure to incorporate positive aspects of welfare, and because of underlying ethical questions about the use of horses in sport. There is a need for more about the welfare of competition horses which not only delineates negative welfare in applicable terms, but also develops a view of what good welfare looks like, and incorporates ethical considerations about possible constraints on the use of horses for competitive sport [4].

It is apparent that more scientifically based training could result in a reduction in injuries due to better conditioning of the bones and soft tissue structures. The goal of fitter horses is important because musculoskeletal disorders are the major cause of wastage in the equestrian field [8].

The emphasis placed on each of these aspects varies, depending on the type of horse and activity being undertaken. For example, a horse trained for show jumping requires improvement of biomechanical skills, rather than aerobic or

anaerobic fitness. This contrasts with a horse being trained for endurance events where an improvement in stamina is the main aim. In the past, the training of horses at all levels, Thoroughbred racehorse, Standardbred trotter or pacer, endurance horse and eventing horse, has been more of an art than a science. This art is important because the understanding of the animal's motivation provides one of the keys to performance. However, without a firm scientific foundation, training processes was the result of subjective impressions.

It is of interest to the general equestrian community, as well as those involved in the equine industry, to determine whether the physiological limits of horse performance have been reached. For the moment in this era of consumerism, the combination of the art and the science it seems to be forgotten. A lot of people just targeted only to produce better results for performance and fitter horses, in a very short time.

The use of horses for sporting activities changes rapidly, but are they beneficial for both [9], performance and welfare? That is currently the well-known being question in the animal rights debate. There is little public support at present for the abolition of some equestrian sports, but equine welfare is high on the agenda and there is certainly a cry for the reduction of what is called "avoidable suffering" [10]. Here again, research-based innovation realized through collaborative efforts between academics and the equine industry can help and is surely in the best interests of the industry and of all those who depend on it. There is plenty of new technology around nowadays that can be used to assess both the performance and comfort of the horse and rider [11], and this offers infinite possibilities for further customization for everyday practical use. If the equine community embraces these opportunities and has the courage to assess objectively, with the welfare of the horse always in mind, traditional and often empirically-based practices and concepts in horse riding and refrains from appearing to be a closed, highly traditional community refractory to change, the battle for the public opinion will be won easily.

Is the welfare of elite horses [12] any better than that of those at the other end of the spectrum? The claim that elite horses' behavioural needs are hard to meet. It is very easy to meet the physical status of the welfare needs of animals, but their mental wellbeing is equally important. Just

because they were stabled did not mean that they had no contact with other horses, whether that was in the stable block or during transit. It should be remembered, that these horses had been bred for this lifestyle, and had adapted to a structured way of life. Welfare issues cross the whole spectrum of the equine world, but, the elite world is different as it was heavily regulated and, if a problem arose, it would be dealt with quickly and measures would be put in place to prevent it happening again.

Whilst equestrians may feel strong positive emotions toward their horses when riding, working or interacting with them [13], which is possibly exacerbated by life events such as competition success or achieving a training goal, it is unclear if horses experience equivalent emotions toward their owner, rider, or caretaker. The limited studies in this area have found that horses showed higher motivation to feed or spend time with their conspecifics compared to being ridden [14], nor did horses prefer exercise over time spent in their stalls when given the choice [15]. Horses may perceive the activity of horseback-riding as stressful from both a psychological and physical level, particularly during the initial stages of training where horses are exposed to novel objects and situations, e.g., tack, mounted rider, which may elicit stress responses that could compromise horse and rider safety. Horses may not enjoy exercise involving strenuous workloads [15,16] and it is not known if horses experience positive emotions such as happiness when being ridden or worked intensely and involuntarily.

Horses prefer turnout with other conspecifics over housing in single box stalls [17] and research has confirmed that forming affiliations, [13], positive social interaction with conspecifics, can be regarded one potential indicator of positive emotional states and, therefore, good welfare in horses [18]. All over the world, the reality in riding school yards often differs and horses are commonly housed in single stalls as well as turned out on individual paddocks without the possibility of full-body interactions to conspecifics [19,13]. Social interactions, including all on grooming, substantially contribute to positive affective states in horses [20] and can generate pleasure [21]. Intensely managed animals, including horses, can display signs of distress, aggression, self-mutilation, when they are deprived from

expressing normal behaviour, including social interactions with conspecifics and the ability to express sexual behaviour [22]. In a natural environment, horses live in bands or herds comprising of mixed-sex members and form affiliations ad libitum with select members of the herd, which is essential to domestic horses' wellbeing [21]. With humans making choices on behalf of horses, separating mares from geldings and vice versa may further compromise horses' needs to express normal behaviour.

Some authors [23] maintains as a part of equestrians believe that only happy horses can perform at their best. This notion particularly applies to equestrian sport, where it is thought that a good or happy human–horse relationship partially contributes to enhanced performance and, ultimately, competitive success [20]. For over a decade FEI has promoted the concept that competition horses should be managed to be “happy athletes” [24], yet it remains unclear how happiness in horses is defined. Research [25] investigating equestrians' perception, and interpretation of happiness in horses is limited.

The latest updated [3] FEI Code of Conduct for the Welfare of the Horses highlighted in five principal aspects as follows:

*General Welfare [3]:*

- a) Management, stabling and feeding must be compatible with the best management practices.
- b) Training methods must only undergo training that matches their physical capabilities and level of maturity.
- c) Farriery, tack foot care and shoeing must be of a high standard.
- d) During transportation, horses must be fully protected against injuries and other health risks.
- e) In transit, journeys must be planned allowing regular rest periods with access to food and water.

*Fitness to compete [3]:*

- a) Participation in competition must be restricted to fit horses and athletes of proven competence.
- b) Health status veterinary advice must be sought whenever there is any doubt.
- c) Doping and medication part pay action or intent of doping and illicit use of medication constitute a serious welfare issue and will not be tolerated.
- d) Any surgical procedures that threaten a competing horse's welfare or the safety of other horses and/or athletes must not be allowed.

e) Pregnant/recently foaled mares must not compete after their fourth month of pregnancy or with foal at foot.

f) Abuse using natural riding aids or artificial aids (e.g. whips, spurs, etc.) will not be tolerated.

*Events must not prejudice Horse welfare [3]:*

- a) In Competition areas horses must be trained and compete on suitable and safe surfaces.
- b) All ground surfaces on which horses walk, train or compete must be designed and maintained to reduce factors that could lead to injury.
- c) Competitions must not take place in extreme weather conditions that may compromise welfare or safety, provision must be made for cooling conditions and equipment after competing.
- d) Stabling at events must be safe, hygienic, comfortable, water must always be available, well-ventilated and of sufficient size for the type and disposition of the horse.

*Humane treatment of horses [3]:*

- a) Veterinary treatment and expertise must always be available at an event.
- b) Referral centres wherever necessary, to give the possibility to be collected by ambulance and transported to the nearest relevant treatment centre for further assessment and therapy.
- c) The incidence of injuries sustained in competition should be monitored. Ground surface conditions, frequency of competitions and any other risk factors should be examined carefully.
- d) If injuries are sufficiently severe a horse may need to be euthanized on humane grounds by a veterinarian as soon as possible, with the sole aim of minimizing suffering.
- e) Retired horses must be treated sympathetically and humanely when they end their career.

*Education [3]:*

The FEI urges all those involved in equestrian sport to attain the highest possible levels of education in areas of expertise relevant to the care and management of the Competition Horse. This Code of Conduct for the Welfare of the Horse may be modified from time to time and the views of all are welcomed. Particular attention will be paid to new research findings and the FEI encourages further funding and support for welfare studies.

### 3. Conclusions

In terms of improving equine welfare, further research studies exploring the underlying factors causing the discrepancy between equestrian

desired and actual horse husbandry practices in some facilities are warranted.

Further studies are needed to explore equestrians' perceptions of equine emotional states. Meanwhile, it is suggested that the dissemination of knowledge about recognizing positive and negative affective states in horses continues as a contribution to safeguarding equine welfare.

### Acknowledgements

The study is based on personal practice and documentation in databases accessible via the internet (PubMed, ScienceDirect, Sci Hub, FEI).

### References

1. Welfare of competition horses. Atock MA, Williams RB. *Rev Sci Tech*. 1994 Mar;13(1):217-32. doi: 10.20506/rst.13.1.765. PMID: 8173097
2. Deloitte. (2013) Economic Impact of British Racing, British Horseracing Authority, London. pp 1-60.
3. [https://inside.fei.org/sites/default/files/Code\\_of\\_Conduct\\_Welfare\\_Horse\\_1Jan2013.pdf](https://inside.fei.org/sites/default/files/Code_of_Conduct_Welfare_Horse_1Jan2013.pdf)
4. Freedoms and frameworks: How we think about the welfare of competition horses, Campbell ML. *Equine Vet J*. 2016 Sep;48(5):540-2
5. Hockenhuil, J. and Whay, H.R. (2014) A review of approaches to assessing equine welfare. *Equine Vet. Educ.* 26, 159-166
6. Brambell, R. (1965) Report of the Technical Committee to Enquire Into the Welfare of Animals Kept Under Intensive Livestock Husbandry Systems, Her Majesty's Stationary Office, London.
7. National Equine Welfare Council. (2009) Code of Practice for the Welfare of Horses, Ponies, Donkeys and their Hybrids. Available at: <http://www.nationalequinewelfarecouncil.co.uk/>
8. Rose, R. J., & Evans, D. L. (2010) Training horses - art or science? *Equine Veterinary Journal*, 22(S9), 2-4.
9. Van Weeren, P. R., & Back, W. (2014). Technological advances in equestrian sports: Are they beneficial for both performance and welfare? *The Veterinary Journal*, 199(3), 313-314.
10. Campbell M.L.H. (2013) When does use become abuse in equestrian sport? *Equine Veterinary Education (American Edition)* 25, 489-492.
11. Back W., Clayton H.M. Eds. (2013) *Equine Locomotion*, second ed. Elsevier, London.
12. Equine welfare: are elite horses any better off? (2014). *Veterinary Record*, 174(1), 7-7
13. Bornmann, T., Randle, H., & Williams, J. (2021). Investigating Equestrians' Perceptions of Horse Happiness: An Exploratory Study. *Journal of Equine Veterinary Science*, 104, 103697.
14. König von Borstel U, Keil J. Horses' behavior and heart rate in a preference test for shorter and longer riding bouts. *J Vet Behav* 2012;7(6):362-74.
15. Lee Floyd T, Erb H, Haupt K. Preference and demand for exercise in stabled horses. *App Anim Behav Sci* 2011;130(3-4):91-100.
16. Gorecka-Bruzda A, Jastrzebska E, Muszynska A, Jedrzejewska E, Jaworski Z, Jezierski T. Do horses like to jump? Strategies used by leisure and sport horses. *Proceed 7th International Equitation Science Conference*; 2011. p. 31
17. Löckener S, Reese S, Erhard M, Wöhr A-C. Pasturing in herds after housing in horseboxes induces a positive cognitive bias in horses. *J Vet Behav—Clin Appl Res* 2016;11:50-5.
18. Mellor, DJ, M Burns, Using the Five Domains Model to develop welfare assessment guidelines for Thoroughbred horses in New Zealand, *New Zealand veterinary journal*, 2020.
19. Hemsworth L.M., Jongman, E., Coleman G.J. (2015), Recreational horse welfare: The relationships between recreational horse owner attributes and recreational horse welfare, *Applied Animal Behaviour Science* Volume 165, April 2015, Pages 1-16.
20. Payne E, DeAraugo J, Bennett P, McGreevy P. Exploring the existence and potential underpinnings of dog-human and horse-human attachment bonds. *Behav Process* 2016;125:114
21. Van Dierendonck MC, Spruijt BM. Coping in groups of domestic horses—review from a social and neurobiological perspective. *Appl Anim Behav Sci* 2012;138:194-202.
22. Zeitler-Feicht MH. *Handbuch Pferdeverhalten. Ursache, Therapie und Prophylaxe von Problemverhalten*. 3rd ed. Stuttgart: Ulmer Eugen GmbH & Co; 2015.
23. Wipperfurth A. The partnership: the horse-rider relationship in eventing. *Symb Interact* 2000;23(1):47-70.
24. Federation Equestre Internationale (FEI) 2004 Global Dressage Forum, Lausanne: FEI; 2004. [internet] <https://inside.fei.org/news/2004-global-dressageforum>
25. Webb LE, Veenhoven R, Harfeld JL, Jensen MB. What is animal happiness? *Ann N Y Acad Sci* 2019;1438(1):62-76.