



Working horse welfare in Senegal is linked to owners' socioeconomic status, attitudes and belief in horse sentience

Collaborative research between Brooke and the University of Portsmouth shows that working horse welfare in Senegal is linked to their owner's beliefs and circumstances.

Owners who have positive attitudes towards their horses believe they can feel emotions. Those who have a larger income own horses in a better welfare state.

Working horses often experience a range of health and welfare issues, such as poor body condition, wounds, foot problems and displays of depressive-like behaviours.

Reasons for poor welfare are often multifaceted but are frequently linked to the exclusion of working equids in policy and international development agendas^[1,2,3], socioeconomic factors such as an owner's inability to afford veterinary care, feed and suitable working equipment, and the owner's limited knowledge base.

The health and welfare of equids such as horses are intimately linked to their owners. If animals

become sick or injured and are unable to work, this not only affects their wellbeing but has a direct impact on the income-generating opportunities and wellbeing of the communities who depend on them. Many communities rely on their equids to carry water, take produce to market, transport people and work in agriculture.

To support communities to ensure their animals experience good physical and mental health, it is important to understand the relationship between different factors that may impact their animal's welfare.

To support this, Brooke and the University of Portsmouth have explored the relationship between Senegalese horse owner's belief in horse mind, their attitudes towards their horses and their welfare, and the owner's socioeconomic status.



Belief in horse mind refers to how we attribute horses with mental capacities such as intellect and feelings of emotion (sentience)^[4].

Socioeconomic status is an individual or group's position in a society, which is determined by wealth, occupation, and social class^[5].

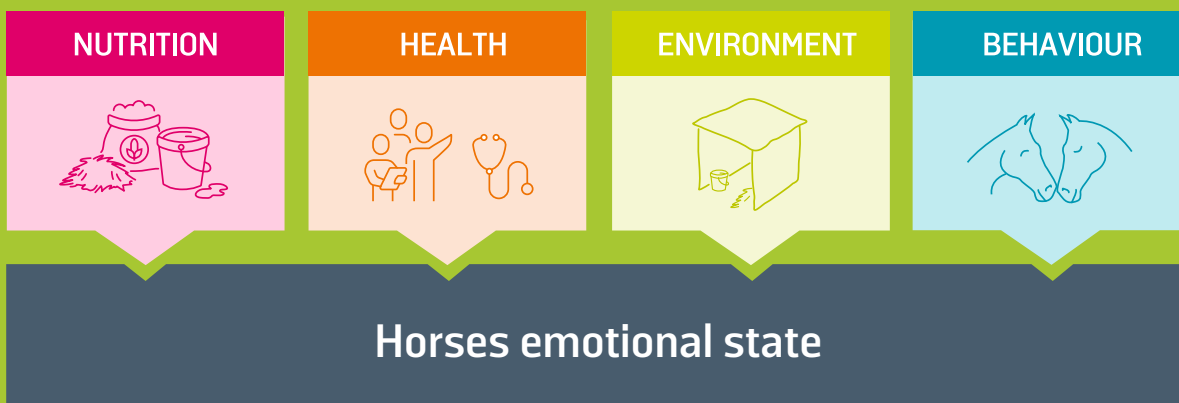
Our approach

The study took place in 2022 in towns and villages in the Senegalese regions of Diourbel, Louga and Thiès. In total, 299 working horse owners and their horses took part in the study, and most of the horses included in the study worked in agriculture. Horse owners were asked a series of questions to assess attitudes towards their horses and their belief in horses' minds, for example, whether they believe their horses feel pain.

Owner's socioeconomic status, including household income, perceived coverage of needs and education level, were also assessed along with their horse's physical and mental welfare.

Selected measures from the Standardised Equine-Based Welfare Assessment Tool (SEBWAT)^[6] were used to assess horse welfare. These measures were body condition score, gait, and lesions.

The Primary Assessment of Welfare Experiences (PAWE) assessment was used to determine whether the welfare of the horses in relation to specific domains (including nutrition, environment, health and behaviour with relevant emotional experiences) was unacceptable, acceptable or good.



The data collectors also provided a holistic view of the general health status of the horses.

The data was analysed to explore if any relationships exist between owner attitudes, belief in horse mind, socioeconomic status and horse welfare.



Brooke is an international charity that protects and improves the lives of horses, donkeys, and mules and the communities that rely on them.

We work with owners, communities and policymakers to bring about lasting improvements to the lives of working animals.

Key findings

This is the first study we are aware of that provides an understanding of the relationship between working horse welfare, owner's attitudes and beliefs, and their socioeconomic status.

The findings from this study highlight the importance of understanding the relationship between socioeconomic status, attitudes, belief in animal mind, and animal welfare. Studying these variables in isolation doesn't allow for the complete picture to be understood; therefore understanding the complex dynamics between the variables is invaluable.

The study will be used to advocate for authorities to implement effective measures to protect the horses who play vital roles in people's livelihoods. The study can be used to convince human development NGOs to engage in joint projects with Brooke West Africa.

Information will be shared with communities to raise awareness of the interdependency between their own wellbeing and the welfare of their horses.

To find out more about this study contact research@thebrooke.org

- Horse owners with a stronger belief in horse sentience and a more positive attitude towards their horses and owned horses with a healthier body condition score.
- Belief in horse mind was positively correlated with the provision of appropriate nutrition, positive horse health and behaviour.
- Positive attitudes towards horses were associated with providing appropriate nutrition and positive behaviour.
- There was a strong relationship between a household's ability to cover their needs, such as paying bills, and horse's physical welfare, for example, providing an adequate diet, suitable housing and veterinary care.
- Larger households and those with a higher income were more likely to own a horse in good general health.
- No association was found between formal education level and horse welfare. This is not surprising as knowledge about how to care for animals usually comes from the community.

References

- ¹ Goodrum F., Theuri S., Mutua E., & Carder G. The Donkey Skin Trade: Challenges and Opportunities for Policy Change. *Glob Policy*. 2022;13: 304–309. doi:10.1111/1758-5899.13072
- ² Pritchard, J., Upjohn, M., & Hirson T. Improving working equine welfare in 'hard-win' situations, where gains are difficult, expensive or marginal. *PLoS One*. 2018;13: 1–16.
- ³ Grace, DC., Diall, O., Saville, K., Warboys, D., Ward, P., Wild, I., et al. The Global Contributions of Working Equids to Sustainable Agriculture and Livelihoods in Agenda 2030. *Ecohealth*. 2022;19: 342–353. doi:10.1007/S10393-022-01613-8/TABLES/1
- ⁴ Hills, AM. Empathy and Belief in the Mental Experience of Animals. *Anthrozoos*. 1995;8: 132–142.
- ⁵ Baker, E. H. (2014). Socioeconomic status, definition. *The Wiley Blackwell encyclopedia of health, illness, behavior, and society*, 2210-2214.
- ⁶ Sommerville, R., Brown, AF., Upjohn, M. A standardised equine-based welfare assessment tool used for six years in low and middle income countries. *PLoS One*. 2018;13: 1–21. doi:10.1371/journal.pone.0192354