

What Are the Perceived Barriers to Avoiding Negative and Promoting Positive Equine Mental States for United Kingdom (UK) Horse Owners?

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Abstract

Understanding barriers that United Kingdom (UK) horse owners face in optimizing welfare-friendly management choices is key to providing a good life for horses. Equine management is often based on tradition, and horse owners may unknowingly rely on outdated practices and lack awareness of modern welfare assessment frameworks, including the Five Domains Model. Resistance to change can arise from concerns over safety, cost, and tradition, with uncertainty prompting a return to familiar routines. Identifying implementation barriers allows for the development of practical, owner-focused strategies to support enhanced positive mental states. Qualitative data from a 2021 online survey of UK horse owners and carers (n = 258) were analyzed for the first time. Responses (n = 247) to the question, "What barriers or limitations do you see to avoiding a negative mental state and promoting a positive mental state in horses?" were thematically analyzed. Themes that emerged were "Livery Yard Restrictions," "Lack of Resources," "Lack of Knowledge and Education," "Tradition and Performance Pressures," "Natural Living Conditions," and "Health and Welfare Concerns." Livery yard policies and traditional practices often limited individualized equine management intended to promote positive mental states. Many highlighted insufficient social interactions and managing health issues as key challenges. Barriers to avoiding negative and promoting positive equine mental states were multifaceted and often systemic, although these data were collected in 2019 and the sample may include those with an existing interest in this topic. Addressing identified barriers requires targeted education, practical support, and collaboration with livery establishments to enable more individualized equine management to promote a good life for horses.

Keywords

Horse welfare; affective states; stable management; equestrian; barriers to change; Equidae

1. Introduction

Despite growing recognition of the species-specific needs of horses, equine welfare in the United Kingdom (UK) remains a topic of concern among animal welfare professionals, veterinary surgeons, equestrian communities, and the public [1]. Recognized as sentient, horses require species-specific

management that recognizes not only their physical health but also their mental well-being [2]. Equine welfare science has made significant advances in defining what constitutes a "good life" for horses, with the Five Domains Model [3] offering a holistic framework encompassing nutrition, environment, health, behavior, and mental state. However, the successful application of such models depends on those

directly responsible for equine care. Changing the behavior of those responsible for limiting negative and promoting positive mental states of horses requires identification and understanding of the barriers that may hinder this change [4], be they actual or perceived.

Most UK horse owners are deeply committed to their horse's health and well-being, yet research suggests there is often a disconnect between evidence-based welfare science and common equine management [5], particularly when considering affective states. Horse owners in the United States (US) reported perceived barriers such as finances, tradition, lack of knowledge, and safety concerns, hindering the adoption of practices and behaviors promoting positive welfare [6]. These barriers do not necessarily reflect neglect or apathy, but more accurately reflect a complex web of beliefs, values, limitations, and concerns. These factors influence how owners understand and implement positive welfare strategies [4]. Exploring horse owners' perceptions of these barriers is vital to designing realistic, effective educational strategies. These strategies should be supportive of owners and caregivers in promoting positive mental states and avoiding negative experiences for their horses.

One of the most enduring barriers to equine management change is tradition, deeply rooted in historical customs and cultures, often outlining how equine practices take place in the UK [7]. While tradition creates community and continuity, it may inhibit the adoption of modern, evidence-based approaches. Rogers *et al.* [8] observed that horse owners maintain routines based on established habits or traditional practices. This is compounded by a psychological tendency to revert to familiar practices when uncertain, even when new approaches are shown to be beneficial [9]. Safety concerns also hinder owners, as horses are large and potentially dangerous to manage, with practices that favor human safety over the species-specific needs of the horse being prioritized [10]. Animal welfare improvements often come with perceived or actual financial costs, equipment requirements, or the investment of additional time or labor [11]. While some changes may be low-cost or cost-saving in the long term, they are not always deemed viable in the short term. As a result, welfare or management advice that does not account for financial, time, or labor realities may be dismissed as impractical or unattainable by horse owners.

The equestrian world can, at times, lack awareness of modern welfare frameworks and equine needs [12], and often, peer advice is not based on the most current evidence. Knowledge gaps and misconceptions can contribute significantly to suboptimal care practices, such as an overemphasis on ridden exercise and undervaluation of free movement and natural behaviors [13]. Exercise routines are often structured around human convenience, performance goals, or livery yard rules [14], limiting opportunities to express natural behaviors imperative to promoting positive mental states in horses.

Horse owners are not necessarily resistant to change, but seek practical, achievable, and evidence-based guidance. Pickering and Hockenhull [13] found that horse owners desired support for evidence-based equine husbandry with a positive focus, through accessible educational resources, workshops, or from industry professionals. Horse owners

are more likely to act on clear, relevant suggestions, especially if these align with their values and perceived abilities [15]. This highlights the need for welfare communication that is empathetic, realistic, and evidence-based rather than subjective or judgmental.

In the UK, the legislative framework set by the Animal Welfare Act in 2006 [16] places a duty of care on animal owners, including provisions for appropriate nutrition, environment, health care, and behavioral expression [17]. This legislation is lagging behind current welfare assessment theories, such as the Five Domains Model [18], where the importance of the mental domain is highlighted. Promotion of positive mental states and avoidance of negative mental states can therefore often not be subject to legislation, with horse owner-led change essential to achieving positive welfare at present. Ultimately, promoting positive equine mental states in the UK requires a shift toward collaborative, owner-influenced strategies. Identifying and addressing the perceived barriers experienced by horse owners is not only a practical necessity but also a moral and scientific imperative. When welfare advice to promote positive mental states in horses aligns with owners' lived experiences, it becomes a shared value. To this end, this study aimed to identify perceived barriers to avoiding negative and promoting positive equine mental states of UK horse owners, a relatively under-researched area. These will inform the development of practical solutions that consider owners' lived experience, ultimately leading to positive equine welfare enhancement.

2. Methods

2.1. Procedure

Following institutional ethical approval (ETHICS2024-341-LR), data from a survey conducted by Fletcher *et al.* [18] (previously ethically approved by the Sparsholt Ethics and Research Group) were analyzed. Collection of the data for the original survey was via a four-part questionnaire comprising closed questions with multiple-choice answers and/or Likert scales, plus a final open question gathering qualitative data, distributed via social media. The survey had been disseminated to a variety of cross-spectrum, multi-discipline, leisure-rider/owners, available online for one month in July 2019. Convenience snowball sampling was utilized, with respondents able to actively share on social media, with participation on an opt-in basis. Participation in the initial survey was voluntary and anonymous, and completion of the form was taken as consent to take part in the study (further details in [18]). Responses from the final question were not analyzed for the initial peer-reviewed publication. These raw data were shared with the first author for analysis and reported following the Standards for Reporting Qualitative Research (SRQR) guidelines [19].

2.2. Data Analysis

Anonymized responses to the question, "What barriers or limitations do you see to avoiding a negative mental state and promoting a positive mental state in horses?" were extracted (n = 247) from the dataset. Initial analysis utilized an online word cloud tool (<https://www.wordclouds.co.uk/>) to identify the most used words in the text. The responses were further analyzed using thematic analysis, following the six-phase process outlined by Braun and Clarke [20]. Firstly, for familiarization, responses were read and re-read to gain an overall

understanding of the content. Initial ideas and reflections were noted, codes were generated, and data were systematically coded using a semantic approach. Each meaningful word or phrase relevant to the research question was labeled with a code. Generated codes were organized into broader categories, and preliminary themes were developed by identifying patterns of meaning across the responses. Themes were reviewed and refined to ensure they were coherent, internally consistent, and accurately reflected the responses. Each theme was clearly defined and named, with attention given to capturing the essence of what each theme represented in relation to the research question. Throughout the process, reflexivity was maintained to acknowledge the researcher's role in the interpretation of the data and to remain aware of potential biases and assumptions.

3. Results

3.1. Data Curation and Initial Analysis

From the original survey of UK respondents ($n = 258$), all responses to the final question regarding barriers to equine mental state enhancement ($n = 247$) were extracted. Six respondents had left this question blank, and five had stated they felt there were no barriers to equine mental state enhancement. Keywords and phrases ($n = 593$) were highlighted within the responses that conveyed the core messages of each answer. Frequency analysis of keywords revealed the most used words and combinations of words. A word cloud was generated using an online word cloud generator (**Figure 1**). The four most frequently mentioned keywords or word combinations were associated with livery yards (68), knowledge and education (49), money (35), and time (25) (**Figure 2**).

3.2. Perceived Barriers to Avoiding Negative and Promoting Positive Equine Mental State

Responses were grouped and given initial codes according to their meaning, which were further grouped into lower-order themes. These lower-order themes were then refined into six higher-order themes (**Figure 3**). The six higher-order themes identified as key barriers to avoiding negative and promoting positive equine mental states for UK horse owners were (in order of importance): 1. Livery Yard Restrictions; 2. Lack of Resources; 3. Lack of Knowledge/Education; 4. Tradition and Performance Pressures; 5. Natural Living Limitations; and 6. Health and Welfare Concerns. Horse owners reported that cost, lack of land, time, and facility limitations make it difficult to provide optimal horse care and achieve positive equine mental states. Livery yards often have limited flexibility in care and turnout due to space, rules, and traditional practices, for example:

"Limited by what the landowner/yard owner allows." (R152)

"No longer being able to keep my horses at home. Livery yards are always a compromise." (R174)

Many respondents believed that traditional training and care practices persist in the UK and that these are often restrictive of positive change. These practices are often impacted by understandable concerns, but conversations need to be opened, for example:

"Traditional ways of keeping horses owe more to historical expediency, as they were relied upon for transport and livelihoods. But tra-

ditional methods still prevail and lead to misunderstanding. People think they are doing the best for their horses, but they are missing the point of what a horse essentially is. It is hard to change this because we have to think of horses as sentient beings rather than animals for our use. This is challenging as they are big and powerful, and there is an understandable fear of being hurt. But this is not necessarily the result if we are prepared to have a dialogue around freedom and choice and boundaries." (R101)

Owners expressed that their horses often lack appropriate social contact with conspecifics, and this can often be limited by a range of barriers that, at times, are not easy to overcome, for example:

"Separated from other horses." (R77)

"Need to restrict food intake and turnout in order to prevent obesity and associated issues." (R129)

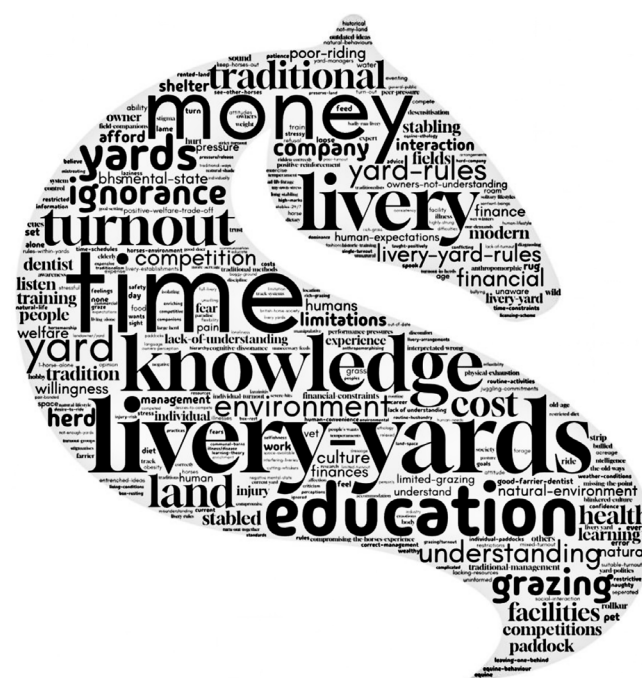


Figure 1: Word cloud illustration of the most used words and word combinations used to describe barriers to avoiding negative and promoting positive equine mental states: text size indicates frequency of use (smallest = fewest responses, largest = most responses).

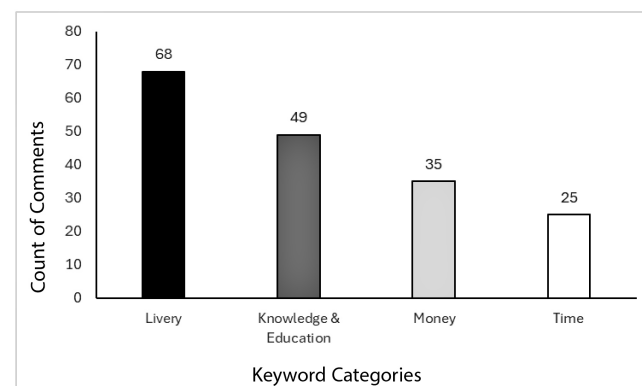


Figure 2: Top four keyword categories reported as barriers to positive welfare from 593 keywords and phrases.

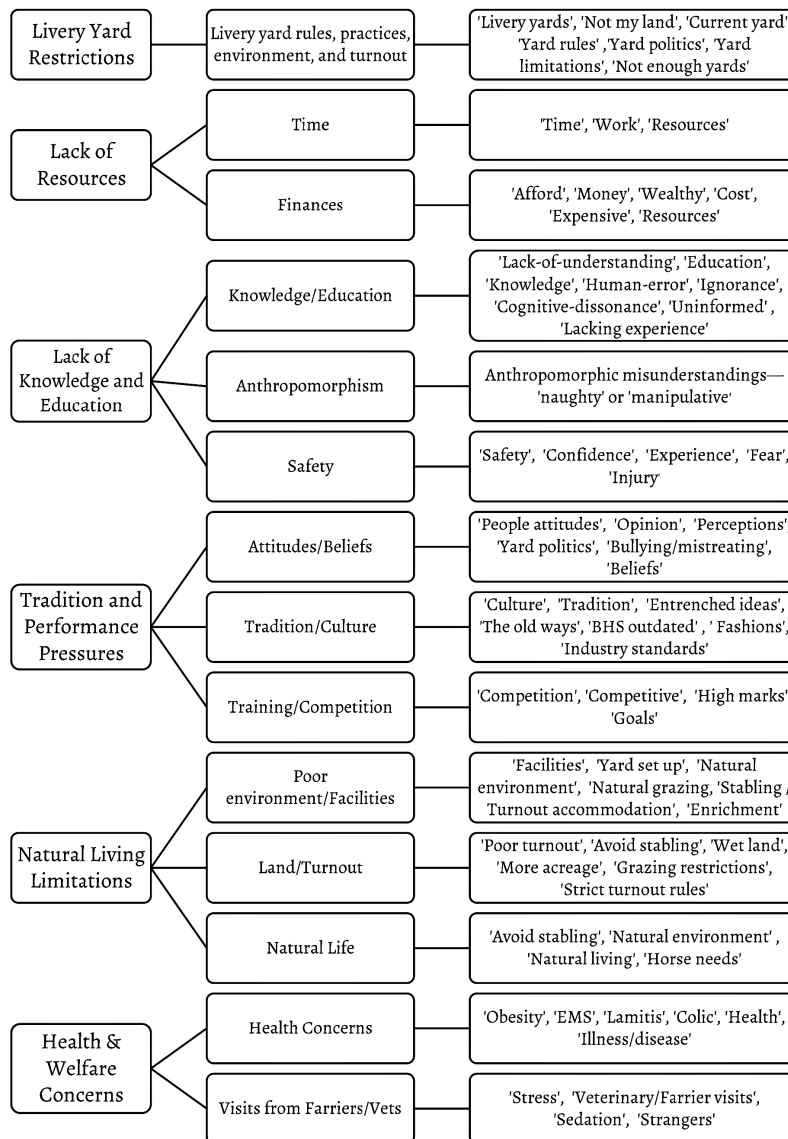


Figure 3: Dendrogram of higher- and lower-order themes identified and example phrases.

4. Discussion

Although Fletcher *et al.* [18] found that equine welfare assessment by the respondents to the survey was impacted by limited exposure to an infographic summarizing the Five Domains Model [21], any desired changes to equine management to address identified gaps may be limited by barriers, either real or perceived. This study aimed to identify barriers perceived by UK horse owners to avoiding negative and promoting positive equine mental states. Analysis of participant responses revealed multiple and interlinked barriers to this challenge. These were categorised into six higher-order themes reflecting the connection between organizational, cultural, and personal factors that influence equine management practices for horse owners.

4.1. Theme 1 - Livery Yard Restrictions

Livery yards, establishments where owners pay to keep their horses and utilise available equestrian facilities, emerged as a significant perceived barrier to avoiding negative and promoting positive equine mental states. Restrictive rules, inadequate facilities, and a lack of autonomy over equine

management or care decisions were cited as sources of frustration and concern for UK horse owners, for example:

"I don't have control over some aspects of the horse's care...." (R115)

"Rules within yards that do not allow for a more natural lifestyle. e.g., restricted and individual turnout. Owners unaware of the horse's needs/pushing them beyond their comfort zone. Lack of education regarding best care for horses." (R67)

Yet during the National Lockdown period because of the COVID-19 pandemic, livery yard owners were seen to prioritise the welfare and well-being of the horses in their care over their own well-being [22], and therefore are characterized as a group advocating for the welfare of horses in their care.

However, livery yard management practices are often designed for financial and logistical efficiency or based on traditional models, as they are businesses that must remain financially viable to stay in operation. This can limit turnout at pasture, dictate routines, or restrict social contact with other horses, limiting the owner's ability to ensure positive

mental states for their horses, regardless of their priorities for their own horse [23], for example:

"Real life. If you have to keep your horse at livery, they probably have limited turnout and are concerned about being liable for injuries, so provide single turnout." (R166)

"Livery setups/yard politics, current fashions for keeping horses need changing to allow them to live a more natural life." (R174)

Several respondents emphasized that many yards operate without adequate acreage or appropriate pasture access for the number of horses on site, making it difficult to offer horses the more natural lifestyle that would benefit them. Owners also reported a lack of choice in yards, leading them to feel they compromise on welfare due to limited availability or affordability, for example:

"Many livery yards don't have enough turnout available, or boggy ground." (R126)

"Livery yards have little choice or freedom, also money can be a factor." (R94)

Equestrian businesses, in particular riding establishments and livery yards, are not exempt from the current economic climate and, as such, many are struggling to improve or expand their provision for the horses in their care in this largely unregulated sector. However, Furtado [24] highlights the importance of working in collaboration with livery yard owners as a conduit to enhance welfare provision for horses in the UK in the future. This is unlikely to be successful if horse owners, or in turn welfare scientists, cast livery yard managers/owners as the enemy when promoting positive equine mental states through amended or updated management practices.

Many respondents suggested a need for greater governance and regulation within the livery yard sector, for example:

"Education of livery yards and absence of a licensing scheme. Minimum standards should be used for horse care. Worse than zoo animals in terms of accommodation and enrichment." (R256)

In 2022, France introduced new legislation to make the education of horse owners mandatory through licensing [25], although this was based on competence and knowledge rather than extensive details of equine welfare science. Hall-Bromley and Dixon [26] also suggested that more effective licensing and education frameworks could help address poor horse welfare in the UK. Indeed, 60% of livery yard owners who responded to a recent survey by SEIB Insurance Brokers Ltd. and LiveryList stated that they would support licensing of livery yards and similar equestrian establishments [27], suggesting that they, too, are keen for better oversight. This suggests that multiple stakeholders in the equestrian sector have a vested interest in avoiding negative and promoting positive mental states for horses, and that collaboration between horse owners and livery yard owners and managers is vital [24].

4.2. Theme 2 - Lack of Resources

Availability of time was consistently identified as a barrier to promoting positive equine mental states. Many owners described their routines as demanding and time-consuming,

balancing work commitments with daily horse care practices and riding/exercising to meet even the most basic of their horses' needs, for example:

"...time (grooming, riding, feeding, mucking out stables, changing rugs, etc., all take hours each day)." (R85)

Financial strain associated with the basic maintenance of horses was identified as a barrier to promoting positive equine mental states. Costs related to feed, facilities, bedding, veterinary and farriery care are all perceived to be increasing, contributing to the difficulty of providing optimal conditions to achieve positive welfare [28], for example:

"Cost (livery, farrier, vets, insurance, instructors, well-fitting tack, etc., are all expensive)..." (R85)

It is likely that these financial pressures have escalated since the time of the survey (2019), as the UK continues to recover fiscally from the legacy of world events such as the COVID-19 pandemic, which was felt particularly keenly within the livery yard sector during the associated lockdown period [29].

Many respondents expressed that the challenge of earning enough income to support horse ownership while also being physically present to provide care creates a constant balancing act. The relationship between the human and the horse requires time spent in each other's company, and many horse owners feel that they are better able to assess their horse's welfare and/or affective state when they are interacting [30]. However, respondents expressed the frustrating nature of this dual challenge, financially supporting their horses versus spending time in each other's company, to the perceived detriment of the horse's welfare, for example:

"I have to work for money to keep them, so sometimes they are not ridden or worked as often as I would like." (R66)

It should be noted, however, that a lack of ridden work/exercise is not necessarily detrimental to the welfare of the horse unless they are subsequently competing, which means they would not be physically fit enough for the level of exertion required, or if they require exercise for the management of their health, i.e., those prone to obesity or laminitis [14]. Indeed, management that allows free movement at leisure may negate the need for exercise by the rider. Not only is this access to free movement vital to meet the species-specific needs of the horse, but it may also reduce the time commitment required from under-pressure owners. Financial constraints on horse owners can also lead to limited choices within management systems, even when owners wish to provide a better standard of care to their horses, for example:

"It would be amazing to create a horse paradise on our fields - trees, hard standing, different plants, wet land, etc., but we don't have bottomless pockets..." (R147)

4.3. Theme 3 - Lack of Knowledge/Education

Respondents pointed to a lack of knowledge and understanding among both professionals and horse owners as a notable barrier to avoiding negative and promoting positive equine mental states. Misinterpretations of equine behavior were commonly reported, often describing how horses are regularly labeled as "naughty" or "manipulative" when dis-

playing stress or discomfort, potentially because of negative mental states, for example:

"Traditional horse training methods, quick fixes, 'breaking in', pressure from professionals who tout old school views. Knowing a horse is not 'naughty' or 'manipulative'." (R17)

"Lack of understanding basic needs. Anthropomorphizing (e.g., mare in season was 'misbehaving'; owner said the mare was using it as an excuse!!)" (R223)

This anthropomorphic thinking can lead to punishment-based training methods and undermine effective equine welfare assessment [31]. A lack of understanding and knowledge of the behavioral mechanisms and cognitive abilities of the species often leads to the use of euphemisms to describe unwelcome equine behavior that are likely grounded in biological mechanisms, pain, confusion, miscommunication, and negative mental states [32].

Concern over equine and human safety was also identified as an issue and was particularly linked to rider fear and/or lack of confidence. Many respondents linked fear and confidence issues to equestrian educational or experience deficiencies, which certainly warrant further investigation in future studies.

"My own lack of confidence" (R23)

"People's willingness to allow their horses to have a more natural lifestyle; many don't want mixed turnout, etc., because of injury risk" (R168)

"My mental state, my actions/cues, not being clear" (R22)

"Culture of competition and perception that horses are 'wasted' if not in work. Lack of understanding of ethological needs and perception that horses need stabling and/or individual turnout to keep them 'safe'" (R4)

Although safety concerns may limit welfare-friendly management choices, equine welfare scores have been negatively correlated with rider injury [33], with horses with higher welfare scores being consistently reported as displaying fewer hyperreactive behaviors. Opportunities to enhance equine welfare could improve rider and horse safety, providing a strong motivation to overcome reported barriers to providing a "good life" for horses.

Improved and empowering educational strategies may prove to be useful and are often welcomed by horse owners.

"Very few—most people can provide an environment that provides an enriched life for their horse, but lack of information and education about what horses really need and how to achieve this type of management is a barrier." (R30)

How these educational interventions are designed, delivered, and received by horse owners requires future study to establish the most effective mechanism to enable horse owners to overcome, or at least mitigate, their actual or perceived barriers to change.

4.4. Theme 4 – Tradition and Performance Pressures

Confidence, experience, and access to accurate information were highlighted as influencing how people assess and then respond to unwelcome horse behavior, often driven by equestrian traditions or performance pressures, for example:

"Traditional horse culture, too much cognitive dissonance" (R18)

"Belief in 'dominance' theory. Lack of knowledge of learning theory and benefits of positive reinforcement in training rather than using pressure/release or aversives." (R108)

"People's lack of understanding, 'the old ways'." (R72)

"Traditional breaking techniques, certain schooling disciplines." (R68)

"People who are overcompetitive and force their horses into stressful situations and use harsh gadgets. Things like Rollkur and severe bits, physical exhaustion, and fear." (R83)

This highlights the importance of accessible, evidence-based educational resources and training that are available to horse owners. Achieving positive equine mental states depends on equipping people with the ability and motivation to recognize and respond to horses' physical needs and affective states accurately and empathetically. However, education and knowledge do not always lead to human behavior change [4]. The drive for competition results, for example, can compromise positive welfare with the use of harsh or outdated training techniques [34], even when the perpetrator has knowledge and understanding of the detrimental impact of these techniques. This is further enabled by the objectification of competition horses and the enculturation in equestrianism identified by Cheung *et al.* [35], leading to equine management practices that may compromise equine welfare. Grigis *et al.* [36] also identified that poorer knowledge of learning theory increased the likelihood of horse owners describing the motivation for unwelcome horse behavior inaccurately. They advocate for better educational opportunities to enhance horse welfare. However, if traditional values limit reflective thinking [37], these barriers must first be addressed, and enablers to behavior change promoted.

4.5. Theme 5 – Natural Living Limitations

The restriction of horses' ability to engage in natural behaviors, particularly in terms of free movement and social interaction, was identified as a significant barrier to promoting positive equine mental states. Respondents expressed concern over the lack of turnout opportunities, limited access to natural environments, and frequent confinement to stables. These conditions were often linked to the management practices of livery yards, seasonal weather, or land shortages, resonating with other themes, for example:

"Allowing them to be themselves in as natural an environment as possible." (R201)

"Too many yards being set up in a way as to restrict these natural behaviors, and too many owners unaware or unwilling to see the effects this has on their horses." (R125)

"Health such as the need to box rest; bad weather restricting turnout." (R28)

"People's willingness to allow their horses to have a more natural lifestyle; many don't want mixed turnout, etc., because of injury risk" (R17)

The limitation of time at pasture reduces opportunities for social interaction and choice. Horses are gregarious herd animals, and as such require consistent social interaction with conspecifics [38]. Owners described scenarios in which horses were kept in isolation or rotated in and out of solitary stabling/turnout, suggesting that this caused "loneliness" or "distress." These limitations are also risk factors for the development of behavioral and health problems, including stereotypies and chronic stress, which contribute to negative mental states [10]. There was a desire among many owners to provide a "Natural Lifestyle," emphasizing the importance of grazing, interaction with conspecifics, and the freedom to engage in species-typical behaviors. Barriers to this reinforce the need for more flexible, individualized, and evidence-based equine care models that center around the horse's species-specific needs.

4.6. Theme 6 – Health and Welfare Concerns

Finally, health-related issues were identified as a potential concern impacting the ability to achieve positive equine mental states. Owners described situations involving chronic illness, the need for prolonged box rest, or injuries requiring restrictive care. While these measures were often necessary for veterinary or health reasons, they also present challenges to maintaining welfare standards, especially in relation to movement, social contact, environmental stimulation, and positive mental states, for example:

"Certain situations, like box resting for an injury for long periods of time, are necessary but could have a negative effect on the horse's mental state. Things can be done to mitigate this, like having them in a box where they can see what's going on and see other horses." (R224)

Routine care tasks by professionals, such as farrier visits or veterinary checks/treatment, were mentioned as potential stressors, especially when compounded by behavioral resistance or poor handling, for example:

"Unpleasant things that have to be done, e.g., vet, dentist, etc." (R98)

Veterinary surgeons (95%) have reported having to work with "difficult" horses monthly [39], with 85% reporting personal injury and often resorting to physical or chemical restraint methods, potentially initiating negative equine mental states. This dichotomy between physical health and positive mental state remains a quandary in the management of the horses in our care and warrants further investigation.

4.7. Limitations and Future Research

The initial survey was carried out in 2019 and published in 2021 [18]. It should be noted that the equestrian landscape has shifted since this time, with a greater emphasis on equine welfare, particularly in equestrian sporting disciplines [40–42]. It should also be acknowledged that those choosing to complete the original survey may already have had an interest in promoting positive equine welfare, introducing a potential bias in the sampling strategy. Yet even these respondents reported barriers to actioning the changes they desired.

Within the everyday management of horses, there has been an upsurge in the interest in and use of alternative equine management systems, such as track system grazing [43], social stabling [44,45], and active stabling [46], but the extent to which barriers identified in this study have impacted the ability to implement any planned management changes is unknown at present. Facilitating any change in behavior requires a multi-faceted approach, and an increase in knowledge and understanding is not always enough [4], particularly when considering sustained behavior change. Revisiting the perceived barriers to avoiding negative and promoting positive equine mental states and identifying solutions to overcome these is recommended in future studies to better empower UK horse owners to make the changes they wish to see in the day-to-day management of the horses within their care.

5. Conclusion

A complex network of interlinked barriers was identified by horse owners that they perceived affected their ability to provide optimal equine welfare, particularly when considering mental state, in the UK. Overall, these findings suggest that avoiding negative and promoting positive equine mental states requires enablers such as education and training for owners, more individualized livery yard models, and a cultural shift in how horses are viewed and managed towards a more equi-centric approach. Regulatory measures, such as licensing schemes and minimum welfare standards for livery yards, may offer a pathway to systemic improvement. Future research and welfare initiatives should prioritize strategies that support owners by recognizing their barriers to achieving optimal equine welfare.

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Authors' Contributions

L.C. and K.F. planned, designed, and conducted the original study. L.C. and K.H. planned, designed, and carried out the current study. K.H. and L.C. analyzed the data and wrote the manuscript. L.A., K.F., and E.B. reviewed it. All authors read and approved the manuscript.

Data Availability

The data supporting the findings of this study are available upon request from the corresponding author.

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Conflicts of Interest

The authors declare that there are no conflicts of interest.

Ethical Approval

This study received ethical approval from the Hartpury University Ethics Committee and the Sparsholt Research and Ethics Group.

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