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ARTICLE

Designing Education Experiences with Horses to Develop Social Skills and Emotional Wellbeing: Supporting the Most Vulnerable

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ABSTRACT

The benefits of horse riding as a form of physical exercise, particularly for those with disabilities, are well known. However, what is less well known is the socio-emotional benefits of time spent in company with horses. This research focuses on a therapeutic equine care club for young people and adults with impairments, developed on the concept of participants volunteering to look after the horses. In the UK, horse-riding is an expensive hobby, inaccessible to many. This club, situated at a state-of-the-art inclusive equestrian centre, and funded by the Commonwealth Games, provided an opportunity to engage in the *care* of horses for those with learning, developmental, physical, or socio-emotional impairments, free of charge. This research explores the views of those who ran the club, as well as the attendees and their carers. Our findings suggest that time spent in the company of horses, even if limited to groundwork, can have considerable impact upon the development of those who typically struggle with social interaction and emotional regulation. Friendships were formed and challenges overcome in the company of these majestic animals. We conclude that much more could be done to improve the lives of the excluded, disabled, and disengaged, by using horses as a catalyst for motivation and interaction.

Keywords: Disabilities; Socio-Emotional Needs; Horses; Equine Therapy; Motivation; Security

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1. Introduction

This article is based on one small-scale case study exploring the ways that interactions with horses can be used as a route to improved health and wellbeing for disabled people and those with additional needs. The research took place in a state-of-the-art inclusive equestrian facility in England that was opened, with charity status, in 2019. The research explores a specific club at the centre that was created through funding from the Commonwealth Games in 2022. This club was created for attendees who wanted to volunteer to help with care for the horses, but lacked the knowledge, confidence, or capability, due to their specific needs, to do so without support. In addition to offering assisted opportunities to care for the animals as volunteers (for example, feeding, grooming, and preparing equipment), at the end of each session, the club provided the opportunity for the participants to meet as a social group and have input from support services appropriate to their needs. For example, a tutor from a local Further Education college spoke to the group about options for study and work experience. The club was free of charge.

The funding that enabled the club meant that dedicated time could be given by experienced staff to ensure that participant needs were met, and that a nurturing space was created for social interaction and communication. All club participant volunteers had additional needs, but these were hugely varied and included (though were not limited to) developmental delay, physical impairments, depression and anxiety, emotional trauma, dementia, learning difficulties, and behavioural needs. The club also catered to a broad age range, from teenagers to seniors (an overview of a sample of participants is found in the methodology). At the time of the research, the club had 32 participant volunteers, with more waiting to join.

The club was eager to hear about the experience of its participants, so, collaborated with the University of Worcester to design an evaluation with the intention of hearing the voices of participants in the club, as well as their carers, and the staff volunteers who supported the club. In their extensive review of equine-related therapies, Cleary et al. conclude that “The perspectives of those ... volunteering for equine-assisted therapy services are largely absent in the research literature, with discussion of the

mental health benefits wholly absent”^[1]. Although we did find a range of texts considering the positive impact on mental health of equine therapy, very few of these emanate from the UK. In addition, mental health benefits do remain in the shadows of the physical benefits of equine therapy—and the voice of the participant volunteers does largely remain silenced in place of parents and professionals. Therefore, with this article, we seek to add to the limited library of texts exploring the socio-emotional benefits of time spent with horses, even when this time does not include riding but focuses only upon their care, and we base our evidence upon the first-hand experiences of those who have benefited.

Mental health is a global priority, and extensive research proves that those with additional needs, such as autism, are far more at risk of mental health challenges than the general population^[1]. Whether resulting from autism or other factors, for example, long-term unemployment, most of the participants in our research suffered from extreme social anxiety and phobias, which made it challenging for them to engage in social situations and to form and maintain relationships. Our research demonstrates, albeit on an extremely modest scale, how time spent caring for horses helped with the volunteers’ communication and connection, through the powerful combination of physical contact and emotional engagement. The bonds created between horses and volunteers created positive opportunities for both joy and calm, and eased the emotional dysregulation with which many of our participants struggled.

2. Literature Exploring the Relationship Between Health and Equine Therapy

Animals have been used for therapy purposes for around 2500 years, since the time of Hippocrates, the Greek “father of medicine.” He described Hippotherapy (hippo is Greek for horse) as a source of rehabilitation and stated that horseback riding was a universal exercise^[2]. In modern times, hippotherapy is predominantly seen as a form of physiotherapy that utilises the senses and sensory signals between horse and rider, and it is thought to have a range of physical health benefits^[3]. What is less recognised, particularly in the UK, is the impact that time

spent in the company of horses can have upon mental health. Within this article, we consider nurturing time with horses that is not based upon riding, but upon Beavers et al.'s description of equine therapy as "any therapeutic activity involving interacting with horses". This might involve direct or indirect contact with the animals^[4].

In research that took place on a care farm in Texas, it was found that "the relationship formed with the horse contributes to a person's increased self-awareness, confidence, patience, and self-esteem"^[5]. This is related to the horse's sense of awareness, including their perceptual abilities, cognitive functions, memory, and emotions. In Italy, Maresca et al.'s research demonstrated that just being on the ground and engaging with a horse could have positive impacts on psychological, social, and educational aspects, by engaging sensory, musculoskeletal, limbic, vestibular, and ocular systems^[3]. Path International explains that horses "are able to perceive, respond to, and learn from the impressions they receive from minimal sensory stimuli"^[6], and that this is the reason for them frequently being used as a therapeutic resource for people with behavioural and mental health issues.

2.1. Providing Safety, Supporting Social Interaction and Communication

It is important to remember that horses are prey animals; they have a need to feel safe and do this through seeking partnership^[7]. It is this aspect that appears to add an additional depth to the equine experience. McKissock et al. explain that "interaction with the horse on the ground encompasses a myriad of horsemanship skills that, when implemented, closely relate to human-to-human relationship skills"^[8]. This is a key aspect to consider when those with both learning impairments and mental health issues often struggle to form meaningful relationships.

Research suggests that the act of developing a relationship with a horse can act as a rehearsal for forming relationships with people^[9]. Through interacting with horses, individuals can become more confident about subsequently initiating social contact with peers^[10]. In Sweden, participants who suffered from debilitating mental health issues "felt supported, less alone and could build new friendships when meeting other people in the environment around the horses"^[11]. For those who struggle with social interaction,

it is thought that just the presence of the horse can create an alternative point of focus, away from the individual, removing some of the pressures of social performance and creating space for communication^[12].

The act of grooming, in particular, has been recognised as a form of communication between horse and carer, promoting the development of trust^[3]. Likewise, a systematic review into the effects of hippotherapy upon children (up to 18 years old) concluded that there is an observable connection between hippotherapy and improved communication habits^[13]. However, Anderson and Meints' research, one of the few UK-based studies, suggests otherwise. They found that although time around horses did seem to improve general interaction and reduce antisocial behaviours in adolescents with autism, they saw no measurable improvements in communicative habits^[14].

Research from the US suggests that a relationship can develop between a horse and a vulnerable person that allows a 'closeness', or partnership, that is unthreatening—after all, a horse will not criticize or answer back^[15]. The importance of a "safe and non-judgmental environment" was also a key finding of Burgon's UK-based research into equine therapies^[16]. Farmers who provided opportunities for children with anxiety to stay at their care farms in New Zealand explained that the animals could act as a rock, a source of steadfast support in a challenging environment. They described how "those who feel insecure, cuddle with animals, and get energy to deal with things. An animal doesn't ask things from them, but it is there all the time"^[9].

In something of a contrast to the calming and moderating function of horses described above, US-based research with those suffering from Post Traumatic Stress Disorder, proposes that a horse might actually respond in an exaggerated way to human emotions^[17]. It suggests that the horse's "immediate feedback about a person's non-verbal behaviour (e.g., horses may crowd a person who is hunched and avoiding eye contact or back away from a person who is approaching quickly with prolonged eye contact)" can actually make an individual more aware of how their actions and emotions can impact upon others. Anderson and Meint argue that it is not the exaggerated nature of horses' communication but the straightforwardness of it that is beneficial for those who struggle to understand social cues. Whilst humans communicate in many complex

ways that can cause confusion, the horses' communication is far more transparent, making it easier for people with autism to understand and know how to respond^[14].

In their research with equine psychotherapists in the US, Lee and Makela discovered a hyper-intuitivism from horses toward the feelings of humans^[18]. Sometimes the horses would signal for others to back away and give space to the client and the horse, seeming to perceive the client's need at that time. Lee and Makela share this poignant comment from one of the therapists:

When a client comes who is either suicidal or very sad, very depressed, that horse goes straight to her and stands in between me and my clients. If I try to process or talk, that horse just sends me away. ... She turns her head to me and pushes me away, so I step back.... When I step back, the horse will come closer, sometimes even curl around the client. Usually, people end up hugging the horse and crying, and feeling healed and heard and safe while crying^[18].

2.2. Relaxation

Grounded interaction with horses can have many therapeutic effects^[19]. Grooming horses can encourage a deep interaction between the groomer and animal, whereby "the non-verbal communication of the horse causes relaxation, due to the horse's breathing and sharing body warmth"^[3]. Such interaction can provide a calming effect for the groomer, without the demand of verbal interaction. Being close to a horse can enable the opportunity to be 'in the present' in a way that can be a struggle in the busyness of daily life^[11]. Earls et al. suggest that this calming effect may be related to the horse's imposing stature- that the horse, quite literally, demands attention and grounds a person^[11]. In Fridén et al.'s research, each of their participants demonstrated enhanced mental, social, physical and emotional abilities and well-being. All the participants emphasised the calming and relaxing effect of being in the horses' environment, which efficiently reduced their stress levels^[11].

Similarly, Earls et al.'s research "reported significant reductions in anxiety and depression symptoms and trauma-related distress"^[17], and Tan and Simmonds' research, which sought the views of the parents of children with autism in Australia, suggested that equine therapy had drasti-

cally reduced the child's anxiety and stress^[20]. It is worth noting, however, that these parents felt that this was as much a result of the security created through the nonjudgmental and accepting nature of the staff, as time with the horses.

2.3. Experiencing Success, Increasing Resilience and Motivation

As individuals with impairments often suffer from low self-esteem, having often been the subject of ridicule and criticism, it is important that attainable goals are set that can feed into their sense of self-worth^[9]. Schultz et al. describe this aspect of challenge, focusing upon the positive impact that resulted when children challenged their feelings of powerlessness during their time with the horses^[21]. When people overcome trials, their motivation to face future challenges increases.

In terms of cognitive development, there is evidence to suggest that learning a skill, regardless of context, can support the development of skills in other areas^[22]. Feelings of self-efficacy, confidence, and self-esteem are improved^[23]. Therefore, for those who have experienced long-term absence from education or employment, developing new skills through caring for animals could be one way to reintroduce them to learning and to experiencing success. As Bandura explains:

The apparent divergence of theory and practice can be reconciled by postulating that cognitive processes mediate change but that cognitive events are induced and altered most readily by experience of mastery arising from effective performance^[24].

Developing proficiency in just one area strengthens the individual's resilience to face other trials.

Boyd and Le Roux refer to the role that enjoyment plays "in pushing past barriers and discomfort"^[25]. They explain that most children with physical impairments are used to a whole raft of therapies and interventions that could be unpleasant and uncomfortable—the difference with their equine therapy was that they wanted to do it, they enjoyed it. The joy that the interaction with the horses created, lessened the awareness of any pain or discomfort experienced.

Lack of motivation can be a significant barrier for those with impairments, and activities with horses can provide a “motivating and efficient way to increase bodily movement and promote physical health” ^[11]. The process of caring for the horse, through actions such as feeding and grooming, can develop an improved sense of self-efficacy and control in those who have previously struggled with emotional dysregulation ^[26]. Studies tell us that feelings of competence and improved well-being are intrinsically linked ^[27]. Care for animals can motivate people to show greater care for themselves as a result ^[28].

3. Research Methods

This research took an Appreciative Inquiry Approach (AIA) ^[29], moving away from the value neutrality of more scientific approaches to research, and closer to an activist stance. This is because the aim of the evaluation was to discover the positive impacts and aid the continuance of this and similar opportunities for those with impairments. In the spirit of Cooperrider and Whitney’s AIA, we were not only asking ‘does it work?’ but we had a particular focus upon ‘what works well and why?’ so that those positive aspects could be further built upon ^[29]. The research approach was qualitative and interpretivist, as the aim was to discover details about individual lived experience rather than seeking statistical data. In this sense, it does not pretend to be replicable or representative of a wider sample, but instead contributes to further illuminating our understanding of this important area ^[30].

We obtained full ethical clearance from the university prior to data collection, which was particularly important when dealing with a vulnerable group of participants. Although the preference for data collection was face-to-face, the socio-emotional needs of the participants meant that the idea of this, however sensitively handled by the researcher, created anxiety in respondents. As a result, data was collected through two means: through an anonymous electronic survey, which included both open and closed questions, and through informal interviews, or “conversations with a purpose” ^[31]; these were carried out by centre staff who were familiar with the club participants and their carers.

The online surveys, created through Jisc ^[32], were

sent to all club participants, their carers, and the staff who helped with the club, via a link embedded in a friendly email. Each group had slightly different questions. Clicking on the link opened up the survey, at the beginning of which was the participant information sheet; for the club participants, their version included picture symbols to aid their understanding if needed. The survey asked a mixture of very simple ‘yes/no’ and open-ended questions. For example, it asked the participant volunteers questions such as: Do you enjoy coming to the Cavalier Club? If yes, what are your favourite things about it? Do you think you have got better at anything whilst attending the club? If yes, what things are those? And, of course, it also asked whether they would like to change anything about the club.

Parents and Carers were asked questions such as: Why did you decide to bring your child to the club? And: Do you think the club has aided any specific areas of their development? If so, what are these? The staff who worked at the centre to support those attending the Club were asked their views on what they felt attendees gained from the experience and whether it could be further developed in any way.

The intention was that participants would be helped by their carers, where necessary, to complete the survey. In total, there were ten survey responses, and seven informal interviews took place. The interviews asked the same questions as those found in the surveys. The sample is small, but in line with similar qualitative research in this area. The survey data were triangulated with the interview data, and inductive thematic analysis was used to identify conceptual groupings from the data. As Braun and Clarke acknowledge ^[33], a range of approaches might be taken to this. Because of the learning impairments of the respondents, most responses were brief, so identifying key themes to code, such as joy, friendship, or confidence, was a relatively straightforward task. These codes were then meaning-checked across the researchers. The coded data were then synthesised into overarching themes, as found in the results section.

In the discussion below, the participants have been given gender neutral pseudonyms in order to protect their identity, whilst carers and staff are recognised by their roles. The voices of all respondents are clearly identifiable through the use of italics. The use of an anonymous online

survey makes it impossible to know which members of the group completed it. Therefore, in order to provide an indication of the typology of respondents, **Table 1** below gives an overview of the age, gender, and broad needs of some of the participants who took part in the informal interviews.

Table 1. Overview of a Sample of Participants.

Age	Gender	Type of Barrier	Time with Horses
23	Female	Emotional trauma Learning difficulties	7 h
21	Female	Autism Anxiety	7 h
31	Female	Autism Depression Anxiety Behavioural needs	10 h
72	Female	Dementia	3 h
43	Male	Learning difficulties Behavioural needs	3 h

4. Results

4.1. The Centrality of Social Interaction

Throughout the data, the social aspects and opportunities provided by the club were intertwined with the opportunity to spend time near and with horses. Much of the data portray horses as the catalyst around which social interaction, learning, and development took place. Respondents referred to the opportunity that the club provided for “*meeting up with other participants*” and “*being able to make conversation with new people*” (Charlie). This was important because, as Staff 2 explained, many participants “*did not always have the skills*” to interact with others without support. Staff 1 added, simply, that it was a chance for participants “*to do something outside and not on their own*”.

It is interesting that all carers and volunteers identified the social interaction provided by the club before the equestrian skills and experience, although Carer 2 did add “*she loves horses. She wants to learn and take part in more than just riding*”. A key aspect of the club was clearly the opportunity that it offered for positive and supportive human contact for people who could easily become isolated. Two participants shared that:

I've been coming to the centre for a while to do other activities, but Cavalier Club has

been great to meet and chat with other people and to make friends. I go to other clubs, but everyone is so friendly here, and it makes me feel very welcome. (Levi)

I've made new friends at Cavalier Club, and it makes a change from being on my own. (Robin)

For some attendees, the opportunity for developing friendships was key to their enjoyment of the club. Trix referred to spending time with a new companion at the club, commenting: “*Having a friend made it a better experience. I get on with her really well*”. Olly also mentioned having “*made a new friend*,” and Kat shared that “*It's nice to meet new friends*” at the club.

The Staff who supported the club commented on how some of the participants needed help interacting with others, and the data suggest they had succeeded in creating a culture based upon sensitivity to individual needs and acceptance. Participants felt comfort and security at the club, which is evident in this poignant comment from Trix: “*I was able to be myself more. I had a good friend and she laughed with me, not at me.*”

The enjoyment and laughter resulting from these new relationships were mentioned several times, with Bere explaining:

I enjoy spending time in the mornings at

Cavalier club, it's great to be with the horses and my friends and Cavalier club. We laughed.

We have a laugh and share some interests like reading as well as horses.

The joy to be found in friendship, and the importance of this to the participants, was recognised by all volunteers and summed up in this statement from Staff 2: “*Friendships formed, which was lovely to see*”.

4.2. Building Confidence

Carers referred to the “*supportive environment*” (Carer 1) at the club, enabling participants to build knowledge, confidence, and self-esteem (Carer 2). The statement from Ash, below, clearly demonstrates how the unique context of the club supported their growing confidence and independence:

I have learnt to work in a group, which has sometimes been hard for me in the past. I like to talk to people at the club, and they listen to me and what I've got to say. They also laugh at my jokes and include me in the things that they do. I don't just like working with the staff now, but also the people in the club. (Ash)

It was clear from responses that participants at the club experienced acceptance, something that was not always the case for them in other social situations, and the result of this was improved confidence. Bere shared how the secure companionship created by the club meant that they were more able to cope if changes occurred, adding that they could “*try to be a bit braver*” because they knew that people were there to help them. The club created a safe space where they could take risks.

Phil shared how they had helped to run a stall at a Halloween event at the centre, which is something that they had not done before, and Berni explained how the club was “*the only place that I talk*”, importantly adding that “*people in the club understand me*”. For some, this experience of acceptance had a significant impact. Staff 1 shared that one participant was hoping to get a job as a gardener, their first employment in a very long time, following their experience in the club. And Chris reflected how attendance at the club had motivated them, saying: “*I*

now want to do more, being with other people is good, and I hope it will help me get a job in the future”.

Although human interaction played a vital role in so many responses, Sam reminds us that it is the horses that have brought all those people together, and remain pivotal to the experience:

The centre is very inclusive and supports my needs. My autism and dyslexia make it hard for me to get a job, and so I often struggle to get up in the morning. Coming to the centre means I can be with the horses and see some other people, but it's the horses I'm really bothered about and interested in. Being with the horses helps me calm and helps me interact with people.

4.3. Tailored Support and Space

It is worth noting that the social contact aspect of the sessions did not apply equally to all. And for those who preferred not to interact, they were provided the space to do that. For example, Phil stated, “*I don't talk a lot to strangers and I don't have to here. [They] let me be on my own with some jobs and take time out*”. Likewise, Trix explained:

It was refreshing to be able to do something when I wanted, but I could also take a time out and have some me time. If I was tired or nobody was listening, I could say I needed space and that was OK.

Reflecting these comments, some of the carers mentioned their preference for support that was provided in smaller, quieter groups, and Staff 2 verified that “*needs are supported so everyone can do something*”.

Carers' responses indicated that they felt the club was inclusive, that participants and staff understood the unique needs of their dependents, and that activities were matched accordingly. Several participants mentioned the various ways that they had been supported by their peers and staff at the club. Charlie noted that they'd received support with how to communicate with others, but also that staff had helped them to “*see there might be alternative ways to do things*”. Phil was grateful that those at the club

“Know what I am bad at and help me,” and Olly shared how they would receive help from staff but also their “friends in the club because I’m slow with some things like sweeping”. Whatever the approach taken, it was clearly appreciated, as one respondent, Wil, expressed how much the club helped with the “mental side” of their wellbeing.

4.4. Interaction with Horses

The participants at the club had a range of opportunities to encounter horses. According to Staff 1, this included:

Work with the horses in the fields and stables. Make sure they are fed and fields are clean. Taking care of the saddles and bridles, and the school. We also helped with the championships, getting equipment ready and in the horse box. And the events like coffee mornings.

Staff 2 added that “*they might not be able to ride but still enjoy being around the horses*”. Ash, who discussed how valuable the social side of the club was, referred to the new skills that they had learned through the club (including how to prepare for a show and pack the lorry), but also how they had developed their confidence around the horses. The comment: “*I’m more confident around the horses as well. I was a bit scared of Douglas when he arrived, but now I’m happy to be in the same field with him*” demonstrates how the club enabled participants to face, and to overcome, new challenges. Similar to Ash, Phil also discussed becoming more confident around the horses, but significantly added that “*Being with the horses...calms me down and I don’t have to talk all the time*”.

Many of the participants mentioned their enjoyment of being outdoors, with comments such as:

I really like being outside, and I really enjoyed the foraging when we were looking around the centre. My favourite thing about Cavalier club is time with the horses, and I enjoyed looking after the fields and the water troughs. (Ash)

I enjoy the activities in the fields, and sometimes we work with the horses. I enjoyed

sorting out the outdoor arena. (Robin)

4.5. How Could the Experience be Improved?

In response to the question of how the club might be improved, the vast majority of suggestions related to more ‘hands-on’ time spent with the horses. In fact, when asked what other opportunities participants would like to see at the club, “*More direct horse contact*” was mentioned twice by Charlie. Olly said:

More with horses. Doing muck picking is ok but I would like to look after the horses. I know how to groom and could do that... Anything with the horses. I really like being with animals and making sure they are looked after.

Although participants like Phil requested more time riding, Staff 1 acknowledged the cost involved with horse riding, and suggested that more grooming might be the most cost-effective alternative. Staff 2 suggested that more time slots on the weekend might provide increased scope for ‘hands-on’ activities. And it seems that this would be appreciated, with Chris commenting that: “*I would like to have had more time with the horses. I enjoy being with the people, but I really like the horses, and I’ve learned a little bit about how to look after them.*”

The Staff respondents concluded that the club and the opportunity for participants to volunteer in this way was a valuable aspect of the centre’s work. Staff 1 explicitly referred to the fact that it was free and “*accessible, whereas other activities at the centre can be too expensive for some people*”. Phil simply commented, “[I] hope it starts again soon”.

5. Discussion

Our data clearly align with existing research into the benefits of equine therapy, in demonstrating that the positive impacts of being around horses extend way beyond the physical benefits of horse riding, and even beyond the calming impact of bodily contact with the animal. Care for these animals, expertly orchestrated by experienced staff, can create a safe, nurturing space for those who often find discomfort in social situations. For some, this safe space enabled the joy of new friendships, and for others,

it enabled their own, mindful space, but within the secure boundaries that the club created. For some attendees, the improvement in their social skills was life-changing, creating the opportunity for them to seek employment for the first time.

The explicit teaching of social and emotional skills and appropriate responses has been recognized as having a positive impact on economic, as well as personal well-being^[34]. Our findings here suggest that hands-on, practical learning within an equestrian environment is efficacious in supporting the development of 'soft', inter-personal skills, which in turn can lead to more concrete outcomes, including further volunteering and employment opportunities^[26]. They can also provide the opportunity for those who so often experience failure and exclusion to achieve and to belong. These successes breed the confidence and resilience to face new challenges and to learn and achieve more^[21].

Peters et al. found that time around horses impacted an individual's confidence, and Buchanan and Higgins' research concluded that it generally improved the individual's social skills^[35,36]. Both of these aspects were reflected in our data. The unique space created around the horses was one where participants who struggled with social interaction generally perceived "greater reward and less sense of threat"^[10]. Similar to the children's experience on care farms in Ferwerda-van Zonneveld et al.'s research, the combination of open space and perceived security created by club volunteers provided "a safe and predictable environment" for interaction, but participants could also "withdraw to a quiet [place] when required"^[9]. As such, anxieties were reduced.

The socio-emotional benefits of time around the horses that were threaded throughout the literature were clearly reflected in the statements made by the participants. Their time with horses was both calming and emboldening, as participants experienced acceptance and felt that they were understood and supported in the ways that they needed. Statements made by participants echo Earles et al.'s suggestions that horses can 'teach' people about their own emotions^[16]. The participants articulated an increased self-awareness, and with that an increased confidence in interacting socially.

As Kemmeny et al.^[10] observe, a lack of self-regulation in the face of high levels of stress can be a huge bar-

rier to social interaction for individuals with a variety of mental health needs, and supporting participants to manage stress in social situations was an aim of this club. Charlie's comment that club staff had helped them to "*see there might be alternative ways to do things*" suggests that they had been supported to react more appropriately in challenging interactions. This tells us that simply giving access to horses is not a universal solution, as there is also a need for learning to be carefully facilitated by knowledgeable staff. It was important that the staff knew how to work in the company of the horses, in order to help the participants learn about the horses, but also themselves, within an inclusive learning environment^[20]. This does link to the possibility, as found in Tan and Simmonds' research, that the developments reported may result as much from the sensitive handling of the staff as from interaction with the horses^[20].

Despite this, it cannot be overlooked that it is an interest in the horses themselves that has brought all of these individuals together, and more hands-on time with these enigmatic creatures was requested by all. Participants mentioned their time outdoors, in the fields, as well as time caring for the horses, reflecting the belief that all humans have a natural propensity to be drawn to time in, with, and caring for, nature^[18].

6. Conclusions

It is clear that all of our respondents relished the opportunity that this club provided to work alongside others and create new equestrian skills, whilst also developing new ways of interacting with others. For many, the club provided an antidote to isolation and boredom. However, just as Beavers et al. found with their research:

Given the lack of methodological control within the research designs it may also be difficult to attribute improvements seen... to the presence of the animal as opposed to the child interacting with the animals' human handler^[4].

The role of the staff must be acknowledged; however, having considered the existing literature alongside this data, it is difficult to believe that there is not some deep emotional connection with horses that simply makes human interaction 'work better'. Anastasya et al. note that a

lack of public awareness and understanding of the positive outcomes still limits the application and use of equine-assisted therapy and learning^[37]. However, research has also stressed that the experience of the horse should not be overlooked, should such approaches be expanded. Further exploration of the impact of their use in therapy is needed, as there is evidence to suggest that some interactions can be stressful for the animal^[38].

The authors do concede that the catalytic effect of horses may not only be limited to this species, as deep connections between humans and canines, or even dolphins, are universally recognised. Perhaps it is being closer to nature that is the 'magical' element. Unfortunately, outdoor experiences tend to decrease with age, in the UK education system at least. Yet research argues that:

people have an instinctive and genetically-determined tendency to deeply connect with the natural environment (including non-human animals). The biophilia hypothesis suggests that animals and nature tell us about ourselves and the world^[18].

Further exploration of how a deeper understanding of biophilia could support learning, including socio-emotional development, through increased interaction with the natural environment, seems more appropriate now, in this period of the Anthropocene, than ever.

Post-pandemic mental health-related school absences have risen sharply in the UK^[39,40]. The benefits of alternative curricula for those struggling within traditional education settings are widely recognised^[41], and developing more collaborative partnerships between equestrian centres and schools could be one way to make alternative opportunities more accessible to young people who are marginalised or at risk of exclusion. Such environments would enable marginalised groups, for example, young people not in education or employment, to re-engage with learning, through harnessing the inherent interest in horses, and caring for animals more generally, which so many people have, and which we find in the data that we have presented here. This could provide avenues to recognized qualifications as well as improving wellbeing by preventing further isolation from education and society.

In the UK, horse riding and the care of horses have

long been viewed as occupations of the privileged^[42]. Building partnerships between education settings and equine facilities would be one way to meet the needs, both social and academic, of marginalised groups, groups that traditionally, in the UK at least, you would least expect to see in an equestrian environment. This research, as well as that from other continents, makes clear the potential for positive impact should those barriers be eroded. When considering alternative provision in the UK, policymakers need to widen their scope beyond traditional education buildings, which simply replicate existing barriers (albeit in an alternative context), to include facilities more closely connected to nature and to nurture. This research clearly demonstrates how the opportunity to care for another living thing, and through doing so, the opportunity to develop new skills, can provide a springboard into further learning and broaden an individual's opportunities^[22].

Author Contributions

C.S. obtained ethical approval for this research through her institute and produced the data collection documents, directed by advice from J.W. C.S. led the data analysis and the writing up of the research.

J.W. advised C.S. on the design of data collection documents, and facilitated the data collection on-site. J.W. contributed literature to the writing of the article, and was involved in co-writing the final version for publication.

Both authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement

This study obtained full ethical approval from the University of Worcester Ethics Panel before commencing. Ref: ECS24250009-R.

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

Due to the sensitive nature of our data, it will only be made available upon specific request made to the corresponding author.

Conflicts of Interest

The authors declare no conflict of interest.

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