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Corresponding author:

Megan Ross;

Email: mmross10995@upei.ca

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A wicked problem: Systemic issues surrounding Canadian equestrian dressage and dressage horse welfare

Megan Ross¹, Kathryn Proudfoot¹, Katrina Merkies^{2,3}, Charlotte Lundgren⁴, and Caroline Ritter¹

¹University of Prince Edward Island, Health Management, Charlottetown, Prince Edward Island, Canada; ²University of Guelph Ontario Agricultural College, Animal Biosciences, Guelph, Ontario, Canada; ³Campbell Center for the Study of Animal Welfare, Guelph, Ontario, Canada and ⁴Linkoping University, Culture and Society, Linkoping, Ostergotland, Sweden

Abstract

Competitive dressage's social licence to operate is in jeopardy due to ethical concerns surrounding the use of horses for dressage. There is limited research that contributes to our understanding of Canadian equestrian perspectives on the use of horses in dressage. The objectives of this study were to: (1) explore the cultural context of the Canadian dressage industry, including how horse well-being is integrated within the culture; and (2) investigate coaches' and riders' perceptions and experiences with the use of horses for dressage. An ethnographic case study approach was employed, where MR spent 2-6 weeks with each of the four participating Equestrian Canada Certified dressage coaches and their riders (at least four riders per coach for a total of 19 riders). Data collection included direct observation, recording field notes and conducting at least one in-depth interview with each coach and rider. Interviews and field notes were analysed using reflexive thematic analysis leading to the development of three themes: (1) the systems that participants operate within; (2) how these systems foster a culture of contradiction in the industry; and (3) the 'equestrian dilemma' highlighting how participants navigate their love for horses with their horses' well-being amid the sport's demands. The three themes portray that the issues faced by the dressage industry may be rooted in systemic problems and could be described as a 'wicked problem'. These results aim to inform future research initiatives that promote a holistic understanding of the challenges faced by the dressage industry and promote systems thinking solutions.

Introduction

In the last few decades, a shift in ethical perspectives regarding the use of horses in recreation and competition has taken place within Westernised societies (Heleski 2023). This shift has prompted increased reflection and scrutiny concerning the treatment of horses used for dressage (Fraser 2008; Douglas *et al.* 2022; Heleski 2023). Dressage is an equestrian training method and discipline that dates back to 350 BC and exists today with its most elite level recognised at the Olympics. The International Equestrian Federation (FEI 2024a) describes that dressage training should display: "...the development of the horse into a happy athlete through harmonious education." Many of the ~509,000 horses in Canada (Klosowicz & Laroche 2023) are exposed to dressage training methods as they form a foundation for other riding disciplines. However, there is now a growing body of evidence suggesting that dressage horses often do not display behaviours that embody those of a "happy athlete" (König Von Borstel & Glißman 2014). For example, research suggests that horses used for dressage are at increased risk for suspensory ligament injuries compared to horses in other disciplines (Kold & Dyson 2003) and perform behaviours associated with frustration and distress, such as tail swishing, stiff and stilted gaits, and abnormal oral behaviours (Von Borstel *et al.* 2009; Dyson 2016; Greve & Dyson 2020).

Further, researchers have shifted their focus to understanding what constitutes "a life a worth living" for animals, emphasising positive experiences, in contrast to traditional animal welfare approaches that prioritised the avoidance of negative experiences (Mellor 2016). Consequently, there are limited data on how to identify positive mental states in ridden horses (Hall et al. 2018; Hausberger et al. 2021). An additional complexity to this issue is whether researchers include the cumulative experiences of an animal's overall life when assessing welfare, as opposed to point-intime or acute experiences, such as those during riding (Lesimple 2020).

Ethical concerns surrounding the use of horses in dressage are also within the public eye, which jeopardises the competitive equestrian industry's social licence to operate (i.e. the level of acceptance that an industry holds from its collaborators and society) (Douglas *et al.* 2022; Heleski 2023). For instance, in recent years, equestrian-related media has been flooded with elite athletes

being reprimanded for poor horse welfare training practices (Bailey 2023, 2024; Harty 2023), some articles even being showcased in mainstream media outlets beyond the equestrian-specific community (Victor & Marshall 2023; Slot 2024). In response to societal concerns, in 2022 the FEI instigated the Equine Ethics and Wellbeing Commission (EEWC) tasked with providing recommendations to the FEI to ensure that "equine welfare is safeguarded through ethical, evidence-based policy and practices" (De Vos 2022). However, defining animal welfare is inherently complex due to its value-laden nature, which can vary based on individual morals and perspectives (Fraser 2008). Furthermore, the FEI guidelines on horse training practices and judging principles, particularly regarding the notion of horses as "happy athletes" that have been developed through "harmonious education", remain unclear (Furtado et al. 2021). This lack of clear language used by the FEI, in conjunction with limited understanding of behaviours that may reflect positive affective states in horses (Hall et al. 2018), complicates the development of training practices that intend to promote positive horse well-being.

Challenges surrounding the use of horses for dressage have been attributed to a culture that relies upon the interplay between science, art and ethics (Thompson 2019). Equitation Science (ES), an academic discipline that has applied learning theory to equestrian sports, is the only scientific discipline that provides guidance for equestrians towards a potentially more ethical way of interacting with horses (von Borstel et al. 2018). However, Luke et al. (2023) suggested that knowledge of learning theory was not significantly associated with improved horse welfare, highlighting a potential knowledge-to-practice gap within the industry. Fundamental to the ethical concerns associated with dressage training is the horse-human relationship, which can have substantial effects on the well-being of the horses involved (Luke et al. 2022a,b). Coach-rider communication and relationships have been studied in various disciplines including equestrian sports (Tufton & Jowett 2021). These partnerships may give rise to ethical and professional concerns and are complicated within equestrian disciplines that include potentially non-consensual equine participants (Jowett 2005; Hogg & Hodgins 2021). Explorations of human-horse relationships highlighted juxtapositions of viewing horses as both objects/instruments in traditional militaristic ways and post-humanist views that perceive horses as sentient (Blokhuis & Andersson 2019). These perspectives underscore the need to explore the way horses are incorporated into Westernised society and further exploited for the sole entertainment of equestrians, such as through competitive dressage (von Borstel et al. 2018).

This study aims to fill a gap by underscoring some of the challenges associated with understanding the perspectives of riders and coaches in their use of horses in dressage, paving the way for future initiatives aimed at human behaviour change within the dressage industry. The objectives of this study were to: (1) explore the cultural context of the Canadian dressage industry, including how horse wellbeing is integrated within the culture; and (2) investigate coaches' and riders' perceptions and experiences during dressage lessons with the use of horses for dressage sport.

Qualitative methodology and research paradigm

This study employed a qualitative approach that combined the use of multi-species ethnography and case study designs (Fusch *et al.* 2017). Ethnography involves the researcher immersing themselves

in a specific culture or organisation to explore a specific phenomenon (Creswell & Poth 2018); the phenomenon in this study included interactions among MR, coaches and riders during interviews, informal conversations and dressage training/coaching. Case studies provide an in-depth analysis of one or more instances of a phenomenon, whereby each coach and their respective riders represents a separate 'case' (Tracy 2024).

Participant recruitment

Participants were recruited based on recommendations from individuals within the dressage community (i.e. word of mouth) and only contacted if their information was publicly available. Inclusion criteria for coaches included being licensed through Equestrian Canada (Equestrian Canada 2024) and having between 4-6 student riders, training at or above training level, that agreed to participate. Coaches were directly contacted by MR via email. Of the 17 coaches emailed, four coaches agreed to participate, two of whom were affiliated with more than one dressage facility. All participants signed consent forms prior to data collection, and for riders < 18 years of age, consent from the legal guardian was also obtained. Coaches (n = 4) and riders (n = 19) were informed of the nature of the study and their ability to withdraw from the study at any point during the data collection period. This study was approved by The University of Prince Edward Island's Ethics Board (REB # 6012120).

Data collection

Data collection included field notes, in-depth individual interviews and direct observation of participants' dressage lessons. MR immersed herself with each dressage coach and their respective students for 2-6 weeks, assisting with chores, including cleaning stalls/paddocks and feeding horses. MR also took between 1-4 lessons with each participating coach to gain a better understanding of their training and coaching methods. Field notes included MR's reflections regarding informal conversations she had with participants and observations she made regarding coach-rider and human-horse interactions beyond the formal interviews and observations. At least one audio-recorded, in-depth semi-structured interview (S1; Supplementary material) was conducted with each participant to encourage discussions surrounding the research objectives and six participants were interviewed a second time to gain a better understanding of their experiences during the recorded lessons.

Researcher characteristics and reflexivity

Reflexivity is a crucial component of qualitative research, particularly in the ethnographic methodology due to the instrumental role of the researcher in data collection and analysis (Reyes 2020). MR conducted data collection and analysis and may have been perceived by participants as having dueling roles as both an 'outsider' and 'insider' (Wilkinson & Kitzinger 2013; Reyes 2020). MR initially held 'outsider' status having been minimally or entirely unaffiliated with the participating coaches and riders prior to data collection. However, MR may have gained a degree of insider status at the outset by informing participants during recruitment of her ownership of two horses and being involved in equestrian sports, including dressage, for over 14 years. MR believes to have 'insider' status through her understanding of dressage terminology as it relates to tacit knowledge (Burns *et al.* 2012).

Additionally, MR's participation in lessons with the coaches throughout the study period challenged researcher-participant power dynamics and may have contributed to MR's dual roles as both an instrument for data collection and analysis and as a participant. Through MR's immersion at each dressage facility, her role as a researcher shifted to that of a student and peer with the participants, fostering connections and friendships. She observed that her role varied depending on the coach, with some viewing her as an equal collaborator and others positioning MR as a student figure. For additional reflexivity information see \$2 (Supplementary material).

Data analysis

Interviews were transcribed *verbatim* and, along with field notes, were analysed following reflexive thematic analysis (Braun & Clarke 2006, 2022). During data collection, MR recorded codes inductively during immersion with the participants and while reviewing transcripts, field notes and recordings. Codes were then clustered in themes and sub-themes (S3; Supplementary material). Through further immersion and familiarisation with the data, themes were reviewed, refined and summarised into a thematic map.

Due to the small sample size, demographic information, including whether the participant was a coach or a rider, was not included throughout the results to ensure confidentiality. See Table 1 for additional demographic information.

Results

The developed themes and the accompanying thematic map (Figure 1) provide insight into how governing equestrian bodies and training frameworks may dictate, influence and were perceived by the Canadian dressage coaches and riders. The first theme ('The Systems: Equestrian governance, research and practice') focuses on the systems that the participants were aware of or adhered to that influenced participants' coaching and riding methods (e.g. FEI and its affiliated Olympic athletes, and ES). The second theme ('Culture of contradiction') encompasses the mixed messaging surrounding the topic of the well-being of dressage horses. Specifically, it

Table 1. Demographic profile of the 23 Canadian coach and riders who participated in the ethnographic study including in-depth interviews, casual conversations and having their dressage lessons recorded

Demographics	Equestrian participants
Coaches	n = 4
Riders	n = 19
Age range (years)	13–60
Gender	Women
Dressage level	Training–3 rd level
Type of horse ridden by riders ¹	
School horse	n = 7
Owned horse	n = 7
Leased horse	n = 3
Horse in training owned by someone else	n = 3

¹One rider rode both training horses that they did not own and their own horse.

addresses the discrepancy between what is proclaimed to be good horse welfare and what is observed or rewarded, for example, at FEI-affiliated competitions, including the Olympic role models for equestrians. The third theme ('Equestrian dilemma – love for horses versus horse well-being') captures the perspectives of the researcher, coaches and riders of horse well-being within the context of dressage training. Theme three underscores the complex cultural dynamic within dressage, highlighting the cognitive dissonance equestrians may face when intersecting their beliefs that horses would never 'choose' to be ridden, the practicality of adopting 'ethically sound' training methods and their deep love for horses.

Theme 1: The Systems: Equestrian governance, research and practice

Various factors influenced the way coaches and riders trained and interacted with horses, including a participant's initial exposure to equestrian sport that often influenced their perceptions of the systems they used or operated within, such as, Equestrian Canada, ES and the FEI. For instance, when participants were asked how they make decisions regarding who they choose to train with, many participants discussed that their first coach "sets the foundation" for establishing what they believed to be "normal" horse training and coaching practices. This rider described their gratitude towards their early equestrian coaching:

"...where [horse name] reared on me, I think that I was incredibly lucky in that moment, the coach that I was riding with, turned to me and you know, made it a relaxed, like, joke wasn't like, yelling at me about it. Because I was already, like, stressed and freaked out. But was, you know, immediately making the joke in the sense of like, okay, so we're all on the same page. You had agency there, the horse, you know, it was scary. But the horse was responding in a way that was appropriate. [...] There was a certain point where it's like, he's saying, functionally, how else can I tell you this stuff? Right. But I can imagine a scenario where the response could, from a different person, have very easily been: 'yeah, maybe you were doing something, but that was also so terrible of him. It doesn't matter what the other things are that you need to fix, but he can never ever do that. So turn him in a circle and like, beat him until he stops or whatever.' I was 14 or 15 at the time. Would I have reasonably said, I'm uncomfortable with that? I don't know. Probably not. Right?"

While early exposure to the equestrian discipline may influence later horse training practices, participants also noted that despite what they had been taught previously, they would adapt their practices based on their current morals and values. For example, this participant stated that they used to train in a way that was consistent with: "...dominance, submissive kind of training, that's what I was taught when I was younger was like horses, you make them do things." However, they shifted their training practices in the: "...last ten years, five years I have tried to open my mind because I want my horses to enjoy being with me. Not that it's being forced" suggesting the potential for participants to adapt practices which may prioritise the horse's well-being.

Equestrian Canada is the national governing body for Canadian equestrian sport and horse welfare (Equestrian Canada 2024). MR asked participants about the role they felt Equestrian Canada played in developing and supporting equestrians across Canada. This participant described that:

"...it's very difficult. I think they're doing the best they can with the resources we have. We need dedicated schools, dedicated programmes if we actually want the progress to happen" [Participant].

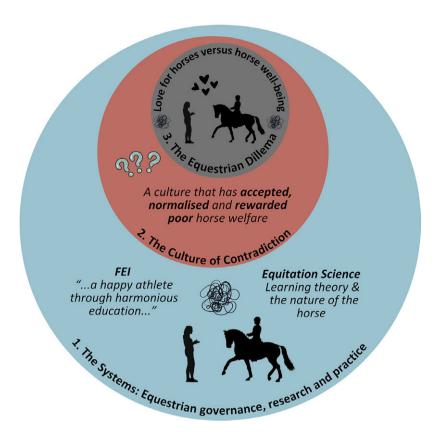


Figure 1. A thematic representation of the three themes that were developed by MR in collaboration with the co-authors based on data collected through a multi-species ethnography with dressage coaches (n = 4) and their student riders (n = 19). The thematic representation illustrates how the participating coaches and riders may be influenced by the overarching systems they operate within (Theme 1) and the cognitive dissonance they may experience when the systems they operate within conflict with research findings or horse behaviour that is rewarded in competition (Theme 2). The final theme represents how contradictions in the industry may amplify feelings of cognitive dissonance, particularly as equestrians navigate the tension between their love for horses and the demands placed on horses used for dressage (Theme 3).

"Dedicated schools like with..." [MR].

"Training centres, like in Germany, which is not going to happen here. Life is too spread out. There isn't enough money to be made for you to spend, [...] so the realistic-ness of a national training centre where people actually go...we're too geographically diverse, and we're too individualistic. Nobody really wants to listen, it's like trying to say like hey, equitation science has something to say and they're like, oh, no, I do the [trainer name] thing or I do this..." [Participant].

Another participating licensed coach shared: "...it's good to have a ruling body [...] but they [Equestrian Canada] didn't teach me anything. I just was tested. But I did do pony club.". This statement suggests that while Equestrian Canada "tests" equestrians, their knowledge comes from other sources. Consequently, Equestrian Canada's influence on Canadian coaches and riders may stem from the individuals they invite for clinics and lectures. For instance, this participant expressed that they gained valuable knowledge from an Olympic equestrian clinician who was regularly invited to events hosted by Equestrian Canada:

"...I think like, the lot of what I learned, I learned from [Olympic coach name]. So Equestrian Canada organised [Olympic coach name] Canada-wide to come every two months. For years and years. All the students rode with him, the coaches rode with him. Like I got to sit right next to him. And we would discuss what [rider name] was getting up to and what the horse needed and what was the next step and that, because then I am right next to him, seeing what he's seeing, right?"

This implies that the FEI influences the decisions of national governing bodies by spotlighting specific equestrian athletes.

The FEI and their equestrian athlete role models (e.g. Olympians) were described by participating coaches and riders as acting as facilitators for knowledge and education. For example, this participant discussed the knowledge they gained from successful professional equestrian athletes:

"I've had the opportunity to ride with world class dressage coaches that have produced hundreds of Grand Prix horses and that have been to the Olympics...so I've gotten all of this information from people that just have 1,000 times more information and experience than I'll ever have in my lifetime."

Hence, the participant suggested that the metric for respectable training and coaching practices was successful competitive performances. The FEI training pyramid also served as a tool for participants. This rider described that they use the: "FEI [training] pyramid of balance" when working with their horse and coach. The language from the FEI training pyramid was also commonly used during lessons to work on the horse's: "relaxation", "straightness" and "collection".

An additional training resource used by some participants included ES. For instance, this participant stated that they used to be "...overly brave, overly aggressive...", but later they attended:

"...an [ES lecture]. And it, like, blew my mind. It was a lecture on how horses learn, really just boiled down to a science. And that was my first taste of it [...]. And then all of a sudden, not all of a sudden, over time, it was just like, you know, you don't have to be violent, right? You don't have to get after them. But I was taught to get after them. Like as a working student, I was taught to just lay the stick on 'em until they

go, and it was just sort of how I was raised, so to find another way was amazing."

This participant's experience highlighted that despite unethical practices being normalised during their development as a professional equestrian rider, they described an adaptation of their training and coaching practices based on the integration of new information gained from ES. However, participants also suggested that many of the tools provided by ES were not "practical for competition", with one participant stating that they "didn't use equitation science" when training their current Grand Prix horse prospect. Another participant stated that: "it [ES] had some tricky bits, because then I was being too passive. And I wasn't really getting the horses connected. And then there were holes in my students' riding." This suggests that the resources provided by ES did not consistently align with expected training outcomes by the FEI standards.

Participants described that they selectively incorporated elements from various educational sources, such as Olympians and ES, based on their perceived compatibility with their existing training system. For example, this participant explained:

"...what I've been able to do is take that [education from Olympians] and learn from it and try to apply it the best that I can to the horses and the stuff I agree with and that I think is appropriate for the horses and riders that I have now."

The integration and adaptation of various horse training systems ultimately suggests that therein lies not a singular system for training practices. Instead, horse training systems were unique to each individual coach and rider and shaped by the paradigm through which they filtered new information.

Theme 2: The culture of contradiction

During the data collection period, several notable and contentious events unfolded which garnered comments from participants. These events included a one-year ban of an Olympic athlete. referred to here as Rider A, and a lifetime ban of another (Rider B) from FEI events for their mistreatment of horses during dressage training (Bailey 2023, 2024), the circulation of a viral video showing a United States Equestrian Federation (USEF) instructor using language that may diminish horse and rider welfare when coaching a youth jumping clinic (Wright 2024), and controversial judging at the 2024 World Cup in Amsterdam (Hector 2024). Many participants remarked that the actions of Rider A were "disgusting" and Rider B deserved more punishment than he was given: "...he should never be allowed to touch a horse again." However, amidst the political issues surrounding equestrian dressage, a world champion rider, who study participants spoke highly of, showed support for Rider A with this participant expressing: "...that [showing support for Rider A] is not something I would have done." This contradiction between participants describing Rider A's actions as "unethical" yet observing support for him from a world champion dressage rider highlighted the complex cultural dynamic amongst the FEI role models within elite dressage.

Additionally, some participants worked as grooms for Olympic athletes who trained at an Olympic dressage facility, founded and owned by Rider A. Participants expressed their conflicting experiences, for example, this participant remarked:

"...they're [Olympic athlete] at the same level as like [Rider A]. Right? Now [Rider A] is going through the whole Operation X thing. And, I mean, that is a whole other level of craziness that I definitely did not see with [Olympic coach], I couldn't imagine seeing that."

In contrast, another participant whose student groomed for an Olympic athlete within the same facility expressed that:

"My student was here from [Olympic dressage facility]. She said she's seen people putting those bungie things on the horses' legs, and that they all use draw reins, and they all pull super hard. Um, she said it [Olympic dressage facility] is just a nightmare. Not as bad as [Rider B], with the random craziness, but all the gadgets and really hard contacts. It's like, what the hell. Nobody pays attention to the proper principles. It's horrifying."

These examples suggest further discrepancies between horses being trained in potentially unethical ways and performing at FEI events, an organisation that states the: "Welfare of the horse must never be subordinated to competitive or commercial influences" (FEI 2024a,b).

The incidents surrounding inappropriate judging and coaching sparked deeper discussions among participants who believed they were symptomatic of systemic issues within equestrian culture. Therefore, participants deemed it unfair for the equestrian industry to single out an individual when, in many cases, the root of an individual's behaviour stemmed from what has been previously accepted and normalised within the industry. For instance, criticism surrounding the lead rider at the World Cup in Amsterdam was perceived as issues with FEI judging, rather than the fault of the individual rider: "the horse literally stopped and backed up at X. It was clearly distressed. I feel bad for the [rider] – it's not her fault the judges rewarded her for it". The controversy was amplified when participants discussed an article published by a Canadian equestrian magazine, Horse Sport (Jones 2024), highlighting a recent study that suggested FEI judges were rewarding horse behaviour that could compromise horse well-being: "Did you see the article about judges rewarding horses that are behind the vertical? It's great to see that the research is starting to support that [industry perception]." Rewarding distressed horse behaviours in elite dressage competitions sparked tensions within the participants, blurring the line between training that promotes positive horse well-being and training that diminishes horse well-being. Furthermore, a viral recording of a USEF jumping coach captured moments where the coach directed statements to student riders such as: "I personally would be flipping him [the student's horse] over backwards" and suggested that student riders looked like "weaklings" while coaching a youth jumping clinic (Jones 2024; Wright 2024). In response to the footage, this participant expressed that they have:

"...seen so much of that in the old school Hunter Jumper coaches that it didn't surprise me, the parts I did see. I've also seen, you know, snotty, ungrateful riders that have been handed everything, that have no accountability, and no work ethic. And I've seen people put them in their place, and I think they need to be."

This statement highlights that participants may believe that there has been a normalisation of unhealthy behavioural dynamics between coach and students which include, in this case, dangerous activities by the riders and abusive language from the coach. Another participant described the complexity of the situation, where the equestrian industry must now balance acceptable practices as perceived by the public (i.e. affecting the social licence to operate) and extreme language used due to fear for rider and horse safety:

"....she [USEF jumping coach] should have thought about the social licence. [...] You can't be saying [expletive] like that. And it's setting a bad example for young people. She's set in her ways. She's not thinking about that...And they [the student riders] were doing dangerous things. That's the other piece, is that if you're not mean enough at the

right time, somebody's gonna get hurt [...]. It's like the military. You don't duck, when I say duck, you get shot. It's terrifying as a coach to know that someone could get badly hurt. So, I feel for her."

The media posed conflicting roles for participants in this study, on the one hand, this participant stated: "... that's where social media is good for our sport", in response to the viral footage of Rider B. While, on the other hand, coaches described a lack of transparency at equestrian farms due to fear of being filmed and berated on the internet:

"...you can take a split-second screenshot. I mean, not everything we do looks pretty. And like that's the hardest part of training like [...] It's gonna look ugly before it looks pretty [...] those split second or those two seconds of video that it's like, oh my god, the whole thing is horrible. It's like no, it's a baby horse having a temper tantrum and there's a lot of factors that go in, but people don't see that on social media. They pick what they want, and the rest is horrible."

Therefore, while media was praised by participants for exposing athletes who used abusive training methods, it faced criticism when training techniques were taken out of context, edited and portrayed to falsely suggest a rider was engaging in abusive practices.

Participants also suggested that, in many cases, success at competitions had less to do with the training practices utilised by the riders and more to do with a participant's socio-economic status, for instance: "...at this elite level, which, to some extent, depends significantly on how much money you have, right? And what horses you can afford to be riding." Some participants also noted that pressure from the FEI has resulted in training practices and judging that favour 'flashiness' over positive horse well-being. This participant communicated:

"...it's hard when they're professionals and they got to make money off these horses. So yeah, that's kind of maybe, the system's a little frigged up too on what they expect from four or five, six-year-olds [horses]...It should not be expected to see these big moving Grand Prix frames in young horses."

This participant further highlights the "demand" placed on horses used for elite dressage describing that:

"...I wouldn't be as demanding. I'm not as demanding. So [horse name], if he was in their [Olympic training] barn, he'd be going in a total frame. On the bit." [Participant].

"And do you think that's a good thing?" [MR].

"...I think there's a balance between what some people think you should do with a baby horse. And what... but what people see is: ohhh they are training that thing to death, but she might ride it for 10 minutes..." [Participant].

This participant suggested that the pressure from competition may lead to training practices that are not perceived to be consistent with positive horse well-being, which inherently contradicts the goals stated by the FEI. Ultimately, the normalisation of practices that do not align with positive horse well-being were highlighted by this participant who stated:

"...a community that is liable to act in ways that are normalised within the community, regardless of how reasonable those things might actually be. And I think that that's honestly probably part of the issue with a lot of high-level equestrian stuff [...] obviously there are inherently gonna be some people that are going to be just terrible people who don't care, but there are also going to be people who do care and are just in a situation where things have been so normalised that they, you know, legitimately are trying to do the right thing and either don't know what the right things to do are or know, but think that it's normal not to do those things. Right? And that's not necessarily to say that they shouldn't be held accountable anyway."

From one perspective, equestrian participants may be seen as integral to the governing equestrian systems, and therefore complicit within a culture that has fostered an environment where horse behaviours that indicate poor well-being have been accepted, normalised and, in some cases, rewarded. An additional perspective may be that this normalisation of compromised horse well-being may create internal conflicts for equestrians or, in some instances, encourage 'barn blindness' (i.e. equestrians are conditioned to perceive negative indicators of horse well-being as neutral or positive). In such contexts, this may place equestrian athletes as victims of the governing equestrian systems.

Theme 3: Equestrian dilemma: Love for horses versus horse welfare

When participants were asked about the way horses contributed to their lives, many participants indicated that horses were attached to their identity in some way. For example, this participant expressed: "...every time I've thought of not having a horse, like, it's very depressing. And I don't know if I could actually live without having a horse to look at, maybe not necessarily always ride." Another participant stated that: "It's my job now. And they also are my...I don't know what do you call that? My life? Yeah, basically, my whole life is centred around horses. I worked before to just afford a horse". Other participants expressed that they started working with horses as: "...a means of self-care. Like, I started my career in the therapy field. And I was like, I know, I'm gonna need to do something for myself. And it very quickly became like a lifestyle, I think it was always a childhood passion", while other participants had competitive aspirations: "I would really like to develop another horse to Grand Prix...". These statements demonstrate the diverse roles that horses played within participants' lives, including being a source of income, an outlet to improve the lives of the participating coaches and riders and to achieve goals and success through, for example, competition.

However, it was also noted that owning horses and running an equestrian facility were not financially lucrative, with most participating coaches having careers external to their job as a dressage coach. For example, this participant stated: "this [equestrian facility] does not pay for this [equestrian facility] [...] my [employed] coaches don't make living wages" and later confessed to feeling, "...lucky because, I don't rely on this [coaching and boarding facility to pay the bills." Consequently, this participant also expressed that because they did not rely on their equestrian facility for income, they were able to avoid situations where they felt pressured to compromise the horse's well-being to satisfy the goals of the rider: "...so, I can be like, I'm not gonna let you ride like that, just to get to a show. Sorry no." This implied that despite participants' love for their horses, many coaches perceived their reality as a balancing act between safeguarding their livelihood and ensuring the well-being of their horses, viewing horses through a utilitarian lens.

Some participants also expressed their belief that horses would never choose voluntarily to be ridden:

"Horses weren't made for us to ride [...] when people say that a horse loves to work, what does that really mean? I don't know that they love to work. I think they accept that they work. I think that they become conditioned to work. But I don't believe they love to work."

While other participants believed that their horse: "...mentally enjoys doing stuff, going places and doing things". However, regardless of whether participants believed their horses enjoyed being

ridden or "worked", participants commonly emphasised the use of horse training and coaching methods that prioritise improving horses' longevity and soundness, with this participant remarking that if horses are:

"...ridden well, then their muscles are better, they're physically fit [...] the longevity of a good ridden horse...I look at my 23-year-old who was ridden very well, round and properly for his whole life. He is still sound, semi-sound. He still has a really nice top line. He still goes out in the field and plays and you know, good lung capacity compared to some of the horses I've seen that, really weren't riding horses. You know, their backs give out...".

Further, this participant suggested that, "...to get to a happy horse, you might make them unhappy for a while..." but that if horses: "... do what you're asking for, they are going to be: (A) in a situation where you are going to release that request, and (B) in a situation where they are ultimately feeling better physically than, than they were a little bit ago." Hence, participants implied that correct training practices promoted horses "feeling better" in their bodies, and that these benefits outweigh the lack of agency horses had within dressage lessons. Additionally, participants also expressed their belief that the care horses receive can justify or offset the stress horses may experience during their dressage training sessions, with this participant highlighting that for "...especially show horses [...] vou're doing more maintenance and care, like their feet are done regularly, they're wormed regularly. They might have a little more stress when they're competitive, but the care that they get is top notch." This perspective reflected a complex ethical consideration by participants, balancing the well-being of the horse with the demands of the sport.

In some instances, coaches also felt they were doing a service to horses who previously experienced training methods that were perceived as unethical. For example, this participant believed to run a "horse-centric" equestrian facility that made them feel that they were:

"...making a difference. Some of these horses, they come to us, so they're in trouble or sore, and they're confused. And we do our best to try to help them figure life out. And, I just like being with them. [...] I enjoy the process of getting a student to ride a horse in such a way that you see the horse going: 'oh, thank god, this feels better' [...] I like making the horse actually happy because quite often, they are not as happy as we think they are."

This participant implied that their role as a coach extends beyond teaching students how to ride horses but also improving the lives of horses that live within their facility. However, other participants described challenges with achieving correct training in an efficient way: "... I need to figure that out, where I can do my 15 minutes of schooling correctly." Participants also associated efficient training with fewer riding hours needed to improve horse posture, ultimately helping horses feel comfortable in their bodies more quickly. When participants were asked how they communicate with their horse when they ride them, it was often described in idealistic terms rather than practical terms:

"...in an ideal situation, I'd get on my horse, and they would be calm about everything, not stressed or anxious about anything. I would ride perfectly at all moments, and, you know, give them the perfect cues in the perfect moments that are so clear that they always understand. And they would be loose and moving freely and in a good position at all times. And that would be the perfect ideal situation. But again, you know, it's not always, it's not always reasonably feasible [...] there's gonna be a lot more grey area [...] and you may not have the knowledge to understand the complexities within the grey areas."

This participant acknowledged that ideal horse training methods were not consistently feasible due to the complexities of real-life situations, suggesting that horses may experience negative emotional states as a result of imperfect training practices.

It was also suggested that equestrians may resist new information that criticises current practices, due to the discomfort they may feel being told that their current practices may be perceived as unethical and/or abusive. For example, this participant expressed that equestrians may push back against new information because:

"...most people I would say, don't get involved with riding horses because they are evil and want to abuse their animals. And so I think that there's (A) a level of just with people in general not enjoying being told what they can or can't do. And (B) I think that it can feel like judgment that you're being told, hey, this thing that you've been doing, you can't do it, it's mean to your animal. So, I can understand how there might be a natural thought process to push back against that. To be like, yeah, well no, I love my horse. My horse loves me. I'm not an evil person."

Despite an equestrian culture that is perceived to be resistant to change, this participant also envisioned an:

"...ideal mindset where everyone would be able to process that and say, oh, okay, so I have been doing this thing. And, man, buddy, I'm so sorry, we now know that it's not great. I was doing, you know, the best thing that I knew at the time. And now I know better, and I'm not going to do it again."

However, the participant also acknowledged the emotional struggle of having this mindset, describing: "... how there might be an emotional response, which probably gets conflated with the natural human urge to say, 'Hey, don't control me, I can do what I want' [...] none of us want to hurt the animals that we're working with." Ultimately, this participant's reflection reveals a tension between the love that equestrians have for their horses and the difficult nature of changing established practices due to internal and cultural barriers.

Overall, the complex cultural dynamic within the equestrian industry was illustrated by participants' expressed beliefs that horses may not be consensual participants, but that the care and training dressage horses might receive has the potential to enhance their well-being in ways they would not otherwise experience. This nuanced perspective reflects the difficulties equestrians face in reconciling their love for horses with the ethical implications of their sport, especially within the context of new information challenging traditional training methods.

Discussion

The aim of this study was to explore the cultural context of dressage coaching with Equestrian Canada-accredited dressage coaches. This study revealed tensions between the expectations put in place by governing bodies of competitive dressage, participants' unique training/coaching systems and participants' perceived ability for horses to experience positive welfare because of dressage training. Results also indicate that while the FEI promotes the concept of developing horses into "happy athletes", it also fosters a culture that rewards behaviour contrary to that message. This contradiction places ethical dilemmas on equestrian riders and coaches who believe themselves to be balancing their love for horses with the demands of the sport that may contribute to poor horse welfare. Riders' and coaches' emotional connection to horses may hinder the adoption of practices that enhance horse well-being since

confronting the possibility that their current or past practices could be perceived as 'abusive' can be emotionally challenging.

It is important to note that these perspectives are a brief snapshot of a narrow subgroup of individuals within the Canadian dressage population and, as such, should not be generalised as perceptions pertaining to the entire Canadian dressage industry. This study sample, consisting of only women, points to a lack of male perspectives on these dynamics, which could offer a rounded understanding of gender roles in equestrian sport. However, the prominent role of women in this study reflects the contemporary shift from dressage's patriarchal origins in wartime applications to a more 'feminised' domain, especially at amateur levels (Finkel & Danby 2019).

Participants in this study highlighted early exposure to equestrian sport as being predictive of equestrians' later interactions, including training practices, with horses. Similarly, Hemsworth et al. (2021) reported that background factors, such as knowledge and experience with horses, including the length of time an individual has owned a horse, whether or not a horse owner has participated in a horse club membership and/or if they received riding instruction were significantly correlated with an individual's beliefs regarding horse behaviour and perceived ability to influence horse behaviour. Despite this, many participants described a shift in their training practices later in life as they adopted new information to better align horse training practices with their morals and values. The revision of concepts often requires downstream shifts in related concepts and perceptions as well as the adoption of alternative categories to replace the misconception (Chi & Roscoe 2002). Therefore, when translating knowledge gained through research, it may be important to provide consumers with sufficient information to bridge conceptual gaps necessary for a paradigm shift, such that new information can lead to meaningful changes in understanding and practice. Based on remarks by some coaches and riders in this study who expressed modifying their training approaches in ways that may be perceived as more ethical, future efforts to enhance riding education could prevent the normalisation of training practices that compromise horse welfare and promote and apply 'ethical' horse training practices, thereby removing the need for significant perspective shifts in adulthood.

Elite equestrian athletes served as role models for many participants in this study which is consistent with previous literature that suggests role models act as a motivator for equestrians to ride at an elite level (Keegan et al. 2010; Lamperd et al. 2016; Luke et al. 2024). Given that equestrians in this study and abroad (Luke et al. 2024) were influenced by their admiration for and/or aspirations to become elite athletes, competitive equestrian organisations likely play a significant role in determining the welfare of horses by adapting rules and judging criteria (Luke et al. 2024). Given the degree of influence elite level equestrians can have on aspiring equestrian athletes, it is important to consider how messaging from Olympic athletes may contribute to cognitive dissonance equestrians may experience when balancing their love for the sport and their love for the horse.

Many participants in this study were aware of and/or believed they applied ES principles in their horse riding and coaching regime. Previous literature has reported that a relatively low percentage of equestrians accurately understand learning theory, from an ES lens, as less than 25% of Australian survey participants were able to correctly identify operant conditioning terms (Luke *et al.* 2023). However, despite participants' awareness of and respect for ES, some did not believe that ES principles were practical for competition goals. This suggests that there may be a discrepancy

between ES principles and participants' ability to effectively apply ES to achieve their competitive goals.

There is a common belief amongst the scientific community that increasing education of science, such as ES, will result in increased adoption of scientific principles (Warren-Smith & McGreevy 2008; Randle 2016; Bornmann et al. 2021). However, this deficit-based model of scientific communication (Sinatra et al. 2014) has been challenged (McGreevy 2007; Browne et al. 2015; Achterberg et al. 2017; Thompson & Haigh 2018). For instance, increased education is suggested to have a limited effect on behavioural adaptions of many individuals due to the innate human nature of biased information processing which is integral to an individual's cultural and psychological orientations (Browne et al. 2015). In the equestrian industry, for example, knowledge-to-practice gaps have been reported whereby despite equestrians' awareness of issues pertaining to poor horse welfare, such as individual housing, these same participants did not apply practices that would improve horse welfare, like keeping horses in groups (Visser & Van Wijk-Jansen 2012). Additionally, barriers external to education often prevent human behaviours that improve horse well-being, including financial and time constraints, lack of space availability, societal norms and minimal resources (Maurício et al. 2024; Ross et al. 2024). Luke et al. (2024) reported that equestrians who correctly identified key components of learning theory (from an ES perspective) did not report improved horse welfare in management or ridden contexts, nor did they report improved rider safety when handling or riding horses, highlighting potential contradictions between what equestrians understand conceptually versus what equestrians do in practice. The ideation that conceptual knowledge ("knowing that...") does not consistently produce procedural knowledge ("knowing how....") (Rittle-Johnson & Alibali 1999; Hadjimichael & Tsoukas 2019; VanScoy 2019) will be an important focus for behaviour change research in the equestrian industry.

Ethical dilemmas were highlighted throughout the study period, based on participants expressing a disconnect between horses' desire to participate in dressage and equestrian participants' desire to partake in dressage, which may contribute to the potential for equestrians to experience cognitive dissonance. Previous reports have highlighted cognitive dissonance among equestrians, describing, for example, their rationalisation of participating in equestrian sports while balancing their recognition of the growing body of evidence suggesting the potential for equestrian sports to cause horses psychological and physical harm (Hogg & Hodgins 2021). The controversial events that occurred within the elite dressage industry may have further contributed to cognitive dissonance among equestrians, who observed a disconnect between horse training that leads to success in elite competition and subsequent criticisms based on documentation that demonstrates training that caused poor horse well-being. In the last ten years, publications have highlighted contradictions within the FEI. For example, despite the FEI (2024a) stating that a horse's "...head should remain [...] with the nose line slightly in front of the vertical", FEI judges were more likely to give a higher score if the horse's nose line was behind the vertical plane (Hamilton et al. 2022). Contradictions between what is stated by the FEI, which is not consistent with what the FEI rewards at elite levels, embeds ethical dilemmas within dressage participants.

It could be argued that social media has played a pivotal role in prompting a recent cultural shift within the FEI (Heleski 2023), leading to their development of the EEWC (De Vos 2022) and the recent launch of the 'Be a Guardian' video, that emphasised the FEI's commitment to safeguarding the welfare of sport horses

(FEI 2024b). Social media was highlighted by participants in this study as playing a dynamic role, recognising that if used properly, it can remove individuals like Rider B, yet may also display outof-context situations that portray rider actions as worse than they are. To demonstrate how the role of social media has influenced FEI decision-making, in 2012, Rider B was reported for welfare violations, after a horse under his training allegedly reared over backwards while wearing restrictive side reins, leaving the horse unable to stand, bleeding from the nose and convulsing (Jaffer 2012). However, Rider B was cleared of these accusations due to a lack of video evidence (Loushin 2015), until 2024 when viral footage sparked widespread public outrage, where Rider B was consequently banned from participating in FEI- and USEF-affiliated competitions (Bailey 2024). This suggests that social media and public opinion can influence the behaviour of large equestrian organisations. Further, based on literature that suggests some elite equestrians prioritised competitive success over their relationship with their horse, it was indicated that governing equestrian bodies reframe what is considered successful to make the needs of the horse and humans equitable (Luke et al. 2024).

A wicked problem and systems thinking

Based on the thematic analysis of the data collected through informal conversations, formal interviews and observations, MR believes the data reflected dressage horse well-being as connected to systemic issues. Evaluating the data solely from the perspectives of the study's participants overlooks the influence of the larger systems they operate within. Throughout analysis and discussions with the research team (i.e, KP, KM, CR, CL), it became clear that ethical concerns for dressage horses represent a "wicked problem", a complex problem that appears unsolvable or can only be addressed within its network of influencing factors (Churchman 1967; Rittel & Webber 1973; Lönngren & van Poeck 2021).

The intention of this project is not to place blame on particular individuals but to accentuate the deep-rooted systemic issues surrounding the well-being of horses used for dressage. With the FEI launching initiatives that promise the protection of the well-being of horses yet failing to acknowledge its own responsibility in establishing a culture that has ignored and, in some cases, rewarded poor horse welfare, the industry will continue to face challenges with public scrutiny and cognitive dissonance amongst equestrian participants. Based on the results from this study along with the political and public controversy surrounding dressage sport, we believe these issues fit within the conceptual framework of a "wicked problem". Rittel and Webber (1973) coined this term which differentiated between issues regarding natural sciences versus social sciences, whereby issues within social science could not be solved through "linear reductionistic problem-solving approaches" (Lönngren & van Poeck 2021). Researchers have proposed adopting systems thinking approaches in place of more reductionist methods. Luke et al. (2022a) extended the systems thinking concept to the equestrian industry, arguing that improving the well-being of horses used for sport would be most effective through a systems thinking lens. The notion of a "wicked problem" has been explored in the equestrian sector by Elliot (2013), who highlighted that the UK's failure to implement policies supporting "grassroots" equestrians may be due to factors that are beyond the control of direct industry actors. For example, broader societal factors such as the perception of equestrianism being associated with elitism and wealth (Fletcher & Dashper

2013; Coulter 2014) reduced government funding that aimed to promote accessibility of the sport.

A systems thinking approach underscores the importance of incorporating diverse worldviews and theoretical frameworks to gain a more holistic understanding of how individual perspectives are connected with the challenges faced by the equestrian industry (Price & Norman 2008; Salas et al. 2010; Thompson & Haigh 2018). For example, welfare frameworks like the Five Domains model (Mellor et al. 2020) and David Fraser's concept of animal welfare (Fraser 2008), illustrate how interpretations of welfare vary depending on personal values and belief systems. These models suggest that achieving optimal animal welfare, including horses used for dressage, requires consideration of all aspects of an animal's life. To advance the discussion on what constitutes 'good' versus 'poor' horse well-being, it will be essential to address the value-laden nature of animal welfare discussions and incorporate the range of worldviews within scientific discourse of horse well-being within the context of dressage.

Animal welfare implications and conclusion

The results of this study suggest that participants' past experiences, along with influence from organisations like the FEI, shape equestrians' training practices and their understanding of methods that may or may not align with positive horse welfare. These experiences, combined with the standards set by the FEI, can create ethical dilemmas when what is promoted theoretically conflicts with what is observed in practice. Furthermore, barriers seem to exist between evidence-based training approaches and their perceived effectiveness in achieving competitive success, which may hinder the adoption of welfare-focused practices. As a result, some Canadian equestrians find themselves balancing their love for horses with the pressures of competitive sport and may feel compelled to adapt their beliefs and/or behaviours based on factors such as horse welfare and/or competitive success. Ultimately, the results suggest that influences on dressage horse welfare extend beyond their riders and owners but is also influenced by the organisations that set the standard for competition and what constitutes positive horse welfare. Moving forward, incorporating holistic frameworks and worldviews into research and the equestrian industry such that practices are consistent with ethical standards will be critical for the sustainability of dressage.

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