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"If You Can Walk, If You Can Breathe, You Don't Need to Go to Hospital": Psychological Responses of British Horseracing Staff to Occupational Injury

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Abstract

Horseracing staff have multifaceted roles, acting as caregivers, skilled athletes, and equine experts, subject to high emotional, physical, and cognitive demands, and an elevated incidence of injury. Racing staff are unlikely to seek support, take time off, or report injuries, and research has yet to explore their lived psycho-emotional experiences. This study aimed to investigate the psychological responses to occupational injury in British horseracing staff. Twelve horseracing staff (two males, 10 females, $\bar{x}$ age = 37.25 ± 14.12 years) were interviewed about their experiences following a serious injury sustained while working in horseracing. Injuries must have resulted in 21 days of disruption to daily life but could be acute or chronic. Thematic analysis identified four higher-order themes aligned to individual injury experiences: injury impact, emotional responses, injury management, and barriers to help-seeking. Staff highlighted negative impacts on their health and wellbeing, discussing the physical, occupational, and financial consequences and the effect injury had on self-worth and identity. All participants discussed denial, frustration, and guilt, which strongly influenced return-to-work decisions. Horseracing staff took a proactive approach to injury recovery, however, they typically opted for self-management rather than seeking professional medical support. Several barriers to help-seeking were identified, including a lack of trust in medical services, normative expectations of injury within horseracing, and limited awareness of the resources available to them. Strategies to improve employee return-to-work following injury, including national return-to-work guidelines and early-contact training for senior staff, would benefit the sector and align with strategic industry objectives on staff retention.

Keywords

Help-seeking; emotion; thoroughbred stud; racing groom; return-to-work; injury culture

1. Introduction

British Horse Racing is a billion-pound industry, contributing £3.5bn to the UK economy per annum [1], and indirectly employs 85,000 people. In 2021, there were 7,961 registered racing employees, including licensed jockeys, working for 581 licensed trainers, responsible for the care and training of over 20,000 horses in the UK [2]. In addition, the industry estimates a further 3,500 staff working in the Thoroughbred breeding sector [1]. Horseracing staff play a multifaceted role within the industry, including horse care—such as training, feeding, stable duties, and health management—as well as race day management, including equipment checks and escorting the horse to the paddock [3].

The skilled nature of the role was recognized by the industry in 2017, which rebranded the role as racing groom [4]. The extensive time commitment and responsibility of care seen by staff in the racing and breeding sectors mean that a member of staff's day-to-day life is impacted in a way not seen in many other industries, making employment in racing *'a way of life'* rather than a part of life [5].

Concerns for the stability of the horseracing workforce are evident in both industry and academic literature [6], with declining trends in staff retention rates, vacancy rates, and job satisfaction reported in the last five years [2], despite targeted investment from the industry. There is an increasing interest within the sector in the physical and mental health of horseracing staff and the implications these areas could have on staff wellbeing, recruitment, retention, and employee satisfaction [3,5,7].

An industry report identified that 72% of training yard staff experienced stress, anxiety, or depression in the previous 12 months [5], while recent research in Korea identified that racing staff have high physical demands, with increased workloads, time pressure, reduced remuneration, and a greater sense of responsibility, all contributing to an increased risk of depression [3].

Occupations where staff experience greater physical or emotional stress are often associated with organizational assumptions that employees are physically and mentally strong [8], and accustomed to working through pain [9]. While these characteristics may be beneficial in a fast-paced working environment such as horseracing [10], they can become problematic for employee mental health when those assumptions are challenged, for example, due to injury [11].

There is a high incidence of injury in horseracing staff, with employees self-reporting an average of 3.3 injuries per annum, ranging from chronic back and musculoskeletal pain to concussion, fractures, and internal organ damage (see [12] for review). While most reported injuries are chronic and low grade in nature, industry data suggest over 50% of yards report more than one serious accident per year [13], with hospital visits required in 28%–71% of cases, highlighting the severity and nature of injury type as far-reaching within horseracing [14].

While horseracing staff experience high levels of occupational injury, the likelihood of reporting injuries, seeking time off or treatment, or resting during recovery is low [12–15]. The apparent disregard for personal injury seen in racing staff has fostered a culture of presenteeism [5], reducing not only the efficacy of the workforce but also influencing the long-term physical and mental health of horseracing staff [16]. Despite this, limited research exists on the mental and physical health of the wider horseracing workforce beyond the role of a jockey.

Injury is widely recognized as a significant factor in occupational stress, particularly for high-risk sectors (e.g., operating heavy machinery, animal handling, or working long or unsociable hours) [17]. Early research in the field investigated the psychosocial implications of injury in workers [18], with employees experiencing threats to their psychological wellbeing, commonly attributed to the loss of worker 'identity' and sense of self [19]. Injured workers often discussed procedural complexities [17], negative attitudes from workplace organizations, and ongoing economic losses as factors for reduced mental health during injury recovery [20]. However, much of this knowledge has been gained from surveys, and researchers noted a need to utilize more qualitative methods to explore the complex experiences of injured workers [19].

Despite this call for more qualitative inquiry, only limited research has investigated the lived psycho-emotional experiences of injured workers, beyond the implications for return-to-work procedures [21] or procedural unfairness [17]. For athletes, considerable research has been undertaken considering the implications of injury on psychological health and wellbeing [11,22,23], as well as performance and continued sports participation. To date, however, research has only explored the impact of injury on the athlete, with no research focusing on support staff to identify the implications of injury on occupational stress, wellbeing, and workplace performance.

The role of sports science support is to maintain the physical health and mental wellbeing of the athlete and manage performance preparations and training—responsibilities akin to those working in horseracing, with the exception that the 'athlete' under care is a non-human animal. The unique nature of horseracing job roles, along with cultural considerations of horseracing as a competitive sport and industry (see [7] for full review), poses a novel situation within which to consider the effects of injury on the workforce.

The result of such research could have important implications for knowledge regarding the psycho-emotional responses to injury, coping strategies utilized within horseracing staff, and staff engagement with current occupational health provision in horseracing.

The aim of this study, therefore, was to investigate the psychological responses to occupational injury in British horseracing staff. The objectives were to: a) explore the psychological appraisal and subsequent emotional and behavioral responses to injury experiences by horseracing staff through narrative inquiry, b) identify current coping mechanisms used and whether they are sufficient to promote positive mental health post-injury, and c) consider whether injury experiences are influenced by cultural considerations that may exist within British Horseracing.

2. Methods

2.1. Design

The quality of qualitative research in sport psychology is determined by the methodological coherence and transparency demonstrated by researchers [24,25]. This study was underpinned by the methodological assumption that knowledge is socially constructed and that meaning and cultural context are important for the interpretation of results. Hence, a social constructivist epistemology was applied to answer the research aim. It has been suggested that injury can only be understood as a sociological inquiry due to the implications that social arrangement,

institutionalism, and embodiment play on the exposure to, reporting, and consequences of injury [26].

The Cartesian dualism of pain, often represented as mind and body, limits the sociopsychological implications of pain and injury. Therefore, this study sought to evaluate the social and institutional habitus formed by the racing industry by asking social context questions [26]. Research into the social construction of identity, habitus, and injury relationships in dance has utilized narrative approaches to discuss the readjustment experienced by injured dancers [27]. Narrative inquiry is the systematic process of gathering information through storytelling, focusing on the participants' lived experiences, how they understand those experiences, and how society, culture, and institutions shape those experiences [28,29]. Social constructivism often utilizes narrative inquiry within interviews to support the understanding of social context [30], thus narrative inquiry was adopted for this study.

2.2. Participants

Twelve horseracing staff (two males, 10 females, $\bar{x}$ age = 37.25 ± 14.12 years (range 20 – 60 years old), $\bar{x}$ time off 3.7 ± 6.2 weeks (range 0 – 20 weeks)) were selected based on their injury experiences. Participant recruitment was obtained using purposive and snowball sampling methods [31], utilizing the researcher, and the University's contacts within the horseracing industry, and through colleagues and employees of these contacts [32]. The use of snowball sampling allowed for recommendations of the researchers' credibility between participants and can instill trust, supporting an open, honest discussion. Previous research has identified a concern with injury reporting, and injury minimalization in horseracing [5,7,12] that hindered a larger sample size being obtained, resulting in a sample size of 12 racing staff interviewed across a 12-month period. Similar sample sizes have been reported in other studies, including Everard *et al.*'s [33] narrative life-story interviews with elite athletes (n = 15), Mosewich *et al.*'s [34] study on elite female athletes (n = 5), and elite equestrian athletes ([35], n = 12).

2.3. Inclusion Criteria

The inclusion criteria required that staff must have experienced a serious injury in the last 12 months while working in horseracing. The current study focused on workplace injury, which was defined as an injury or illness caused, contributed to, or significantly aggravated by events or exposures in the work environment [36]. Injuries were accepted to be acute, chronic, or resulting from overuse; may or may not have required medical attention; and may or may not have required time away from work. A serious injury has previously been defined in psychology of injury literature as a minimum of three weeks' disruption from normal life protocols [34], including time away from sport in athletic populations, time off work in occupational settings, or required adjustments to transport, work situations or homelife as a requirement of injury restriction [37,38]. These re-adjustments to normal life processes are considered disruptive and require reappraisal to support coping and are considered as significant time for psychological impact [39]. Further support exists for this time frame within the racing industry, currently, horseracing insurance claims classify a serious injury as requiring three or more weeks away from activity [40,41]. While previous research has utilized sick leave of absence from training, competition, or work as a measure of injury severity, the presenteeism previously reported in the racing population could have affected the sample available of injured staff who have explicitly taken >21 days absence [5,7,12]. When no time has been lost (work or training), injuries are referred to as transient, and this is often due to the normative social culture of denial [42,43]. It was therefore decided a minimum of >21 days of disruption to life protocols, including adjustments to daily life (e.g., driving, restrictions at work), rather than specified sick leave, would be utilized as inclusion criteria. At the time of the interview, nine racing staff had returned to work, with a further three opting to leave the horseracing industry following their injury.

2.4. Measures

In line with narrative inquiry, interviews were deemed the most appropriate method for this study. The interviews followed an initial short-life story framework [44], focusing on key moments in the life of the interviewee that are linked to the research aims, i.e., workplace injury. The term life story is defined as drawing on people's experiences, assuming individuals construct their identities by narrating stories about themselves [45]. Participants were asked to recount stories of their life in horseracing to date, their current role in the industry, and their experiences of a workplace injury in the previous 12 months. This allowed for a window into the participants' experiences, and where required, prompts were used to obtain further detail however care was taken that these were not biasing or directing the answers of the participants. Probing techniques included echo, re-questioning, silence, repetition, and encouragement probes, as utilized in Kerr's [46] research into vicarious trauma and injury responses. Horridge *et al.* [47] suggest that prompts, summaries, and clarifying statements increase the researchers' understanding of the participants' experience and may further develop important themes. When the participant and interviewer felt there was no more information or thoughts to add to the stories being told, the researchers considered data saturation to be reached in terms of the individual short-life stories [48]. Before undertaking interviews with participants, a pilot interview was conducted with a former horseracing staff member who had experienced injury. The completion of the pilot interview confirmed the interview protocol was appropriate to meet the aims of the study. The pilot data were not included in the analyses. One concern in the investigation of this field, and with this participant group, was the risk of hidden narrative, whereby due to a lack of integration in the social and cultural field, the researcher is not permitted to discussions of true experiences [32]. Instead, participants may report occupational and organizational viewpoints on the subject, due to fear of being judged or misunderstood by 'outsiders'. Previously seen in the military, racing, dance, and nursing sectors, participants reported a lack of engagement in personal topics with those they felt were not part of the existing culture [27,32]. The primary researcher (ED) is considered a member of this community and has significant experience with injuries obtained in a similar context (equestrian industry). While the 'insider' status may have developed open discourse during the interview, shared injury experiences between the researcher and

participant can pose several challenges, including imposing one's own beliefs or values onto participants **[49]**. Everard *et al.* **[33]** noted that when participants were aware of the researcher's injury experiences, they used this knowledge to reinforce their beliefs (e.g., you know what it's like), which was seen in several participants in this study, despite the researcher maintaining neutral responses to avoid leading the participant.

2.5. Procedure

Following institutional ethics approval by the Hartpury University Human Research Ethics Committee (approval number ETHICS2021-09) and informed consent, 12 horseracing staff were interviewed on their experiences of occupational injury. Recruitment was achieved through personal and organizational industry contacts, collaborating industry partners, and social media groups/pages to recruit participants **[31]** who met the inclusion/exclusion criteria. To protect the anonymity of the participants, all participants in this study were allocated numbers (i.e., P1, P2). Each interview, conducted by the first author, lasted on average 51.3 ± 19.9 minutes (range: 16–90 minutes) and was audio and/or video recorded using either the Philips VoiceTracer Audio Recorder (DVT28100/00) device, Microsoft Teams (Version 1.5.00.22362) or Zoom (Version 5.12.0 (11129)). Interviews utilized a mix of face-to-face (n = 6) and online methods (n = 6); the interview method was determined based on participant preference. The use of online interviews allowed for a wider geographical representation of participants and mitigated the implications of any COVID-19 regulations during the data collection **[50]**. Interviews were scheduled to accommodate participants' busy schedules, which is a challenge often seen in research exploring the horseracing industry **[32]**. Online interviews have been shown to gather data equivalent to face-to-face interviews, with the advantage of participants being comfortable in their environment which may facilitate deeper discussion on sensitive topics **[51]**, thus the research team felt the use of both online and face-to-face interviews was appropriate.

2.6. Data Analysis

This study utilized thematic analysis to allow new information to be extracted from the data and did not seek to answer a hypothesis or quantify themes **[52]**. The data were analyzed using an eight-stage approach adapted from **[53] (Table 1)**.

The lead researcher's epistemological perspective is a social constructivist lens, which framed how the thematic analysis was undertaken. It should be acknowledged that the interpretation of the findings and emergent themes may have been influenced by the primary researcher's experiences with personal injury within equestrianism. While this provided strength in offering opportunities for connection, rapport, and empathy through shared experiences during the interview process, recognition and reflection following the interviews were conducted alongside the remaining researchers to ensure that the first author's positioning had not influenced the coding and subsequent themes identified.

Table 1: Description of analysis process.

Stage	Description of analysis process
1	Transcription of the interviews.
2	Data were checked and re-read to ensure familiarity.
3	Direct quotes were extracted and divided into categories **(Figure 1)**.
4	Inductive grounded theory analysis was undertaken using open coding line by line to represent each participant's personal interpretation.
5	Focused coding was used to formulate themes (ED).
6	Themes were organized to represent their relationship with the aims **(Figure 1)**.
7	Validation consensus was conducted by researchers.
8	Discussion to determine whether the research aims had been appropriately met.

3. Results

Participants (n = 12) worked in a range of groom and groom/rider-based roles across the horseracing sector, including stud, flat training, jump training, pre-training, and rehabilitation yards. All participants were actively working within the horseracing industry at the time of their injury, with three part-time and nine full-time staff. All staff experienced an injury that resulted in more than three weeks of disruption to occupational demands within the last 12 months. At the time of the interview, nine participants had returned to work, and three had left the industry **(Table 2)**. Ultimately, the analysis resulted in four higher-order themes aligned to individual injury experiences: (A) injury impact, (B) emotional responses, (C) injury management, and (D) barriers to help-seeking **(Figure 1)**.

3.1. Theme A: Injury Impact

Horseracing staff described several consequences associated with experiencing workplace injury, including 1) physical; 2) occupational; 3) financial; and 4) implications for self-worth.

Participants believed injury negatively influenced future employment opportunities, career progression, or physical and mental health.

3.1.1. A1: Physical Impact

Most participants reported experiencing physical consequences from their workplace injury, including subsequent pain, acute physiological responses to the injury incident, or longer-term physical limitations. Some participants described in detail the physical sensations of pain they experienced: *"... it's like someone puts a knife into your back... start off with a shooting pain, then all the muscles around it go into spasm..."* (P4). While others minimized their experiences of pain, perceiving it as less significant in comparison to prior injury experiences or other patients. This was suggested by one participant during her time in the intensive care unit (ICU) following an incident that punctured her lung, dislocated her jaw, and broke several ribs: *"I didn't consider my pain to be painful..."* (P10).

Table 2: Participants' Demographics.

Pp.	Age (years)	Gender	Industry sector	Part-/ Full-Time	Injuries	Injury Causation	Time off work	Outcome
P1	20	Female	Jump racing	PT	Concussion, leg and back pain, lacerations	Fall	1 week	Remained in racing industry
P2	21	Female	Pre-training Yard	PT	Fractured scaphoid	Fall	2 weeks	Remained in racing industry
P3	32	Female	Stud	FT	Rotator cuff injury, crushed hand, kick to the head	Leading horses, kick	0 weeks	Remained in racing industry
P4	42	Female	Jump racing	FT	Back pain	Chronic	0 weeks	Racing welfare support; remained in racing industry
P5	25	Female	Flat racing	FT	A) Fractured cheekbone & eye socket, broken nose B) Ankle ligament damage, two broken ribs, lacerated quadriceps C) Fractured scapula, fractured cervical vertebrae, torn muscle (shoulder)	Kick (A) Fall (B & C)	A) 0 weeks B) Left C) 4.5 weeks	Left racing industry
P6	25	Female	Rehabilitation yard	PT	Leg injury, soft tissue damage, cause undetermined	Fall	0 weeks	Remained in racing industry
P7	41	Male	Stud	FT	Broken finger, torn ligaments	Handling horses	0 weeks	Remained in racing industry
P8	52	Female	Traveling groom, stud	FT	Hand injury – unknown diagnosis	Slip	0 weeks	Remained in racing industry
P9	23	Female	Jump racing	FT	Five broken ribs, lacerated liver, kidney damage, internal bleeding	Kicked by horse	12 weeks	ICU stay; left racing industry
P10	57	Female	P2P, jump racing	FT	Dislocated jaw, punctured lung, six broken ribs	Reared on, kicked by horse, trampled	3 weeks	Hospital stay (4 days); remained in racing industry
P11	49	Male	P2P, jump racing	FT	Broken leg	Kicked by horse (mounted)	11 days	Hospital stay (5 days); surgical Intervention; remained in racing industry
P12	60	Female	Flat racing	FT	Golfer's elbow, nerve pinching	Chronic	20 weeks	Surgical Intervention; left racing industry

One participant was also very descriptive about other physical sensations she experienced while waiting for medical support at the time of the injury incident: *"It was freezing cold and wet… I was shivering… it was really hurting my stomach… I couldn't move… I was really struggling to breathe… I was just so cold, and I was really thirsty… I was just so uncomfortable. And it was like, honestly, the worst thing that I could ever. It was horrible"* (P9).

Other individuals chose to emphasize the chronic physical limitations of their injury, highlighting concerns with restricted or reduced movement, sleep difficulties, weight gain, or their ability to drive or ride their own horses: *"You literally you would drop the knife because you couldn't grip it…"* (P12). These participants often discussed how the injury had ongoing negative consequences for their health and wellbeing after their return to work. One such participant highlighted the physical and mental consequences of an injury that reduced his hand dexterity and affected his confidence in social situations as a result: *"… it affects hobbies, as well as outside of work… it makes you very clumsy and you drop things… not only does it affect you physically, but mentally it probably has a bigger effect on me as well… What if I dropped my wine glass…? I never used to be like that…"* (P7).

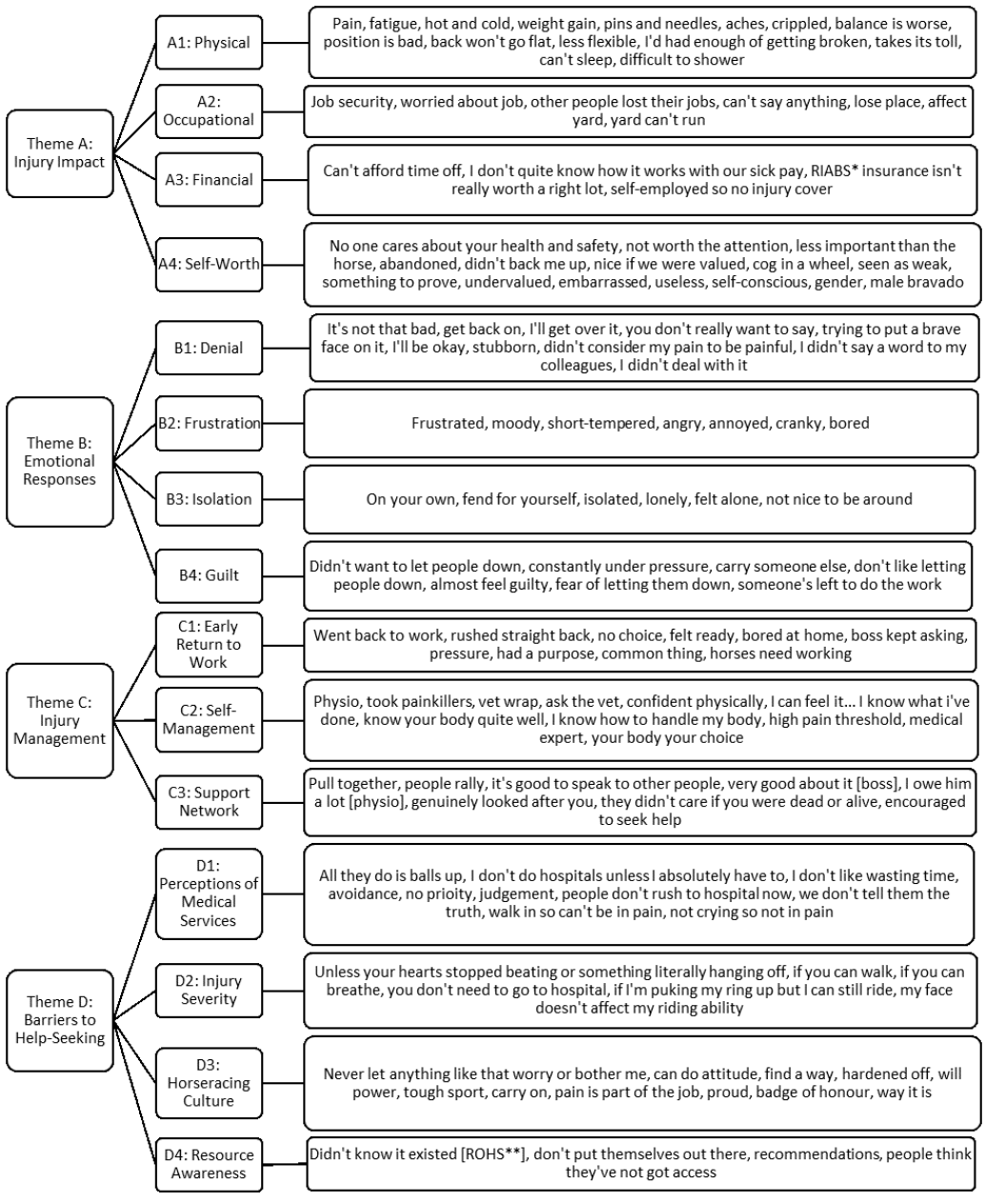

Figure 1: Higher- and lower-order themes (*RIABS – Racing Industry Accident Benefit Scheme; **ROHS – Racing Occupational Health Service).

3.1.2. A2: Occupational Impact

Many participants described concerns about how their injury would affect their employment, including job insecurity, an inability to attend work, a sense of missing out, and physical limitations affecting job demands. Participant 2 felt they experienced minimal effects on their home life; however, when forced by their employer to take several weeks off work due to a fractured hand, they noted: *"It wasn't too devasting in my actual life, it was more directly affecting my work life more than anything..."* (P2).

For injured participants who took time off, many reported concerns over job security, as well as fears about missing out on career opportunities: *"I didn't want to blow my chances for the future..."* (P8), or feeling guilty for letting their teams down. Several staff noted that the working conditions in the industry made it harder for them to feel comfortable either taking time off or reducing their duties following an injury, due to the consequential effects on their colleagues' workload, with participant 4 highlighting this struggle: *"Every yard in the country is short staffed. There is no room for breaks or sit downs, or oh I can't be bothered to muck out my six because, you know, because then some else has to do 10"* (P4). Another staff member, one of the younger participants in the study, felt left out socially when off work, stating: *"... then having a week off knowing that everyone else is at work and because I enjoy work it was harder... it's really hard because*

everyone's getting ready for the races, and you can't be a part of it" (P1).

Job security was a key concern for several participants. One participant felt that, in missing work due to injury, their job role was at risk, despite legal protections offered for injured and sick employees: *"I didn't want to lose my job. That was the fundamental basis of everything. I didn't want to let the boss down, and therefore lose my job… I was very easily replaceable, or I thought I was…"* (P6).

3.1.3. A3: Financial Impact

Several participants discussed the financial implications of injury and the various options, or lack thereof, for financial support available to them. Participants described how their decision to continue working was influenced by financial motives, often an inability to afford time off because of injury: *"I couldn't afford the statutory sick pay, so erm I kind of, I had to keep working through injuries because I couldn't time off… I just thought about what I could afford to do"* (P3). This sentiment was also echoed by staff classified as part-time or self-employed, who felt they lacked additional support mechanisms to permit them to take time off. One such participant describes: *"It was more the financial side of it because obviously I was self-employed so there's no injury cover or anything"* (P2). Staff typically chose to return to work earlier than might be anticipated by medical advice and financial security was a significant factor in this decision.

Within the British horseracing industry, a national Racing Industry Accident Benefit Scheme (RIABS) exists to financially assist eligible persons following accidental injury out of their duties for a licensed trainer. Several staff highlighted that RIABS was their only form of injury or accident insurance, and they had experienced financial difficulties as a result of not being able to continue to work following injury, either from limited financial remuneration from the scheme: *"It was just what the RIABS pay sick pay and that was what I had to survive on… RIABS insurance isn't really worth a right lot…"* (P5), or that they felt they were unable to access the financial support due to technicalities about their injury. One such participant experienced a chronic overuse injury resulting in 5 months off work prior to surgical intervention, and due to the chronic nature of her injury, felt this impeded her ability to seek RIABS support: *"The union didn't back me either. I tried to claim on RIABS… the only way I have this injury is because of the job I do. But they [RIABS] have turned me down… It's wear and tear and you won't get nothing for that…why was I paying?"* (P12).

3.1.4. A4: Implications for Self-Worth

While not always explicitly stated by participants during their interviews, an overall theme of self-worth was identified by the researchers during the analysis. For some horseracing staff in this study, their injuries seemed to interact with their sense of self-worth, with multiple staff reporting feeling undervalued or not appreciated, with descriptions such as *"useless"* (P3), or *"embarrassed"* used to describe themselves while injured, and one participant felt like a *"cog in a wheel"* and an *"inconvenience"* (P12), not appreciated or valued by their employer. One participant (P8) suggested that due to their choice to work with young horses in the industry, their injuries were deserved: *"I probably would say, I've got what I deserved over the years…"* (P8). Several staff also highlighted the disparity in the care shown by employers or colleagues to their state of health compared to if a horse had been injured: *"… and they [trainers] give a shit more about the horse."* (P5), *"the value of us compared to the value of the horse…"* (P3), and *"there's not really a lot of priority on human health when compared to horse welfare…"* (P2).

Interestingly, the role gender plays in feelings of self-worth and perceptions of weakness was also identified by both male and female participants. Participant 7 (male) felt that as the type of injury they experienced was not deemed "severe," they needed to maintain a masculine bravado response: *"… it was more bravado on my front… sounds a bit silly, but I was a man and I have broken me fingers…"* (P7). In contrast, one of the female participants who worked in a male-dominated sector of the horseracing industry felt that being the only female increased the likelihood of being perceived as weak by their colleagues if they complained about an injury: *"But it was the fear of being singled out I think as a female as much as anything. Most of the ********** [company grooms] are men so I was slightly concerned I didn't want the you know the woman to be the weak link…"* (P8).

3.2. Theme B: Emotional Responses

All the horseracing staff interviewed in this study discussed a mixed range of emotional responses to their injuries, which included denial, frustration, isolation, and guilt. The emotional profile of injured staff in this study highlights the importance of further research and interventions to support employees working within horseracing.

3.2.1. B1: Denial

All participants within this study denied the severity of their injuries; denial varied in nature between individuals, ranging from several staff who initially denied their injury severity until after they were medically assessed, to those staff who at the time of interview still considered their injuries to be *"not that bad"* (P6), some despite medical diagnoses to the contrary.

Participants who initially self-assessed their injuries as less serious were often encouraged (or forced) to seek medical attention by colleagues, employers, or family and friends. Support networks, with an external perspective, often saw the severity of the injury more clearly than the injured party: *"The director was there at the time, actually, he did say to me, you need to get that seen to… he sent me a phone number for his doctor…"* (P7). One participant, who was kicked in the leg while riding, resulting in fracture and subsequent surgical intervention, noted that despite feedback from eyewitnesses to the contrary, their initial assessment of their injuries was not as serious: *"I wasn't convinced that it is broken, probably trying to put a brave face on it, according to eye witnesses they said they knew it was broken straight away…"* (P11).

Other participants were still confident at the time of the interview that their injuries were not overly serious, despite either follow-up medical advice, or chronic issues following the injury. Participant 10, who was trampled by a horse and experienced a dislocated jaw, punctured lung, and rib fractures, compared their injury severity to other participants during their stay in the hospital, despite the severity of their own injuries *"… wasn't so high priority. Yeah,*

and you're thinking well, yeah, the next stop home because someone else needs this bed, yeah really needs this bed" (P10). Participant 2, a younger participant who fractured their wrist during part-time employment in the racing industry said: *"I didn't view it as that serious an injury…"* (P2). This participant reported arthritis in their wrist as a partial consequence of that injury (and two prior wrist fractures) but downplayed the severity of that consequence, and the chronic issues they faced as a result: *"… its just a bit niggly day to day and it's interesting like it does affect my work life, erm, but er, yeah, I'm quite easy-going about it. I don't, I don't mind, you just find a work to work around it, erm…you just sort of look at that, take some painkillers and move on [laughing]"* (P2).

3.2.2. B2: Frustration

Half the participants in this study reported feeling frustrated by their injuries, in response to impaired or restricted ability to continue daily activities, such as work, driving, or riding. Participant 2, who fractured their scaphoid, was frustrated over having to find cover to care for their horse: *"Er, a little bit frustrated… trying to work out obviously with my feral pony for 2 weeks [laughs], but er yeah that's it really, just frustrated,"* while participant 12 felt more frustrated by the impact on their home life: *"I couldn't butter bread, it was you know, it was so frustrating…"* Participant 8 also described how they felt frustrated by the situation, that they had made a mistake causing the injury to occur: *"That's my own personal upset because of the pain and the frustration… it was a rookie error."* Finally, participant 10, who also lives onsite at their workplace, felt the effect on their typical routine, stating: *"Frustrating, frustrating… No, it's frustrating when you can't work… Just like part of that routine, isn't it. The normal things you do every day that you then can't do."*

3.2.3. B3: Isolation

Several of the horseracing staff discussed feeling isolated and lonely following their injuries. These individuals were all younger female participants who did not live in onsite accommodations, working both full- and part-time within the industry. For two of the participants, isolation was specifically linked to the COVID-19 pandemic and restrictions imposed by lockdowns or hospital procedures. Participant 9 was worried about not being able to see their family: *"We weren't allowed visitors or anything because it was during COVID."* Participant 2 lived in a rural area, limiting their social interactions during recovery: *"I couldn't drive so, erm, fairly isolated to my house, it's very rural where I live um it didn't, the time frame because it was corona…"* The other participant who felt lonely after their injury had just moved to a new area for work, and their partner was working abroad, thus they didn't have a strong social support network within their current geographical location: *"I didn't know anyone down here. I couldn't go to my mom's coz I couldn't drive that far like it was, it was… it was sort of like, hey, you're on your own now, fend for yourself… I yeah, I was [lonely], it wasn't pleasant"* (P5).

3.2.4. B4: Guilt

Most horseracing staff in this study reported feeling guilty about their injuries, expressing concern for colleagues, or sometimes employers, about additional workloads to compensate for their recovery. Participants described how their injuries reduced their ability to 'carry their own weight' in the workplace, meaning they often felt that they were *"a hindrance to the team…"* (P3) or that *"someone else is gonna have to pick up the slack"* (P5). All discussed feeling guilty, or that they were *"letting every[one] down…"* (P4) due to taking days off. Participant 4 describes this feeling in this quote: *"Because you just feel that thing that you're letting every people down by not being there. And you know how, how much work and how hard it is on them just doing your own jobs. But then if you have to carry someone else, as well"* (P4).

Staff suggested the increased feelings of guilt were due to staff shortages within the industry overall, or specifically at their workplace. Participant 2 worked in a small yard as a team of three people and felt that their absence had a significant effect on workloads: *"I just I knew they were struggling just between the two of them because it was quite a lot of horses…"* (P2). However, other staff felt that the wider staffing issues within horseracing led to a cultural ethos of working as a team: *"… the desire to not let people down, I think that goes back to the racing industry, it's teamwork"* (P8) suggesting a larger industry perception regardless of yard size.

3.3. Theme C: Injury Management

When asked to describe how they had managed their injury, horseracing staff typically described a proactive management approach, often preferring to return to work earlier than advised, or would be considered appropriate, and self-medicate or self-manage injuries, rather than seek professional medical intervention. Participants also discussed the role of their work colleagues and employers in key factors in managing injuries.

3.3.1. C1: Early Return to Work

Most horseracing staff in this study reported continuing to attend daily working commitments despite serious injury, or returning to work before their suggested medical leave was completed. This was usually connected to either a desire to alleviate boredom or frustration from periods of inactivity, such as seen in participant 9: *"I just could do nothing, so I decided to go back early"* or because participants felt that work commitments were a priority: *"Yeah, I got back on after and I still worked him, erm and then I carried on riding the other four lots I had that day…"* (P1). One participant described a sense of purpose and pride from returning to work while injured: *"I almost felt proud that I was [working]… you always you want people to realize that"* (P7). Horse care was often described as a critical reason to either stay at work post-injury or to return to work sooner than recommended. One participant described the early return to work as *"quite a common thing in our industry…"* citing *"the horses need working and the horses need doing and people go back to it perhaps before they should"* (P10) while another suggested *"that's just how we do things. Wasn't heroic or anything like that. It was just these horses needed brushing"* (P12). Interestingly, another participant took a different view and noted that horses often act as non-judgmental friends, thus encouraging injured staff to want to spend time around them, which may explain the earlier return to work in some cases: *"I think the connection with, one thing I am forgetting I think, probably a connection with the horses is probably sometimes, when everything goes wrong in your life, it never goes wrong with horses…why perhaps I don't take time off… horses don't judge it do they? So even when you're offered those, if you're offered a 2 weeks, you haven't got that, that that*

friend beside you, which is a horse who don't judge you. So that's another thing as well" (P7).

3.3.2. C2: Self-Management

Many participants discussed an approach of self-management of their injuries, preferring to rely on knowledge obtained from prior injury experiences, an enhanced understanding of anatomy and physiology, and unorthodox sources of medical advice to support recovery, rather than seek professional medical attention.

Participants described feeling like they intrinsically knew what injuries they had or had not experienced, and the best methods by which to treat them. Several individuals reported a sense of 'knowing' about the outcome of injury investigations prior to seeking medical expertise: *"I am good at guessing what I've done…"* (P5), or in how to treat or manage their injuries due to prior experiences: *"Because I have been broken a lot. I know I know how to handle my body"* (P10). Participant 5 suggests that their job role was the main reason for their better understanding of injury and what their body could cope with: *"I think when you have a physical job you know your body quite well… I know what the difference is in feelings or in the way something looks"* (P5). Other participants had physical 'checklists' by which they deduced the extent of their injuries and treated accordingly. Participant 10 described how the type of pain experienced was used as an indicator of the injury type: *"But I hadn't got that shoot pain, what I would consider a break… I treated it as a break."* Another example was given by participant 3, who felt that their ability to undertake certain physical tasks while injured determined the extent of the injury: *"My theory was if I could lift up a heavy weight [pitchfork of muck from stable duties] with a broken wrist, I wouldn't be able to do it… and the fact I could lift a fork full of **** [poo], which was fairly heavy, meant that it wasn't broken"* (P3).

Furthermore, several participants in this study reported an advanced level of anatomical and medical expertise because of their career choice. One participant described how she knew that her injury was not serious enough, in her opinion, to seek medical attention: *"Working with horses, you think you're a bit of a sort of medical expert, don't you?"* (P8). Another participant suggested that they had learned how to rehabilitate injuries for themselves based on how they would do so in a horse: *"Erm, cuz now I've learned that, for injuries to heal you have to have time off which is why they give horses time off [laughs]"* (P3).

Two participants described alternative sources of medical advice. Both participants stated that prior to attending an accident and emergency department (A & E), they sought advice from an equine veterinary surgeon, who was visiting their workplace close to the time of the injury incident. One participant asked the vet to complete some diagnostic imaging: *"I did ask the vet to x-ray my hand…"* (P3) while the other went further to ask for medical assistance in resolving a dislocation: *"I actually asked the vet to pull it back for me, the vet was there… he said I can't do that…"* (P7).

3.3.3. C3: Occupational Support Network

Horseracing staff in this study felt that the key contributors to successful injury periods were their employers and the staff surrounding them at work, and during the interview process, more readily highlighted occupational support networks than personal ones, suggesting these were a priority for them. The role of the employer appeared to be a critical factor in participants' responses, with some praising the contributions and support of employers, such as P7, who notes: *"All the way through it the director, he was worried… he sent me to his doctor… there wasn't any pressure not to go, or any of that, there's probably more encouragement to go"* (P7). Other staff suggested their employer had not been as supportive: *"You know, once you no good to them, they aren't bothered"* (P12). One participant who had experienced working for several employers during their racing career highlighted the disparity in support offered by employers during periods of injury or illness: *"I think it depends a lot on who you work for as to what you get… [boss 1] would check in, see how I was getting on… [boss 2] he…genuinely looked after you. Whereas [boss 3], they didn't give a **** [poo]. They didn't care if you were dead or alive… The head lads[1] and the people you worked with, they did [care]"* (P5).

Participant 5 above also highlighted the supportive nature of wider members of the staffing teams, such as head lads/lasses[1], or colleagues. Team dynamics also seemed to be a factor in facilitating return to work, with close-knit and well-functioning teams often supporting each other through periods of injury: *"I appreciate I'm very lucky cox it is a smaller yard, erm, and we're very close as a team and they do look out for us and everybody is always present there's no sort of hiding… they very much eased me back into doing the [ridden] work…"* (P2).

3.4. Theme D: Barriers to Help-Seeking

Throughout the interviews, horseracing staff identified several perceived barriers that limited the likelihood of them accessing additional support, whether that was medical provision, rehabilitation or psychosocial support services or even just asking for additional help from social or occupational support networks. Barriers noted most frequently in this study were: 1) trust in medical services; 2) perceptions of injury severity; 3) cultural perceptions of injury within the horseracing industry; and 4) awareness of available resources.

3.4.1. D1: Trust of Medical Services

Horseracing staff in this study had typically negative perceptions of medical services, especially hospital and emergency services, often following prior experiences. There was also a lack of trust in the expertise of National Health Service (NHS) Accident and Emergency departments in treating injured racing staff, with one staff member describing her reason for not visiting a hospital was *"all the horror stories of A & E…"* (P8). Horseracing staff expressed feeling a sense of judgment from medical providers for injuries that were *"self-inflicted"* (P3), and felt medical staff were unlikely to believe the severity of some injuries as

[1]Head lad/lass is the term typically used in horseracing to define a male or female member of the management team within a racing yard **[74]**.

staff often presented walking, talking, driving, and without significant displays of pain or emotional responses.

Horseracing staff felt they were judged by and accident and emergency (A & E) teams for their involvement in horseracing as a dangerous sport, with participant 3, who experienced several major injuries including a kick to the head, suggesting: *"I don't think there's much sympathy involved when it comes to horse related injuries because they kinda look at it and go, it's self-inflicted… you have to have a thick skin…"* (P3).

Within this study, negative perceptions of hospital interactions seemed to stem from a feeling of not being believed about injuries or injury severity, often because the patients' presentation was seen as atypical for that level of injury or pain. Participant 5 described their experiences of A & E when they drove themselves to the hospital following a horse fall which resulted in fractures to the cervical vertebrae and scapula: *"… I will never go back to that hospital 'cause all they do is balls up… I told them this is what's wrong with it, can you please sort it and they said no, no no don't be silly 'cause I wasn't crying and screaming, they've gone there's no way you've done what you're saying you've done. If you're not crying and drove yourself here…"* (P5).

Participant 10 describes their conversation with a doctor about challenges with horsey patients: *"He [hospital doctor] said the worst patient is horsey people, rugby, and farmers. Yeah nothing hurts with them he said"* (P10). Interestingly, one participant reflected that their behavior and dismissal of pain and symptoms during their initial presentation to A & E following an accident at work may have led to their misdiagnosis, which resulted in chronic limitations to the movement of their hand, dexterity, and fine motor movement: *"I was having physio at **** hospital when they realized they had misdiagnosed my finger… they thought it was a fracture, it was actually a full on snap of both ligaments… But like I said, when I went to A & E I was full on rush mode, get me saying get me out of here, I need to get back to work. So I probably pressure, I pressurized them. And I was happy, probably with the diagnosis at the time, because it made it simple break, put a splint on enough to go back to work… I'm not blaming the NHS at all, or anyone else, I was happy with it until the foaling season had finished. Then I thought something's not quite right"* (P7).

Racing staff were more likely to trust the medical judgments of physiotherapists (or equivalent musculoskeletal therapists) with whom they had built long-term relationships, and often sought their expertise in managing and recovering from injuries, with or without medical diagnoses, such as participant 10, who noted: *"I saw my physio three days a week when I got hurt, yeah and then I went to hydropool quite a lot…"* (P10). For participant 11, despite surgical intervention following a fracture during which it can be assumed that prognosis and recovery timelines would have been discussed, the true extent of their injuries was only realized following a conversation with their personal chiropractor, with whom they had a long-standing relationship: *"… I went to see him… he was the person I'd always go [when race riding] to to have a little fix, so I always feel quite reassured when he looks after me… he turned around to me and he said this won't actually properly heal for two years, and again it was sort of like that… the dawn of how long this takes to heal was, erm, was quite shocking really… I trust ***, I actually trust him…"* (P11).

Those staff based in Newmarket, the racing epicenter of the UK, also reported positive experiences of the heath medics where injury resulted from a fall during training: *"… the heath medics are obviously on point and they're very very good at the job. They're worth their weight in gold, bless them…"* (P5). Heath Medics are members of the Newmarket Training Grounds team who have undergone medical training and were introduced in 2016 by the Jockey Club to attend to injured riders prior to the arrival of emergency services while on Newmarket Training Grounds.

3.4.2. D2: Injury Severity

One of the most prevalent factors that influenced horseracing staff's treatment and recovery from injury was their perceptions of what constituted a severe injury, which seemed to be more of an industry-wide viewpoint, than individual perceptions due to similarity in participant responses. Participants expressed a disregard for what others may suggest are medically severe injuries, and this sometimes affected their likelihood of seeking medical attention. Participant 3 described an incident with a colleague at work: *"Yeah, one of the guys at work got kicked in the head yesterday, he just carried on as normal, actually had blood pissing down his head."* When asked what level of injury severity may warrant a visit to Accident and Emergency (A & E), horseracing staff typically responded with *"something's literally hanging off"* (P8), *"dead and dying…"* (P6), or *"if you can walk, if you can breathe, you don't need to go to hospital"* (P12). Participant 8 describes the attitude of racing staff to attending A & E for an injury: *"… unless your heart stopped beating, or something's literally hanging off… it's that underlying attitude…"* (P8).

One participant suggested that any injury that may affect someone's ability to concentrate, or where a broken bone would affect the balance/stability of the rider, would be a safety risk that may result in stopping ridden work. However, when asked about their own injuries, which included a fractured nose, eye socket, and cheekbone, the participant went on to say: *"… my face doesn't affect my riding ability, it hurts, but its not causing me any issues. It doesn't affect the rest of my body that I use to ride so why shouldn't I be here… it doesn't affect my hands or me legs"* (P5).

3.4.3. D3: Horseracing Culture

An underlying theme of the interviews with all injured horseracing staff in this study was that the context of the racing industry had and continued to influence their normative expectations of injury prevalence, severity, treatment options, and help-seeking behaviors within the sector. Staff in this study believed that injuries were an acceptable and accepted part of their roles working with horses, commonplace in nature, *"getting kicked is basically weekly occurrence…"* (P3), and that a level of pain was to be expected, as shown by participant 8: *"We should have to deal with that [aches and pains]. Unfortunately, that's the nature of the game"* (P8).

Staff viewed those working in the industry as *"tough"* (P4), having a *"thick skin"* (P3), being the type of people to *"grin and bear it"* (P2 and P7), or *"just carry on"* (P4 and P12), and

having a *"can-do attitude"* (P11). Several participants used this industry 'persona' to justify their decisions when injured, for example, participant 11 describes how their actions during the injury and recovery period were not dissimilar to what others may have done: *"...people that work with horses and their can-do attitude, yeah, I think everyone's the same in industry, find a way, don't think I'm an exception, I think I am the norm. Everyone's the same, you just do..."* (P11). Those who did not meet these typical characteristics were seen as weak, and several of the participants judged colleagues who took time off or did not immediately return to the saddle: *"If someone is not getting up, the like more the banter you get from other people, ah yeah, she's known for it"* (P5). Participant 4 felt that not everyone was suitable to work in the racing industry based on their ability (or lack thereof) to continue working while injured: *"You either pull your weight or you don't... if you can't do it, you can't do it and then you need to decide, like we're all adults"* (P4).

When asked from where these viewpoints originated, many staff expressed that they had not explicitly heard the negative comments about themselves during periods of injury but had experienced previous examples of other colleagues' injuries so assumed the same was being said about themselves. Participant 3 discussed this at length, stating: *"No, no one told me directly yeah [that they were useless] but you're always thinking if they're saying about others, must be saying about you as well"* (P3). Furthermore, participant 7, who is in a management role within a large stud establishment, suggested that while these shared beliefs are not officially seen, they are ever present in the working environment, and even acknowledged their own role in perpetuating the cycle further: *"I do see it. I don't see it officially. I don't see it from when I go into health and safety meetings. I don't see it from the director. But I do hear it on a day to day basis, I'll probably find myself saying it at times as well"* (P7).

Horseracing staff often identified previous experiences in equine and racing industries as the framework for their current belief system about injury. Participant 7, an older individual in the study, identified a story from their youth that they felt encapsulated how their viewpoints on injury were informed by the industry: *"I can remember getting kicked when I was 17/18... I was there and I thought somebody's going to come and help me, [made me] realize you was never going to come and get an arm around your chair or a sugary cup of tea"* (P7).

Horse riding, in general, holds shared beliefs about returning to riding after a fall, and participant 1 identified that this ethos was something they still considered important in their decisions about returning to the saddle following an accident: *"I think just as a child, its, you always get back on... when I learned to ride and I fell off, it was always don't cry, get back on and you'll end up enjoying it and I think it's just stuck with me"* (P1).

Several of the older participants also note that familial connections to the sport, agriculture, and military industries may have exacerbated their shared beliefs on injury normalization and *"toughness"* of those working in the sector: *"My family on the male side are all military, and we're all horsey farmers, and you just carry on"* (P12), *"my father was a farmer, jockeyed, I grew up with it."* (P10), *"I was born into it [hunting and racing] ..."* (P11). Several staff discussed a generational trend to injury approaches that may have influenced their responses, with participant 12 discussing how carrying on was typical for their generation: *"I think that's just my generation. That's what we do"* (P12), while participant 8, who considered themselves an older participant, felt that their generation had not helped the younger generations in breaking 'old' viewpoints about injury and help-seeking: *"But again, I'm probably the generation that has helped perpetuate this, you know... I'm guessing my generation have not helped the current generation because we've sort of played along with it"* (P8).

3.4.4. D4: Resource Awareness

Some of the horseracing staff in this study were aware of industry resources available to them during recovery, such as the Racing Occupational Health Service (ROHS), Injured Jockeys Fund (IJF), Racing Injury and Accident Benefit Scheme (RIABS), or advice from the National Association of Racing Staff (NARS) who acts as a union for racing grooms. Those participants who were aware of the services provided by Racing Welfare, as the main charity to support the needs of racing staff, were positive, with participant 8 stating: *"They're a great organization, aren't they."* However, despite this awareness, only limited staff had utilized these services previously, *"what little I know of Racing Welfare..."* (P8), and discussions regarding RIABS, and NARS Union support were not always positive for injured staff: *"The Union didn't back me either"* (P12). Furthermore, staff who were aware of these services often highlighted that other staff misunderstood accessibility, with participant 10 stating: *"...there are these places that are supported by charities and fundraiser. And a lot of people think they haven't got access to them"* (P10).

More typically, horseracing staff interviewed in this study were unaware of the extent of opportunities offered by the horseracing industry for injury and illness, most notably the provision of Occupational Health Services by ROHS, Racing Welfare. Some staff believed they should have the same support and facilities as jockeys, comparing the workloads: *"...us guys that produced the horses, work with them every day have no access to that [rehabilitation facility] unless you've had a jockey license. You can't touch it"* (P12).

Those staff who had used one or more services from Racing Welfare, often initially engaged in support services through personal recommendations from trusted sources, such as a friend. Participant 4 identified that their first contact with Racing Welfare was through a support line, during the COVID-19 pandemic to support mental health after a colleague had expressed concern: *"So one day, she just came up...Here's an hour, read this [leaflet from Racing Welfare]. And I just went ok...so we had a chat and she said **** [name] is really worried about you she thinks, she thinks you're not looking after yourself...yeah then that led to having an interview..."* (P4).

Since engaging with other services, participant 4 then felt comfortable seeking additional support for their ongoing back pain as part of the ROHS.

4. Discussion

This study aimed to investigate the psychological responses to occupational injury in British horseracing staff. Staff highlighted the negative impacts on their health and wellbeing, discussing the physical, occupational, and financial consequences of injury as well as the effect injury had on feelings of self-worth and identity. All participants

discussed a range of negative emotional responses upon injury, including denial, frustration, and guilt, which seemed to strongly influence staff decisions to return to work early. Horseracing staff took a proactive management approach in injury recovery, however typically opted for self-medicating or self-managing techniques rather than seeking professional medical support. Finally, several barriers to help-seeking were identified, including a lack of trust in medical services, the normative expectations of injury within the horseracing sector, and limited awareness of the extent of resources available to them to facilitate recovery.

4.1. Psychological Implications of Injury

Primarily, injury results in negative implications for horseracing staff, on their short and long-term health and wellbeing. Injury alters a person's assumptions about the safety of their proximal environment and has far-reaching connotations on self, world, and future viewpoints **[54]**. Following an injury, stable staff experience complex psychological responses to injury, including changes in cognitive appraisal, emotional responses, and behavioral changes, similar to those seen in injured athletes **[39]**. Staff in this study reported both physical and psychological consequences of injury, including pain, limited mobility, altered movement patterns, a range of emotions including frustration, denial, and isolation, and a loss of confidence and reduced sense of self-worth. Frustration is typically reported in injured athletes following injury, due to a sense of loss **[55]**, which could result from an inability to undertake daily working tasks, being unable to manage the horses in their care due to physical limitations, or slow recovery processes and pain **[7]** which has been seen here. Isolation can have detrimental effects on injury recovery **[56]** with racing staff disengaging from their community socially, because of time off work, or through enforced isolation present in some stories in this study due to COVID-19 restrictions at the time of the injury.

Injured horseracing staff interviewed here also reported implications for employment, including concerns regarding job security, and financial concerns, such as loss of earnings or lack of insurance. Insecure job roles or no opportunities for sick leave are some of the reasons that employees in the horseracing sector may not report injuries, or do not take time off **[57]**. Financial losses following injury are well documented, especially for self-employed individuals **[58]**. Working in horseracing, staff may be employed full- or part-time, but several yard roles are also classified as self-employed, which can affect the security and protection offered to staff when injured. Some members of the horseracing industry have access to the Racing Industry Accident Benefit Scheme (RIABS), designed to provide financial assistance to "racing staff who are off work as a result of accidental injury arising out of and while carrying out duties for a licensed trainer," and linked to paid contributions from wages **[59]**. While this opportunity is in place for full- or part-time paid training staff, and far exceeds any support currently offered in the equestrian sector, this financial assistance does not cover those working as self-employed, working in the stud sector, and from the participants in this study, may present some discrepancies in the definition of accidental injury, with one interviewee suggesting payments are not given to chronic injuries, although this perception cannot be verified. Injury benefits from RIABS must also be linked to an accident declared by the claimant's employer **[59]**, presumably reported in Yard Accident Books, a requirement of awarding a Trainers License in Britain **[60]**. These sources of injury data have been found to be notoriously inaccurate in the equine sector **[57,61]** due to both employer and employee underreporting. Staff in this study noted the importance of having personal accident and injury insurance to supplement working life in horseracing, although this was not utilized by all racing staff. Further research should consider a review of the RIABS scheme and sociocultural barriers that may prevent the utilization of vital support services, with consideration to the effects of the racing injury habitus identified here and in previous literature.

4.2. Absentee Guilt

One area of concern for employers in horseracing should be the presence of absentee guilt in injured racing staff, with staff citing lack of cover, understaffing in yards, and not wanting colleagues to 'pick up the slack' as sufficient reasoning to continue working by participants in this study. Guilt has been defined as the emotional response to the perception that one's actions have harmed others, intentionally or otherwise, or that through one's actions, they have failed to meet socially prescribed or personal standards of behavior **[62]**. Guilt has also been associated with judgment from others, for actions or behaviors that do not meet social or cultural norms and within the workforce, may arise from societal pressure around moral obligations to work **[62]**. High levels of guilt have been reported in the ill or injured workforce across multiple sectors, with 29 – 50% of employees feeling guilty about sickness-related absences **[63,64]**. Typical reasons that staff report guilt following absences at work are often attributed to; a sense of letting colleagues or employers down, or leaving them without necessary cover **[65]**, failure to fulfill job demands or personal expectations or associated poor mental health from illness or injury **[64]**, all of which were reported by horseracing staff in this study. Understaffing in the workplace is seen as a contributing factor to absence-related guilt **[66]**, with staff more likely to attend work when they shouldn't due to not wanting to add additional burden on the remaining workforce, which may induce additional guilt responses **[62]**. Furthermore, where staff believe that their attendance to work will be helpful to the workload of their colleagues, and staying at home will induce a level of harm, they often choose to attend work ill or injured, citing guilt as a factor, not wanting to be seen as a burden or letting their colleagues down **[67]**. All these viewpoints were echoed in this study as key influencing factors for returning to work early.

Guilt has been strongly associated with higher levels of sickness presenteeism in multiple occupations **[68]**, defined as attending work despite illness or injury that would provide an adequate reason to stay home **[69]**, resulting in an early return to work **[64]**. While presenteeism is often viewed by employers as less significant to the workforce than absenteeism, research suggests that globally, presenteeism is more costly **[70,71]** and should be avoided. Consequences of presenteeism are well documented; with negative

associations for both the individual (i.e., poor physical health, poor mental health, and poor workability [72]) and the organization (i.e., productivity losses; increased risk of accidents, and higher error rates [73]). More intensive feelings of guilt in injured horseracing staff in this study may have influenced their decisions to return to work early, which could result in longer-term negative consequences for employee health and wellbeing in the future. Poor physical and mental health in injured horseracing staff has already been identified [5,35]; however, the association between guilt, presenteeism, and subsequent accident risk or reinjury in the racing workplace has yet to be explored.

4.3. Injury Culture: Institutional Habitus

While this study has identified the lived experiences of injured horseracing staff, which are individualistic in nature, sociocultural factors developed from the racing habitus [74] were found to have influenced the thoughts and behaviors of injured racing staff. This presented as conformity to the belief that pain and injury are expectations of working with horses [61,75], a cultural deprioritization of safety first principles and safety culture [61], that injury is not sufficient reason to take time off [12,76], and that a presenteeism culture is normalized. Habitus is historically grounded, often reflective of society at large, and develops as part of a long-term belief system [77,78].

Employees within the racing industry are reported to suppress and regulate emotional displays to meet the organization's expectations of the role which Cassidy [79] suggested, creates an organizational culture where employees act, think, and feel in accordance with expectations, and new staff entering are taught to adhere to these cultural norms [78]. Horseracing has previously been suggested to have an institutional habitus [7,77], including reference to injury and injury attitudes [12,80], and in relation to gender norms where masculine traits, such as physical strength are prioritized and pain is ignored [74,78]. Institutional habitus, particularly related to injury expectations, has previously been reported in military personnel, boxing, dancers, veterinary professionals, farmers, and equestrian populations [57,61,76,81–83], whereby the expectation to tolerate pain is part of the social contract [26]. The cultural expectations of the habitus override any prior cultural, religious, or ethnic diversity, and the members now belong solely to the habitus they joined [84]. While all participants in this study echoed the expectations of injury and pain tolerance within the racing sector, none could identify its origin, with most participants generating the *"it's always been like this"* rhetoric [78] or suggesting family connections to the sport and/or farming or military cultures engendered this belief system [74,85]. This poses significant challenges for organizations, such as the Horseracing Industry People Board, to dismantle these norms that may be affecting recruitment, retention, physical and mental health and wellbeing, organizational productivity, and perhaps equine welfare itself [86].

Safety culture is defined as "the product of values, attitudes, competencies, and behavioral patterns at individual and group level, which determine commitment to, and style and competence of, an organization's health and safety program" [87], built and sustained over time [61]. Positive safety culture has been linked to decreased risk of occupational injuries [88], improved employee job satisfaction [89], increased productivity, and lower costs [90]. While other sectors have reduced the risk of injury in the last 10 years, the equine industry has not [91]. Strategies that have been implemented to reduce injuries in the human workforce prioritize technical interventions, such as enhanced safety equipment, which have been shown to have the least effect on workplace health and safety controls [92]. Chapman and Thompson [91] stress the need to review industry perceptions of risk, and factors that influence risk-taking behavior, such as perceptions of injury severity, racing habitus, and cultural and social messaging [75] to create a more positive safety culture within horseracing. Leaders are typically considered the carriers of this culture [61], with the ability to influence employee thoughts and beliefs. Small-scale enterprises (SSEs), businesses with <50 employees such as those seen in horseracing, are more strongly influenced by managerial interests [93], with working practices that may be more guided by personal or cultural beliefs in risk-taking and health and safety practices than national guidelines [94]. Horseracing yards are a hierarchical structure, with employees supervised by 'head' roles (head lad/lass, head traveling groom) with managerial responsibility for colleagues [7]. While the context of leader may initially imply trainers or assistant trainers within a horseracing yard, it is more likely senior racing staff, head lad/lass roles, or long-standing employees who hold the most cultural sway over working practices and normative expectations in training yards. In the equine sector, shared values have also been tied to management, such as where horse wellbeing is prioritized over employee health and safety [93], evidenced by the "horse first" culture adopted by horseracing in 2020 through the BHA Equine Welfare Strategy [95]. This study found that individual yards had different approaches to injured employees regarding communication, support, and signposting, and thus suggests the role of leaders within individual yard managers, trainers, and senior yard staff is imperative to tackle both safety culture within the industry and facilitate positive recovery for injured racing staff to encourage staff retention and positive wellbeing.

Research suggests there are three key demands that increase the presence of presenteeism in the workplace, including excessive workloads, understaffing, and attendance policies [66], although additional factors have also been identified, including job security, personal finances, identity, and professional and moral obligations to work [65]. While attendance policies are not a concern for staff in the horseracing sector, issues pertaining to excessive workloads, understaffing, job security, and professional obligations were all raised by staff in this study following injury. Ideal workers are defined as those with a clear, relentless commitment to paid work [96]. In sports, the ethos of a good worker/athlete is one who embodies "a willingness to make sacrifices; a striving for distinction; an acceptance of risk and the probability of participating while enduring pain; and a tacit acceptance there is no limit to the pursuit of the ultimate performance" [97]. These qualities are echoed in all definitions of the role of stud and stable staff [60,98]. The roles of stud and stable staff are multifaceted, including daily horse care, feeding, and health management, and may include exercise management in horses under training [3].

Racing and stud groom roles have high physical demands with increased workloads, time pressure, and long hours [3,93], that often equate to poor pay, with an unforgiving and arduous regime, which may be attributed, in part, to the current staffing crisis seen within the sector [80]. Brosi and Gerpott [62] suggest that "organizations have developed a powerful norm in favor of presenteeism," and that presenteeism behaviors in employees favor the company, by reducing the need to find staff cover and maintaining numbers. Finding cover was one of the main causes of stress in horseracing trainers [99], and attitudes of trainers and senior staff roles within yards may be influencing the behaviors of horseracing staff, who have previously reported absentee guilt and lack of staff cover [7,12]. Aronsson *et al.* [100] also identified that staff were more likely to work if the institution or organization were already understaffed, as did not want to place additional burden on colleagues, similar to the perspectives voiced by participants interviewed in this study.

Several staff in this study noted that the horses still needed care, and this was a factor for early return to work. Recent research by Bergman Bruhn [101] classified those working in the equine sector as engaging in 'meaningful' work, defined as engagement in personally significant and worthwhile work, often aligning livelihood to lifestyle and hobbies, who find increased enjoyment from work respective of pay or working conditions [102]. Meaningful work has been associated with increased job satisfaction, higher levels of staff commitment, reduced staff turnover, and positive employee wellbeing in wider sectors [103]; however, research has also suggested that there may be negative implications for employee health [104]. Employees, such as those working in horseracing, may be more likely to accept poor working conditions and may engage in overworking practices, such as longer hours without associated compensation, or taking on additional responsibilities [104,105], and by sacrificing their own health and wellbeing for the benefit of others [101]. In human service care work, staff has professional and moral obligations to their patients, and the workload is dictated by urgent client needs, rather than organizational staffing requirements [103]. Service care workers often form close relationships with patients, and typically prioritize their clients' needs over their own. These attitudes increase the likelihood that care workers demonstrate presenteeism, attend work when ill or injured, and choose client wellbeing over their own health [106]. This phenomenon has also been seen in animal caretakers [107,108] and farmers [109] who form meaningful relationships with animals in their care and may prioritize their needs over their own. The interconnection between guilt for the horse and guilt for colleagues was seen in several participants in this study.

4.4. Support Utilization in Horseracing Staff

Despite the plethora of resources that are available to injured horseracing staff, including support for mental and physical health and wellbeing from Racing Welfare and Racing Occupational Health, occupational advice from Racing Welfare, NTF, NARS, and the TBA, and industry-wide financial resources such as RIABS, uptake and awareness of such resources is seemingly low. Reasons for a lack of engagement in support services are complex, with several confounding variables influencing the likelihood of injured horseracing staff to seek out additional resources, such as the relationship to their employer, the habitus of racing, and the sociocultural context of injury and pain within this population, as well as the emotional profiles of injured staff and the influence of those emotions on help-seeking behavior and social stigma.

This study found that where successful relationships with employers existed, horseracing staff typically had a more positive experience of injury recovery and return to work. The relationship between the injured employee and their employer is considered significant to successful recovery and can act as both a facilitator or barrier to accessing support and return to work [110,111]. Positive support from employers may include accessible sick leave, back-to-work schemes, or the implementation of alternative duties which have been seen to facilitate successful recovery and readmittance to the workforce [58], techniques that were discussed by several injured racing staff in this study. However, negative support can include challenges with communication, such as employers not listening or understanding an employee's needs, or setting unrealistic expectations for work capacity, and this can increase feelings of self-devaluation, hostility, and resentment [58,112]. Several participants in this study highlighted challenges with employers expecting a return to work too soon or expecting them to undertake unsuitable tasks without reasonable adjustments. While offering reasonable adjustments for return to work is important, research has also identified that negative reactions from supervisors, such as doubt or anger, are more likely to influence an employee's commitment to the organization in the future, as well as their overall mental health [113,114]. When participants were discussing their interactions with employers, early interactions, such as a check-in phone call or message were positively received, and employees felt valued. Hepburn *et al.* [113] identified that strategies that show concern for the individual, e.g., early contact, are likely to engender commitment and positively influence mental health. Workplace organizations, including those within horseracing, should look to improve training for managers regarding injury communications and employee interactions to complement current return-to-work procedures [113].

Occupational culture and attitudes to workplace safety and risk have previously been found to be significant barriers to the efficacy and uptake of occupational health improvement initiatives in the workplace [61,101]. Shared values within communities are one such barrier [93], and in horseracing, this may include the prioritization of horse welfare over human wellbeing and employee health and safety [7], or the sociocultural racing habitus of an accepted risk of injury and working through pain [12,80]. Recent horseracing research suggests there may be a negative societal stigma associated with injury, and help-seeking behavior within the sector [35,115]. The stigma associated with perceptions of weakness, vulnerability, and incompetence is considered the principal barrier to accessing support [116], and internalizing stigma can decrease a person's sense of worth and self-esteem following injury [55], viewpoints which are echoed in the interviews of injured racing staff within this study. Wider literature also reports additional barriers that were noted by staff in this study including negative past experiences,

lack of mental health literacy [8], lack of time, privacy concerns, financial barriers, and lack of perceived need for help based on injury severity [116]. Previous research in Irish jockeys also identified cultural norms of masculinity and self-reliance as barriers to help-seeking [115], which echoes the work of Butler and Charles [74] and reinforces a gender narrative of physicality and strength associated with masculinity as dominant in horseracing. Given that gender was seen in this study relative to perceptions of weakness in both male and female participants, it could be assumed that gender bias may also be influencing the likelihood of racing staff to access support services.

Furthermore, emotional responses to injury, such as guilt, have also been linked to an increased risk of social isolation in athletes, which can hinder the likelihood of completing any physical or psychological rehabilitation [117]. Guilt has previously been reported in injured horseracing staff [12] and point-to-point jockeys [118], often attributed to either absentee guilt for the impact of their injuries on colleagues and co-workers, such as seen here, or guilt for the horse, whom they are therefore unable to care for, previously reported in animal care workers [107]. Guilt, therefore, may increase the likelihood of isolation, and act as a barrier to accessing help for injured racing staff.

4.5. Recommendations and Future Research

Given the findings of this study, several recommendations and future directions are proposed. Further research should consider the implications of presenteeism in horseracing on organizational productivity, employee retention, subsequent injury risk, and possible implications for standards of equine care, in line with industry strategy to investigate staff retention. In addition, research should investigate the influence of gender norms in horseracing specifically on injury attitudes, and subsequent return-to-work behaviors as research suggests women are more likely to demonstrate presenteeism than men [119]. Finally, researchers should consider the impact of National Health Service (NHS) Accident and Emergency (A & E) Department attitudes in horseracing populations on injury triage and subsequent diagnoses within the NHS, as challenges such as perceived biases, and poor communication, were identified in this study, which may be affecting injured horseracing staff from accessing appropriate medical support. Recommendations from this study include:

1. To conduct an independent review of the Racing Injury Accident Benefit Scheme (RIABS) to consider its application for chronic injuries arising from working in horseracing, and to those workers classified as self-employed.

2. The development, and subsequent implementation, of a national return-to-work procedure for injured stud and stable staff.

3. Employment modifications and workplace adaptations are implemented on an individual basis following discussions with the line manager, considerate of physical limitations, injury type, and pain levels.

4. The creation of educational resources, such as injury narratives, for early contact injury communication training to be made available to employers and senior staff within stud and training yards.

4.6. Limitations

There are limitations to consider within the study. Although this study recruited most participants through purposive sampling and utilized multiple methods of recruitment to achieve a sample representing a wider proportion of injured stable staff in the role, age, gender, and injury type, the voluntary nature of the interviews and use of non-probability and convenience sampling may be subject to self-selection bias [120]. This bias may have increased the likelihood that participants only came forward if they perceived themselves to have experienced significant impacts (physical, mental, or occupational) following a workplace injury. Furthermore, in health psychology research, self-selection bias can lead to difficulties in data interpretation if participants are examples of extremes: subjects who are likely to 'complain about everything' and therefore may exaggerate problems in their own health and environments, and on the other end, subjects who complain about nothing, who are likely to present denial narratives and underreport health, injury or environmental concerns [121]. Examples of both types of individuals have been seen in this study; however, across all participants, a wide range of narratives were identified to counteract the polarizing influences of these extremes.

5. Conclusion

Findings from this study have identified the effects of injury on the horseracing workforce, including consequences to the physical and psychological health and wellbeing of employees, as well as occupational and financial challenges arising from injury. Initial emotional responses, such as frustration and absentee guilt, strongly influenced staff decisions to return to work early within the horseracing sector. Horseracing staff were less likely to utilize professional medical services during recovery, opting for self-medication or self-management techniques. Several barriers to help-seeking were also identified, including a lack of trust in medical services, the normative expectations of injury within the horseracing sector, and limited awareness of the extent of resources available to them to facilitate recovery. With high levels of presenteeism demonstrated by this population, horseracing employers and organizations should be concerned with the potential implications of presenteeism on workforce mental health, recruitment and retention, and employee efficiency. Strategies to improve employee return to work following injury, including phased return-to-work procedures, national guidelines for reasonable adjustments, and early-contact injury training for employers and senior staff, would benefit the sector and align with industry objectives on staff recruitment, retention, and training.

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Authors' Contributions

Conceptualization, E.D., J.M.W. and W.J.M.-P.; methodology, E.D., J.M.W. and W.J.M.-P.; formal analysis, E.D.; investigation, E.D.; resources, E.D. and J.M.W.; data curation, E.D.; writing—original draft preparation, E.D.; writing—review and editing, J.M.W., W.J.M.-P., J.K.P. visualization, E.D.; supervision, J.M.W., W.J.M.-P. and J.K.P.; project administration, J.M.W., W.J.M.-P. and J.K.P. All authors have read and agreed to the published version of the manuscript.

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Conflicts of Interest

The authors declare that there are no conflicts of interest.

Ethical Approval

This study received ethical approval from the Hartpury University Ethics Committee. The study complied with the guidelines of the Declaration of Helsinki.

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